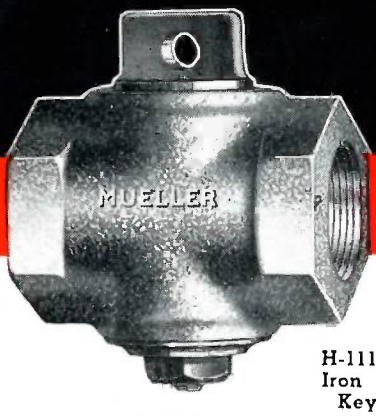
MUELLER RECORD

MARCH • 1949 • APRIL

GAS WAYS ARE LARGE

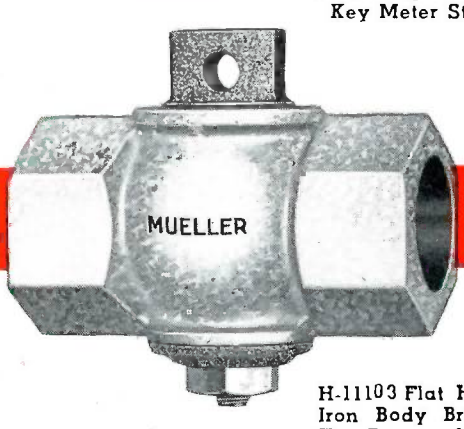
IN THESE

MUELLER STRAIGHTWAY STOPS



H-11100 Flat Head
Iron Body Bronze
Key Gas Stop

H-11102 Lock Wing
Iron Body Bronze
Key Meter Stop



H-11103 Flat Head
Iron Body Bronze
Key Recessed End
Gas Stop

Gas men have long appreciated the sound design and rugged construction of Mueller Straightway Iron Body Gas Stops. The extra thick body sections are cast from tough, close grained gray iron. The use of heavy bronze keys with large port openings accommodates the full flow of the pipe line. Mueller methods of machining and lapping the keys into the bodies assure a Stop that turns easily, yet gives a leak-proof seal.

These are just a few of the extra values you receive when you specify and install Mueller Straightway Iron Body Gas Stops. There are many styles and types available from which you may make your selection to meet your requirements. Ask your Mueller Representative for complete details, or write to us for further information.

DEPENDABLE SINCE 1857 FULLY WARRANTED OUR 92nd YEAR

MUELLER CO.

MAIN OFFICE AND FACTORY.....DECATUR, ILLINOIS
OTHER FACTORIES: *Los Angeles, Cal.; Chattanooga, Tenn.; Sarnia, Ont. Canada*

MUELLER RECORD

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MAIN FACTORY AND OFFICE
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COLUMBIAN IRON WORKS
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Chattanooga, Tenn.
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MUELLER, LTD.
Sarnia, Ontario
BRANCHES
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CONTENTS

COVER
Harold M. Lambert Studios
Philadelphia, Pa.

MOSTLY PERSONAL

DELEGATES TO THE annual conference of the American Water Works Association, which this year will meet at the Hotel Stevens, Chicago, on May 29 through June 3, are cordially invited to visit the Mueller Co. exhibit in booths 122 and 123, near the registration desk. The exhibit hall will be located on the floor below the main lobby of the hotel.

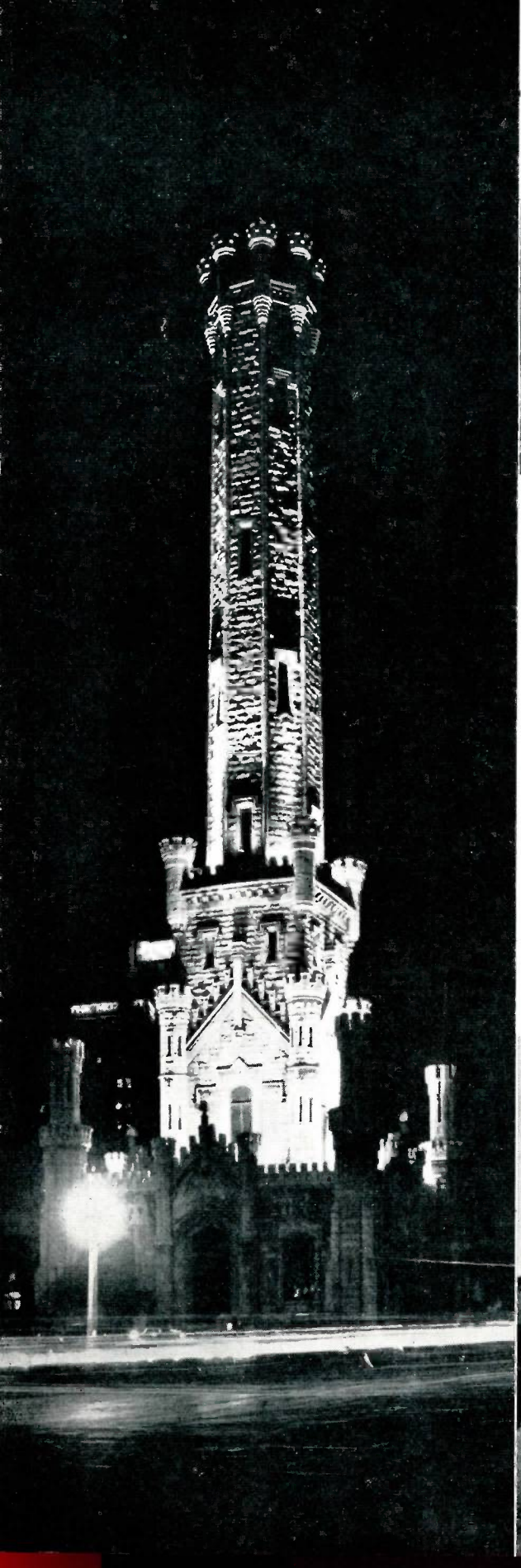
■ ■ ■

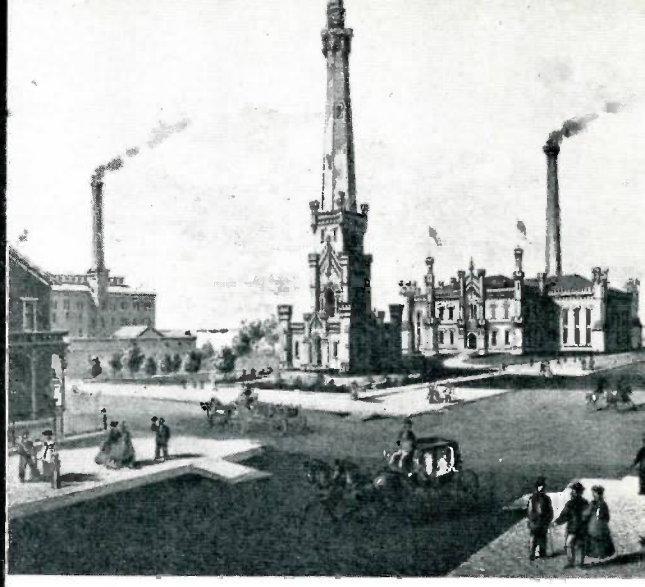
Speaking of the A.W.W.A. convention, we've been asked to get in a plug for a golf outing, which is being arranged by the Illinois Section, at the Olympia Fields course on Wednesday, June 1. The outing will be open for A.W.W.A. members, guests, manufacturers' agents and their wives.

Green fees at Olympia Fields Country Club are $3, and the committee plans to make an additional charge of $1 to cover prizes for the outing.

Members of the Illinois Section will provide motor car transportation from the Stevens Hotel to the course from about 9 o'clock until 2 o'clock that day. Persons who may wish to play golf are requested to bring their clubs, and they may register for the outing at the same time they register for the convention.

(Continued on page 20)





Left: the tower today; above: in 1870, before the fire.

CHICAGO'S OLD WATER TOWER

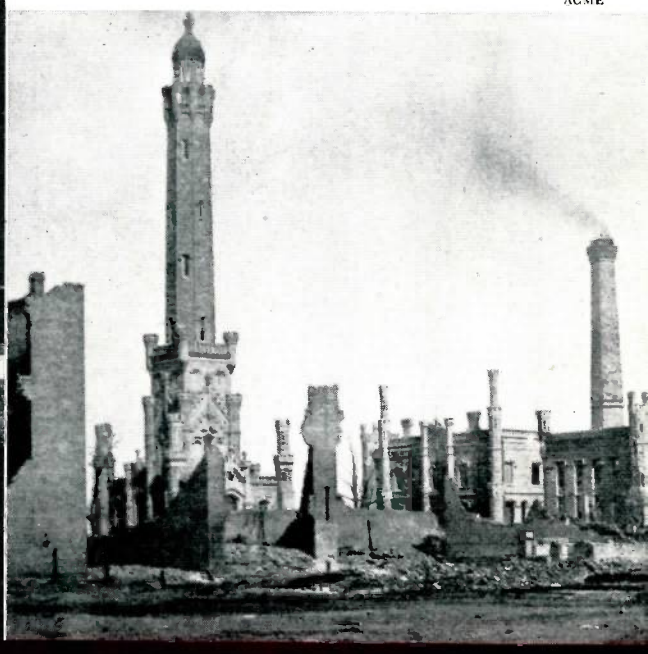
Famous landmark a survivor of the city's great fire of 1871.

