MUELLER Record





THIS MONTH'S COVER

Water witch, conjurer, power of the devil? What are the facts about divining rods? The practice of "dowsing" to locate water is probably 7,000 years old and has never been explained. Disbelievers can prove why there is no substance to the belief! Yet, diviners or dowsers DO find water. For more details see adjoining page.

MUELLER Record

February • 1956

WALTER H. DYER, Editor LOUISE COLE, Assistant Editor

MUELLER CO.

MANUFACTURERS OF WATER AND GAS DISTRIBUTION AND SERVICE PRODUCTS

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Recording Our Thoughts

Did you ever wonder about the origin of the now outdated term "fireplug"?

Although still commonly used by many people today even though the utility man and the manufacturer prefer the usage of fire hydrant or water hydrant, this expression has a beginning that dates back many years.

Long before our present distribution systems when wooden mains transported water to our homes and industries, firemen would dig down to the wooden water "pipe" and bore a hole in it. Then the bucket brigade could dip up water from the "pipe" for fire fighting when a blaze occurred in the area.

After the fire, a wooden plug was fitted into the hole in the main. A marker was placed above ground, usually with "fire-plug" inscribed on it, to point out the location of the plug in case another fire occurred in the area at a later date.

By the time pipes and modern fire hydrants were developed, the name "fire-

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"You say it does that every time someone takes a drink?"

water witching

7,000-Year-Old Mystery Fact or Fancy?

(Editor's Note: The following article was written by Harold C. Gadd, staff writer for the Charleston, W. Va. Gazette. Permission to publish this article in the MUELLER RECORD was granted by that Newspaper.)

THE neatly dressed man in sport coat and grey felt hat strode across No. 2 fairway of Meadow Brook Golf Course steadily.

Instead of a golf club, he had a thin, L-shaped, brass rod, which he held by the short leg at arm's length before him and raised slightly higher than his head. As he walked the rod jiggled and bobbed slightly until he reached a point about 10 feet out into the fairway from the drainage ditch which marks the left side. At that point the rod suddenly started spinning in his hand. After whirling for about 30 seconds it came to a rest with the tip pointing toward Rt. 14 that runs beside Meadowbrook.

"There's a stream here," he said, turning to us. "It comes from that direction" (he pointed toward the highway) and runs under the hill."

His words, and the spinning rod there on the sunbathed fairway were the climax of a two hour demonstration in "dowsing," a practice probably 7,000 years old but as yet unexplained.

The origin of the divining rod is not known. There are references to them in the Bible; Herodotus indicates that they were used by the Scythians, Persians and Medes; the Greeks had a word for it: rhabdomancy, a combination of rhabdos, rod and manteia, divination. The lituus of the Romans, with which the augurs divined was apparently an arched rod. Marco Polo reported the use of the rod throughout the Orient. Tacitus said the ancient Germans used branches of fruit trees as divining rods.

Down through the years, divining rods have been used to locate ore deposits, discover buried or hidden treasure, find lost landmarks, detect criminals, analyze personal character, cure diseases, trace lost or strayed domestic animals, ward off ill fortune, and, of course, to locate underground water.

Little wonder they fall into the category of witchcraft. In England divining

Three different dowsing rods are regular fork, as shown, fork with coil spring at tip and thin brass rods. There is almost an endless variety of rods.



rods have been described as conjurer's wand and the person using them is known as a water witch.

There is a staggering amount of literature on the subject, which ranges from the staunch supporters to the violent opposition.

The supporters come mostly from the ranks of those who believe their eyes when their minds cannot explain what is happening. The opposition mostly comes from those who demand an explanation for a thing before they will believe it.

So far, no one has satisfactorily explained dowsing, just as no one has satisfactorily explained sleep. There are theories, lots of theories, ranging from the "power of the devil" to magnetism and electrical sensitivity.

Most supporters of dowsing agree that the material the divining rod is made of means little. Most commonly used, perhaps, are hazelwood, peach, elm, willow, apple and hawthorn, but steel, silver, brass and ivory rods also seem to work.

An Amish Dowser, Dave King of Stoystown, Pa., uses a pair of regular garage-variety pliers for his divining. Produces with them, too. At least, when

Dowser demonstrates how thin brass rods cross over and point in direction of flow.





Single brass rod held overhead spun when dowser stood over hose.

he was hired by the Stoystown Water Co., to pick the site for a new well, he found a spot with his pliers, rigged up a swinging ring gadget, watched it for a bit and told the drillers they would find water at 140 feet, 200 feet and at 281 feet. They did!

The dowser we watched had an old peach fork, but relied for the most part on brass rods he had formed. He was Reo V. Barnett, an official of the West Virginia Water Service Co., but dowsing isn't a part of his work. With him it's a hobby carried over from his younger days when he was employed as an electrician at a steel mill in Ohio.

"An armature winder who worked in the plant with me, told me how to make a dowsing rod," Barnett explained. "One day on my father-in-law's farm, I saw a likely looking branch and made myself a rod. I tried it over a cistern, but nothing happened." (Dowsers say rods will not work over still water.) "Later on, from time to time I would try using it walking around the fields and pastures. One day it worked and I can't describe the thrill it gave me. I've been fooling

around experimenting with them off and on ever since."

