

Greenville's Famous Table Rock Reservoir and Efficient Water Department are Discussed on Page 3

MUELLER RECORD

Editor Jim M. Milligan

> Assistant Editor Joe Penne

SEPTEMBER • 1963

Published by MUELLER CO. 500 W. Eldorado St. Decatur, Illinois

Contents

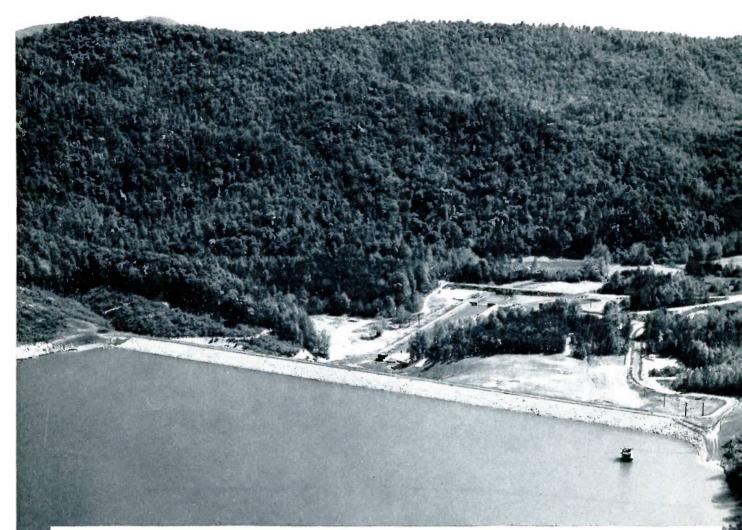
3	NO SHORTAGE OF WATER OR YOUTH relates story of Greenville,
	S. C. Water Works under John L. Hawkins.
7	AROUND THE WATER INDUSTRY is news brief about water and people who deal in it.
8	MODEL H ₂ Omes
9	ADAMS PIPE REPAIR PRODUCTS, INC. PURCHASED
10	WATER REPLACES COSTLY TOYS?discusses water play as an outlet for agressive impulses.
12	MUELLER PRODUCTS
13	THE MAYOR IS NO GENTLEMANis a story about the lady mayor of Bloomington, Ind.
16	FROM SHORTAGE TO SURPLUSdescribes some of the advances in the Bloomington, Ind. water system.
18	MUELLER PRODUCTS
19	STRICTLY OFF THE RECORD is to be taken lightly.
20	AN INVITATION TO JOIN A.W.W.A.

Since 1857 Quality Products for the Waterworks and Gas Industries

MUELLER[®]SALES and SERVICE

... serving the water and gas industries

Member: Central Illinois Industrial Editors Association and International Council of Industrial Editors



North Saluda Reservoir

Greenville, S. C.

No Shortage of Water or Youth

"A serious shortage of youth in the water industry has been of concern to me for many years." That was John L. Hawkins speaking. Good-natured, jovial John has been General Manager of the Greenville, South Carolina Water Works since 1934.

Mr. Hawkins "happened into" the water industry on October 10, 1916 when, at the age of 15, he was offered, and quickly accepted, a job as office boy at a then-generous compensation of one dollar per day.

He felt right at home. He has been feeling that way ever since, in a career that has brought him the Fuller Award, numerous other tributes, and the accolade of Dean of the Water Works Men in the Southeast. We think of the word "dean" as implying administrative ability. Anyone who is familiar with the operation of the Greenville Water Works will agree that John Hawkins is, indeed, a capable administrator. Two facts should serve to illustrate that point.

First, since 1938, all improvements in Greenville's extensive water system have been made with money from revenue bonds. Not one cent of tax money has been used.

Second, the Greenville Water Works operates under a five-man commission. Three men are elected to six-year terms; the mayor and a member of the city council then fill out the five-man team on an ex officio basis. Smiling broadly, Mr. Hawkins said: "We like to think our public relations is pretty good." Apparently it is, for no commissioner has ever been defeated in his bid for re-election! The present commissioners are only the ninth, tenth and eleventh since August 1, 1918.

The Greenville Water Works was built and put into operation about 1888 by a private firm in Philadelphia. In 1918, the City of Greenville purchased the property for \$800,000. At that time, there were four reservoirs. One was kept, and three were given to the State to be used as state parks. A system improvement begun on July 4, 1925, was destined to bring world-wide recognition and identity to Greenville. On that date, work was started on the now-famous Table Rock Reservoir. Perhaps no other such reservoir has been so widely and frequently depicted. The photo which accompanies this story will bring to mind many other photos of it which you have seen.

The reservoir itself is 130 feet deep, covers 500 acres, and holds nine and one-half billion gallons of water. The water is clear and soft, and requires no filtration.

The Table Rock watershed is covered with virgin timber. One day in 1928, Mr. Hawkins stood and admired the natural beauty of the area from the Table Rock Dam. After pausing there a short time, he moved on to inspect a part of the watershed. A few minutes later, the very spot on which he had stood erupted with volcanic fury.