ALMOST AS FAMOUS as the great fire of 1871, which it survived, Chicago's old water tower is a landmark that should prove of particular interest to delegates attending the annual convention of the American Water Works Association at the Hotel Stevens May 29 to June 3.

The water tower was two years old at the time Mrs. Patrick O'Leary's cow supposedly set off an inferno in which 300 persons perished, more than 100,000 were made homeless, and an area of

Below: the tower immediately following the fire of 1871.

ACME



CHICAGO HISTORICAL SOCIETY

Burning of the Tremont House, one of Chicago's leading commercial hotels at the time of the fire.

2,100 acres were burned over with a property loss totaling $300 million. The tower was the only major building in the path of the fire to emerge unscathed.

Chicagoans have a sentimental regard for the old tower, an attachment that saved it in 1928 when Michigan Avenue was being widened and extended. The tower stood smack in the way of the boulevard's proposed route, and there was some talk of razing the old structure. But the hue and cry raised by those who wanted it spared prevailed, and the avenue was obligingly jogged to one side of the little park where the castellated tower stands, incongruous among its modern and taller neighbors.

J. J. McDonough, chief mechanical engineer of the Chicago water bureau, is one of the building's staunchest friends. Somewhat ironically, however, it was partly through the efforts of Mr. McDonough, who came to the water bureau in 1900, that new pumps were installed in 1903, ending the usefulness of the tower. The steel standpipe which it enclosed was dismantled and sold for scrap, and the tower, once a mecca for sightseers who could look out over all the city from its top, was later closed to the public. Mr. McDonough conceived the idea of lighting the tower, and it stands as an illuminated beacon for night traffic on Chicago's near north side at Michigan and Chicago Avenues, a few blocks north of the Chicago River.

The tower was designed by William A. Boyington and erected by A. Wallbaum. Native limestone was used in the construction of the 154-foot tower.

This is a view of State and Madison streets, taken from the Tribune Building just after the fire.

CHICAGO HISTORICAL SOCIETY

Dr. A. P. Black To Head A. W. W. A.

Other officers-elect are W. Victor Weir, vice-president, and William W. Brush, renominated to treasurer post.

DR. ALVIN P. BLACK, professor of chemistry at the University of Florida, Gainesville, will succeed Linn H. Enslow, New York, editor of *Water and Sewage Works,* as president of the American Water Works Association on June 3 at the 1949 conference of the organization in Chicago.

The other officers-elect are: vice-president—W. Victor Weir, president of the St. Louis County Water Company and Missouri Water Company, University City, Missouri; and treasurer—William W. Brush, editor of *Water Works Engineering,* who was renominated for the post. Harry E. Jordan is secretary of the association.

In addition to his duties at the University of Florida, Dr. Black is a registered chemical engineer and has acted as consulting engineer for many Florida municipalities and organizations. He has been an A. W. W. A. member for the past 20 years, and received the Fuller Award in 1939.

Dr. Black came to the University of Florida as assistant professor of chemical engineering in 1919, after service with the Chemical Warfare Service, U. S. Army, and as assistant chemist with the U. S. Bureau of Standards, Washington.

Dr. Alvin P. Black, who will take office as president of the American Water Works Association on June 3, is professor of chemistry at the University of Florida at Gainesville.

Prior to that he had been professor and chairman of the department of chemistry at Wesley College. He received his Ph.D. degree from the University of Iowa in 1933.

W. Victor Weir
Vice-President

William W. Brush
Treasurer

Harry E. Jordan
Secretary

Thomas L. Amiss
Honorary Member

M'Kean Maffitt
Honorary Member

Harry A. Faber
Diven Medal

Laurie M. Leedom
Goodell Prize.

Mr. Weir first was associated with the West St. Louis Water & Light Company, which became the St. Louis County Water Company, as a junior engineer, following his graduation from Washington University of St. Louis in 1923. He became successively engineer, assistant manager, chief engineer, superintendent, and vice-president and general manager. He became president of the company in 1946. He also was superintendent, vice-president and general manager of the Missouri Water Company before his promotion to the presidency of the company. Mr. Weir received the Diven Medal in 1940 and the Fuller Award in 1943.

Mr. Brush has been treasurer of the A. W. W. A. since 1930 and also held the office from 1922 to 1927. He is completing his twenty-fourth term as treasurer and also served for almost a full year in 1929-30 following the death of Treasurer G. C. Gensheimer in June, 1929. Mr. Brush was chief engineer of the New York Bureau of Water Supply in the Department of Water Supply, Gas and Electricity prior to his retirement in 1934. He has since been editor of *Water Works Engineering*. He first joined the A. W. W. A. in 1911, was vice-president in 1928, president in 1929, awarded the Diven Medal in 1932, and was elected an honorary member in 1937.

Mr. Jordan, the association's veteran secretary, was chemical engineer with the Indianapolis Water Company for 33 years prior to his appointment. He served as president of the A.W.W.A. in 1935-36, and in 1936 he became the association's secretary and editor of the *Journal* of the American Water Works Association. He served with the rank of major in the construction division of the Army's General Staff in World War I.

There are now 7,030 A.W.W.A. members, an all-time high, Mr. Jordan recently reported to the association's board of directors. This represents an increase of 374 over the last year's membership figure.

Harry A. Faber, research chemist for The Chlorine Institute, Inc., New York, since 1935, was recommended for the Diven Medal, the highest honorary award made annually by the association. Mr. Faber's selection was based on his many years of service in the water works field and his outstanding contributions to water safety.

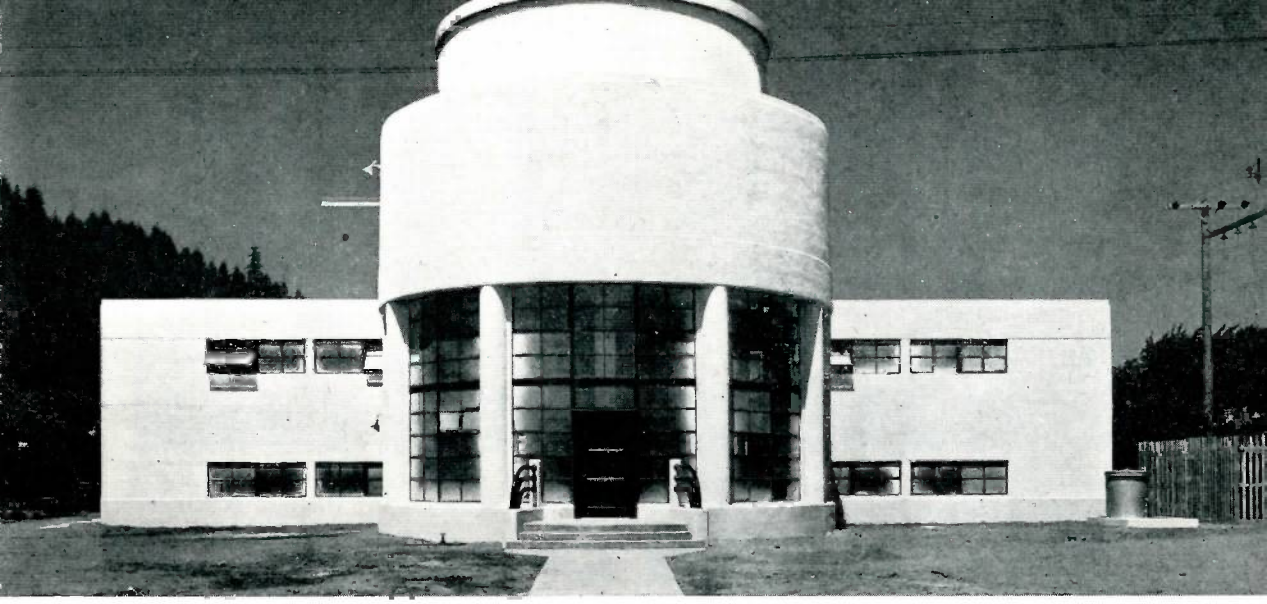
Laurie M. Leedom, construction engineer in the division of water, Newark, New Jersey, received the John M. Goodell prize. The award was based upon his paper, "Shutdown Procedure in Main Breaks." He has been an A. W. W. A. member since October, 1945.

Honorary members named by the A. W. W. A. board of directors were:

Thomas L. Amiss, superintendent engineer, department of water and sewage, Shreveport, Louisiana.