In a publication entitled 'The Divining Rod, A History of Water Witching," put out by the Department of Interior about 1913, when Franklin K. Lane was secretary, and reprinted in 1938, the U. S. Government says water witching is a lot of hokum.

It warns the public not to be taken in by the claims of dowsers because although "some of them are doubtless men of good character and benevolent intentions... there can be no reasonable doubt that many of the large group of professional finders of water... who take pay for their 'services'... are deliberately defrauding the people."

In sum, the Government pamphlet says that "no appliance, either mechanical or electric, has yet been devised that will detect water in places where plain common sense and close observation will not show it just as well."

In contrast to this warning, the Royal Engineers of Britain during World War II, enlisted the aid of water-diviners as a regular practice in the army. The percentage of success of these operators was just as high as that of the geologists and surveyors who sought water by scientific means.

Perhaps the most exhaustive survey on dowsing in recent years has been made by S. W. Tromp, professor of Geology at Fouad I University in Cairo, Egypt.

In the introduction to his book, which he calls "Physical Physics," (Elsevier Publishing Co., Inc.) Prof. Tromp says that as a geologist, he met many dowsers in his work and was always extremely skeptical about their capacities. The results were not very convincing.

But, about 1940, he says, more and more important data were collected which indicated that divining phenomena were as real as electricity and other physical phenomena.

In 1946 and 1947 he conducted tests in the physical and physiological laboratories of Leiden University (Holland) and in the laboratory of Technical Physics at Delft (Holland).

According to Prof. Tromp, these tests showed:

1. That divining phenomena are not due to charlatanry and suggestion, but

really exist and the number of people sensitive to them is greater than is usually assumed:

2. That many physical and physiological factors might cause errors, which could explain most of the "failures" of scientific tests on diviners;

3. That the phenomena can be explained by normal physical and physical laws:

4. That a careful analysis of these phenomena might prove to be of great value to future medical science.

What we need, says Tromp, is to stop rejecting the things that do not fit into the frame of scientific or philosophical beliefs of our time, and start investigating and testing on a large scale.

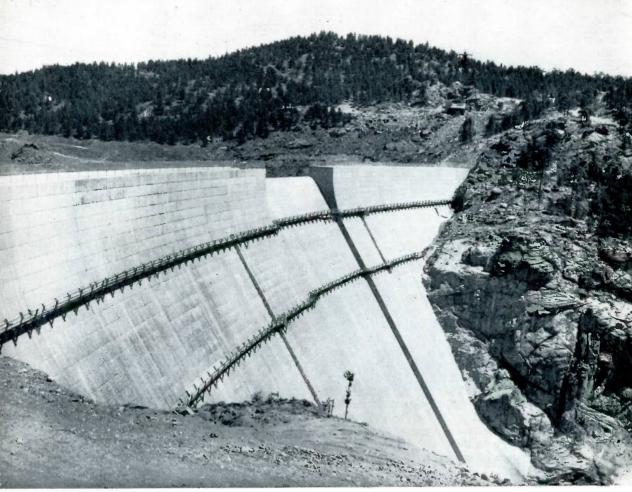
"Chief" Thomas Leaves Working Man's Creed

E ARL F. THOMAS, San Diego, California superintendent of water distribution, died December 13, 1955, twenty-eight years after he first came to work in the Department. Not only did he leave a vacancy that will be hard to fill, he also left a working man's philosophy and a crew who had unbounding respect and loyalty for him and his policies.

In appreciation of his years of service, and to honor him as a man, the San Diego City Council has passed a resolution to name the second thirty million gallon clear water reservoir at Alvarado Treatment Plant after Mr. Thomas.

Born November 29, 1901, in Birch Tree, Missouri, Mr. Thomas decided to make his home in San Diego when he was stationed there as a Marine in 1923, and remained there after his discharge. At this time he had already completed his apprenticeship as a steam engineer for the Mid-Continent Iron Company at Midco, Missouri; his apprenticeship as a pipe fitter was completed during the reconstruction of the Sapulpa Refinery at Sapulpa, Oklahoma.

(Continued on page 19)



This is the \$12,000,000 Gross Dam which is part of Denver' \$100,000,000 water expansion program.

Denver Looks Ahead With \$100 Million Insurance Plan Against Future Water Needs

ONE OF THE NATION'S largest water expansion programs is underway now in Denver, Colorado. In 1955 the people of Denver, in effect, rolled up their sleeves and started the expansion ball rolling when they voted fourteen to one for a whopping \$75 million bond issue to finance the fifteen year plan.

> The \$75 million will be used to complete scores of engineering projects, including the \$40 million Montezuma Tunnel under the Continental Divide, and an additional \$25 million will be added to that fund from department operation funds to bring the grand total to \$100

> Thirsty Denver, one of many victims of the long-lasting drought, saw, in

September, 1955, the dedication of the \$12,114,000 Gross Dam, the first major project under the current expansion program. Some measure of relief was felt at its completion since strict measures, from restricted lawn watering to forced installation of water cooling towers for air conditioners, had been in force for some time.