Downtown Greenville

The 42-inch pipe beneath the dam had been crushed. The repair bill ran to \$300,000, and the lake had to be completely de-watered to effect necessary repairs.

When Mr. Hawkins became General Manager in 1934, he was, basically, a one-man organization. He set out immediately to remedy that situation by building a team which now numbers about 115. He is capably backstopped by W. W. Adkins, the Assistant General Manager who joined the water works in December, 1956.

We mentioned that a lack of youth in the industry has concerned Mr. Hawkins. That is obvious, when you note that the average age of his employee team is in the mid-thirties.

What was to be the biggest challenge in his career began its course from dream to reality when, in 1955, Mr. Hawkins received the first engineering report on a huge new reservoir to be constructed on



MUELLER RECORD

the north fork of the Saluda River. In May, 1957, construction began on the North Saluda Dam. Eighteen months later—on November 6, 1958, the dam was completed. It was put in service in early 1959, and the North Saluda Reservoir began to fill.

Engineering and other forecasts indicated that two years would be necessary for the filling process. It was full in just ten months.

It covers 1100 acres, it is 150 feet deep, and it holds 24.8 billion gallons of water. There are three and one-half million yards of earth in the dam.

The challenge to Mr. Hawkins was not so much the actual construction process as it was the multitude of problems which confronted his organization when the decision to go ahead with the reservoir was made.

The commission called in a nineman real estate committee. It was necessary to purchase 30 square miles of watershed on which were located one hotel, two motels, six summer cottage subdivisions and an 18-hole golf course. The eventual cost of the land was three and one-quarter million dollars.

Mr. Hawkins had selected the dam site in 1925, when most of the land was unoccupied. Determined that this was still the best possible site, he proceeded to handle the problem. Hundreds of smaller buildings were moved. All cultivated land was returned to nature. Construction began. Total cost of the project: eleven million dollars.

How important was the decision to go ahead with the North Saluda development? That can best be answered by pointing out that the Greenville water system—which stretches about 45 miles north and south, and about 15 miles east and west—serves a metropolitan Greenville population of nearly 200,000 people.

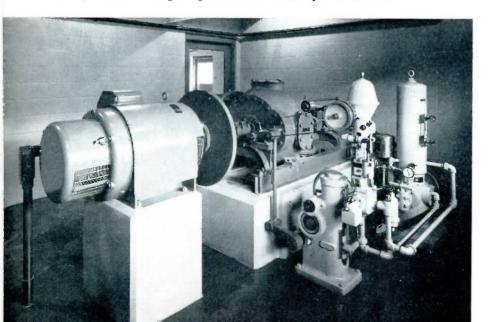
The city and immediate area host varied but essential industries. Perhaps best known for its textile factories, greater Greenville also claims machine shops, plastics manufacture, fur processing, and Greenville General Hospital, one of the largest medical centers in the South. Well-known actress Joanne Woodward received much of her award-winning experience in the Greenville Little Theater. Joel Poinsett, one of the city's founding fathers, introduced the beautiful poinsettia to this country.

Since an adequate water supply plays a significant role in modern industrial development, Greenville is certain to obtain its fair share of industry. This is no accident, but rather a dream not only dreamed but turned into reality by such men as Commissioners H. Cleveland Beattie, J. Ed Hart and E. George McCoin, by Mayor David G. Trax-

General Manager John Hawkins stands on the edge of the 1,100-acre North Saluda Reservoir, which holds 24.8 billion gallons of water for the Greenville system.



This modern, neat North Saluda Treatment Plant (above) is completely powered by this generating plant (below) which is located inside the building. The operation is completely free from outside power sources.





ler, and by Councilman Gus Smith, the five men who currently form the Water Works Commission.

As of July of this year, book value of the Greenville water system stood at \$24 million. Revenue for the year ended July 31 topped two million dollars, over a million of which goes into the fund for new construction.

Anticipating steady residential and industrial growth beyond its present 44,000 services and 38 mgd pumpage, the Greenville water system, by 1990, will still be using only one-half its capacity.

It takes a team to produce a win, but every team, whether in athletics or business, must be blessed with an enthusiastic, determined and capable coach. Greenville, South Carolina has such a man. His name is John Hawkins.



John Hawkins (right), General Manager since 1934, discusses some plans with W. W. Adkins, Assistant General Manager at Greenville.



About 3.5 million yards of earth were necessary to build this North Saluda dam which was completed in 1959. Using the anticipated normal growth in the community,

the Greenville water system, by 1990, will be able to supply the expected needs and still be using only half of its capacity.

.... Around the Water Industry

What Is Water Consumption? Answers Vary

Scare stories to the effect that the nation, with its rapidly rising population, is headed for a critical water shortage may spring from arbitrary definitions of water consumption, according to the Chamber of Commerce of the United States.

This is indicated by testimony presented at hearings on water problems by a House Government Operations subcommittee.

Excerpts from recent testimony show strikingly how different definitions of what constitutes water consumption affect forecasts concerning a future water shortage. Below are examples.

