

MUELLER
Record
APRIL-MAY • 1958



Big Days In Big "D" See Page 21

Mueller Record

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SALES OFFICES

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Recording Our Thoughts

Since this issue is devoted to both the waterworks and gas industries, we'll attempt a little news for each one in this column.

To lead off, we want to report how successful the AWWA Convention in Dallas turned out to be. One of the largest groups in AWWA history had a busy week of technical sessions, exhibit-visiting, and all kinds of entertainment. High-points socially were: the BIG D (Dallas, that is!) Buffet April 20 in the Baker Hotel; the awards and President's Reception April 21 (also at the Baker); the annual AWWA golf tournament, held at the Preston Hollow course, site of the \$100,000 Texas National Golf Tournament; "Potpourri," a gala variety show held in the Lyceum Theater; Dallas Night, a night when conventioners took in the sights and sounds of Big D; and the finale — the annual dinner and dance, held April 24 in the Grand Ballroom of the Statler-Hilton, Dallas' newest hotel.

There were many "firsts" at this convention. The filmed story of

water supply was premiered. Sessions were devoted to the new public relations activities of the AWWA. Manufacturers unveiled dynamic new products to better serve water departments and their customers.

All-in-all, it was certainly a progressive week, and one which made everyone look forward to another great convention next year in San Francisco.

One of our Sales Representatives, F. R. SeEVERS, sent us an interesting letter to tell us about a surprise for Mr. Warren Terry, Vice-President and General Manager of the Home Light and Power Company of Greeley, Colorado. Mr. Terry was called to the Greeley Gas Company offices by Mr. Paul Good, President of the latter firm, on the pretext of an important meeting. The "meeting" was a surprise party in honor of Mr. Terry's birthday, and he was presented with an attractive Blue Flame necktie. May we add our belated congratulations, Mr. Terry.

As of this writing, more than one thousand delegates have registered for AGA's 1958 convention, to be held October 13-15 in Atlantic City. All suites in two hotels have been booked, and the other hotels are filling rapidly. Attendance is expected to exceed 5,000, according to A. M. Beebe, chairman of the General Convention Planning Committee.

Four Atlantic City Hotels will serve as headquarters for AGA sections during the annual convention. The Residential Gas Section and the Industrial and Commercial Gas Section will maintain headquarters at the Traymore. Others are: Accounting Section, Sheraton-Ritz Carlton; General Management Section, Dennis; Operating Section, Claridge.

Better make those reservations early!

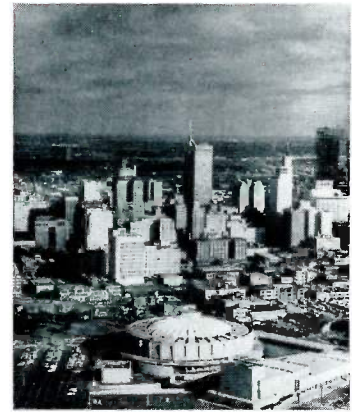
The League of Women Voters, a national organization with more than 125,000 members, has been engaged in a study of water resources and water supply problems for almost two years. Its local chapters have been actively cooperating in the study. This is a case where a public information program about water supply is already effectively at work. The AWWA has urged all of its members to co-operate in the program.

The American Gas Association's second annual competition to give recognition to outstanding public relations achievement in the gas industry has been announced by T. H. Evans, chairman of the AGA General Public Information Planning Committee. Last year's competition, with 33 entries, was won by Southern California Gas Company, Los Angeles, for its "Facts About Natural Gas" program. The trophy and an engraved certificate of achievement for 1958 will be presented at the AGA convention in Atlantic City in October.

Our sincere thanks to Mr. Bill Kuhs of Illinois Power Company, Decatur, Ill., for his complete cooperation on the story which appears elsewhere in this issue.

Student: "Is waterworks all one word, or do you spell it with a hydrant in the middle?"

Our Cover this month shows "Willing Water" invading downtown Dallas for the annual American Water Works Association Convention. A photo feature on the convention appears in this issue. In the foreground of the cover photo is the beautiful new auditorium, where nearly one hundred manufacturers displayed products for the waterworks industry.



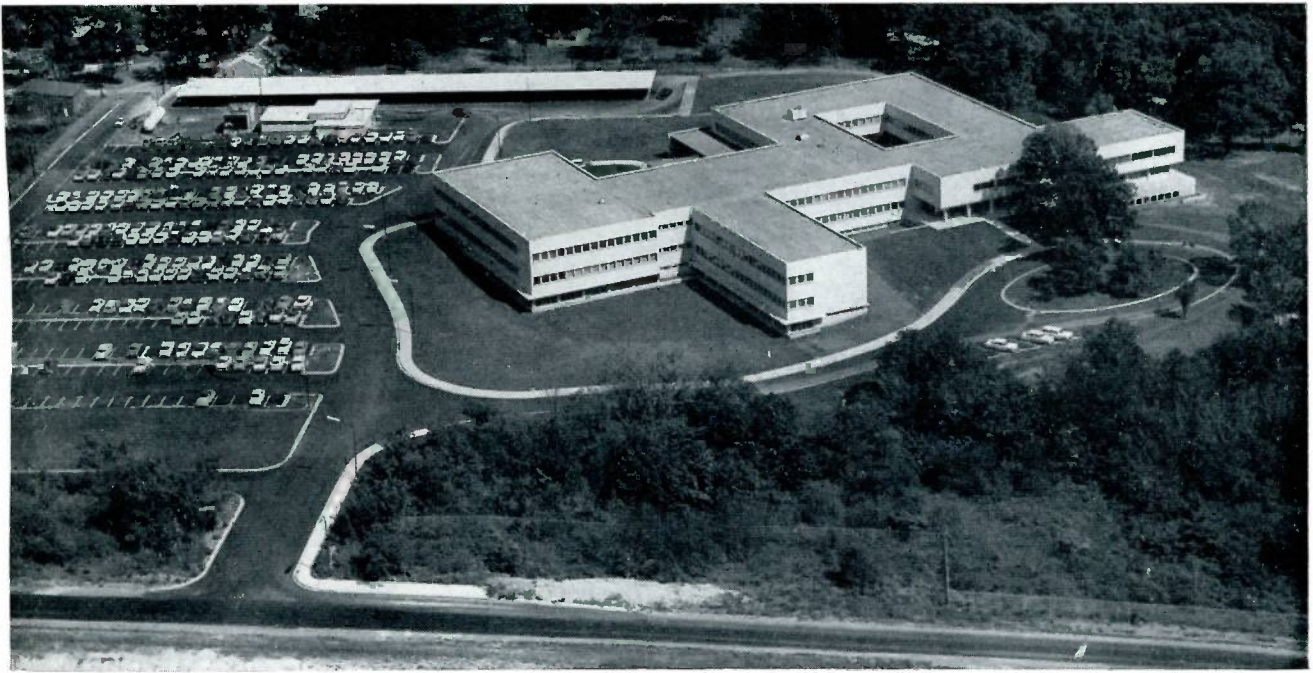
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Preview

The June issue of the MUELLER RECORD brings you an interesting feature on the Board of Water Supply of Utica, New York. We'll also bring you a report on what is being done to "de-salt" sea water. This latter will be one of a series of reports on progress in salt water distillation. Although there is no serious national water shortage, many areas of the country are periodically faced with disastrous dry spells. Success in distillation experiments could mean the virtual end to such problems. Don't miss this interesting article in the June issue!





This aerial view shows the extent of Illinois Power's recent headquarters expansion. The building is ultra-modern throughout. All offices have outside windows, and the

attractive cafeteria faces a court-yard filled with flowers and evergreens.

Decatur, Illinois

Illinois Power Company Records Rapid Growth

Illinois Utility First Organized In 1923

At the left is the front entrance of Illinois Power Company's beautiful new headquarters building located in Decatur, Illinois.

ILLINOIS POWER COMPANY, with headquarters in Decatur, Illinois, was first organized as the Illinois Power and Light Corporation on May 25, 1923, when a number of smaller companies were consolidated. This company operated electric, gas and water systems as well as streetcar and interurban lines.

Until the late 1920's, when the automobile experienced its great popularity boom, the transportation activities of the company were the most profitable. As more and more uses for gas and electricity developed, however, changes were made to accommodate the increasing demands in these areas.

In 1937, the name of the company was changed to Illinois Iowa Power Company, indicating the ownership of certain out-of-state properties. Another name change

occurred in 1943 — Illinois Power Company. It is now a locally-managed, independent utility.

In the early days of Illinois Power, gas service was furnished from plants which manufactured the fuel. In 1931, the first natural gas pipeline was laid from Texas and Oklahoma through Illinois, and the company began to change to natural gas at that time.

Since that time, Illinois Power's growth has kept pace with progress registered in the entire industry. Natural gas is distributed in some sixty-five communities in the state, and the total number of gas customers exceeds 176,000. Two thousand, three hundred and forty-eight miles of gas mains stretch to these sixty-five communities to continue the excellence of service afforded by this utility. The approximate population of the area served is 680,000.



Illinois Power uses teletesting instruments in Decatur to measure the amount of gas purchased from four of their five pipeline suppliers. It has been praised as one of the most advanced systems of its kind in the country.

Of fairly recent vintage in the natural gas industry is the appearance of penalty clauses in the contracts signed by pipeline companies and the utilities to which they sell. These clauses govern the amount of gas delivered. The emergence of the rate-schedule penalty system in turn gave birth to a new use for electronic teletesting equipment — gas teletesting. Several months ago, the MUELLER RECORD carried a

story on the use of teletesting equipment in the distribution system of the Memphis Light, Gas & Water Division of Memphis, Tennessee.