M'Kean Maffitt, who was formerly superintendent of water and sewage, Wilmington, North Carolina, and is now retired. He received the Fuller Award in 1947.

Henry Berry, past chairman of the Metropolitan Water Board, London, England. The honorary membership conferred on Mr. Berry was the second in the history of the A. W. W. A. to be awarded to a water works man living outside the North American continent.



This is Longview's filter plant, which has a capacity of four million gallons a day. The front of the building is curved to blend with the 40,000-gallon wash water tank which is located atop the building.

A New Look for Longview

Selection of the city's water source involved making a delicate decision before the filter plant was built.

BEFORE THE New Look in filtration plants came to Longview, Washington, the manager of the city's water department, A. H. Labsap, found himself in one of those ticklish positions that are not too uncommon among men in his profession. Briefly stated, there were two schools of thought on the matter of the city's water supply, and he decided not to be the middle man. Such a state of affairs often results in one disgruntled camp, once the ultimate decision is made, but it is to Mr. Labsap's credit that the plant's performance has effected a reconciliation among even the most unreconstructed element.

A. H. Labsap

In the beginning there were six possible sources for a water supply, considerably more than the number of choices offered most cities. Four of these were readily eliminated, fortunately, and the decision boiled down to these:

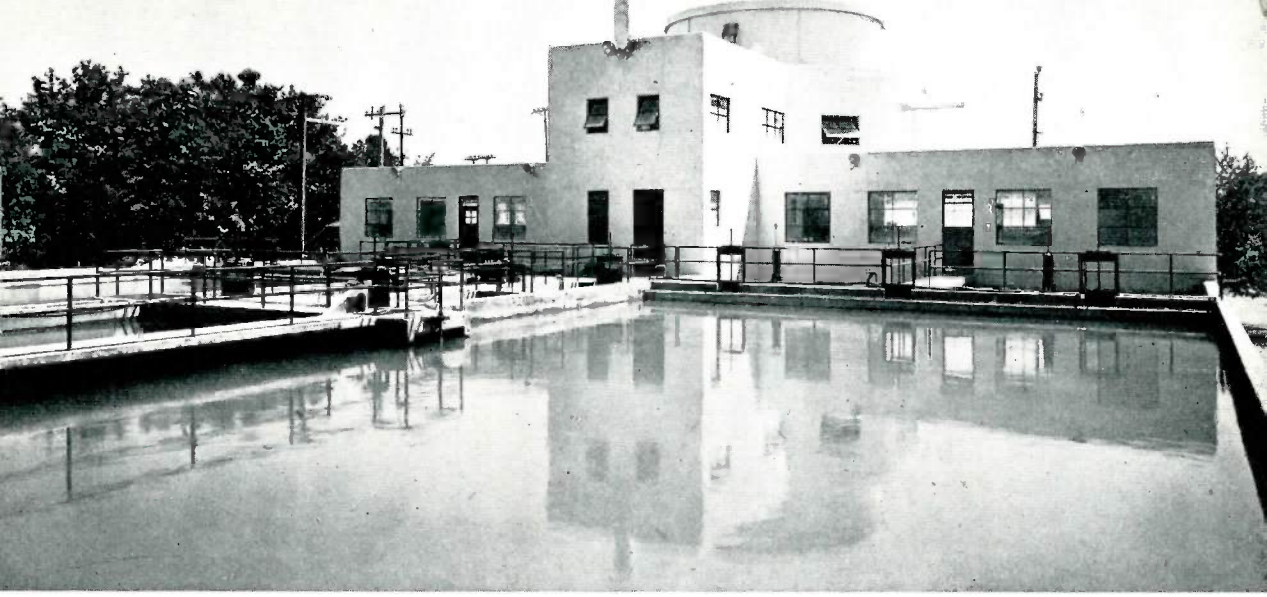
(1) The Kalama River, which offered "undefiled," sparkling mountain water at a distance and, therefore, at a price; or

(2) The Cowlitz River, which offered a virtually unlimited and economic supply, but which required filtration because of upstream pollution.

It was immediately realized that this situation had two radically different appeals: one to the esthetic sense, the other to the pocketbook. The use of either source would result in the city obtaining pure water. Mr. Labsap, backed by the advice of three reputable firms of consulting engineers, cast his fortunes with the purse-conscious.

Primarily, he reasoned, the cost of securing water from the Kalama River would be excessive and was not justified by water revenue. Further, it was a matter of principle:

"No engineer, water works man, or municipal official could conscientiously



A rear view of the plant, showing coagulation basins and filter beds. Provision has been made for the addition of two other units, which would raise the plant's capacity to six million gallons a day.

advocate such a supply and feel that he was rendering his community the right kind of service."

Mr. Labsap conceded that "a so-called mountain supply does have some attractions from an esthetic viewpoint, but its actual superiority is in many cases entirely imaginary, while often, as in the case with any supply available to Longview, such a supply would be decidedly inferior to Cowlitz River water unless filtered. A gravity supply would be advantageous from an operating standpoint only if the fixed charges due to the cost of acquirement, plus operating cost, were less than those which obtain with a pumping plant. There is no such gravity supply available at Longview."

However delicate the task of making the decision to use water from the Cowlitz River, the more economical filtered supply was selected, and the new filter plant was built and placed in operation. At least one concession was made to the esthetic by the plant's architect, who combined function with simple attractiveness. The plant is of concrete construction and the front is curved, so that the 40,000-gallon wash water tank atop the chemical storage room blends well with the building outline. Its cost was approximately $200,000.

The plant has a capacity of four million gallons a day under normal operation. Each of the four filters has a capacity of one million gallons a day, and they are so arranged that by the addition of two filters the plant's capacity could be increased in the future to six million gallons a day. High and low lift pumps have a capacity of six million gallons, so that no change would have to be made in the pumping plant. Since the maximum daily demand has never exceeded slightly over two million gallons a day, the present plant should be good for many years.

The high lift pumps boost water through a 16-inch line to concrete reservoirs at an elevation of 244 feet above mean sea level. Between the filtration plant and reservoirs, a 12-inch line runs south and connects with two 8-inch existing mains, which feed through the business district. This affords a trilateral connection between the filter plant, reservoirs and distribution system: an old 12-inch main from the reservoirs to the distribution system, a 12-inch main from the 16-inch pumping line to the distribution system, and the previously-mentioned 16-inch line.

In addition, a 5,000,000 gallon reservoir was constructed in 1948, and a 20-inch steel pipe is now being installed from the new reservoir to a 24-inch main in the distribution system. This gives an aggregate of 7,000,000 gallons storage capacity, ample for present needs.

PHOTO BY HOWARD BARTLEY

This is 120-year-old Barcelona lighthouse as it appears today. The sturdy tower was built in 1829, when the village was a bustling lake port. With the building of the lake shore railroad, shipping rapidly declined, and the light was discontinued in 1859. Natural gas was used as the illuminant.

In 1830 the United States Government became one of the earliest commercial consumers of natural gas for

Barcelona Lighthouse

The unauthorized change-over from whale oil served to illuminate the beacon "in the most splendid style."

THROUGH WHAT NOW APPEARS to have been a combination of shrewd business dealing and resourcefulness, plus a possible dash of county politics, the United States Government in 1830 became one of the earliest commercial consumers of natural gas. Quite probably nothing illegal transpired, but the fact remains that the government was using "natural carburetted hydrogen" as the illuminant for its new lighthouse at Barcelona, New York, on Lake Erie for several months before it became officially aware of the innovation.

Whale oil had been the standard illuminant for lighthouses for some time, the change-over from candles having been completed about 40 years before, and oil lamps were specified—and installed—in Barcelona lighthouse. So far as can be determined, no authorization was ever issued for gas lamps. However, when it was learned that the light was being illuminated by natural gas "in the most splendid style," as one writer of the day put it, the government simply made the most of the situation.

The story of how the government came to be a natural gas customer—however unwittingly—primarily concerns three men: Judge Thomas B. Campbell, a prominent citizen of Chautauqua County whose varied business interests were not considered prejudicial to his duties on the bench; William A. Hart, the ingenious gunsmith whose gas well, the first ever drilled, was supplying lights in the principal shops and taverns of Fredonia, a few miles northeast of Barcelona; and Lieut. Charles C. Tupper, whose role in the transactions is somewhat obscure, perhaps intentionally so because of his military rank.

Barcelona at the time was a thriving lake city. It was an official port of entry, and there was every reason to believe that as a commercial center it would become one of the most important shipping points on Lake Erie. The volume of traffic in and out of Portland Harbor, as Barcelona was known prior to 1827, led Congress to pass an enabling act on May 23, 1828, "That the Secretary of the Treasury be empowered to provide, by contract, for building a lighthouse at a proper site, at or near Portland, on Lake Erie in the State of New York." The sum of $5,000 was appropriated for the site and the erection of the tower, lights and buildings.