Assistant Secretary of Health, Education and Welfare James M. Quigley said:

"Our present use of water is 350 billion gallons a day, and estimates (are) that our use in 1980 will be near 600 billion gallons and our use in the year 2000 will be about triple the present figure. This will be considerably more than we can expect on a dependable year-round basis!"

However, Albert von Frank of the Manufacturing Chemists Association had a different approach to the question. He said:

"As for the future, estimates indicate the nation can develop a water supply for normal use of 650 billion gallons daily. Current consumption for all purposes is 80 billion gallons daily, and is expected to be more than 150 billion gallons daily by the year 2000.

"Irrigation accounts for most of the water actually consumed, by which is meant removal from availability for reuse in the same local area. Industrial use is in the nature of temporary withdrawal, with all but a small fraction returned to surface waters."

Dr. Richard D. Hoak of the Mellon Institute of Pittsburgh commented:

"During the past several years a number of popular articles have been published that have alarmed the public by claiming that this nation is running out of water, and that there will not be enough to satisfy essential needs within 40 years.

"These writers improperly assume that all water withdrawn from rivers, lakes and wells is consumed. The implication is that such water, for practical purposes, is gone forever. This is very far from the truth. The fact is that nearly all the water withdrawn for industrial and municipal purposes is discharged for reuse downstream."

President William H. Chrisholm of the Oxford Paper Co. said:

"It is important to note that the great bulk of industry's water withdrawal does not represent depletion of the water supply and therefore does not materially affect any local or seasonal shortages of water that may naturally exist.

"This is because industrial water is normally used but not consumed. Approximately 95 per cent of the total water intake of the paper industry is returned to the water supply.

Water Rates Rose 25% in Five Years

Like everything else these days. water also costs more money than it did five years ago. According to the statistics released recently the average rate charged by water utilities for their services rose an estimated 25 per cent from 1955 to 1960, compared with an increase of 17.5 per cent for the preceding five years. The rising rates are due to increased construction costs coupled with the need to expand water systems to accommodate rapidly expanding urban populations. In addition, many cities are forced to bring water from greater depths or distances, and the increasing problem of pollution requires more thorough and more expensive treatment methods.

Steam Drills Probe Ice for Water Supply

Steam drills are being used by U.S. Army engineers to solve water supply problems at the army's under-the-polar-icecap city in Greenland. Camp Century's water supply is obtained by a unique steam drill that melts its way into the frozen snow to create reservoirs of water that measure as much as 50 feet in diameter. The result is a supply that is one of the purest in the world. Sewage is pumped into a 350-foot hole in the ice where it slowly melts its way downward and freezes, thus creating a growing "pillar" of sewage.

U. S. Children Drink Little Tap Water

The average U.S. child drinks less than a pint of water a day, which represents less than onefourth of his total liquid intake. Children get most of their liquid requirements in the form of juices, milk and soft drinks. The average water intake remains constant with increasing age, but the intake of juice, milk, soda pop, and other beverages increases.

AWWA Sponsors Seminars On Utility Management

Through its Advancement and Public Information Committee, AWWA is sponsoring two five-day pilot seminars in water utility management this fall. The first is scheduled at Omaha, Neb. in October and the second will be at Harrisburgh, Pa. in November.

It is expected that the pilot seminars, if successful, will be the first in a series of regional AWWAsponsored management seminars.

Harvey A. Sartorius, a specialist in management training and executive development, will conduct the seminars for the association. For the past three years, he has successfully conducted similar seminars under the auspices of the California Water Utility Association and AWWA's California Section.

From their experience as participants in the California seminars, members of the AWWA Advancement and Public Information Committee are, according to committee chairman Robert S. Millar, enthusiastic in their endorsement of the seminar format and content.

Local arrangements for the seminars are being handled by the respective AWWA section Advancement committee chairmen: Joseph Laferla in Nebraska and Thomas V. O'Leary in Pennsylvania. Gary, Ind.

Model H₂Omes

The importance of a plentiful water supply to family health, comfort and pleasure is being demonstrated in Gary, Indiana, by a long-range program sponsored by the Gary-Hobart Water Corporation, the Northern Indiana Plumbing and Piping Contractors and the local plumbers union.

As the initial result of the program, nearly 10,000 persons have inspected three model homes which meet the requirements specified by the Plumbing-Heating-Cooling Information Bureau to be eligible for the designation: WATERight HOMES. This is the first time a water utility has joined in sponsor-



Sponsors fill a swimming pool in ceremonies officially opening a model WATERight home in Gary, Ind., suburb. The home is designed to demonstrate how plentiful water supply contributes to family health, comfort and pleasure. Manning the hose are (left to right) Dr. J. J. Forszt, Lake County Commissioner; Fred Huminik, President of the Northern Indiana Plumbing and Piping Contractors Association, and Harry Harman, vice president of the Gary-Hobart Water Corp. One of the methods of promoting the homes is the use of Gary-Hobart Water Corp. trucks (below), which carry signs telling about WATERight Homes.



ing actual residences identified as "WATERight HOMES" and erected for eventual sale in a housing development.

The program is in contrast to the publicity efforts of many water utilities who must concentrate on inducing their customers to curtail water use, Leo Louis, Gary-Hobart president, points out.