Six men in Denver have delegated the execution and responsibility of the \$100 million program. Each has proved himself, through many years of diligent work for the Denver Water Department.

Dwight David Gross, who earned the honor of having the new dam named for him, has served in the Water Department's engineering office for 52 years, and was chief engineer from 1926 through 1951. He was the engineer in charge of the dam.

Hudson Moore, Jr., president of the Denver Water Board, his predecessor, George R. Morrison, and all the other officers and members of the board whose duty it is to plan, coordinate, supervise and guard the tremendous project are due immeasurable gratitude for their present work and that they will doubtless do in future years.

Topping the list of faithful workers is August P. Gumlick, first vice-president of the Board, and one who has long devoted much of his time to Denver's Water problems. The other hard working members of the Board are Assistant Secretaries John Burgess, chief engineer; Grace L. Norr and Glenn G. Saunders.

When the mammoth bond issue was voted, the Board created the new post of Project Engineer and named Earl L. Mosley to the job. Mosley, who had been secretary-manager since 1950, was utilities director under the administration of former Mayor Quigg Newton. Before coming to Denver he was for many years city manager of Colorado Springs.

Mosley's new assignment gives him full authority to develop plans for the acquisition of additional water to meet present and future needs of the metropolitan area. He will also expedite the large number of engineering projects pending under the \$100 million program.

Filling Mosley's former position as secretary-manager is Robert S. Millar. Millar has been associated with water utility operations since 1923. A graduate of Cornell University, he served with the American Water Works Co. in New York until 1937. Since that time he has served in management positions with water utilities at St. Joseph, Missouri, and Wichita, Kansas.

In such capable hands have Denver citizens placed this huge project in the hope it will be as successfully completed as Gross Dam.

The dam itself, was quite a project. Most of the features of construction described above are similar to many dams constructed in recent years, but the spillway is different from most of them. The spillway flow is over the top of the dam, which is not uncommon; but most spillways of this kind have training walls down the face of the dam, from the crest to the river channel. In this case the training walls are omitted and instead a depression is formed down the face of the dam.

The dam, which is for Reservoir No. 22, is located in narrow, rocky South Boulder Creek Canyon, 35 miles northwest of Denver. Field surveys were



DWIGHT DAVID GROSS

started in 1945, but construction did not actually begin until 1951, though preliminary work pegan in 1950.

Built of concrete, the design of the dam is a gravity arch with the radius of the arch 1,740 feet. The dam is 340 feet high and 1,050 feet long at the top. The thickness at the base is 268 feet; with a thickness of 25 feet at the top. Maximum capacity of the dam is 42,000 acre feet of water, however, plans are to increase capacity to 113,000 acre feet by increasing the height of the dam to 460 feet, when the need arises.

A tunnel 800 feet in length has been driven in the north canyon wall to serve as an outlet. This tunnel is eight feet in diameter, lined. A valve chamber has been excavated on the line of this tunnel 300 feet from the discharge portal. Access to the valve chamber is had through a 90 foot adit. Four 42 inch outlets are provided in the tunnel and through the valve chamber, and an operating valve and reserve valve will be placed in each

outlet pipe. The outlets through this tunnel are designed to pass the natural flow of South Boulder Creek up to 1200 cubic feet per second at a low water stage in the reservoir. This is the amount required to satisfy irrigation appropriators down the Creek.

A second outlet is provided through the dam at an elevation of 150 feet above low water to serve as the outlet to the power conduit, constructed down the canyon a distance of four miles at a point above the present diversion dam to the South Boulder Conduit serving Ralston Reservoir. At this point a hydroelectric plant has been installed.

For the people of Denver Gross Dam provides additional water for lawns, gardens, new industries and the growing city. It makes it possible for them to utilize the Moffat Tunnel Diversion water to the fullest extent, and every drop of water from the Fraser watershed can be stored at Gross Dam and reservoir and in Ralston Reservoir.

INTRODUCING:

Charles Farmer, Chattanooga Sales Correspondent

Charles E. Farmer, a veteran of high school and college sports, left his coaching position in Central High School in Chattanooga in September, 1954, to accept his present job as sales correspondent in our plant there.

Born in Alabama City, Alabama, Mr. Farmer went to grade school in Montgomery City, junior high in South Pittsburg, Tennessee, and graduated from high school in Chattanooga. He served two years in the Marine Corp after his high school graduation, then went on to major in physical education at the University of Chattanooga where he graduated in 1953. A member of Pi Kappa Alpha fraternity, he was vice-president in 1952, and president in 1953.

Mr. Farmer probably would be a bad person to get into an argument over sports, since he has been an athlete most of his life and has coached football. He is also quite a wrestler.

However, Mr. Farmer has other interests at which he excels. His hobby, woodworking, is quite a project as he makes furniture pieces for his home.

Mr. Farmer's job as sales correspondent includes taking care of debits and credits, correspondence with customers, other plants and with salesmen.