S. Pleasanton, fifth auditor and acting commissioner of revenue, requested Daniel Garnsey of Dunkirk, the district's first Congressman, to select and purchase the site. Garnsey conferred with a Judge Peacock of Mayville, agent for the Holland Land Company, which at one time had land holdings totaling more than two and a half million acres in New York and Pennsylvania, and the property was duly purchased for $50. The deed conveying the property was dated July 10, 1828, and it provided for the reversion of the title to the grantors in the event the light should ever be discontinued.

According to specifications for the lighthouse, the height of the tower was to be 40 feet; the diameter at the base 22 feet, tapering to 10½ feet at the top; the walls were to be three and a half feet thick at the base, graduating to two feet at the top; and "11 patent lamps, 11 14" reflectors and 2 spare lamps; dou-

NEW YORK STATE LIBRARY

Judge Thomas B. Campbell, one of Chautauqua County's most prominent citizens, was instrumental in "selling" the government on natural gas as the illuminant for Barcelona lighthouse.

ble tin oil butts for 500 gals. of oil; 1 lantern canister and iron trivet, etc." also were to be provided.

Judge Campbell was awarded the contract for building the lighthouse and lightkeeper's dwelling, as well as the installation of the oil lamps. The contract, dated August 27, 1828, set the completion date for June 1, 1829, and an additional month was allowed for fitting up the lights.

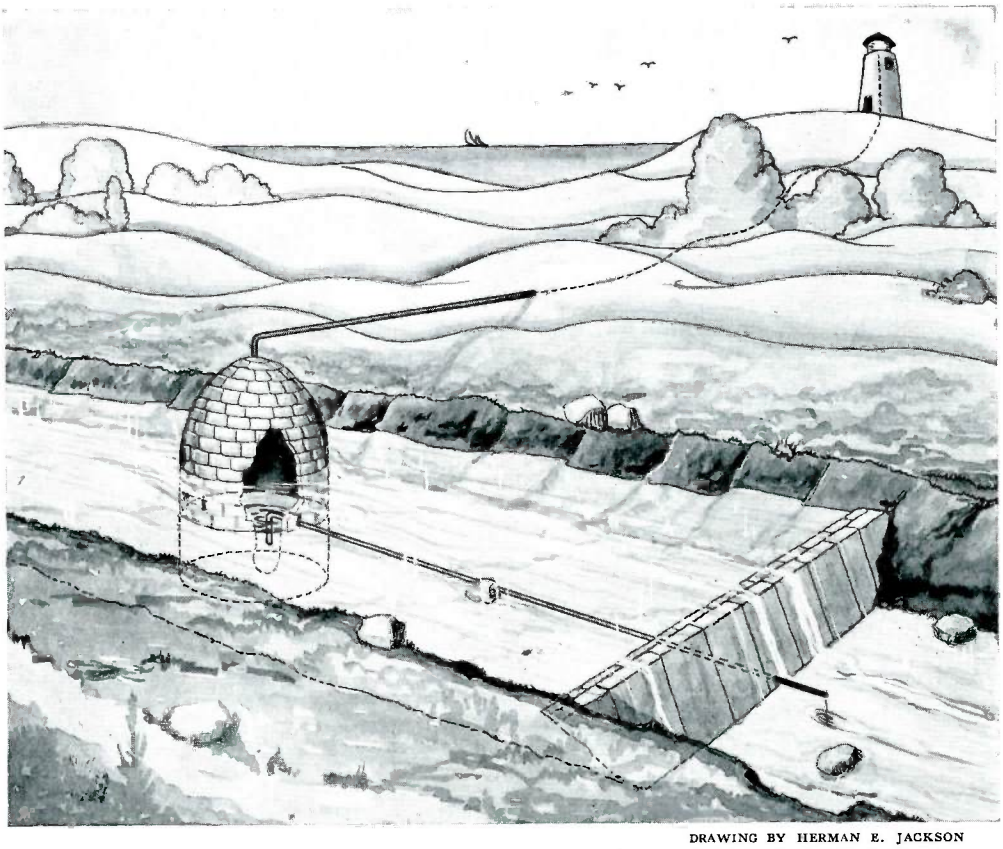
On May 27, 1829, President Andrew Jackson appointed Joshua Lane, a retired clergyman, as the lightkeeper. Apparently the deciding qualification in the appointment of Rev. Lane, who was deaf, was the fact that he had "numerous female dependents." His salary was fixed at $350 a year.

During the fall of 1829, Judge Campbell, influenced no doubt by the success of the gas lights at Fredonia, became associated with Hart and Lieut. Tupper. Hart's place in the partnership is quite understandable, for anyone in the county who planned to utilize natural gas for any purpose would have consulted him as a matter of course. It seems possible that Lieut. Tupper was counted upon to exert a certain degree of influence with the proper authorities if and when a time came for that.

This association developed into a partnership, and the three men purchased a plot of land immediately adjacent to the lighthouse on which a "burning spring" was located. The presence of the spring and the inflammable quality of the gas that issued from it had been known for many years before the settlement of Chautauqua County, first by the Indians, then by French explorers. The surveyor who made the original survey of the township into lots noted in his fieldbook: "On lot 16 is a spring that by putting a blaze of fire to the air that issues out of the fissures of a rock will as quick as lightning take fire, and burn with such fury that the leaves on the trees immediately over the blaze at the height of ten feet will be burnt. When the air of the atmosphere is heavy or moist, the smell of the air from this spring may be discovered at the distance of forty rods. When you are at the place you feel a sickness of the stomach." But there seemed to be no practical use for the gas.

Hart's experience at Fredonia was invaluable in solving the problems of collecting the gas at the spring, which was located about three-quarters of a mile from the lighthouse, piping it to the tower, and devising suitable lamps. This work seems to have occupied his skill for most of the winter months, but in the early summer of 1830 the partners were ready to launch their experiment.

Gas issued from the burning spring at several places in the bed of a brook, and to collect it at one point, the partners dug a well about three feet deep at the spot where the largest quantity was escaping. Over the well they erected a cone of masonry to serve as a holder. The brook was dammed to bring the water level up around the cone and over the creek bed. A pipe was inserted in the base of the cone, bent down at the end toward the bottom of the well, and extended along the level of the creek bed to the downstream side of the dam. This kept the water within the well at a level with the natural bed of the creek, while the water outside was from a foot and a half to two feet deeper than that inside the well. Such an arrangement



DRAWING BY HERMAN E. JACKSON

Based on an 1830 newspaper clipping, the above drawing illustrates the method used to collect and pipe natural gas from a so-called "burning spring" to Barcelona lighthouse on Lake Erie.

tended to funnel the seeping gas into the reservoir.

Some 230 rods of wooden pipe were laid from the reservoir to the lighthouse, and the gas was conducted to the top of the tower through a section of wrought iron pipe. Two horizontal pipes, one above the other, were led off from the perpendicular pipe in a semi-circle, and on these the lamps or burners were located—seven in the lower tier, and six in the upper. Each burner was equipped with a glass cylinder to protect the flame from the wind, and each of the lamps had a large reflector. The quantity of gas each burner consumed was regulated with a stop-cock.

On the night of July 5, 1830, Barcelona lighthouse began using natural gas as its illuminant. A newspaper account of the new method stated: "Altogether this is one of the greatest natural, philosophical and mechanical curiosities which the country can produce." Continuing, the writer said, "As a light for a lighthouse it exceeds both in quantity and brilliancy anything of the kind I ever saw."

Judge Campbell delayed informing the Treasury Department's representative of the change until August 25. By that time he had made arrangements for Cornelius Grinnell, Jr. & Co. to relinquish their contract for supplying oil to the lighthouse. In his letter, Judge Campbell said:

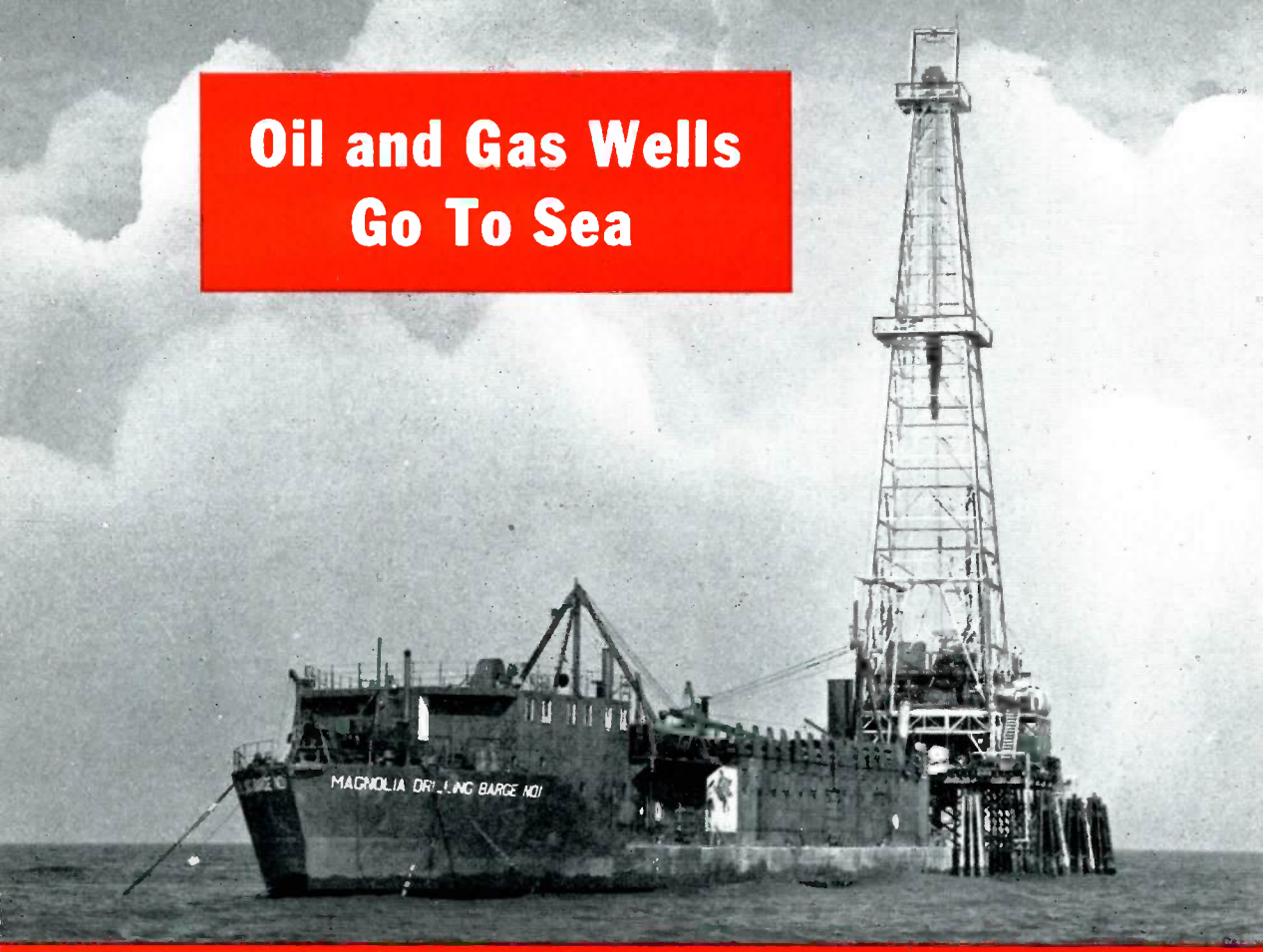
"We have succeeded to the utmost of our expectations in bringing the natural gas to answer all the purposes of oil . . .

"The property in the gas is owned by William A. Hart, Charles C. Tupper, and myself, and when the government does anything in relation to the lighthouse we expect to be equally bound and equally benefitted.

"I would beg leave to ask, whether it would be legal and consistent with the

(Continued on page 20)

Oil and Gas Wells Go To Sea



Above: Magnolia Petroleum Company's fourth well in the Gulf of Mexico, off the coast of Louisiana. Magnolia alone has spent more than $18 million for leases, exploration, marine equipment and drilling operations in the gulf area since 1944, indicating the value placed on offshore possibilities.

Estimates place total investments of industries in the coastal waters off Louisiana and Texas at $70 million.

THE OIL AND GAS industries have literally gone to sea in the quest for new sources of supply. This search for underwater treasure has been intensified since the end of the war, and the seekers for production and reserves in areas heretofore untouched are depending heavily upon modern geophysical and geological techniques and instruments and on improved drilling methods and equipment.

One of the great sources of future oil and gas supplies lies in the Continental Shelf in the Gulf of Mexico, where it has been estimated there are from four to ten and a half billion barrels of oil along a 30-mile strip of submerged land off the coasts of Louisiana and Texas. Already these two states have leased more than two and a half million acres of their offshore tidelands to oil companies and independent operators. Still another possible source of supply lies off the coast of California, and intensive exploration is being carried on there.

Magnolia Petroleum Company pioneered exploration and drilling operations in the gulf area off the coast of Louisiana where the industry thus far has done nearly all of its drilling. Magnolia began its geophysical work in 1944 south of Morgan City, Louisiana, and since then has spent more than $18 million for leases, geophysical exploration, drilling barges, marine equipment and drilling operations in that area.

Since drilling operations began two and a half years ago, there have been five

oil fields, three gas distillate fields and one dry gas field discovered in the Louisiana gulf area by the petroleum industry, whose total investment in coastal waters of Louisiana and Texas up to now has been estimated at $70 million. At the present time there are 29 active drilling operations and announce locations by companies, independent operators and combination of companies operating in the Gulf of Mexico area.

One of the most recent developments in the gulf area of particular interest to those associated with the gas industry was the laying of 13 miles of 8⅝-inch pipe to transmit natural gas from wells in Matagorda Bay, off the coast of Texas, to a new plant being built by Aluminum Company of America near Port Lavaca.

The natural gas will be used as fuel for 120 gas engines, each driving a generator developing 1,100 kilowatts. The electric power from these generators will be used for reducing powdered alumina to metallic aluminum. According to present plans, five wells will be used to supply the plant, and others may be added later. Continental Construction Co., Inc., a Port Lavaca firm, laid the line under contract from Lavaca Pipe Line Co.

As one of the first companies to explore and attempt to tap these offshore potentialities, Magnolia has encountered —and surmounted—its share of difficulties. Some of the highlights of its past and present operations may be cited as typical.

Seismograph exploration involved many complex problems in the beginning. Adapting usual land seismograph techniques to marine exploration necessitated making under-water surveys and recordings by delicate instruments from the unsteady decks of small craft. For this work and initial construction operation, shrimp boats manned by skilled seamen schooled in gulf coast waters were used until Magnolia could build its own small fleet for seismograph exploration and construction and drilling operations.

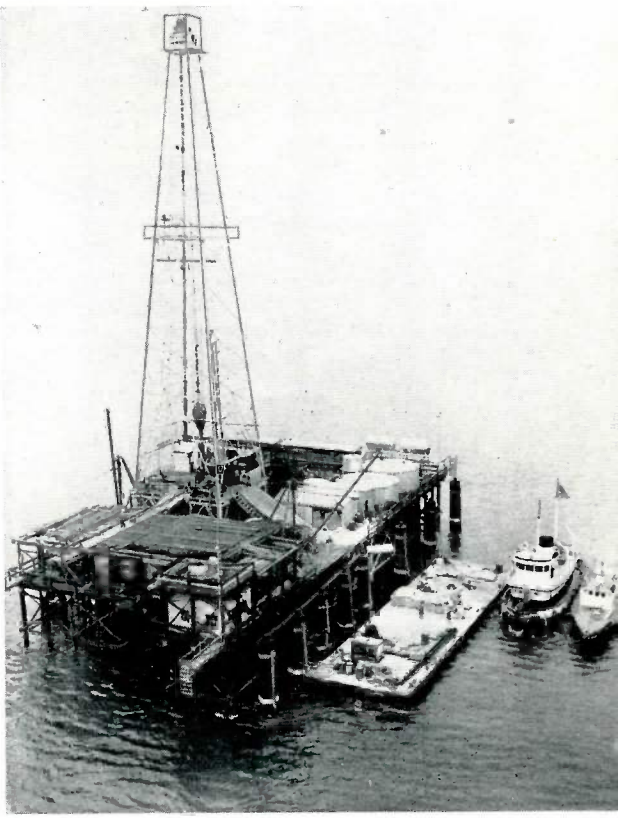
The first well drilled on one of Magnolia's large units, leased from the state of Louisiana in blocks of 5,000 acres, was located south of Morgan City, about five miles from Point au Fer, the nearest land. While several wells in the gulf coast area and along the Pacific coast have been drilled offshore, this operation was the first ever attempted at such a distance from land.

After headquarters were established in Morgan City and a sub-base built on Eugene Island, a shell reef in the gulf used only for a U. S. Coast Guard lighthouse, an island platform was constructed on steel and wooden pilings in 18 feet of water. Drilling operations were begun in August, 1946, and the well was drilled to a depth of 12,874 feet. In April, 1947, this initial well was plugged and abandoned.

A second well again set a record in being the world's farthest ever drilled for oil at sea, being approximately 28 miles from the mainland. Oil and gas shows were encountered, but not in sufficient quantities for the well to become a commercial producer.

In addition to these two test wells, Magnolia has drilled five more wells in the gulf, two of which were shallow

A view of Magnolia's Well No. 1. Alongside the well is one of the huge supply barges used to bring drill pipe, casing, cement, muds and other supplies from the mainland.



deviated holes from a single location. On the fourth well a small platform that accommodated only the necessary drilling equipment was used. All the other machinery, together with supplies necessary to drill the well, was placed aboard a reconverted YF Navy barge. This well was completed last August as a gas producer and established the immediate area as a gas field. In addition to this discovery, Magnolia also brought in a gas distillate well in November which marked the opening of another potential oil field in the Gulf of Mexico.