"Our company and our advertising and public relations counsel, Bozell & Jacobs, are committed to the policy of selling the use of water just as any manufacturer of a consumer product seeks to sell what he makes," Mr. Louis explains.

"We feel that if we constantly point out the advantages of a plentiful water supply and encourage our customers to make full use of it, we are creating the most favorable public attitude toward our utility possible," he said.

The model homes are completely equipped with facilities designed to provide the maximum benefits through the use of water including full-flow water, an adequatelysized water heater, two full bathrooms, water and drain facilities in the laundry area, sprinkling system, outside drinking fountain and a sink in the garage. One of the homes even has a swimming pool! For the benefit of visitors waterusing facilities are marked with labels displaying the "WATERight HOME" trade mark.

Offers to buy both homes were received before the official opening but builders have delayed signing contracts in order to take full advantage of the crowds that make daily visits.

To publicize the official opening of the homes, a 16-page special supplement was published by the Gary POST-TRIBUNE containing advertisements from the sponsoring organizations, builders, and building material suppliers. Editorial material and illustrations described the advantages of the home. Gary-Hobart is also devoting a large number of its regular radio commercials to calling attention to the homes. Utility trucks and trucks of the plumbing contractors display appropriate signs, and a number of newspaper stories have appeared publicizing the event.



Mueller Co.'s recent acquisition.

El Monte, Calif.

Adams Pipe Repair Products Inc. Purchased

Mueller Co. has purchased Adams Pipe Repair Products, Inc. of South El Monte, Calif., and its affiliated companies, according to a recent announcement by Mueller Co. President John F. Thurston, and P. N. Adams, president of the Adams firm.

The Adams firm, founded in 1946, provides a complete line of pipe repair clamps and compression fittings for the waterworks, gas, plumbing and petroleum industries.

Mr. Adams will remain in his present position and no other personnel changes are anticipated.

"The Adams firm," said Mr. Thurston, "provides a fine line of repair and leak clamps, and compression fittings, which will complement Mueller Co.'s present product lines. We anticipate the continued success of the Adams firm under its present capable management."

The South El Monte plant is about 20 miles from Mueller Co.'s new plant near Brea which is now in operation.

The Adams purchase is Mueller Co.'s second acquisition during the past few months. Mueller recently added a second plant to its Canadian operation with the acquisition of St. Jerome Industries, Limited, of St. Jerome, Quebec.

Since World War II, St. Jerome Industries has been one of the major suppliers of cast iron municipal castings to the Province of Quebec and Eastern Canada. Mueller, Limited plans to use the St. Jerome facilities within the Quebec market to integrate sales and service of products from both plants.



Richard Kahl SEPTEMBER • 1963

Richard F. Kahl Appointed To Pennsylvania Sales Position

Richard F. Kahl has been appointed Mueller Co. Sales Representative for the western half of Pennsylvania. The appointment was effective Sept. 1.

Mr. Kahl is a graduate of Eureka College, Eureka, Ill., with a Bachelor of Arts degree in Business Administration. Since joining Mueller Co. more than a year ago, he has been in the company's sales training program where he has gained a thorough knowledge of products for the water and gas industries.

He served with the United States Air Force and is presently with the Air National Guard on a reserve status.

Mr. and Mrs. Kahl will make their home at 124 Oakville Drive, Apartment T-A, Pittsburgh, Pennsylvania.

Recording Our Thoughts-

66 JOHNNY, you've spent 20 minutes just washing your hands. They must be clean now. Hurry up and dry them. We're ready for dinner."

That paragraph leads off a recent news release from the State University of Iowa at Iowa City. The release adds: "It's not at all unusual for children to dawdle over any activity which involves the use of water" These are the words sent to the nation's news media by teachers in the preschool laboratories at the State University of Iowa Child Welfare Research Station.

For months, now, water works men throughout America have been seeking ways and means to sell more of their product. Now comes a boost from an unexpected quarter.

The release continues: "Many children love playing with water, as such play satisfies varied needs." These are the words of Professor Ruth Updegraff, director of the preschool labs.

"The timid, uncertain child can get a feeling of mastery and achievement by blowing soap bubbles or by simply filling pans with water or washing a table top. Inhibited children often become stimulated and gay when playing with water. So water play helps such children to mingle with others and to feel more spontaneous in playing with other materials, such as paint and toys," Dr. Updegraff says.

"Water play," she says further, "provides an excellent outlet for aggressive impulses, letting the child release feelings of resentment, hostility or defiance as he spills and splashes. Water offers little resistance, so the child can do what he likes with it.

"Water activities can be relaxing for older children, too On rainy days, when children tend to feel restless and unruly, the monotonous nature of most water play and the experience of handling soft and yielding materials will help quiet most youngsters."

Dr. Updegraff mentions the simplicity of providing water play for the children, pointing out that sponges, washcloths, pots, pans, floating toys and pitchers are standard items in most households.

"The big stumbling block to providing frequent chances for water play for your children," she says, "will be your own reluctance to tolerate a messy kitchen or bathroom and wet clothes. You can overcome this by using a play area as nearly 'mess-proof' as possible, and by providing simple ponchos or coverall aprons cut out of oilcloth or plastic to protect clothing."