CHARLES E. FARMER

Louis P. Mautz to Texas, New Mexico; Frank Kuenstler Goes to Dallas Area



LOUIS P. MAUTZ

The appointment of a new sales representative and the transfer of another has been announced by Robert H. Morris, Mueller Co. Vice President and General Sales Manager.

Frank L. Kuenstler, sales representative in West Texas and New Mexico, joined Ward L. DeWitt, effective February 6, as a representative traveling the Dallas area. Louis P. Mautz, who has just completed the company's sales training program, will travel in West Texas and New Mexico.

Mr. DeWitt and Mr. Kuenstler form a team coordinating work in the rapidly expanding Southwest. The latter has a background particularly suitable for service in the utility field.

A graduate of Southwest Texas State College at San Marcos, Mr. Kuenstler was a junior partner in a large Texas construction firm prior to joining Mueller Co. Mr. Kuenstler and his family will make their home in Dallas.

As the replacement for Mr. Kuenstler, Mr. Mautz has been engaged in an intensive sales training program since July 15, 1955. During his training period he has made a thorough study of the Mueller product line as well as field sales procedures. In addition, he has studied sales office procedures and manufacturing methods in the Decatur and Chattanooga offices and plants.

Mr. Mautz holds a Bachelor of Science degree from the University of Illinois and before joining Mueller Co. he was a radio announcer and sportscaster. Later he was with the sales staff of a television station.

He also was sales manager for an auto appliance dealer before joining Mueller Co.

Mr. Mautz and his family will make their home in Lubbock.



FRANK L. KUENSTLER



Sales representatives and administrative personnel attending the 1956 general sales meeting in Decatur were, front row left to right: W. G. Gansler, J. Milne, G. W. Knipe, A. D. Parks, R. D. Kitchen, R. L. Jolly, W. R. Augustine, D. R. Gannon, L. J. Evans, R. H. Morris, R. K. Levey, A. O. Yonker, F. E. Carroll, E. G. Baker, R. W. Tibbils, J. D. Bailey, W. H. Dyer, H. L. Baker. Center row, left to right: E. P. Graeber, F. R. Seevers, R. J. Ott, L. E. Grosboll, R. J. Thomas, K. F. Tohill, J. H. McClintick, L. George, R. J. Cope, P. L. Hines, R. L. Burdick,

When you find the man who knows his product . . . the market he serves . . . and his own ability to sell, then you have found the man who is doing a service for both his company and customers.

Such a man is the type Mueller Co. strives to develop for representation in the field. These men are our first contact with the industries we serve and they must be equipped to meet our customers as both a consultant and as a representative of a manufacturer.

Therefore, Mueller Co. sales representatives are carefully selected and thoroughly trained in every phase of our operation before leaving for direct contact with the customer.

Mueller Salesme

To insure that they maintain an understanding of Mueller products, both old and new, that they know the markets we serve, and that they may be able to re-evaluate their own ability as salesmen, Mueller Co. has for many years conducted a General Sales Meeting.

From January 24-26, 1956, such a meeting was held at our Headquarters



W. D. Crawford, J. T. Leahy, W. L. DeWitt, E. D. Ayers, J. C. Rubicam, R. K. Morris, H. V. Seevers, F. V. Martin, G. W. Simpson, F. C. McCown. Back row, left to right: R. B. Herrin, R. C. Sponsler, H. T. Huffine, G. A. Smith, F. L. Kuenstler, H. W. Cessna, R. E. DeWeese, R. H. Roarick, L. Mautz, E. C. Fenstad, W. A. Arnett, J. E. Williamson, H. K. Udell, F. X. Uhl, E. W. Peterson, R. G. Medick, S. B. Johnson, P. B. Watts, R. H. Gamble, C. W. Auer.

n Get Together

in Decatur. It was attended by our entire field sales force as well as those men in administrative sales positions. The training consisted of three days of concentrated instruction on sales policies and techniques and a comprehensive review of all our major products.

Robert H. Morris, Vice President and General Sales Manager, was in charge of the sessions which among other things featured sixteen speakers who discussed all phases of our products and business.

One of the three days was turned over to our Engineering Division, headed by Frank H. Mueller, Vice President and Director of Engineering. Mr. Mueller and his staff lectured on the use and operation of our major machines and equipment.

Dr. Kenneth McFarland, nationally known public speaker and Educational Consultant for General Motors Corporation and the American Trucking Assocition, was guest speaker. Dr. McFarland is a former guest editor for Readers Digest.

A #weet Roll

Water Employee's Wife Bakes Way To National Fame

This was the big moment when Mrs. Bertha Jorgensen was told her ring-a-lings won first prize and \$25,000. Art Linkletter of television fame is congratulating her.



Three of the 100 best cooks are shown right after the judging. From left are Mrs. Nicholas Suciu, third place winner, Mrs. Claude E. Hughes who won second and Mrs. Jorgensen. Sampling the winner's rolls are Mrs. Phillip W. Pillsbury and Miss Helen Traubel, guest of honor.