At this time the company has three well drilling and three locations at which rigging up operations have begun. Of the drilling wells, one looks promising for gas production and the other has had shows which indicate favorable conditions for oil or gas production.

Magnolia's present practice in offshore drilling is to use a small island platform and a barge or ship to supplement the operation. Today Magnolia has two drilling barges in use and two being reconverted which will soon be ready for service. Additional barges have been ordered and will be delivered by late spring.

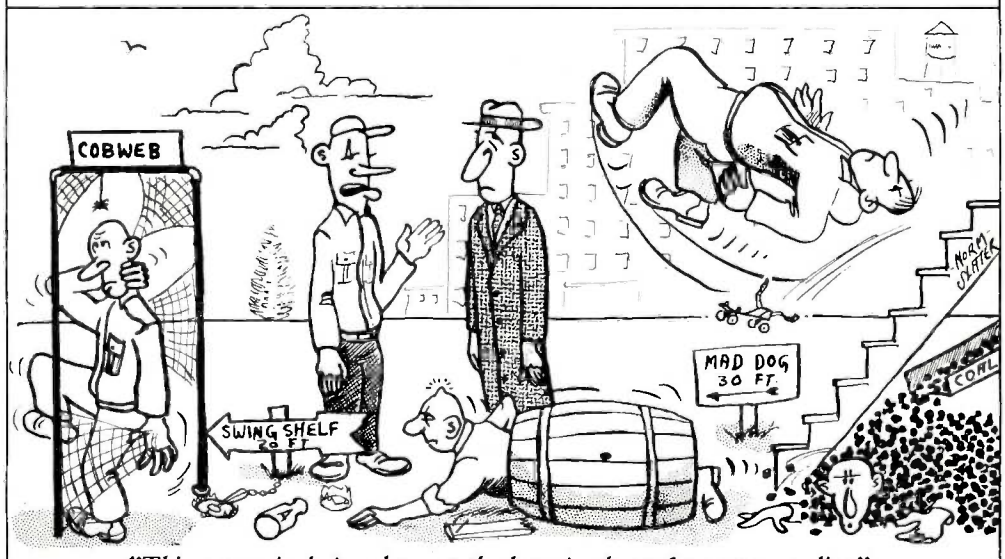
Offshore operators have come to expect the unusual, but there was nothing in the book to prepare Shell Oil Company for the recent loss of drilling rigs, a barge and two landing craft in a weird eruption of flame and mud, which was compared to an underwater volcano.

Officials of the company said the drilling equipment and vessels simply disappeared in the fiery upheaval and that nothing remained at the site, located at Pass a Loutre, the easternmost mouth of the Mississippi River. No one was injured, however.

The "volcano" was preceded by a well fire, which started March 11. At that time gas under high pressure became ignited when it began blowing from a direction hole being drilled from a barge. The heat generated from the fire melted a flow line through which oil was being produced from another well alongside. Damage from the original fire was estimated at one million dollars. The burning gas, it was believed, formed a crater beneath the ocean floor, and the eruption, which occurred March 30, was similar to an underwater volcano.

Thus, events in the course of offshore operations within just the past several years indicate that an entirely new chapter is being written in the quest for oil and gas.

Liverlip and Leo



"This course is designed to get the boys in shape for meter reading"

Richard D. Kitchen

Francis V. Martin

Mueller Co. Adds Two Salesmen

Richard D. Kitchen to Texas; Francis V. Martin succeeds R. W. Karr in Washington and Oregon territory.

MUELLER CO. has recently added two new salesmen to its staff of field representatives. They are Francis V. Martin, whose territory will consist of western and central Washington and Oregon, and Richard D. Kitchen, who has been assigned to the central and southern Texas sales territory.

Mr. Martin's headquarters will be in Portland, Oregon, and Mr. Kitchen will make his headquarters at San Antonio, Texas.

Both Mr. Martin and Mr. Kitchen have had previous sales experience. Mr. Martin already is well-known to the water works trade in his area, having been a representative of a pipe manufacturing company before joining Mueller Co. He succeeds R. W. Karr, who recently resigned from the company to enter business for himself.

Mr. Kitchen is a veteran of World War II, having served in the Army Air Force from 1942 to 1946. Prior to his military service he attended Los Angeles Junior College.

Mr. Martin attended the University of Utah, and became associated with a Utah pipe manufacturing firm as foundry superintendent, later as production superintendent. He requested a transfer to the company's sales department, and accordingly was assigned to a territory consisting of Oregon, Washington and Montana. Mr. Martin was a salesman in this territory for five years before resigning to accept a position with Mueller Co.

Mr. Martin is married, and the couple has three children.

Mr. Kitchen is well acquainted with the Southwest, having traveled in the territory extensively.

Both of the new salesmen came to Mueller Co. highly recommended, and it is expected that they will make many friends in the trades served by the company.

Mr. Kitchen, incidentally, is not related to the late B. F. Kitchen, who was for many years a Mueller Co. salesman before his retirement and subsequent death.

Boston's water supply system can be traced back to this crude reservoir, built in 1652.

A History of Boston's Water Supply

By James J. Matera
Superintendent of Wachusett Section, Metropolitan District Commission

LAST FALL THE City of Boston commemorated the hundredth anniversary of its first public water supply. One hundred years ago, on October 25, 1848, the Cochituate Water Supply System was officially dedicated to the service of the rapidly growing city and for the first time in its history Boston had a supply of pure water adequate for its needs.

James J. Matera

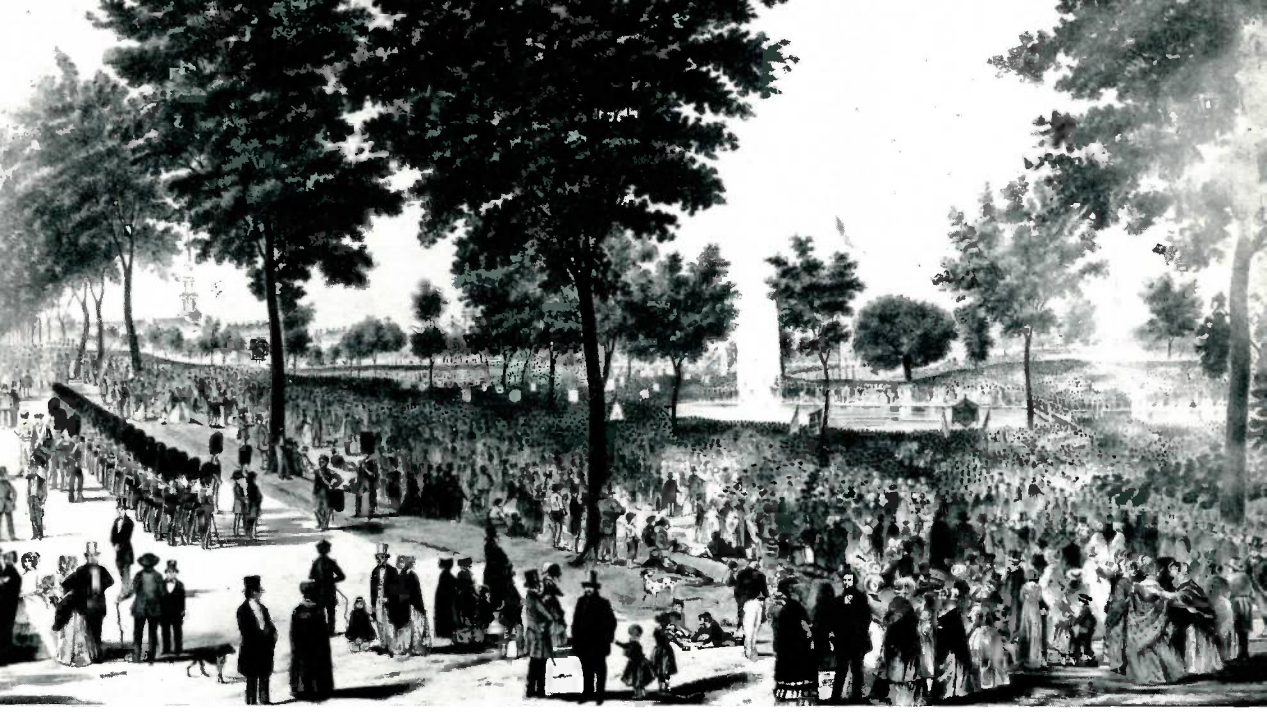
However, the history of Boston's water supply can be traced back to its feeble beginnings in 1652. In that year, according to Dr. N. B. Shurtleff, author of *Boston in the Olden Time,* "at the May Session of the General Court of the Colony, on petition of the inhabitants of Conduit Street in Boston, 'The Water Works Company' was incorporated for building the conduit, and provisions were made for the use of the water in case of fire."