The release sums it all up by adding: "At a few cents' cost for the water, you can give your child more stimulating and satisfying experiences than you could by providing the most costly toys."

This writer would like to add a few lines of summation, in behalf of parents. We have a couple of pre-

WATER REPLACES COSTLY TOYS?

The Gift For The Child Who Has Everything: His Own Water Supply System

school-age children at home. As parents of the socalled "modern generation," we are, of course, quite eager to provide our offspring with stimulating and satisfying experiences, short of spending fifty or more dollars on a single toy.

We have some oilcloth at home, which could be easily transformed into simple ponchos to protect clothing; but believe me, it would be used to protect our clothing, not the childrens' attire. We rather suspect that, much as most children like to play in water, the researchers for the above news release avoided delving into that boisterous but necessary period at the end of a busy child's day-that period called "bathtime."

By the time momma has broken up three bathtub brawls, spent thirty minutes just getting the wee ones into the tub to begin with, tried desperately to keep the five-year-old from drowning the three-year-old, and spent twenty minutes mopping up the mess-we suspect that it is momma who needs the stimulating and satisfying experience of water play-say, in Bermuda or Nassau.

Some of you readers are parents of small children. Let's hear your opinion!!!



MUELLER. METHODS for thin wall pipe service connections

proven methods that provide pressure tight, dependable connections

■ With these three proven Mueller products, dependable service connections to thin-walled mains can be made easily and dependably under pressure without interruption of service. A full range of sizes and styles of corporation stops, a complete selection of malleable iron or brass single or



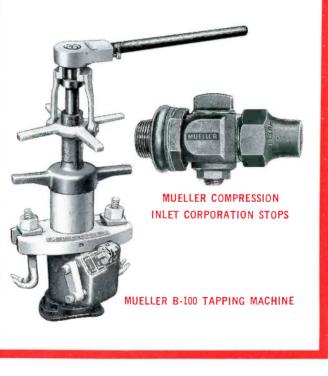
double strap service clamps provide the proper clamp and corporation stop for every application. The versatile E-4 machine permits connections to be made under pressure quickly and economically.



■ Fast, dependable service connections can be made on thin-walled pipe under pressure without interruption of service. ■ The special compression joint on the Mueller corporation stop provides a pressure-tight seal, while the short inlet threads assure a strong mechanical connection to the main.

■ The B-100, either hand or power operated, is designed for ease of operation and assures perfect alignment for watertight service connections.





For complete information on proven Mueller Service Connections for thin-walled pipe ... contact your Mueller Representative or write direct.





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

The Ludy of The Bloomington House is Mary Alice Dunlap

Bloomington, Indiana



A newcomer to the City of Bloomington, Ind., recently called the mayor's office to discuss a particular city service. After talking a few minutes with a soft feminine voice and receiving straight answers from this "sharp secretary", the taxpayer still insisted on talking to the mayor.

After questioning remarks and comments of disbelief the taxpayer realized that the mayor of Bloomington isn't a gentleman— "His Honor" is a lady. That female voice on the other end of the line belonged to Mayor Mary Alice Dunlap, chief city administrator, grandmother and homemaker.

Conversations about garbage can sprays, water supply, sewer systems, economic development, bond issues or urban renewal programs are not the normal topics of talk for a woman over mid-morning coffee or on the telephone, but for Mary Alice these are her favorite subjects, unless it happens to concern her granddaughter.

For the past 15 months this pert, graying lady of 49 has been running the city household. As chief administrator she has a budget to watch that would make any homemaker gasp (more than two million dollars annually) and a "family" of 32,000 citizens. Under her guidance and direction, about 175 city employees and department heads are responsible for the op-



Bloomington Mayor Mary Alice Dunlap

eration and services of the community.

Mayor Dunlap isn't the first woman in the country to hold the office of mayor, but it is believed that Bloomington is one of the largest cities to have a female as its top administrator. City government work is not new for Mayor Dunlap. Her first job was in the office of the water department in 1945. From 1948 to 1952 she was office manager for that department. For the next four years she managed the office of a woman's store in Bloomington.

SEPTEMBER • 1963

13



AT THE OFFICE Mayor Dunlap presides at the regular meeting of depart-

ment heads. Here she talks with Fire Chief Bernard Glover (right) and

tice office she lost by 182 votes, but she got the job a few weeks later anyway when the newly-elected city clerk-treasurer resigned and Mary Alice was appointed to fill the position. Four years later, 1960, she led her ticket and planned to be clerk-treasurer for the next four years.

In her first attempt at an elec-

About 15 months ago, however, the former mayor, Thomas L. Lemon, resigned to accept the post of deputy commissioner of the Cincinnati District of the United States Post Office and Mrs. Dunlap was appointed to fill the term. Mr. Lemon has recently resigned his postal position and announced his candidacy for governor of Indiana.