Wins \$25,000

FROM BABY SITTING in Portland, Oregon, to national fame and fortune via New York City and the Waldorf Astoria Hotel, is the story of Mrs. Henry Jorgensen, a Portland housewife and mother.

Mrs. Jorgensen won the \$25,000 Grand National Prize in Pillsbury's seventh annual bake-off, and did more than her share to glamorize the all important career of being a housewife.

Mrs. Jorgensen is the wife of a Portland city water department employee, and is a regular baby sitter for a school teacher. Her hobbies are raising flowers and Chihuahau puppies. The Jorgensen's have one son, Robert who is 18 and a student at Portland State College, and Mrs. Jorgensen plans to use part of her prize money to send him to a large university for graduation. The remainder of the money will be spent for a new home, she said.

Before microphones and television cameras Opera Star Helen Traubel presented the prize to Mrs. Jorgensen for her "Ring-a-Lings," a no-knead sweet roll made with a twist of the wrist.

Actually, contest winning is not new to Mrs. Jorgensen. She enjoys entering contests and has won a radio, a war bond and an automobile. This was her seventh time to enter the Pillsbury Grand National.

Her winning entry is an original recipe for a roll handed down by her mother. However, Mrs. Jorgensen developed the recipe to use an Oregon product, filberts, and it is unusual because of the filbert flavor. The nut-filled roll features a simple way to fill, cut, twist and curl the dough so that the full flavor is tucked into every bite. Judges said it demonstrates a simple way for the average housewife to produce a sweet roll with a professional look.

Since winning Mrs. Jorgensen has been busy as any movie star with dinners in



Oregon's Filbert Growers held quite a reception at the airport in Portland where a large crowd welcomed Mrs. Jorgensen home. The Jorgensen's son, Robert, is standing at the extreme left, with Mrs. Jorgensen in the center and Mr. Jorgensen at right next to her.

her honor and guest appearances on radio and television. Perhaps one of her greatest thrills came January 23 when Oregon's late Governor Paul Patterson presented her a citation with the Oregon State Seal at a dinner sponsored by the Oregon-Washington Filbert Growers.

It was the Filbert Growers, too, who welcomed her home from New York City with a large crowd of friends and well wishers, along with her family. They met her with large signs, "Welcome Mrs. Jorgensen." In the immediate future for the Grand National Winner is a tour of the United States, arranged and sponsored by Pillsbury and the Filbert Growers.

It was Mrs. Jorgensen's first trip to New York City and she had the time of her life, what with Pillsbury and General Electric doing their best, and two nephews, whom she hadn't seen in 38 years, also giving her a "Cook's tour."

Mrs. Jorgensen was one of 100 final contestants in the bake-off. These "100 best cooks of 1955" were selected by their recipes from thousands of entrants, and were invited to New York City by Pillsbury and General Electric, cosponsors of the contest, for three exciting days.

Arriving on Sunday, the ladies began early Monday (with a little prayer, Mrs. Jorgensen said) to bake, making up the recipe twice in order to choose the best one for judging. Each contestant is given a new colored range and mixer for her baking. And giving is the word;

the range and mixer are gifts of General Electric. The 100 ranges are set up in rows in the grand ballroom of the hotel.

When the product is handed to the judges, the ladies, and the few male contestants, go out on the town with a heavy schedule of things to see and places to go, with all arrangements made by the host companies.

Then, at a luncheon Tuesday the winners are announced. Art Linkletter, of TV fame, is the master of ceremonies at this function. The award luncheon concludes the bake-off each year.

Along with Mrs. Jorgensen other winners were, Mrs. Claude E. Hughes, Orange, Virginia, who won \$7,500 for her "Regency Ribbon Cake." Third prize of \$2,500 was awarded Mrs. Nicholas Suciu, Otter Lake, Michigan, for her "Apple Dimplings," made by enclosing a slice of apple in rich pastry and topping it with jam.

The teenager who outclassed 19 others for the \$3,000 junior first prize was 13year-old Karen Folkmier of Battle Creek, Michigan, who baked "Pieburgers." Using a hamburger base which she flavored with dehydrated onion soup and pickles, she produced an individual slice sandwich by wrapping it in a cheese flavored delicate pie-crust.

Over \$100,000 in prizes, including the ranges and other electrical equipment from General Electric, was given to prize winning contestants during the gala three hour luncheon party in the same room in which they had baked previously.

Best four of class awards of \$1,000 each were made to Miss Helen Zymalski of Miami for her bread, "Yam Yam Pecan Buns"; Mrs. Donald W. Edwards of Lincoln, Nebraska, for her "Chocolate Hawaiian Pie"; Mrs. Louis Ganssle of Glen Ridge, New Jersey, for her cookies, "Lucky Stars"; and Mrs. Morris Avery, Greybull, Wyoming, for her "Family Treat Cake."

Second junior prize of \$2,000 went to 15-year-old La Vonn Jost, Stringtown, Oklahoma, for her "Apricot Gooey,"



Once each year the grand ballroom of the Waldorf Astoria, one of the worlds most famous hotels, is the scene of Pillsbury's bake-off. This year each range was colored so that the busy ladies made quite a picture creating their artful pastries.

a simple one-layer cake with an apricotflavored batter and a novel topping of apricots laced with coconut.