Illinois Power put teletesting to work at the "point of purchase" — the metering stations where gas is delivered from the pipeline company to the utility. The first equipment was installed in 1950 in La Salle, Illinois. Today, thirty orifice meters in eighteen metering sta-

tions on four of the five pipeline suppliers are connected to this teletesting equipment. This electronic system employed by Illinois Power has been called one of the most advanced systems of its kind in the country.

To collect the necessary data, a flowmeter is attached at each point where gas enters the system from the pipeline companies which supply Illinois Power. These meters measure the flow of gas, automatically making adjustments for pressure and temperature variation. The data is then transmitted to a totalizer which combines the flow from each orifice meter in a particular station. The total is then retransmitted to the load control office at Decatur, where it is automatically received and recorded. Data from the several stations is received and recorded, and the total flow of gas from that pipeline is thus made instantly available.

Data is accumulated on teletesting equipment almost instantaneously. Each message originates on telephone circuits. From there, some are transferred to microwave, some are brought in over the company's carrier system, and some come all the way to Decatur by telephone circuits.

Since weather is an all-important factor in determining natural gas requirements, Illinois Power's slide-wire receivers are equipped with range-change switches to enable personnel at the metering stations to adjust their equipment when weather changes force pipeline companies to make adjustments.

Bad winters often bring with them the necessity of delivering more gas to customers than has been contracted for with the various pipelines. It is in this area that teletesting pays its own way. Illinois Power operates eighteen propane plants throughout its system. When it is necessary to supplement the supply of natural gas, one or more of these plants go into operation. Results are quickly registered on the teletesting receivers, so that gas supply supervisors know exactly when a plant goes into operation, as well as the extent of its operation. When sufficient gas has been produced, a telephone call stops plant operation. Correla-



The work of Illinois Power crews is never done, as the utility constantly expands to meet the needs of population and industrial growth in the area which it serves.

tests and repairs over 100,000 meters each year. The latest equipment is used in this consolidated gas and electric meter repair and testing headquarters. A rebate is made to customers if a meter shows more than four percent inaccuracy; meters are checked to within three-tenths of one percent accuracy. The shops also test safety equipment and protective clothing belonging to servicemen.

Illinois Power Company plans to spend an estimated \$99,000,000 for general construction during the next three years. Included in this figure are development of underground storage plans and improvements in its telemeter operations.

These improvements, and many others, along with the already efficient operation experienced by the company, promises to Illinois Power Company even greater successes in the future.

tion of natural gas deliveries and produced gas is easily made to avoid exceeding contracts with the pipeline companies.

According to the Chief Gas Engineer of Illinois Power Company: "Telemetering is a far cry from the native drums in the jungles of Darkest Africa or the Pony Express of the Old West, but all do the same type of work; that is, convey information. Before the telemeters were installed, load information was obtained by personal contact over the telephone or by telegraph — sending and receiving innumerable figures, then spending time to work out the meaning of the figures. Historical information is good to have, but effective gas load control today requires modern methods of assembling information quickly and accurately. Telemetering does this job."

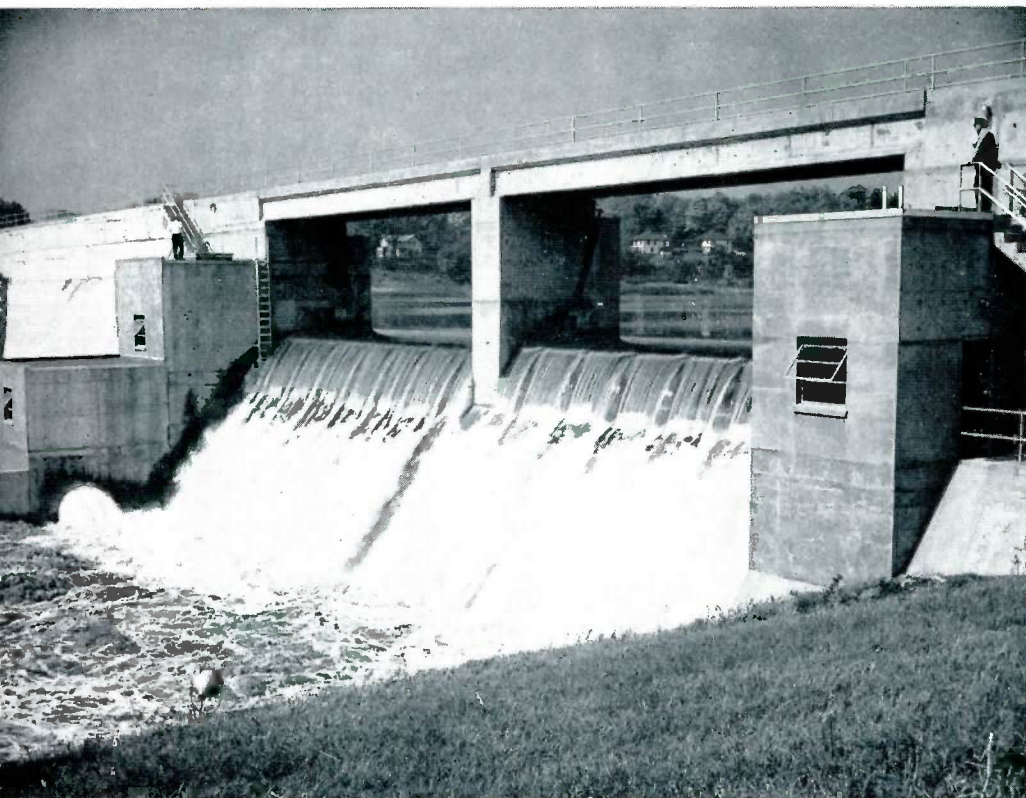
It is somewhat difficult to imagine the intricacy of such equipment. Automation seems to be the key to better gas system control at lower costs. The American gas industry has budgeted nearly two billion dollars for general construction this year, and this figure promises to be much higher by 1960.

In addition to its efficient telemetering system, Illinois Power is proud of its new meter building in Decatur. Here, the company

Mains stretch into the horizon in this dramatic night shot. Two thousand, three hundred and forty-eight miles of mains wind their way to sixty five communities in the state.



Hackensack Water Company Among Nation's Largest



This is a striking view of the dam at DeForest Lake Reservoir, impounding 5.6 billion gallons of water. The dam is 1,450 feet in length, and the crest of its concrete spillway is at elevation 85 feet above sea level.

IN 1869, the incorporation papers of the Hackensack Water Company, Weehawken, New Jersey, stated: "... supplying the Village of Hackensack and places adjacent thereto with water sufficient for extinguishing fires, culinary and other family uses, watering the streets, and such other purposes as may conduce to the health and comfort of the citizens."

From this modest beginning, the company has grown to become one of the largest private water supply utilities in the nation, serving more than 600,000 persons in 55 communities of Bergen and Hudson Counties.

Where does the water come from

to meet this ever-increasing demand? It comes from a watershed area of about 116 square miles, encircled by hills and drained by numerous streams and brooks which constitute the upper tributaries of the Hackensack River and the Passack Brook. In this watershed area are three storage reservoirs—DeForest Lake, which impounds 5.6 billion gallons; Oradell Lake, with a capacity of 3 billion gallons; and Woodcliff Lake, which has a capacity of 900 million gallons.

Long before the water flows into these impounding reservoirs, the first steps have been taken to insure a pure and uncontaminated

Serves 600,000

In 55 Communities

drinking water. The company owns and controls thousands of acres of marginal lands around the reservoirs and along the streams in order to protect the water supply from pollution. These protective land areas have been reforested with extensive evergreen plantings. Under the direction of the company's health officer, uniformed inspectors continually patrol the watershed area, collecting samples for analysis from more than ninety points on the various streams and investigating possible sources of contamination.

The State Health Departments of both New York and New Jersey have established rules and regulations regarding the sanitary protection of public water supplies; these departments, together with local boards of health, co-operate with the company in maintaining proper sanitary conditions in the huge watershed area.

Water from DeForest and Woodcliff Lakes flows into Oradell Lake, then along an intake channel, through a series of fine screens, and is pumped into the coagulation and sedimentation basin at the purification and pumping plant at Oradell. Chlorine and ammonia are the disinfectants used, and activated carbon successfully con-

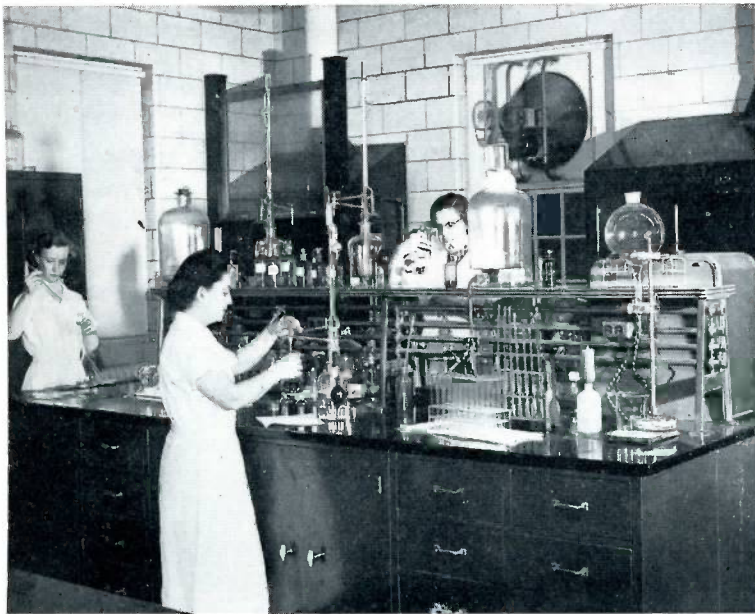
trols taste and odors. Color or turbidity present in the river water is erased by the use of aluminum sulphate.