Mrs. Dunlap's political ambitions do not carry her outside her native Bloomington area, which some of her ancestors helped pioneer. Mayor Dunlap was born and brought up on a farm near Bloomington. She attended Bloomington High School and married Chester Dunlap, a high school classmate.

During the first years of marriage the Dunlaps lived in Houston, Texas, but they returned to Bloomington in 1942. Mr. Dunlap has an appliance repair business in Bloomington, but he says he feels a strong obligation to being the mayor's spouse. He says he has lost his identity as Chet Dunlap the businessman, but is now known as the "husband of the mayor."

Mary Alice, as she is known to most of her constituents, says that this good-natured attitude of her husband has made her public life possible. "Without Chet's help and understanding it would be impossible to do the job. He has his own interests and his business but we Water Superintendent Lester Thornton. still find time to be with each oth- with only a si

er," she said.

"I try to lose my title and office at home, but that isn't possible to do. I still do my cooking and housework, but my favorite form of relaxation is digging in my flower gardens," she added, pointing to the beds of flowers which surround their modest bungalow near the campus of the University of Indiana.

A few pieces of family antiques blend well with the Early American furnishings, but the modern telephone is the one single instrument that keeps Her Honor ever aware of her job.

"When you accept this job you expect to get phone calls from taxpayers who have problems, complaints, suggestions or, once in a while, compliments to pass along. Just this morning I didn't get to finish my breakfast because I had a number of phone calls from people regarding some insect spray the city is putting on garbage cans. In the middle of the night it might be a call about a barking dog," she said.

When asked to describe a routine day, the Mayor first replied

with only a smile. "We have no routine in this office; this is what makes this job so wonderful." Thumbing through a neat date book, she picked out one day that was still two or three weeks away. The morning was devoted to discussions with a consultant from another city. At noon she had scheduled a luncheon with 30 businessmen who make up the local Redevelopment Commission, which directs an ambitious local urban renewal program. At 3 p.m. a meeting with the American Cancer Society was on tap, and at 7 p.m. there was a special meeting of the city council to review the budget for the coming year. Mayor Dunlap anticipated that her day would end about 11:30 p.m.

Sandwiched into this fast schedule will be calls from the press, correspondence, sessions with department heads which might involve a trip to a far end of the city where a street is being patched, or to a ditch in a subdivision where a new water main is being installed. Many evenings are spent at dinners and functions where she acts as official greeter or representative of the city. Oh yes, the housework and



AT HOME Her Honor holds 18-month-old grandaughter Cynthia, while her daughter Patty, and husband Chet, stand by, ready to assist.

cooking that goes with being a wife also is wedged into the schedule.

"I would be lost without my work. Now that my daughter is married and gone, my job is the big part of my life even though there are brief times when I would like to be able to go back to the less hectic life of a housewife," she said.

In spite of this heavy work load, Mayor Dunlap doesn't feel she is handicapped by her sex in operating in this "man's world" of city administration. "Many times I am the only woman at meetings but these are meetings of mayors and civic leaders—not men's groups. I am accepted by virtue of my office, not rejected because of my sex," she said.

While clerk-treasurer of Bloomington, Mrs. Dunlap was president of the Indiana Clerk and Treasurer League three times and a member of the advisory board of the International Institute of Municipal Clerks.

She is presently a member of the public health and welfare committee of the Indiana Municipal League.

Although Mayor Dunlap is in a position sometimes thought of as reserved for men, she has lost none of her maternal instincts and she is probably one of the proudest grandmothers in Bloomington.

The Dunlaps have a daughter, Patty, married to Kenneth Simpson, and living in Waukesha, Wisc., where he is a recreation director. The newest member of the family is granddaughter Cynthia Lynn, 18 months old.

This pride and interest in her personal family and home, however, are equaled by her desire to run one of the finest civic households in the country and to keep the Bloomington family content for many years to come.

About Bloomington, Ind.

Monroe and Lawrence Counties are the center of the Indiana limestone industry; 80 per cent of the dimension limestone quarried in the United States comes from these two counties. Bloomington is the home of the "Nation's Building Stone." Here, quarries and mills valued in the millions employ about 1,600 skilled workmen.

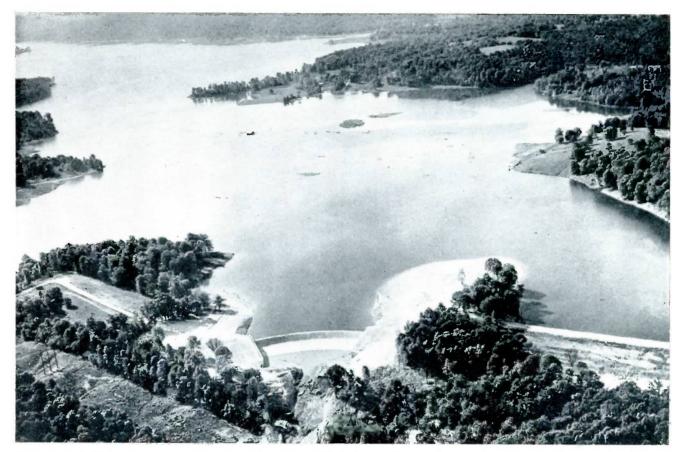
Five to six thousand persons are employed in the electronics industry. Another one thousand persons are employed by two companies which make home freezers and electrical distribution equipment.