Continuing, Dr. Shurtleff said, "It would appear that the conduit was a large reservoir, about 12 feet square, made for holding water, conveyed to it by pipes leading from neighboring wells and springs, for the purpose of extinguishing fires and supplying the inhabitants dwelling near it with water for domestic purposes."

This first conduit or reservoir never lived up to the expectations of those who built it, and all traces of it have disappeared. A plan of the town, engraved in 1722, places its location where the present North Street and Market Square join Union Street.

Apparently no other action was taken toward supplying water to the city for almost 150 years. Then on February 27, 1795, Governor Samuel Adams ap-

This is the first of two articles, condensed from Mr. Matera's paper, "One Hundred Years of Public Water Supply for Boston," which was prepared for the New England Water Works Association.



This great celebration on Boston Common heralded the city's first supply of pure water.

proved an Act of the General Court whereby Luther Eames, Nathan Bond and William Page were empowered to form a corporation for bringing water to Boston by "subterraneous pipes." Under a subsequent act, passed June 10, 1796, the corporation assumed the name of "The Aqueduct Corporation." Boston and Roxbury were to have the "privilege of hydrants for extinguishing fires."

Water was brought from Jamaica Pond in Roxbury through four main pipes of pitch-pine logs, two of which were of 4-inch bore, the other two of 3-inch bore. At the height of its prosperity, the corporation supplied about 1,500 houses with water.

There was no public action on the subject of introducing pure water into the city until 1825. But it was not until 23 years later that Boston finally obtained its first public supply.

The Cochituate Water Act was passed by the state legislature in 1846, authorizing the city of Boston to construct a public water supply, with an expenditure of about $3 million. The supply was to be taken from a natural lake, then known as Long Pond, situated in the towns of Framingham, Natick and Wayland. An aqueduct was to be constructed of brick masonry with the necessary appurtenances to convey and distribute a pure and wholesome water supply to the city's inhabitants.

The introduction of the first water to the Frog Pond in Boston Common on October 25, 1848, was the subject of a monster celebration. A report published at the time said in part:

"The day opened propitiously by beautiful weather, after a heavy rain during the night, disappointing the gloomy anticipations of the preceding day. The discharge of artillery, at break of day, was the appointed signal that the celebration would proceed . . . and a salute of one hundred guns opened the ceremonies of the day, accompanied by the ringing of the bells of the city . . .

"At the end of his address, Josiah Quincy, Jr., Mayor of Boston, inquired of the assembly if it was their pleasure that the water should now be introduced. An immense number of voices responded 'Aye,' whereupon, on the signal of the Chief Engineer, the fountain gate was gradually opened and the water began to rise in a strong column, increasing rapidly in height, until it reached an elevation of about 80 feet."

Off the . . Record . .

An old man heard about some pills that would restore his youth. He bought a box, but instead of taking one every day, he swallowed the whole box-ful one night before going to bed.

Next morning the family had great difficulty in waking the old man. At last he rolled over and rubbed his eyes.

"All right, all right," he grumbled. "I'll get up, but I won't go to school."

■ ■ ■

Stranger: "I've come out here to make an honest living."

Native: "Well, son, there ain't much competition."

■ ■ ■

During a cold and stormy passage the mate of the ferry-boat called down to the crew's quarters: "Is there a mackintosh down there that will keep two young ladies warm?"

"No, sir," came the reply, "but there's a MacPherson here that's willing to try."

■ ■ ■

A beautiful girl, emerging from the secluded pool where she had been enjoying a swim a la natural, heard a rustling in the bushes. "Who's there?" she asked.

"Willie."

"How old are you, Willie?"

"Eighty-nine, dern it!"

Two sailors, retired from the navy, pooled their money and bought a saloon in a small town. They immediately closed it and began to paint and fix it up inside and out. A few days after repairs had been completed and there was no sign of its opening, a thirsty crowd began to gather outside. One of the crowd knocked on the door and, when a head appeared at the window, inquired, "Say, when you guys gonna open up?" "Open up, hell!" growled the sailor. "We bought this place for ourselves!"

■ ■ ■

A distinguished scientist sat in an observatory peering at the heavens through the huge telescope. "Hmmm," he at last remarked impressively to a fellow scientist, keeping his eye glued to the instrument, "it's going to rain." "How can you tell?" inquired the other scientist. "Because," said the learned one, still studying the heavens, "my corns hurt!"

■ ■ ■

She stepped out of the bathtub and onto the bathroom scales.

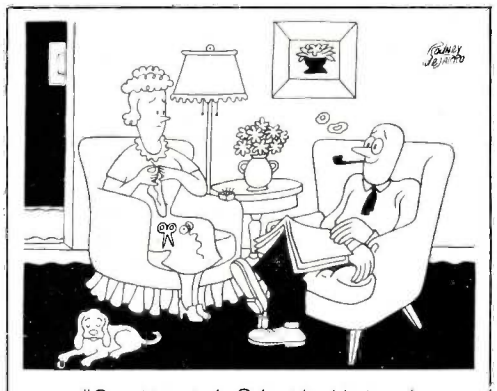
Hubby came in the back door, walked past the bathroom door, observed what she was doing and inquired: "How many pounds this morning, honey?"

Without bothering to look around she answered, "Fifty and be sure you don't leave those tongs on the back porch!"

■ ■ ■

"My worst sin," she sighed, "is vanity. I spend hours every day admiring my beauty."

"That's not vanity," her friend replied. "That's imagination!"



"Gee, this is nice! Only eight o'clock, and we're all through quarreling about the bills"

"By George, I'm sure glad I thought of this!"

The doctor's little daughter opened the door to the caller. "Is the doctor at home?" he asked. "No, sir," replied the child, "he is out performing an appendectomy." The caller smiled and said, "That's a very big word for a little girl like you. Do you know what it means?" The little one nodded, "Oh, yes . . . it means $125."

■ ■ ■

"You ought to get married, George."

"I would if I could figure out how to support the government and a wife on one income."

■ ■ ■

A six-year-old child from New York's East Side was visiting in the country. The farmer's wife took her for a tour around the place. She showed her the garden, the chickens, the stables, and finally they arrived at the pig-pen where an enormous sow reclined in the sun.

"Big, isn't she?" asked the farmer's wife.

"No wonder," the little girl replied. "I saw her yesterday and she had 10 little ones blowin' her up!"

■ ■ ■

"Jones has eleven children."

"Gosh, he's gone stork mad, hasn't he?"

■ ■ ■

"What do you think of a man who constantly deceives his wife?"

"I think he's a wonder."

■ ■ ■

Excited young woman: "Oh, Officer, please help me I've lost my aunt's pay."

Officer: "Well stop talking pig Latin and tell me where you lost 'em. Then maybe we can get somewhere."

Joe's wife caught up with her husband in a bar, sampled the highball he was drinking, and demanded, "How can you drink such horrible stuff?" "See!" said the husband, "and all the time you've thought I was out having fun!"

■ ■ ■

"That Georgia undertaker's daughter is certainly the biggest snob I ever met."

"What makes you think that?"

"She's going around telling everybody her father is a Southern planter."

■ ■ ■

"I couldn't serve as a juror, your honor. One look at that fellow convinces me he is guilty."

"Sh-h! That's the district attorney."

■ ■ ■

He: "Since I met you I can't eat, I can't sleep, I can't drink."

She (shyly): "Why not?"

He: "I'm broke."

■ ■ ■

They were having just one more at the bar when an old friend, previously quite normal, came through the door, walked up the wall, across the ceiling, down the other wall, and disappeared through the back door.

There was a moment's stunned silence then: "What in the world's got into that guy!"

"Yeah, he didn't even speak to us!"

■ ■ ■

Teacher: "Jimmy, what's a cannibal?"

Jimmy: "I don't know."

Teacher: "Well, if your father ate your mother, what would he be?"

Jimmy: "A widower."

"Constance, I'm making an excellent salary, don't owe a cent, and I've got $2,000 in the bank. Therefor ... er .. I don't want to get married"

"On the other hand, if you don't ask for a raise, they're perfectly willing to let you keep on working for what you're worth!"

Mostly Personal

(Continued from page 1)

Registration for the convention will be held in the hotel's exhibit hall.

■ ■ ■

Some of our readers may recall an article we carried some time ago on "Bannerstone Ben" Nussbaum, water superintendent at Fairbury, Illinois, and his fine collection of Indian artifacts. After running the article, it occurred to us that other collectors might be interested in learning of Ben's experiences. So after some further correspondence with him, we dutifully took typewriter in hand and dashed off an epistle which detailed his trials and tribulations in running down a cache of six bannerstones—the only known cache, incidentally. Well, an article on Ben and his bannerstones appeared in the February issue of *Hobbies* magazine, and we're not coy enough to attempt to disguise who wrote it.