Martha Parkinson, 16, of Encampment, Wyoming, took home third prize of \$1,000 in the junior division with "My Grandma's Pudding," an old-fashioned English steam pudding adapted from a recipe handed down in her family for generations.

And here, finally, is Mrs. Jorgensen's \$25,000 Ring-a-Lings

- 2 cakes compressed yeast
- 1/4 cup lukewarm water (or 2 packages dry yeast and 1/4 cup very warm, not hot, water)
- 1/3 cup butter or margarine
- 3/4 cup hot scalded milk
- 1/3 cup sugar
- 2 teaspoons salt
- 2 teaspoons grated orange rind
- 2 unbeaten eggs
- 4 to 4½ cups sifted Pillsbury's Best Flour
- 1/4 cup orange juice
- 3 tablespoons sugar
- Soften compressed yeast in lukewarm water.
- Combine butter and milk in large bowl. Stir until butter melts. Cool to lukewarm. Add sugar, salt, orange rind, eggs and yeast mixture.
- Gradually add the flour to form a stiff dough. Mix thoroughly. Cover. Let stand 30 minutes.
- 4. Roll out to a 22 x 12-inch rectangle on floured board. Spread half of dough along 22-inch side with nut filling. Fold uncovered half of dough over filling. Cut into 1-inch strips (crosswise). Twist each strip 4 or 5 times. Hold one end down on baking sheet, curl around in a spiral, tucking end underneath. Cover with waxed paper or towel.
- Let rise in warm place (85 degrees to 90 F.) until doubled in size, 45 to 60 minutes.
- 6. Bake at 375 degrees F. for 15 minutes until light golden brown. Meanwhile prepare glaze of orange juice and sugar. Brush tops of rolls and bake 5 minutes longer until deep golden brown. Remove from baking sheet immediately. Makes 1½ to 2 dozen rolls.

Nut Filling

- 1/3 cup butter or margarine
- 1 cup sifted confectioners' sugar
- 1 cup (¼ lb.) filberts, ground or chopped very fine (other nuts may be substituted)

Cream butter. Blend in sugar thoroughly. Add nuts.

Paul Weir Heads Officers' Slate; Awardees Named

The Board of Directors of the American Water Works Association, Inc., following their annual meeting in New York, has announced nominees for president, vice-president and treasurer. If opposition candidates are not announced by March 1, the nominations will constitute elections.

For president the nominating committee has chosen Paul Weir, general manager of the Atlanta, Georgia, Water Works; for vice-president, Fred Merryfield, professor of sanitary engineering at Oregon State College, Corvallis, Oregon; for treasurer, William W. Brush, editor of Water Works Engineering of New York, New York.

Also at the meeting the Board extended honorary membership to Dr. Alvin Percy Black, Henry Francis Cronin, Thomas Julian Skinker, and William Victor Weir.

Dr. Black, head of the department of chemistry at the University of Florida, has been an Association member since 1929; was president in 1950; director for the Florida section from 1936-39; Fuller Award winner in 1939; winner of the Goodell Prize in 1950, and of the Diven Medal in 1955. President of Black and Associates, engineers, of Gainesville, Dr. Black has served as chairman of the Committee on Fluoridation and is one of the country's foremost authorities on fluoridation. He was the author of an article appearing in the August, 1954, Mueller Record.

Mr. Cronin is chief engineer of the Metropolitan Water Board in London, England, and a member of the Association since 1944. The Board chose Mr. Cronin "in recognition of his many contributions to the water works profession, and particularly for his outstanding leadership of the London water board for so many years—and especially for his unfaltering courage and steadfast devotion to duty during the Blitz of World War II; and for his friendly spirit of cooperation with this Association."

Mr. Skinker, commissioner of water in St. Louis, Missouri, has been a member of the Association since 1924; was named a life member in 1954; was director for the Missouri section 1931-32 and winner of the Fuller Award in 1948. The Board said, "he has served the AWWA with distinction in all its divisions, water works management, resources, purification and distribution.

Mr. Weir, who is president of the St. Louis County Water Company at University City, Missouri, has been an Association member since 1924; was president in 1951; director for the Missouri section in 1946-49; winner of the Diven Medal in 1940, of the Fuller Award in 1943 and the Goodell Prize in 1950

Award Winners Announced

Also at the Board meeting the various award winners were announced. Fred Guyon Gordon is the recipient of the Diven Medal for the most outstanding service to the Association during 1955. Mr. Gordon won the award specifically "for his constructive leadership and accomplishments in the development. through a committee, of standards specifications for metal-seated and rubber-seated butterfly valves—of great potential value in water works control and distribution; and for placing the engineering details of production of such valves on a sound and fully professional basis."

William John Orchard was voted the Harry E. Jordan Achievement Award, established in 1951 and conferred upon a member of the Association who has distinguished himself for service outside the line of duty. The Award has been presented one other time, to Abel Wolman in 1952. Mr. Orchard was commended for "his long and unselfish voluntary and unpaid services to the community and the region in which he lives."