The water then flows by gravity to the modern filter plant, capable of filtering 100 million gallons daily. Here it is further purified in filter beds, and then moves to filtered water storage basins. As the water flows from these storage basins to the high-lift pump suction wells, it is treated with lime for corrosion control, and the final application of chlorine is made to assure the bacteriological quality of the supply before delivery to the distribution system.

Every detail of operation, from the sanitary control of the watershed area through the purification and pumping processes to delivery of water to its ultimate use, is under the watchful eye of expert chemists. The laboratories at the



Above, a view of the main storage yard of the Hackensack Water Company offers convincing proof that the company's territory is ever-expanding.

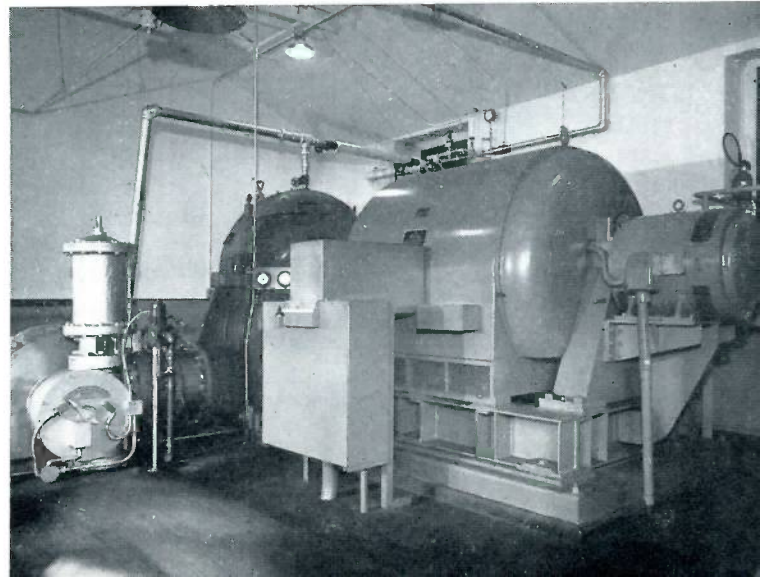


Left, the Chemical and Bacteriological Laboratory at the Oradell Purification Plant, Oradell, New Jersey, examines approximately ten thousand samples yearly.

Below, the 30 million gallon, electrically-driven pumping unit at the main pumping station in Oradell. This station pumps water through approximately 1,400 miles of mains.

purification plant, equipped with the most modern apparatus for water testing, examine approximately ten thousand samples yearly, and perform some seventy thousand separate chemical, bacteriological and microscopic analyses. All of this work is accomplished in strict accordance with regulations established by the State Health Department of New Jersey.

Continuous and uninterrupted service is essential. At the pump-





These are the new five million gallon capacity filters, located at the Oradell Purification Plant. This modern plant is capable of filtering 100 million gallons daily.

ing station in Oradell, steam and electric-driven pumping units, with a combined capacity of 175 million gallons daily, are used to pump the water through approximately 1,400 miles of mains.

At points remote from the pumping station, a number of reservoirs and elevated tanks have been installed for storage of purified water on the distribution system. This additional storage, with a combined capacity of 124 million gallons, materially aids in meeting the daily distribution system demands, as well as providing a reserve for fire protection and heavy peak demands. Reservoirs are situated in Weehawken, Fairview, Alpine, RiverVale, Ridgfield, and Woodcliff Lake. Elevated tanks are located in Carlstadt, Alpine, and Englewood Cliffs.

The largest reservoir, impounding 5.6 billion gallons, is DeForest Lake Reservoir. It is located about three-quarters of a mile below the junction of the east and west branches of the Hackensack River. It is formed by a dam approximately 1,450 feet in length, constructed of earth embankment. The crest of its concrete spillway is at elevation 85 feet above sea level. The dam rises about forty feet above the floor of the river valley, so that its top is at elevation 100 feet above sea level, or fifteen feet above the flow line.

A broad, flat valley has been flooded to form a lake which is about 4.5 miles long and from one-quarter to one-half mile wide. The flooded area covers more than 1,000 acres. About 1,600 acres of land are required for the reservoir, including a protective strip. The

yield of DeForest Lake Reservoir is approximately twenty million gallons a day. The area is also available for boating, fishing and controlled recreational use.

An important unit in the company's operations is the Central Service Bureau, located at the main office in Weehawken. Connected by direct telephone lines and radio to all offices, plants and service trucks of the company, the Bureau operates twenty-four hours a day, every day of the year, as an un-failingly responsive agency of control, which through its elaborate network of communications, links both the public and the management to all the forces of water supply.

The residential and industrial expansion of the territory served by the Hackensack Water Company cannot proceed without an adequate water supply. By careful planning, utilization of sound engineering and scientific principles, and adoption of modern processing methods, the company will continue to meet the ever-increasing demand for a potable and palatable water delivered in sufficient quantity at adequate pressure to satisfy its customers.

A Hackensack Water Company crew works on a transmission main installation project to serve the expanding territory in northern New Jersey.



STRICTLY

Off the Record

A man entered a Texas saloon with a piece of paper in his hand. In reply to a question, he said, "It's a list of all the men I can whip."

"Is my name on there?" demanded a broad-shouldered ranchman menacingly.

"Yes."

"Well, you can't whip me!"

"Are you sure about that?"

"I right sure am," he replied as he rolled up his sleeve.

"Very well," replied the other. "I'll take your name off the list!"

Did you hear about the couple who had to leave a lively party because the wife was so tired she could hardly keep her mouth open?

Small girl (as golfer in sand trap pauses for breath): "He stopped beating it, Daddy. I think it must be dead."



"If I can hold off for five more minutes, it will be two years since I stopped smoking!"

If hard work is the key to success, most people would rather pick the lock.

"I'm not wealthy and I don't have a yacht and a convertible like Jerome Greene," apologized the suitor, "but darling, I love you."

"And I love you, too," replied the girl, "but tell me more about Jerome."

A terribly jealous woman used to subject her poor husband to a regular inspection every evening. The slightest hair on his coat would lead to frightful scenes.

One night, finding nothing at all, she burst into tears and wept: "Even bald women, now!"

On a crowded elevator in Washington, a friend asked a congressman how the previous year had been for him.

"Best year I ever had," was the reply. Then he spotted a commissioner of internal revenue and added: "I mean spiritually, not materially."

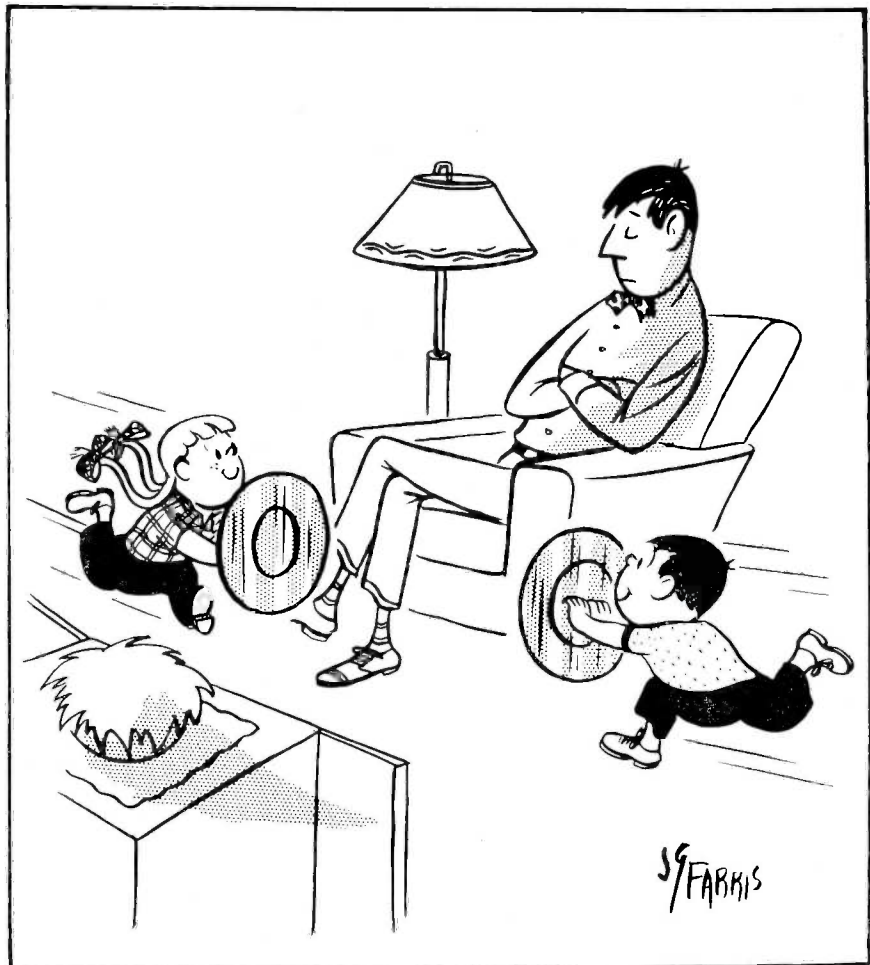
The difference between a neurotic, a psychotic and a psychiatrist: The neurotic builds castles in the air, the psychotic lives in them, and the psychiatrist collects rent on them.