The biggest single employer in Bloomington is the Indiana University. It has about 1,000 academic faculty and staff members and about 2,300 non-academic staffers. In addition, there are about 4,000 parttime workers from those working in the cafeteria to graduate assistants. In all there are about 7,300 persons employed at the school.

Bloomington first became a settlement about 1816, when President James Monroe selected the site for a seminary. One of the conditions imposed upon the territory of Indiana for statehood was that two townships of the state should be reserved for seminaries to provide education for the area. A few people had settled on the site, probably because it was on a trading route, spring water was available in abundance, and drainage was good. In 1818 the settlement was surveyed and lots were sold, creating a town that was made the county seat of newly established Monroe County.

In 1820, the state elected Bloomington for the site of Indiana University, thus meeting one of the obligations for admission to statehood. At that time, the site was near the center of population of the state. In 1827, the citizens of Bloomington voted to incorporate as a town, but records begin only after reincorporation in 1845. Bloomington became a city in 1876.

In 1853 the railroad came through Bloomington, and this contributed greatly to the town's expansion. In 1878 the population was 2,400 people. Today, the city has grown to about 32,000, plus about 16,000 university students. About one-third of the nation's population is within 450 miles of Bloomington. Indianapolis is 50 miles away and Chicago and St. Louis are about 220 miles away.



Bloomington's Lake Lemon provides the city with a $5\frac{1}{2}$ -billion gallon water supply. Prior to the construction of the lake Bloomington was having serious water supply problems during peak periods.

From Shortage To Surplus

Increased supplies the past years and even greater capacities during the coming years mark the development of the Bloomington, Ind. water system.

Bloomington has owned its own water supply system since 1939. By 1952 Griffey Lake Reservoir, north of the city, with a capacity of three-quarters of a billion gallons, proved barely sufficient to meet normal domestic and industrial demands. In 1953 Lake Lemon Reservoir, with a capacity of about $5\frac{1}{2}$ billion gallons, was completed in Bean Blossom Creek Valley, 10 miles northeast of the city. It covers about 1,600 acres of land and is fed by 75 square miles of watershed.

Water from Griffey Lake is fed into the Bloomington Water Treat-

ment Plant by gravity, while Bean Blossom Creek water flows from Lake Lemon down Bean Blossom Creek to a pumping station where it is pumped to the plant. The original Griffey Lake plant has a filtration capacity of three million gallons daily. To meet the increased demands for water, a large addition was begun in 1954 and completed in 1956.

With no restrictions on its use, water consumption has risen to about 130 gallons per day per capita, necessitating the treatment of five million gallons daily at the combined plants. Seven and a half million gallons daily can be handled without overloading, and 11 mgd are possible in an emergency.

The Bloomington Water Treatment Plant is believed to be adequate to meet anticipated population growth until 1977.

To meet the future needs of the area, a reservoir is under construction that will ultimately contain Indiana's largest lake. The Monroe Reservoir, under construction about 10 miles southeast of Bloomington, will be a multi-purpose reservoir with the federal government providing 45.9 per cent of the funds to cover the cost of flood control on Salt Creek, White and Wabash Rivers; the State of Indiana provides 54.1 per cent covering costs of water storage for low-flow release. Other uses, such as public water supply and recreation are planned.

This project will impound over 180,000 acre-feet by 1964, with capacity for an additional 258,000



Lester Thornton, Water Superintendent, explains to Mayor Dunlap how the Mueller B-100 drilling and tapping machine (right) inserts a Mueller corporation stop into a main under pressure.

acre-feet for flood control storage. About 160,000 acre-feet are reserved for low-flow regulation uses downstream from the dam. Its 85 miles of shoreline are expected to add many new areas for recreational development when it is completed in 1965.

The Bloomington Water Department is under the direction of Superintendent Lester Thornton. Mr. Thornton, who directs the 40-man department, started with the water department in 1948 as an operator and helper. Prior to this he worked as a plumber. He was named water superintendent in 1950, but he was out of office from 1952 to 1956 during a change in administrations. He returned to head the water department in 1956.



The original Griffey Lake Treatment Plant (above) has a filtration capacity of three million gallons daily. To meet increased demands for water, a large addition was started in 1954, providing total facilities which are capable of treating $7\frac{1}{2}$ million gallons daily.