The Goodell Prize is to be awarded H. S. Swanson, H. J. Chapton, C. L. King, and E. D. Nelson for their paper entitled "Design of Wye Branches for Steel Pipe," as published in the June, 1955, issue of the Journal. Recognition is given to the authors' "original and intensive research devoted to the wvebranch problem." The four men are all with the Los Angeles Department of Water and Power, Mr. Swanson and Mr. King are structural engineer associates; Mr. Chapton is project design engineer: and Mr. Nelson is civil engineering assistant. A fifth author, W. J. Wilkinson, is not a member of AWWA.

Best Industry Papers

Four division awards are made annually for the best paper published in its field of interest. Leslie Paul won the distribution division award for his paper. "Selection of Valves for Water Works Service": Abel Wolman was given the management division award for his paper, "Providing Reasonable Water Service"; Arnold K. Cherry won the purification division award for paper, "Split-Treatment Method of Water Softening"; and the resources division award went to Finley Burnap Laverty for his paper on "Development of a Fresh-Water Barrier in Southern California for the Prevention of Sea Water Intrusion."

The Harry E. Jordan Scholarship was awarded to Marvin Robert Lindorf of Oakland, California, a senior sanitary engineering student at the University of California.

The Hill Cup was awarded to the Southwest section for membership growth during the year. The section had a point score of 28.665, with the Indiana section second with a point score of 24.467.

The Henshaw Cup was awarded to the Cuban section which had 72.22 percent of its members in attendance at its annual meeting. The Montana section was second with 68.42 percent present.

The Old Oaken Bucket award, given annually to the section having the greatest number of members, was again awarded to the California section which continues to lead, with 1,266 members at the end of 1955. The Southwest section again stands second with 994.

Frank C. Amsbary Heads Long Island Water Company

RANK C. AMSBARY JR., a native of Champaign, Illinois, and a veteran of 30 years in the field of water supply engineering and management, has been named vice-president and general manager of the Long Island Water Corporation. This private company supplies water to nineteen South Shore communities centering around Lynbrook, Long Island.

Mr. Amsbary, president of the American Water Works Association, went to the Long Island utility from Champaign where he had served as vice-president and secretary of the Illinois Water Service Co. and vice-president of the Northern Illinois Water Corporation for many years. A civil engineering graduate of the University of Illinois and a registered professional engineer in the state of Illinois, Mr. Amsbary was the 1941 recipient of his section's George Warren Fuller Award for outstanding professional accomplishment.

He has been a member of the American Water Works Association, 11,000 member water supply engineering society, since 1927, and was made president the past June at the organization's 75th annual meeting in Chicago.

Mr. Amsbary's many activities have included: trustee of his Illinois section, 1934-35; vice-chairman in 1936; chairman, 1937; A. W. W. A. director, 1939-42; secretary-treasurer of plant management and operation division; chairman, committee on water works administration; Goodell Prize committee; committee on service line material; special committee on Nicholas S. Hill cup; chairman, committee on water use in air conditioning and other refrigeration; and chairman of the committee on recommended design of valve boxes and covers, curb stop boxes and covers, and meter boxes and covers (now inactive).



FRANK C. AMSBARY, JR.

In addition to the American Water Works Association, Mr. Amsbary is a member of the American Society of Civil Engineers, the National Society of Professional Engineers, the Public Utility Advisory Committee of the University of Illinois College of Commerce, and Theta Tau engineering fraternity, as well as an honorary member of Musan, the college municipal and sanitary engineering group.

The company, of which Mr. Amsbary is vice-president and general manager, actually began in 1884 under the name of Queens County Water Company. It was incorporated under the name of Bellport Water Supply Company, Inc. in May, 1924, and was changed to its present name, Long Island Water Corporation in 1925.

The service area of this public utility operating company comprises approximately 43 square miles in Nassau County, which adjoins New York City (Queens County). The population served approximates 200,000.

Enjoying phenomenal growth, a modern \$30,000,000 suburban shopping center, said to be one of the largest in the nation, is now under construction on a 70 acre parcel in the Green Acres area of the Corporation's territory.

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MISS LOUISE COLE

Miss Louise Cole Named Assistant Publications Editor

In a move to further expand Mueller Co.'s publications program, Miss Louise Cole of Huntsville, Texas, has been employed as assistant editor of the Mueller Record and Main Connections. The latter is the company's employee newspaper.

Miss Cole, who studied journalism at the University of Texas, has had extensive experience in the weekly and small daily newspaper field, and in addition has served as correspondent for the Houston (Texas) Post, and the Houston Chronicle, two of the South's largest newspapers, and for the United Press Bureau in Houston.

A native of Roscoe, Texas, Miss Cole attended Hardin Simmons University before entering the University of Texas. She began her career in 1950 as a reporter for the Madisonville, Texas, Meteor, a weekly newspaper. She was named society editor for the Angleton, Texas, Daily Review in May, 1951, serving in this capacity for nine months

before being transferred to the general news staff as courthouse reporter.