■ ■ ■

Barcelona Lighthouse

(Continued from page 11)

rules of the department, to grant us a contract for keeping and supplying the Portland lighthouse for a number of years? Or if such contract was made, would it be necessary to petition Congress to pass a law authorizing such proceedings.

"Before obtaining any contract we will render satisfactory evidence from the collector of the revenue of this district and other responsible persons of the truth of our representations."

Judge Campbell's "representations" must have been effective, for on January 1, 1831, a contract was made between Judge Campbell and Pierce A. Barker, Buffalo, collector of customs and lighthouse inspector, for providing natural gas "at all times and seasons" and "to keep apparatus and fixtures in repair" at an annual cost of $213, payable quarterly.

Difficulty was experienced from time to time in maintaining the gas supply, and oil lamps were kept as stand-by equipment. In a report made by Lieut. C. T. Platt, U. S. N., dated November 26, 1838, it was stated: "Owing to a failure of gas, that may be attributed to the excessive draught, oil is now substituted. It is presumed, however, that the fall rains will replenish the stream from which the fountain is supplied, and thus prevent the escape and loss of the gas. The recurrence of such a draught will, if ever occurring, be at great intervals, and will not then, probably, render the use of oil for a long time necessary."

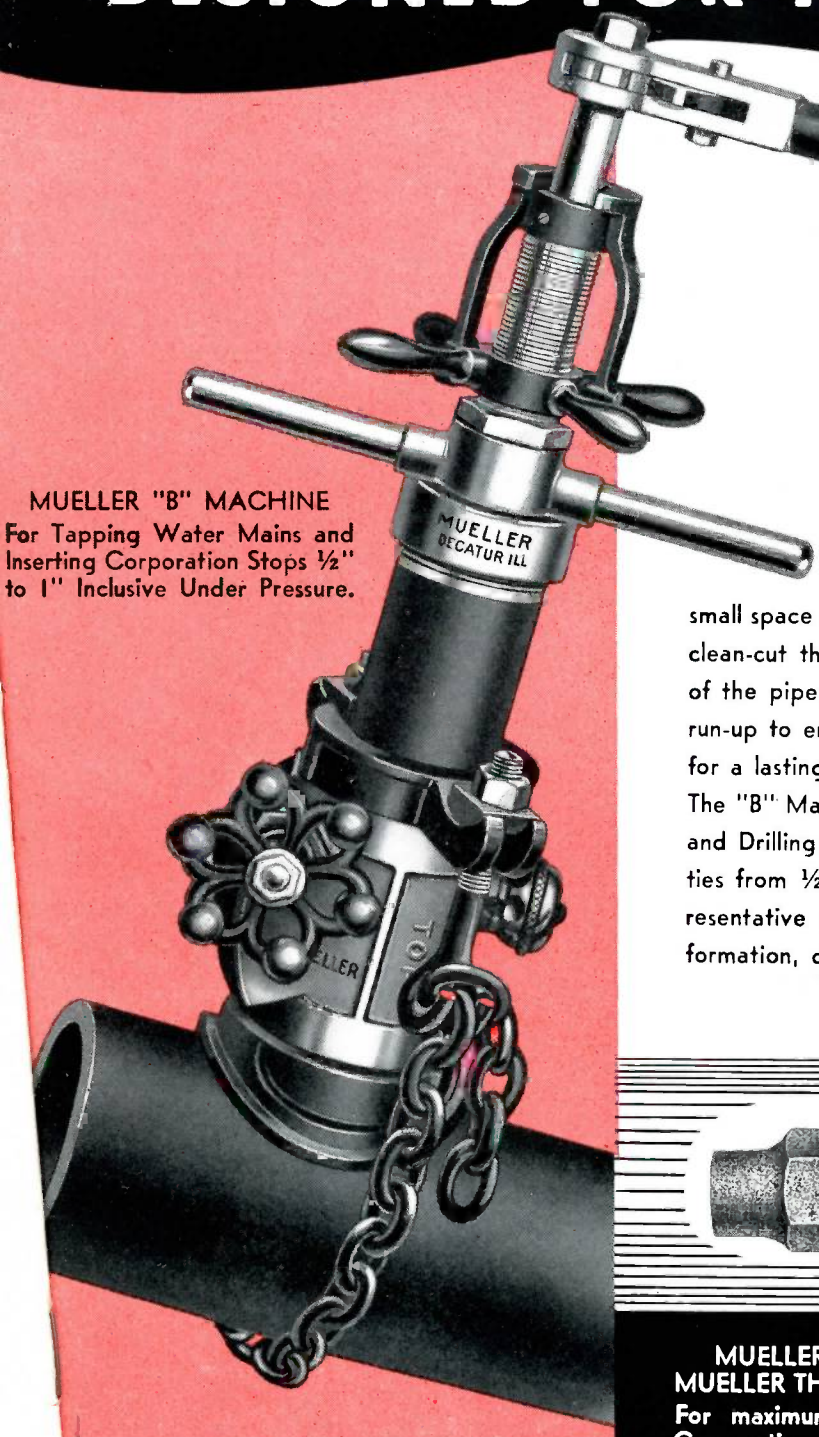
In another report, made by Lieut. S. Pleasanton and dated June 7, 1851, is the following: "We have one lighthouse at Portland, on Lake Erie, lighted with natural gas, carried a distance of two miles (Lieut. Pleasanton evidently misjudged the distance) in pipes and even here we are obliged to keep oil and lamps, as water frequently collects in the pipes, over which the gas will not pass, and whilst they are taken up and freed from water, oil light has to be used. We have a contract for supplying the natural gas at the annual cost of the oil that would be required if lighted with this material."

A year later a railroad was routed along the lake shore, and Barcelona's shipping was hard hit. It soon became apparent that the town's lake traffic was being taken by the railroad, and in 1855 the Lighthouse Board recommended that Barcelona light be discontinued, but the recommendation was not adopted until 1859, just 30 years after its establishment.

On June 7, 1872, Secretary Boutwell of the Treasury authorized the sale of the buildings by auction. They were bid in by a representative of Lieut. Gov. George W. Patterson, who as successor to the Holland Land Company, owned the site.

George Patterson Crandall, whose mother, Mrs. Frank W. Crandall, is the granddaughter of Lieut. Gov. Patterson, owns the lighthouse property at the present time. Mr. Crandall reports that "gas is still bubbling up through the nearby stream as it was 120 years ago." This would seem to bear out a prediction made in 1830 by a writer who signed his article "A Traveller" to the effect that the lighthouse would stand as "a monument of honor to the ingenuity and enterprise of those gentlemen who erected it, until some great convulsion of nature shall break up the fountain from which it is fed."

DESIGNED FOR THE JOB!



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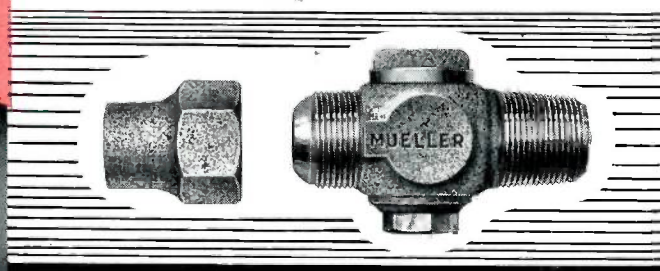
The "B" Machine is one of several Mueller Tapping and Drilling Machines that are available in capacities from ½" to 12" inclusive. Your Mueller Representative will be glad to give you complete information, or if you prefer, write us direct.



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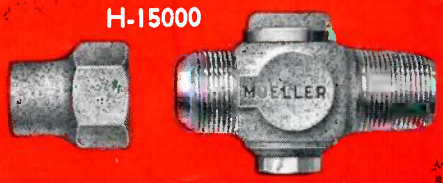

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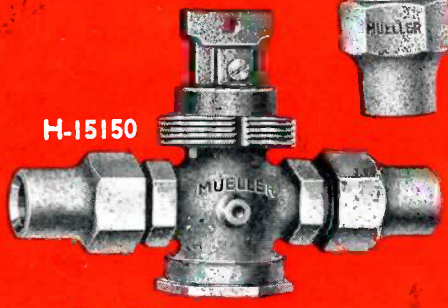

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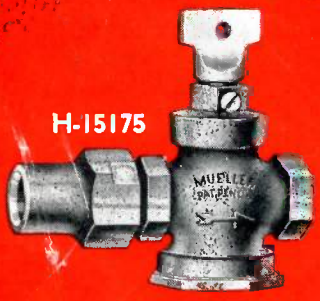

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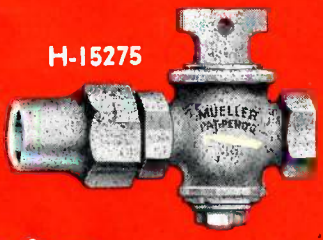

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