A rich old couple were sitting in church and the collection plate was approaching. In a hoarse whisper she said to him: "Don't put in more than a quarter."

"Listen," he said. "Andrew Carnegie gave \$4 million for his seat in heaven. John D. Rockefeller gave \$2 million for his seat in heaven. Where the devil do you think I'm going to sit for twenty-five cents?"

One of the nicest things about old age is that you can whistle while you brush your teeth.

Most couples these days have a plan for the future. It is called an installment plan.



Farley Gannett



Succumbs

**Devoted His Life
To the Firm
He Founded**

ON Monday, January 20, 1958, Farley Gannett, founder of Gannett Fleming Coddry and Carpenter, Inc., a well-known engineering firm in Harrisburg, Pennsylvania, passed away at the Garfield Memorial Hospital in Washington, D.C. His death brought to a close an engineering career of sixty years.

For Mr. Gannett, the end came while he was engaged in activities typical of his later administrative

years, and which he most enjoyed—attending professional meetings, seeing old friends and making new ones, and in all ways raising the prestige of his organization. At the time of his death, Mr. Gannett was serving as Chairman of the Board of Directors of the firm.

In the words of Mr. W. Howard Coddry, Vice-President of the firm: "Several years ago, Mr. Gannett had the happy idea of compiling a history of the firm from its beginning, when he gave up his position as Chief Engineer of the Pennsylvania Water Supply Commission to start his own practice as a consulting engineer. Installments of this history appeared in the January, March, July and December issues of our Monthly Letter in 1955, and were undoubtedly read with great interest. . . . They were also illuminating, for between the lines may be discerned the evidences of the qualities that carried him to a successful career—a broadness of vision, a constant drive toward expanding activities, a clear and direct approach to the solution of problems and difficulties, and above all, the human qualities that endeared him to all who knew him.

"In all these he served as an example and guide for all of us who have been privileged to work with him, and the value of that example and guidance will be more realized as we carry on in an endeavor to live up to the high standards he established."

Mr. Samuel W. Fleming, Jr., Vice-President and Treasurer, stated: "The present financial strength of the company and its outstanding position in the engineering field are additional proofs of the sound foundation laid by Mr. Gannett. . . . The success of the business in large measure was due to his initiative, courage and ability.

"His death is a great loss. It is inadequate to say we will miss him. All who came in contact with him, a host of friends, his close associates and the staff, recognized his high qualities as an engineer, his endearing personality and his devotion.

"The story of his life is chiefly the story of the engineering firm he founded and loved."

M U E L L E R R E C O R D



- Direct-reading feed and position indicators!

- Full-time position indicator shows boring bar position at all times!

- Easily-set feed indicator automatically shows depth of cut!

- Feed automatically disengages to prevent overtravel of boring bar when travel limit is reached!

Now! *automatic* cuts up to 12" with the

NEW MUELLER® CL-12 *Machine!*

New design and new features give automatic operation for faster, safer cuts; more strength for reduced maintenance; simplified operation for use by inexperienced personnel; more compact for easier handling; and standardized tools for simpler tool selection.



MUELLER CO.

DECATUR, ILL.

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

NEW *self-adjusting boring bar packing*

High temperature chevron packing is spring-loaded to insure positive, leakproof sealing without packing adjustments. Line pressure does not enter case.

NEW *rugged all-steel construction*

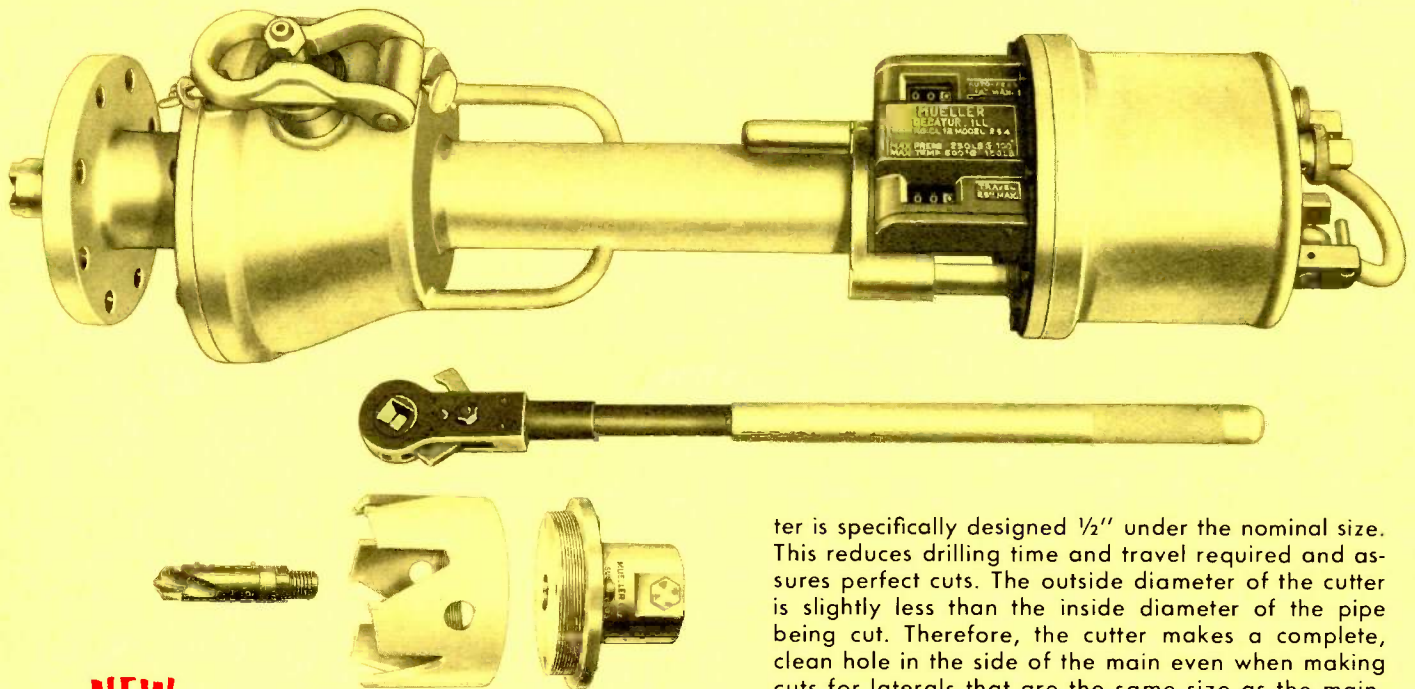
All working parts are totally enclosed in a galvanized steel case to permit complete lubrication and to prevent damage from dirt or other foreign matter and from rough handling. Lubricant is sealed in with "O" rings. Large bearing surfaces assure boring bar rigidity.

NEW *power or hand operation*

May be hand operated with ratchet handle or power operated with Mueller H-601 Air Motor or Mueller H-602 Gasoline Engine Drive Unit. No changes are required in the machine to use hand or power operation.

NEW *handling ease*

Telescopic design reduces over-all length and weight. Conveniently placed handles and lifting yokes permit easy handling of machine—manually or with hoisting equipment. Front lifting yoke may also be used to lock the boring bar while attaching or removing tools.



NEW *standardized tools*

Tungsten carbide tipped shell cutters are designed for cutting cast iron, cement-lined cast iron, asbestos-cement, reinforced concrete and steel pipe. Tool selection and inventory are greatly reduced. Each shell cut-

ter is specifically designed $\frac{1}{2}$ " under the nominal size. This reduces drilling time and travel required and assures perfect cuts. The outside diameter of the cutter is slightly less than the inside diameter of the pipe being cut. Therefore, the cutter makes a complete, clean hole in the side of the main even when making cuts for laterals that are the same size as the main. Cutter hubs for $5\frac{1}{2}$ " size shell cutters and larger are of the "E-Z-Release" type. All pilot drills screw into the cutter hub to give greater rigidity and perfect centering. Pilot drill contains a mechanical coupon retaining device. The cutter, hub, pilot drill and coupon can be removed as a unit without first removing coupon.

NEW CL-12 FEATURES

... designed to reduce your cutting time!

Now! a new, automatic drilling machine

for 2" through 12" cuts in any type of pipe!

NEW *automatic tool position indicator*

Direct-reading indicator shows—at all times—the position of the pilot drill and shell cutter in relation to their fully-retracted or rearmost position. Large numerals read in inches and tenths of an inch and automatically add as the tool is advanced and subtract as the tool is retracted. Eliminates tool position guesswork.

NEW *automatic overtravel protection*

Tool feed is automatically disengaged when the maximum 25" travel of the machine is reached. Damage to the machine is prevented—even when the automatic feed has been set for travel beyond the maximum travel of the machine.

NEW *automatic feed-setting*

The amount of travel required in automatic feed can be quickly and accurately set in inches and tenths of an inch. This amount is clearly shown on the automatic feed travel indicator to insure accurate settings every time.

NEW *automatic feed travel indicator*

As the cut progresses, the direct reading indicator automatically subtracts—always showing the amount of travel remaining in automatic feed. You always know just how much of the cut remains to be made.

NEW *rapid hand travel*

When not cutting, the boring bar may be quickly and easily advanced or retracted by hand. Rapid advancement and retraction of the boring bar reduces time of operation.

NEW *automatic feed disengagement*

When the preset travel in automatic feed is completed and the indicator reads zero, the tool feed is automatically disengaged to prevent damage and loss of time.

Check with your Mueller Representative for complete details.