In 1952, Miss Cole was appointed editor of the Angleton Times, a weekly newspaper, and later served as editor of both the Times and Brazoria County Light, a weekly serving five small towns.

She was named city editor of the Texas City Sun in July, 1953, but left on a leave of absence a year later due to the illness and subsequent death of her father. She was preparing to return to Texas City when she accepted the new position with Mueller Co.

Frank C. Amsbary

(Continued from page 17)

On the technical side, all water supplied by the Long Island Water Corporation is pumped from 192 wells which tap prolific water-bearing strata between the depths of 20 and 1100 feet. These water-bearing strata serve as impounding reservoirs supplied by precipitation on Long Island. The wells and well pumping equipment have a reliable capacity of 51 mgd.

Forty-four percent of the well pump capacity is low head, pumping into ground level storage. The other 56 percent is high head equipment pumping directly into the system. To meet the widely fluctuating maximum demands for water in the summer months there is provided 11,200,000 gallons capacity of ground level storage, 500,000 gallons capacity of elevated storage and a high head pump capacity of 85,700,000 gallons daily

The main pumping station utilizes diesel power, and the other stations utilize either diesel or electric power, or both.

About one third of the total supply is available from the main pumping station where the water is aerated, treated with lime, filtered and chlorinated. The remainder is available from 15 other stations scattered throughout the system in Valley Stream, Lakeview, Baldwin, Roosevelt, Lynbrook, Oceanside and Atlantic Beach where in general the water is treated with lime and chlorine. Storage is available in the same areas by main-line meters of various types.

Recording Our Thoughts

(Continued from page 2) plug" was so common that the layman has continued to use it.

After seeing service regularly since

'Chief' Thomas . .

(Continued from page 5)

After joining the San Diego Water Department as a laborer, "Tommy" Thomas climbed steadily to crew foreman, acting superintendent and finally superintendent of Water Distribution on July 1, 1947. It was as crew foreman that Mr. Thomas organized a crew which is still referred to as the "dream unit." The tools of this crew were marked "T", and thereafter, for many years, Water Department toolkeepers referred to caulking hammers as "T's".

Mr. Thomas not only worked in virtually every capacity in the Department as preparation for Superintendent, he also studied continuously, with the culmination in the award of a certificate by the University of Chicago upon completion of a course in public works administration.

He was always an advocate of inservice training, and it is believed that after his appointment as Superintendent this division conducted a more comprehensive in-service training program than any other division of the city.

Called "Chief" or "Papa" by his "boys", Mr. Thomas was a firm believer in brotherly love and practiced the philosophy that a man's time could be bought or a man's physical presence at a given place, but that loyalty, initiative or devotion could not be bought, but must be earned.

He sold his motto, "Service to the public," to everyone who worked around him by his own personal demonstration and his ever constant battle to give San Diego the best water service obtainable. When there was a night time emergency the crew knew the Chief would be there. They remember he never asked any man to do more than he himself would do.

July 23, 1872, a Mueller tapping machine owned by the City of Warren, Minnesota, is ready for retirement.

According to a letter from Thompson-Stolee Company at Grand Forks, North Dakota, the machine is still in use, but is in need of some new parts. Because this model machine was made so many years ago, parts are no longer available since many improvements have been made during the ensuing years.

Therefore, the Water Department at Warren wants to trade it for a new model. They will receive their new machine in the near future.

The Federal Reserve Bank of Chicago has just issued its annual report for 1955. The colorful 48-page book gives a description of the growth and prosperity of five Midwest cities. Leading off is the story of Decatur, Illinois, which the Federal Reserve Bank calls a "Town of Transition".

Very favorable mention is made of Mueller Co. in the report which we would like to repeat in this column. The report states:

"The other old-time metal products firm (previous mention in the report was made of Wagner Malleable Iron Company) is the Mueller Co. Its origins can be traced to a gunsmith established in 1857. If this is a legitimate way of tracing industrial family trees, it is really Decatur's oldest manufacturing ostablishment. Today it is the nation's leading producer of gas and water main equipment, especially tapping equipment. When you see a new house going up. chances are that Mueller equipment is being used to tie it into the water and gas systems. The boom in residential home building and the development of new subdivisions has been a real stimulant to Mueller's activity. In addition to the Decatur plant, Mueller Co. has branch plants in Tennessee, California and Canada.

AWWA GATE VALVES

give tighter

Only Mueller Gate Valves have the exclusive "four-point contact" disc wedging mechanism, Closing pressure is equally distributed to four separate points near the outer edge of each disc. Shutoffs are made faster, easier and tighter - without disc deflection or sliding contact. See your Mueller Representative, Catalog W-96 or write today for full details on the complete line of Mueller Gate Valves.

> "O" Ring Conversion Kits now available for all Mueller non-rising stem Gate Valves up to 12", which were originally equipped with conventional packing.



Iron Body, Bronze Mounted Double Disc, Parallel Seat Type "O" Ring Seal or Conventional Packing 2" Operating Nut or Handwheel Hub, Flanged, Spigot, Universal, Screwed, Mechanical Joint or "Ring-Tite" Ends Sizes 2" through 48"

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