ELECT MUELLER®

Underwriter Approved Fire Protection Products

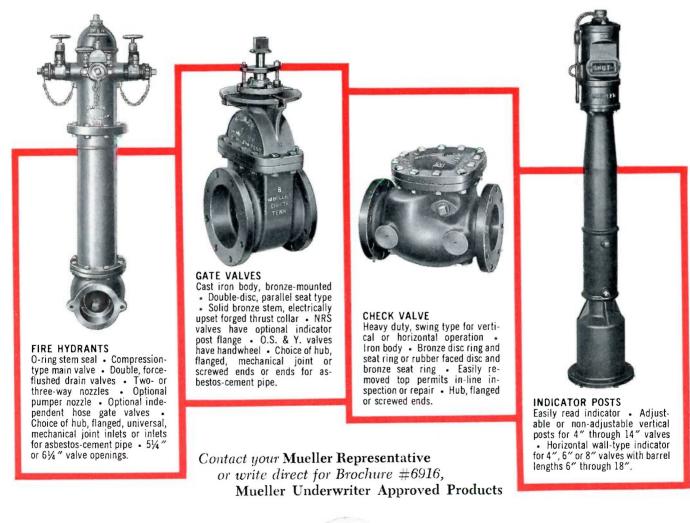
... there is no equal!

• Over a century of engineering and manufacturing experience behind each Mueller product assures dependable, long-lived performance.

Designed primarily for use in industrial, commercial, institutional and private fire protection systems, each product meets or exceeds the rigid standards of

the Underwriters Laboratories of Chicago and the Associated Factory Mutual Laboratories of Boston.

All the benefits of standardization and dependable service can be gained when you select Mueller . . . there is no equal for quality, dependability, and longlived performance.







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

Strictly Off the Record

Mabel: "My father is a model man. He doesn't drink. He does not smoke. He never runs around with other women. He doesn't even go to shows. In fact, he has no vices. And he's going to celebrate his 80th birthday tomorrow."

Bill: "How?"

* * *

French guide (showing places of interest)—"It was in this room that General DeGaulle received his first commission."

American salesman—"How much was it?"

A tourist approached a New York native on Broadway and asked, "Could you tell me how to get to Carnegie Hall?"

"Practice!" answered the New Yorker.

* *

The four-year-old came home crying every night because one child kept picking at him. After this went on for some time, the father decided to do something about it.

He took his son aside, showed him how to make a fist, and told him the next time the student bothered him to swing hard.

The next day the four-year-old boy came running into the house jubilantly.

"Daddy!" he yelled happily. "I did it. I did it. I hit her!"

Modern girls adore spinning wheels—four of them, and a spare!

The hunting party was hopelessly lost and the hunters turned angrily to their guide.

"I thought you said you were the best guide in Maine," one of them snapped.

"I am," protested the guide, "but I think we're in Canada now."

What do they call it when you're stung by a bee and bitten by a mosquito—both at the same time? Sting along with itch.

SEPTEMBER • 1963

Nowadays the car is just a status symbol—all it really does is to enable you to let it stand in a traffic jam while empty trains go by.

Discovering at the last minute that he had forgotten to invite the elderly parishioner to the garden party, the minister hastily telephoned her.

"It's too late," she curtly answered. "I've already prayed for rain."

A teacher asked her class to name some of the benefits of the automotive age.

There was a silence and then one boy spoke up: "Well, it stopped horse stealing."

* * *

A rooming house landlord received a phone call from the mother of a college freshman. "Please keep an eye on Albert for me," begged the mother. "See that he gets plenty of sleep and doesn't drink or run around too much."

"You see," she added in an apprehensive tone, "This is the first time he's been away from home except for two years in the Marines."

* *

*

Near the end of the question and answer period of an oil company's annual stockholders' meeting, one of the ladies present raised her hand. "Mr. Chairman," she ventured timidly, "one thing has always bothered me ever since I bought stock in this company. When you build a new gas station on a street corner, how do you know you'll find oil there?"

Los Angeles is represented by two teams—the Dodgers and the Angels. And with the traffic out there, you're either one or the other.

A woman traveling by train was talking with a man in the next seat. She told him she had spent some time with her married daughter in San Jose, Calif.

"You pronounced that wrong," the man said. "In California it is pronounced San Hosay. All the J's are pronounced as H's. When were you there?"

"In Hune and Huly," the woman replied.



"Ah, Hassim! The Sultan will love his wedding cake!"

MUELLER CO., DECATUR, ILLINOIS **RETURN REQUESTED**



IF YOU HAVE AN INTEREST IN PUBLIC WATER SUPPLY YOU HAVE AN INTEREST IN

Says John G. Copley, President American Water Works Association

"And AWWA will be as strong an exponent of your needs and interests as

you make it by your support and participation! "To do its job in representing the industry, as well as to do its job in giving service to the industry, the Association needs to expand its membership in breadth as well as in depth. To provide for the broader base, it has just expanded its classifications of membership. To provide for the deeper base it has designated October 1963 as AWWA Membership Month.

"As an individual, you can join AWWA as an Active member. "As an organization, you can join AWWA as a Utility, Consultant, Associate,

Manufacturers Agent, Contractor, or Technical Ser-

vice member. "The industry and the Association are counting on your support and you can count on A WWA's through becoming a member." For full facts, please clip and mail this coupon to:

Raymond J. Faust, Executive Secretary, AWWA

2 Park Avenue, New York 16, N.Y.



	Dear Mr. Faust:
	Send me booklet "What AWWA Can Do for You"
	Have your local section chairman contact me;
NAME	
TITLE	
ADDRESS	· · · · · · · · · · · · · · · · · · ·
BUSINESS	