MUELLER CO. DECATUR, ILL.

specifications

MUELLER CL-12 *drilling machine*

Capacity and Use

The CL-12 Machine makes cuts from 2" through 12" inclusive in any type of pipe. It is used with tapping sleeves and valves

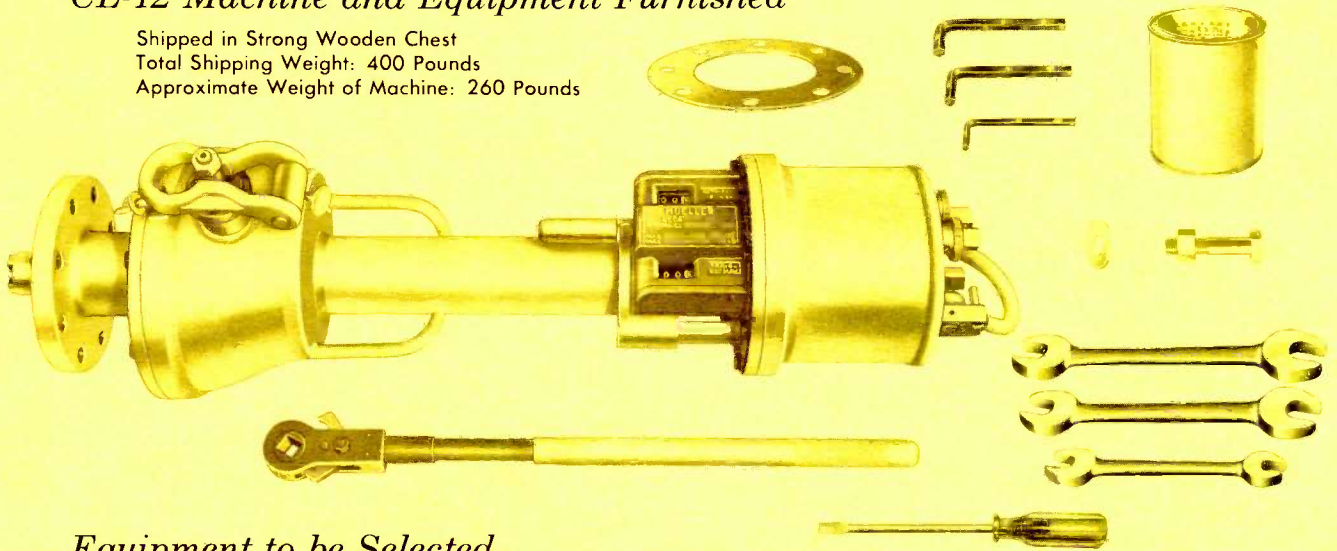
to make lateral connections up to 12" under pressure and to install inserting valves up to 8" in size under pressure.

Working Pressure and Temperature

250 p.s.i. at 100° F.
500° F. at 150 p.s.i.

CL-12 Machine and Equipment Furnished

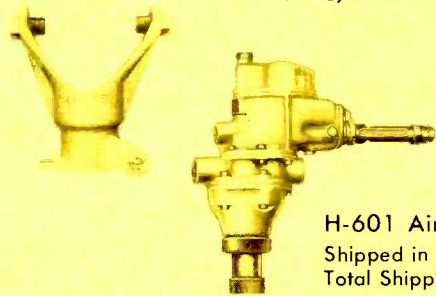
Shipped in Strong Wooden Chest
Total Shipping Weight: 400 Pounds
Approximate Weight of Machine: 260 Pounds



Equipment to be Selected

Power Operating Units, Cutting Equipment (cutter, pilot and hub) and Adapters.

	TAPPING VALVES							
Size of valve	2"	2-1/4"	3"	4"	6"	8"	10"	12"
Size of Drill or Shell Cutter	2"	2"	2-1/2"	3-1/2"	5-1/2"	7-1/2"	9-1/2"	11-1/2"
Drill	64567	64567	.....	.....	.....	.....	.....	.....
Boring Bar Adapter	83666	83666	.....	.....	.....	.....	.....	.....
Shell Cutter	.....	.....	83617	83203	83134	83135	83140	83141
Cutter Hub	.....	.....	83599	83671	83673	83676	83679	83682
Pilot Drill	.....	.....	83634	83634	83639	83675	83678	83681
Machine Adapter (For Mechanical Joint Tapping Valve)*	83668	83669	83367	83368	83369	83370	83371	83372
*Bolts, Nuts and Washers	2 ea. 36445	2 ea. 36445	Furnished with each Mechanical Joint Tapping Valve 3" size and larger.					
Machine Adapter (For Hub End Tapping Valve)	83770	.....	83361	83362	83363	83364	83365	83366

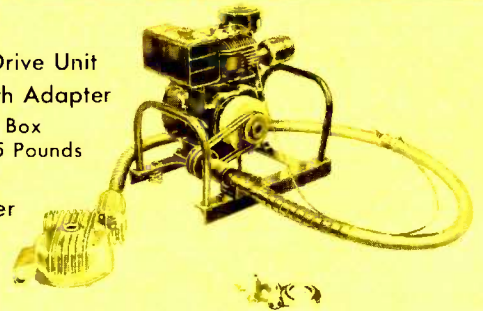


H-602 Gasoline Engine Drive Unit with Adapter

Shipped in Strong Wooden Box
Total Shipping Weight: 265 Pounds

H-601 Air Motor Power Unit with Holder

Shipped in Strong Wooden Box
Total Shipping Weight: 95 Pounds



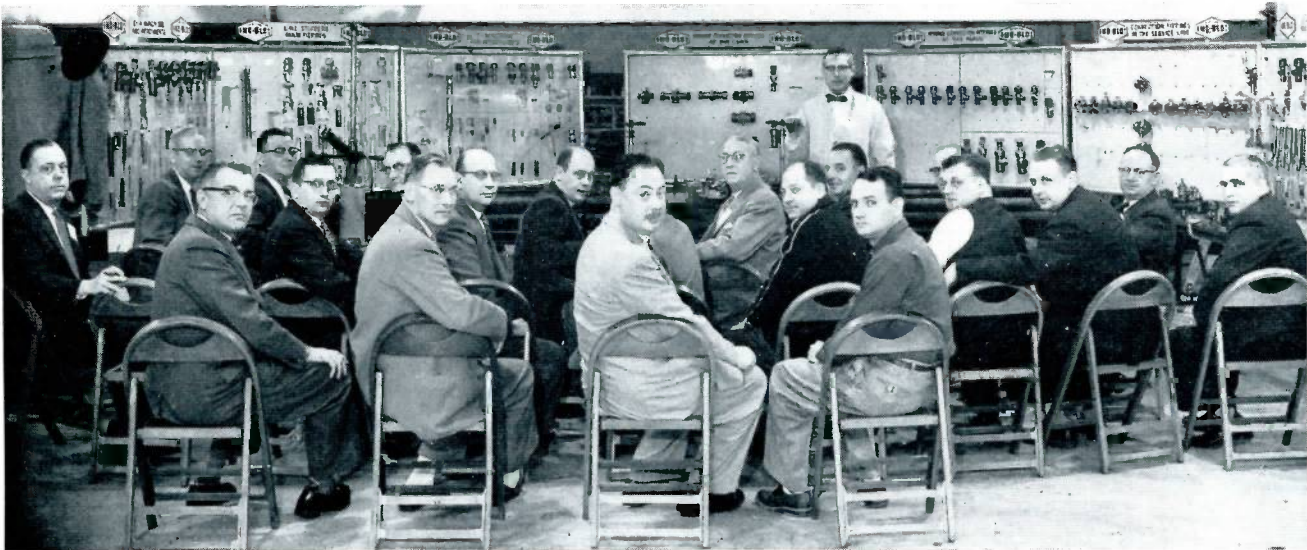
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DECATUR, ILL.

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Francis X. Uhl, Mueller Sales Representative, presented a demonstration of Mueller No-Blo equipment to these men on January 30. The demonstration took place

at the Wheeling, West Virginia branch office of the Manufacturers Light and Heat Company. Twenty-five men were on hand to observe the display.

Wheeling, W. Va.

No-Blo Demonstration Given in West Virginia

On January 30, Francis X. Uhl, Mueller Co. Sales Representative, visited the Wheeling, West Virginia branch office of The Manufacturers Light and Heat Company, and presented a demonstration of the well-known Mueller No-Blo Equipment.

There were some twenty-five men present at this meeting. Fifteen of them were from the supervisory staff of the Wheeling branch from East Liverpool, Ohio to New Martinsville, West Virginia. Also in attendance were the Safety Director and his assistant from the general office of the utility, the Chief Welding Inspector and his assistant from Pittsburgh, two district Industrial Engineers of Manufacturers Light and Heat, and invited engineering guests from steel mills and aluminum manufacturers in the area.

According to a letter from Mr. C. M. Taylor, District Manager: "Mr. Uhl did an excellent job explaining the No-Blo equipment and all of the available fittings and appliances that your company manufactures. All of the men attending the meeting were very much im-

pressed with this new equipment, and the added safety and flexibility that the equipment offers."

The demonstration was the second held in the district, to be certain that those using the equipment are familiar with it, and are aware of its flexibility.

District Four personnel have been using their No-Blo equipment to help men from other districts, and the advantages of the equipment in distribution operations and transmission facilities have been proven time and time again.

Our thanks to Mr. Taylor for his excellent report.

Even though some of your fondest dreams fail to materialize, you can be thankful that many of your nightmares didn't come true, either!

An old-timer is one who remembers when the only skin-diver was a mosquito.

Middle-age is when a guy keeps turning off lights for economic reasons.

Sales Climb; Revenues Up

Gas utility and pipeline industry sales and revenues reached new all-time highs in 1957, exceeding earlier estimates reported in the industry's annual year-end review issued by the American Gas Association in December.

Sales climbed to a record peak of 75,617 million therms during the twelve-month period ending December 31, 1957 — a 3.8 percent gain over the 72,846 million therms sold in 1956. Revenues from sales to ultimate consumers topped the \$4 billion mark, totaling \$4,072 million in 1957 for a gain of 6.2 percent over the previous year.

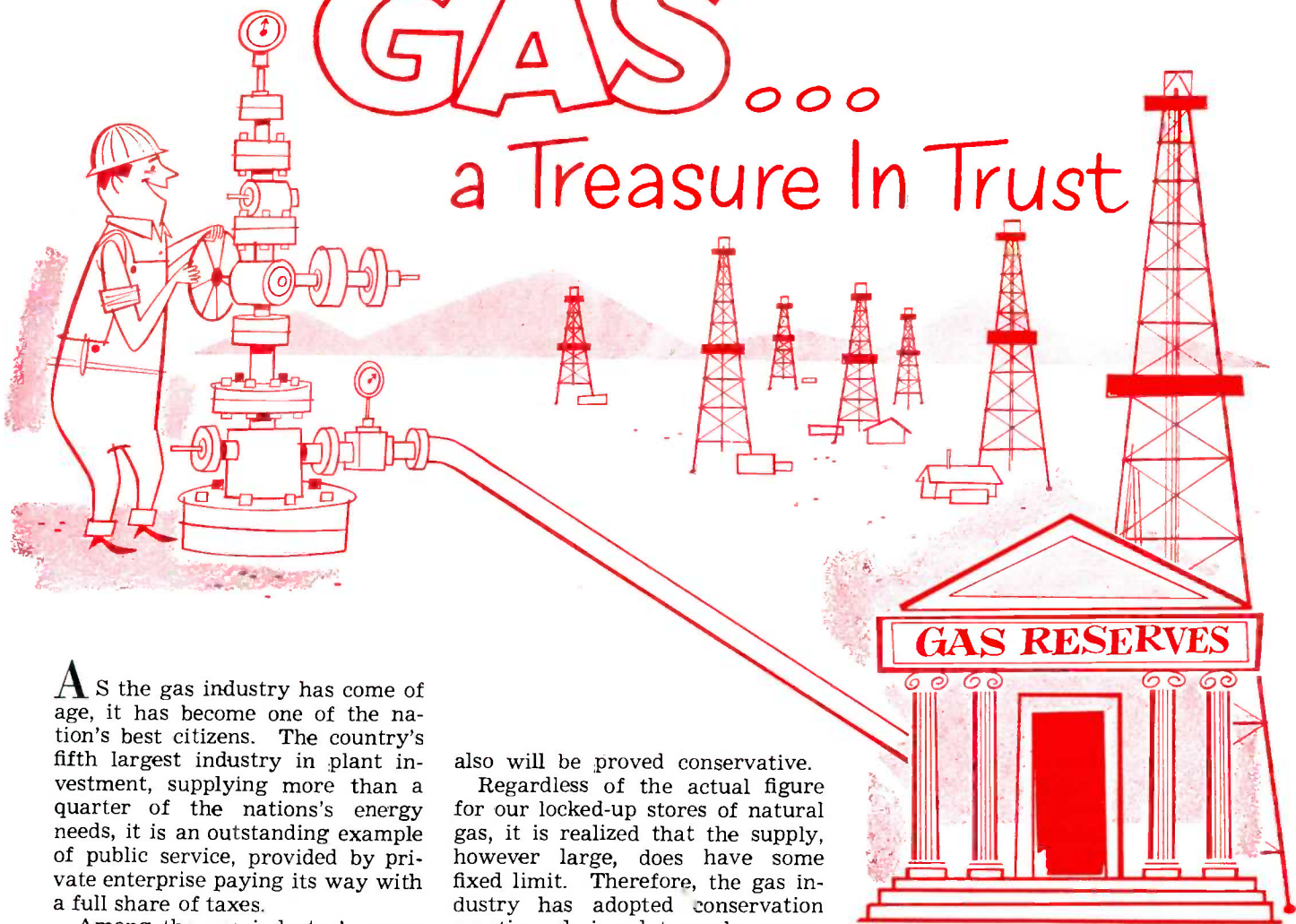
Total taxes for calendar year 1957 were \$749 million, and represented 11.8 percent of the total operating revenues received by the gas utility industry.

Gas industry sales during January of this year continued the upward trend set in the last quarter of 1957. January sales amounted to 8,799 million therms, 5.5 percent higher than a year ago, when the month's sales totaled 8,339 million therms.



GAS...

a Treasure In Trust



AS the gas industry has come of age, it has become one of the nation's best citizens. The country's fifth largest industry in plant investment, supplying more than a quarter of the nation's energy needs, it is an outstanding example of public service, provided by private enterprise paying its way with a full share of taxes.

Among the gas industry's many contributions is its present-day leadership in the conservation of our natural resources.

Nobody knows exactly how much gas actually has been placed to our account by nature, in the underground storage vaults where explorers find it. One of the most recent estimates places total reserves ultimately recoverable in the United States at more than one thousand trillion cubic feet. This is enough to last more than three generations at present rates of use. However, advancing exploration and improving conservation methods have caused all previous such estimates of our gas "bank account" to be revised sharply upward. There is thus every reason to believe that this recent estimate

also will be proved conservative.

Regardless of the actual figure for our locked-up stores of natural gas, it is realized that the supply, however large, does have some fixed limit. Therefore, the gas industry has adopted conservation practices designed to make recovery as efficient as possible, and to stretch the useful life of our reserves far into the future.

General adoption of wise gas conservation practices would have been unlikely without well-established laws on the subject. Fortunately, in recent decades gas producing states, under the guidance of the Interstate Oil Compact Commission, have completed such legislation. Typical statutes now specifically prohibit the waste of gas, either above the ground or because of improper drilling or producing practices below the ground.

Many years ago, competitive conditions often forced producers, racing to draw their share of oil from a common gas-and-oil reservoir, to "flare" their gas or allow it to

escape into the air, for lack of a market. Today the laws, administered by state commissions, regulate rates of production and require proper spacing of wells to obtain maximum ultimate recovery. They also provide that pipelines shall purchase gas equitably from all producers, so that none need be wasted. Development of a dependable market through our huge continental pipeline network has made this possible.

Producers have found many advantages in good gas-saving practices. For instance, preservation of the gas "cap" over many oil deposits is the best means of conserving and obtaining the maximum ultimate recovery of the oil. By

pumping the gas back into the reservoir — perhaps after “stripping” it of valuable liquid hydrocarbons such as natural gasoline — pressure is maintained underground to help lift more oil to the surface. Such “re-cycling” of gas may often more than double the amount of oil ultimately recoverable. When the oil finally can no longer be produced economically, the re-cycled gas still remains to be produced and sold.

Wells producing “wet” gas—gas rich in the liquid hydrocarbons—may also be recycled, even though no oil is present, so that the greatest possible amount of these liquids may be removed before the remaining “dry” gas is sent to market.

The development of underground storage has played a part in the conservation of gas reserves. When the storage place is a previously abandoned well, re-pressuring with stored gas may even result in extra recovery of oil or gas left in the ground at the time of abandonment. Many wells have thus actually been given a new lease on life!

Gas storage also helps producers to maintain even rates of flow by providing a place to put extra supply during months of low consumption, and by furnishing supplemental gas during months of peak demand.

Rates of flow from gas wells are important in conserving our reserves. Too fast a flow may result in premature depletion, since time must be allowed for gas in the reservoir to travel through the porous rock or sand surrounding the well. When the thousands of pounds of pressure which drive the gas upward through the well hole are supplied in part by underground water, too fast a gas flow can produce an uneven rise in the water level. This could result in large pockets of gas being cut off from the well, untapped. Controlling rates of flow assures that today this form of underground waste seldom occurs.

To stretch ultimate recovery of gas as far as possible, supplementary means may be used to increase or maintain underground pressure. One example is the method known as “water-flooding,” in which large amounts of water are pumped down into the gas layer

Market Potential For 57 Million Appliances

Product development and improvement have been major factors in the swift progress made recently in the gas industry, and will help it reach further goals, American Gas Association leaders declared at the Gas Appliance Manufacturers Association convention in White Sulphur Springs, West Virginia, on April 1.

to help force more gas to the surface. Special wells, strategically placed, are used for injection of the water, which drives the gas before it to the production well. In other cases, air may be pumped in under pressure, similarly to force the gas upward and flush out the rock pores where it lingers.

Many wells nearing depletion have had their production dramatically increased, and their lives extended for months, by a process known as “fracturing.”

The “frac” method consists of driving a special fluid (or water, in some cases) down the producing well hole. As the fluid emerges under pressure through the openings in the well casing, it forces cracks or breaks to open up in the surrounding rock. This rock-breaking action may be assisted by the use of acid in the “frac” fluid. Sand or gelatinous elements in the fluid prop open the new channels thus created. Upon the removal of pressure, gas may flow in renewed quantities, until the original deposit is almost completely drained.

The effectiveness of such gas-stretching methods as these may be judged from the fact that without them, much of the original gas might be wasted or left in the ground. Under modern methods, recovery rates of more than 90 per cent are considered normal.

It has been said that conservation means, not hoarding, but wise use of natural resources. This being true, we can expect that the gas industry will continue to lead the way in conservation as in so many other fields, as it employs every practical means to get the utmost gas mileage from every cubic foot.

Robert W. Otto, president of the American Gas Association, and Chester S. Stackpole, Managing Director, gave a large share of credit to appliance and equipment manufacturers for the vastly expanded use of gas.

Customers are using more gas—several times the amount of only a few years ago — because they are constantly being shown how much more the fuel will do than just cook food, Mr. Otto commented. Mr. Stackpole, noting that an AGA survey has shown the existence of a market potential for 57,000,000 new residential gas appliance and equipment items in five years — not counting air conditioning and refrigeration — stated: “If our industry is to reach these goals, it must point its experience toward greater product improvement, broader sales promotion efforts, more intense sales and service training, and spread the gospel of ‘every man and woman, including wives, who is part of us, a salesman for gas, gas appliances and the gas industry’.”

Lone Star Gas Petitions FPC

Lone Star Gas Company, Dallas, Texas, has filed an application with the Federal Power Commission, seeking authority for construction and operation of natural gas facilities during 1958 at an estimated cost of \$1,750,000. Lone Star proposes to construct various lateral pipelines, compressor stations and treating plants to enable it to take into its main pipeline system natural gas which it will purchase from producers in the general area of its existing system. The cost of a single project would be limited to \$350,000.

Around the Gas Industry

Dr. Martin A. Elliott, director of the industry-sponsored Institute of Gas Technology, told top gas executives recently that the advent of nuclear and solar energy will be a boon to the growth and progress of the gas industry.

Speaking on "Today's Frontiers of Science Point To A Bright Future For The Gas Industry," Dr. Elliott told some 300 industry leaders at AGA's fourth annual General Management Conference in Washington, D.C. on March 31: "Any discussion of the future of the gas industry is inextricably linked with the overall energy problem. Studies have clearly indicated that the future demand for energy will be enormous if our sociological and economic progress is to continue as in the past.

"The question is not one of demand for energy," he declared, "but rather how to advance our knowledge and technology so that we can satisfy this demand in the long-range future."

Manpower problems, gas air conditioning, the general outlook for U. S. business, accident prevention, gas utility financial management and the current regulatory situation were among the other major subjects discussed the second and third days of the meeting.

"We in the gas industry," said Dr. Elliott, "know that storage of gas derived from solar energy offers a proven economical method for solving the storage problem, and at the same time puts the energy in a form that can be transported and distributed more economically than electricity. In fact, the cost of distributing gas is less than one-fifth that of distributing an equivalent quantity of electrical energy. Gas is destined to play an important role in any future large-scale indirect utilization of solar energy."

Proved recoverable natural gas reserves in the United States climbed to an all-time record of more than 246 trillion cubic feet in 1957, according to a joint announcement made by the AGA and the American Petroleum Institute.

A net gain of 8.8 trillion cubic feet was the fourth greatest in the industry's history, according to AGA, which has published official estimates since 1945. Additions to natural gas reserves during 1957 aggregated 20.3 trillion cubic feet. This included nine trillion cubic feet of new discoveries.

Canadian natural gas reserves, reported by the Canadian Petroleum Association, climbed to 20.7 trillion cubic feet last year, compared with 19 trillion cubic feet at the end of 1956.

PCGA Workshop Hears J. W. Gaw

Public relations has come a long way in the gas industry, but it still has a long way to go, Chairman J. Wilson Gaw, vice-president in charge of PR, Washington Natural Gas Co. of Seattle, told a joint workshop of the Pacific Coast Gas Association and the American Gas Association recently. More than 50 delegates from eleven Western states, Hawaii and Canada attended the two-day sessions in Las Vegas, Nevada, on January 28 and 29.

"When PR functions at peak efficiency, it builds PRestige for the company and sells so much gas that the company PRofits and make PRogress," Mr. Gaw declared. "PR is like gas in more ways than one. You can't see it, taste it, feel it, smell it or even benefit by it unless it is properly channeled. PR is also like gas in that it takes a trained man to measure it, channel it, and put it into action. . . ."

Robert K. Levey Retirement Announced



ROBERT K. LEVEY

Robert K. (Bob) Levey, Customer Service Director of Mueller Co., has retired after nearly thirty years of service to the firm.

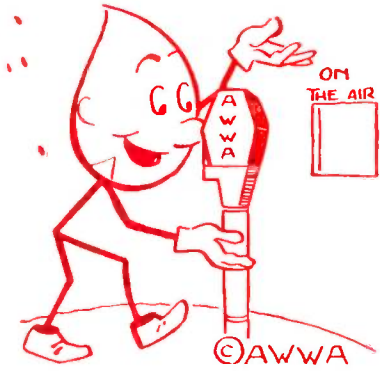
Born and reared in Chicago, he joined the company in early 1929 after studying at Northwestern University. His first assignment was in the Sales Division, traveling out of Chicago; and, for the next sixteen years, he held the unique honor of being the youngest member of our sales force.

In 1945, he came to Decatur as assistant sales manager. He also served as promotional engineer, during which time he had charge of advertising, sales promotion and demonstrations of equipment. It was Bob who first introduced Mueller No-Blo demonstrations to the gas industry.

Bob is well-known to many of you, and has always been a familiar figure at national and regional conventions. His personality and product knowledge combined to make him an outstanding representative of Mueller Co.

Bob expects to spend most of his time at his home in Moweaqua, Illinois, eighteen miles south of Decatur. He is married, and has six children.

MUELLER RECORD



Announcing

New AWWA Officers



**PRESIDENT
LEWIS S. FINCH**

**VICE-PRESIDENT
LAUREN W. GRAYSON**



**TREASURER
WILLIAM J. ORCHARD**





Above left: Enjoying the AWWA convention in Dallas last month were Mr. P. J. DeGeurin, Kerrville, Texas, Mrs. Ray Roarick, and Mr. Roarick, Mueller Sales Representative. Above right: The smiles, reading left to right,



belong to: Mr. Ed Belsom, New Orleans, La.; Bob Thomas, Mueller Sales Representative; Carlo Saragusa, Marrero, La.; and Dick Kitchen, Southwest Sales Manager for Mueller Co.



Above left: Two particularly handsome couples in the Mueller Co. suite at the Adolphus Hotel were, left, Mr. and Mrs. Joe Collins, Houston, Texas. Joining them in the festivities were Mr. and Mrs. Warren Crawford. Warren is our Western Sales Manager. Above right:



These gentlemen found a lot to talk about at the Mueller Co. exhibit in the auditorium. On the left is Mr. Joe Kuranz, Waukesha, Wisconsin. On the right is Cliff Auer, our Central Sales Manager.

Below left: Amid cries of "They'll break the camera," these five were snapped in our Hospitality Suite. From left to right: Warren Crawford; C. E. Umscheid, Houston; K. V. Stutts, Houston; Phil Tinsley, Mueller Sales Rep-

resentative; and W. T. Lubbock, Houston. Below right: Ray Roarick talks with Bob Raw (center) from San Antonio, and Mr. James C. Deal, San Antonio.





Above left: This party traveled all the way from East Chicago, Indiana. Left to right, they are: Mr. and Mrs. Lester Ottenheimer, Jr.; Mr. Charles C. Thornburg; Mrs. Peter J. Vintila; Mr. Matt Domkowski; and Mr. Vintila.



Above right: Mr. and Mrs. Marvin C. Turner of Austin, Texas, responded well when asked to say "cheese." With the Turners are Mr. and Mrs. Ray Roarick.



Above left: Texas was well represented in this photo, as attested by the presence of: Phil Tinsley; Mr. Billy R. Miller, Houston; Mr. Lloyd L. Wolken, Port Acres, Texas;



and Mr. Albert Breaux, Port Acres. Above right: This happy threesome consists of: Mr. Sidney Brittain (left) San Bruno, California, and Mr. and Mrs. Phil Tinsley.

Below, left: Mr. Leon Holtzclaw, Port Arthur, Texas; Phil Tinsley; Mr. Lee Smith, Groves, Texas; and W. A. Coventry, Sales Office Manager of our Chattanooga plant.

Below right: Here are those Roaricks again, this time smiling along with Mr. and Mrs. J. G. Younggren, San Antonio, Texas.





Above left: Busy bees in Dallas were, left to right: Mr. and Mrs. E. D. Hawkins, Knoxville, Tennessee; Mr. Bill Cessna, our Southeast Sales Manager; and Mr. and Mrs. Hunter Owen, Nashville, Tennessee. Above right: Mr. Dan



R. Gannon (second from left), our General Sales Manager, enjoyed visiting with Mr. R. Rueckle, San Antonio; Mr. Joe Younggren, San Antonio; and Ray Roarick.



Above left: This smiling group consists of, seated: Mrs. W. T. Lubbock, Houston; Mrs. K. V. Stutts, Houston; and Mrs. C. E. Umscheid, also of Houston. Standing, left to right, are: Phil Tinsley; Mr. Lubbock; Mr. Stutts; and Mr. Umscheid. Above right: Seated, Mr. Charles A.



Courtney, Springfield, Missouri; Mr. M. E. Castleberry, Springfield; and Mr. C. M. Close, also of Springfield. Standing are Mr. Larry C. Day, Springfield, and Mr. Russell Jolly, our Midwest Sales Manager.

Below left: Mr. W. C. Hague, Salt Lake City, Utah; Mr. W. F. Richards, Ogden, Utah; and Mr. and Mrs. C. W. Wilson, Salt Lake City. Standing in the background is Mr. Walt Arnett, Mueller Sales Representative. Below

right: These ladies said they hoped the date in the background didn't lead people to think it was their birth date! Left to right are: Mr. and Mrs. W. H. Smith, Alice, Texas, and the Ray Roaricks.





Above left: Mr. and Mrs. Henry Riemer, San Antonio, posed with the Ray Roaricks in our Hospitality Suite. Above right: Attired in those colorful "extra" ties are



left to right: Mr. Pete Russo, Marrero, Louisiana; Bob Thomas, Mueller Sales Representative; and Mr. Nezem Lorio, also of Marrero.



Above left: This group consists of, from left to right: Mr. Norman A. Cobb, Wyandotte, Michigan; Mr. Joseph B. Thompson, Oak Park, Michigan; Mr. S. J. Wagerson, Dearborn, Michigan; Mr. W. Muhlitner, Ann Arbor, Mich.; Mr. John Skotzke, Wyandotte, Michigan; Mr. Thomas L.

Below left: Standing are Russ Jolly; Mr. Charles Reich, Oak Lawn, Illinois; Mr. O. T. Kennedy, Kansas City, Kansas; Mr. John A. Dhooghe, Kansas City; Mr. Ed Waldo, Billings, Montana; and Mr. Ed Alvey, Kansas



Butcher, Warren, Mich.; and Mr. W. A. Hendrickson, Ferndale, Mich. Above right: Seated are Mrs. Ray Roarick; Mrs. Robert Perrenot, Dallas; Mrs. Plaster Hall, Sinton, Texas; and Mrs. Anais Plank, Superior, Montana. Standing: Mr. Perrenot, Ray Roarick and Mr. Hall.

City. Seated are Mr. Lowell E. Fisher, Great Falls, Mont.; Mr. Del Brick, Great Falls; Mrs. Waldo; and Mrs. Alvey. Below right: Mr. and Mrs. Robert Anderson, San Rafael, California, enjoyed a chat with the Phil Tinsleys.





JOHN Q. EUBANKS
Port Acres, Texas



MR. A. K. CHERRY
Cedar Rapids, Iowa

MR. G. W. BOWMAN
Fresno, California



At the left: Two popular people at the convention in Dallas were Mr. and Mrs. Leo McQueen of Coldwater, Michigan. Center: Mr. R. W. Evans, Uvalde, Texas, had

a long talk with Ray Roarick. At the right: All the way from Michigan was Mr. G. E. Mathews, Muskegon. With him is Cliff Auer, Central Sales Manager.



The *November, 1925*, issue of the *MUELLER RECORD* carried an item which brings to mind certain modern developments on the national scene:

"A system of interstate roads known as United States Highways and touching every state capitol is planned by the United States Bureau of Roads." That was thirty-eight years ago, and we're still trying to get the appropriations!

You've undoubtedly heard of the industrial editor who parked his 1950 Chevrolet each morning beside the janitor's 1957 Imperial. Editors of all types and sizes have consistently been the butt of "poor" jokes, as attested by this entry in the *November, 1925* issue:

"We have just learned of an editor who started poor twenty years ago, and retired with a comfortable fortune of \$50,000. This was acquired through industry, economy, conscientious effort, indomitable perseverance, and the death of an uncle who left him \$49,990."

The *RECORD* plugged the *RECORD* in *December, 1925*: "This Mueller Record has a circulation, as large, if not larger, than any publication in the state outside of Chicago. It consists of 45,000 copies, and will reach every gas and waterworks company and every plumber in the United States."

Have you been reading of all the controversy stirred up when a group of architects recently and strongly recommended that the Capitol in Washington, D.C. be remodeled. If so, you will know that the dome has been the object of sharp barbs, with critics of the remodeling plan saying that it is in as good a shape as the day it was constructed. We ran across this item in the issue of *February, 1926*:

"Contrary to the belief that lightning does not strike twice in the same place, the dome of the Capitol in Washington has been struck 50 times, but, of course, under different administrations."

Members of the gas industry can chuckle at this prognostication from the *March, 1926* issue:

"Homes artificially cooled in the

LOOKING BACKWARD

summer and artificially warmed in the winter months are developments of the not distant future, according to H. DeWitt Valentine, chairman of the refrigeration committee of the American Gas Association. Imagine the climate of Florida or Alaska in your own home, whenever you desire it!"

Here are some "did you know" items for members of the gas industry from the *May, 1926* issue:

"To England goes the credit for first using gas for cooking purposes. The date—1832.

"In 1864, the Old Dominion Gas Stove Company in Philadelphia featured a three-burner hot plate and portable oven. Later the same year, this firm advanced the Hellen gas range.

"The honor of opening the first gas appliance store goes to Providence, Rhode Island, in 1873."

Ever wonder how your wife talked you into matrimony? Apparently, she did it by listening to just such advice as this, from the *August, 1926 RECORD*: "To Catch and Preserve a Husband."

"Select with great care the young and green varieties. Takes longer to prepare, but excellent when done. Those too old take a long time to cook, and are often tough after being prepared. Even the poor varieties may be made sweet and tender by the following method: "Wrap in a mantle of charity and keep warm with a steady fire of loving domestic devotion. Garnish with patience, well-sweetened with smiles, and flavored with kisses to taste. Serve with peaches and cream and, thus prepared, will keep for years."

The *May, 1927* issue recalls the attitude of some states toward that new invention, the automobile. This appeared among the Iowa statutes in 1897:

"The traveling motorist is

ordered to telephone ahead to the next town of his coming so that owners of nervous horses may be warned in advance."

Is your grocery bill high? Just read this item from the *December, 1927 RECORD*:

"The average grocery bill in the United States totals \$500 a year, according to the Harvard University Bureau of Business Research. Out of this the grocer gets \$100, of which \$10 is profit and \$90 is absorbed by rent, salaries and other overhead expenses. The wholesaler with whom the grocer trades gets \$400 to pay his operating costs and a profit."

Those were the "good old days," friends!

Our last entry is drawn from the *March, 1928* issue:

"An Englishman, just returning to London from a visit over here, was much impressed with our slang phrase, 'So's your old man!' In telling his friends about it, he explained: "You know, they have a deucedly-funny saying ovah theah when they question wot you say. Instead of sneering, 'Fiddlesticks' or 'You don't mean it, old chap,' they say, 'O, hell, your fawther is the same way!'"

The *May, 1928, RECORD* carried these quips:

"It takes a thousand bees a lifetime to make one pound of honey, but it only takes one bee thirty seconds to break up a picnic dinner. A bumble bee can do the same job in about ten seconds, but he doesn't belong to the union."

"We are still a few leaps ahead of the game. Latest statistics prove that people are being born faster than automobiles can kill them!"

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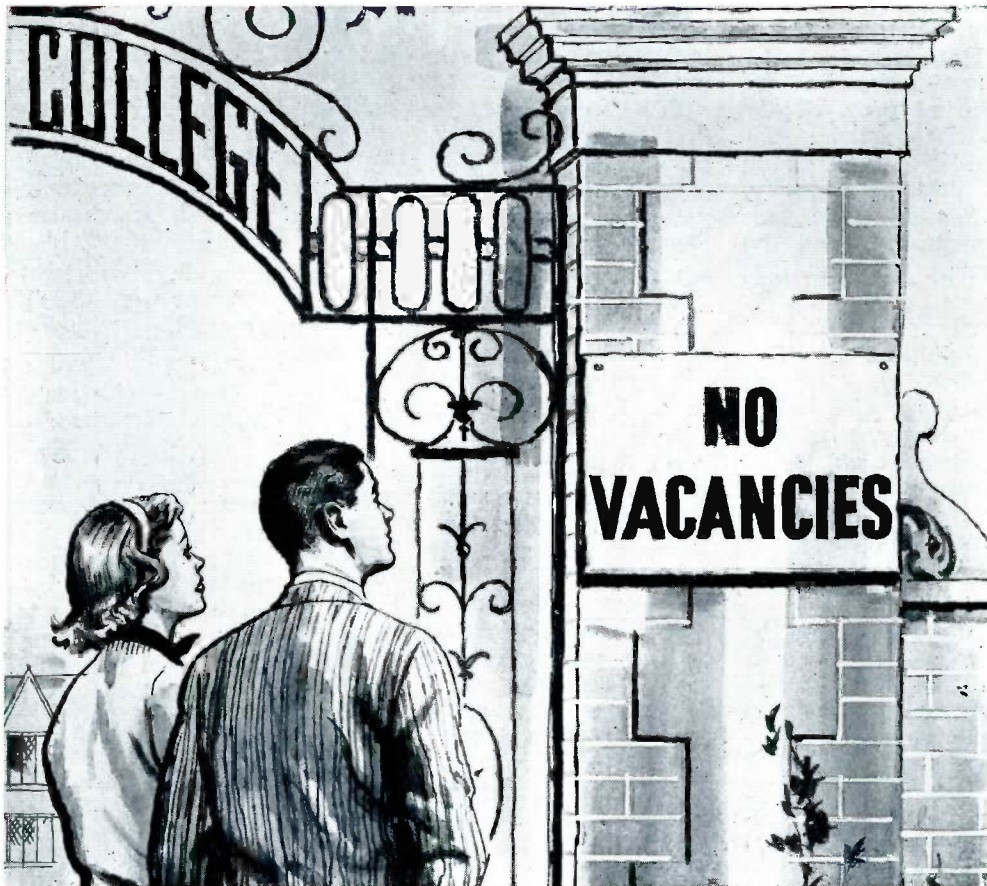
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The situation is becoming acute. You can do your part by seeing that your community has adequate educational facilities, and by backing collegiate expansion plans.

Remember: that "no vacancy" sign could confront YOUR child. Do everything possible to prevent it.