

## Woman Plumber Installs New Plant for Heating

Mrs. A. S. McKenna, widow of the late A. S. McKenna who established the plumbing and heating business at 354 West Railroad avenue, Kenil-

worth, a quarter of a century ago and who enjoys the distinction of being the only woman plumber in the state of Illinois, installed the heating plant at the Glencoe waterworks. It is the Warren Webster Vapor system, one of the most modern, up-to-date plants of its kind on the market today.

## ALVORD, BURDICK & HOWSON

JOHN W. ALVORD

CHAS. B. BURDICK

LOUIS R. HOWSON

### ENGINEERS

SUITE 1417-18 HARTFORD BLDG., CHICAGO

Investigations, Reports, Designs, Estimates, Plans and Specifications for the Construction and Improvement of Engineering Works.

Water Works—Water Purification—Flood Relief—Sewerage—Sewage Disposal—Appraisals and Rate Reports—Power Generation.

DONALD H. MAXWELL

Principal Assistant Engineer

## Masonry Work at Plant Done by Caesar Fiocchi

In the construction of the new waterworks, an important feature was the masonry. The plans called for detail of an exacting nature, requiring careful handling of the job and this contract was let to Caesar Fiocchi of Highwood. The fine appearance and staunchness of the new structure is evidence of the contractor's good work. Mr. Fiocchi specializes in stone work of all kinds, building drives,



C. Fiocchi

walks, walls, stone buildings and boulder stone work. He has handled the masonry work on many north shore residences.

### POLYCHROME AWNINGS

A polychrome awning has been introduced recently which is an awning with a solid background in various tints. Upon this background is placed a painted design, which is prepared to harmonize with the surroundings.

## GLENCOE WATER WORKS NEW STEP IN PROGRESS

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2,000,000 gallons of water a day Glencoe is able to sell some water and thereby enhance the earnings of its new plant, Northbrook to the immediate west needed water and a contract was closed by which Glencoe is to furnish the smaller village with water sufficient for its demands.

Under the terms of this contract Northbrook will construct a sixteen inch cast iron water main in Park avenue and South avenue to the village limits where a recording meter will be installed. This main will become the property of the village of Glencoe. From the west village limits the Northbrook main will be twelve inches in diameter and it is expected Northbrook will receive water before Christmas. Northbrook is expected to use 250,000 gallons daily and will pay Glencoe eighteen cents net for each 1000 gallons.

### New Works in Operation

The new plant is kept humming daily. Carl G. Gibbs is the superintendent at the plant and has three men, who work in three shifts of eight hours each. This means that one and very often two men are on the job.

It has been mentioned that the plant has a pumping capacity of three million gallons daily, but there are other interesting statistics. The pressure at the present time in the center of the village is fifty eight pounds. Before the new plant was built the water pressure was approximately forty-two pounds. The increase in pressure runs around twenty-five percent. Attention is called to the point that the pressure can be and will be regulated, because there is no need for full pressure at night.

When the intake is completed it will reach 3300 feet into the lake, and to a depth of 22 feet. The pipe is 24 inches in diameter. From the intake the lake water goes into a huge suction well. This well is ten feet in diameter and has a depth of 39 1/2 feet. It holds approximately 231,000 gallons. Low lift pumps raise the water from the suction well to the mixing chamber where it is properly chlorinated after which it passes through the filters to the clear water reservoir. It is then ready for public consumption.

One of the important features of the plant is the testing laboratory where raw water is tested daily to determine its bacterial record. This, of course, determines how much chlorine it is necessary to apply.

In the construction of the new plant, two organizations were awarded contracts, these being:

Nelson Brothers, Holthe and Beauvais of Muskegan, Mich., were awarded the work of constructing the building, and all marine work, while the Allied Contractors of Omaha were awarded the work of constructing the building, installing the machinery and all other land work. Alvord, Burdick and Howson, engineers, designed and superintended the construction of the entire plant, Mr. Lilley being the resident engineer in charge.

## Engineers Build Plant Imposing and Efficient

The engineering organization which designed and superintended the work on the new waterworks had an important assignment and turned out an imposing and efficient plant. The contract was let to the firm of Alvord, Burdick and Howson of Chicago. A building of Spanish tone was considered and plans accepted by the Glencoe board with the result the new waterworks is more than a mere building. It is a most attractive structure. The engineers carefully superintended all the work at the plant, which accounts for the efficiency in operation.

## CINCRETE USED IN GLENCOE WATER WORKS DUE TO EXCELLENT PROPERTIES

In the Glencoe Water Works Buildings strength, beauty and durability were obtained by using building materials possessing special merits. The Allied Contractors, Glencoe, Illinois, due to their experience, realized that the buildings were exposed in all directions to climatic changes, especially changes in temperature, and selected Cincrete Building Units as the best obtainable base for Portland Cement stucco. This, due to the fact that Cincrete and Portland cement stucco expands and contracts equally at changes of temperature. This prevents the formation of unsightly cracks and consequent deterioration of the finish of the building.

Located on the shore of Lake Michigan where wind, rain, heat, and cold will exert their forces on the buildings, it was necessary to provide durability, comfort, and safety, as well as beauty, in the structures.

Durability is assured by using Portland cement stucco applied to walls of Cincrete, an inseparable bond resulting between the two materials.

Stability of wood trim is assured by nailing the trim directly to the Cincrete wall. Interior plaster was applied to the bare Cincrete walls and will remain indefinitely.

Comfort for the crew of the water works is assured by the use of Cincrete, which has high value as an insulating material.

Safety against weather and fire is assured by the sturdiness of design and the use of strong, fire resistant Cincrete.

Beauty was obtained by designing the building in the Spanish style of architecture. Stucco plays an important part in the color scheme. Stone trim adds to the beauty of the design and to the durability of the structure.

There is nothing in Cincrete which would stain plaster or stucco, or which would corrode metals embedded in it. Iron pipe has been taken from good cinder concrete after 23 years service and found to be in an excellent state of preservation. Nails holding wood to Cincrete and exposed to the weather for 9 years have been found in perfect condition.

Dryness of buildings built of Cincrete is due not only to its insulative property, but also to the total lack of capillary action. Moisture cannot rise in Cincrete walls as in most all other masonry materials.

Lack of capillarity may be explained by saying Cincrete is non-wicking, if we remember that fluids rise in wicks because of capillarity. Cincrete has been used as an insulative material in homes, apartments, hotels, industrial buildings, lighthouses, furnaces, boiler settings, and ice houses.

Cincrete has been used as an insulative material on solid concrete walls, as fire-proofing for steel columns, as fillers in T-beam floor slabs, as a backup for brick, stone and stucco, and for sound, absorbent, fire resistant partitions.

Artistic results have been attained by painting Cincrete walls in a way to preserve the rough textured surface, and with no other surface covering.

For foundation walls, and for garden walls, Cincrete is unsurpassed as it will not rot, burn, decay or be disrupted by frost. A hundred repeated freezings and thawings by the University of Wisconsin left Cincrete unimpaired as to strength or appearance. No spalling or disintegration occurred. Garden walls can be stuccoed in many attractive ways, or given a cement paint or spray coat in any color, simulating the texture and stability of a stone wall with great economy.

Cincrete possesses strength with lightness and is suitable for load bearing walls and for non-load bearing walls, such as partitions, and curtain walls. Cincrete walls weigh approximately 50 pounds per cubic foot.

Walls have three major functions;—to support, to protect, to beautify. In the Glencoe Water Works buildings, these functions are well performed by the materials used. The investment in the buildings is stabilized by construction that is durable to the point of permanency. Many generations will view the buildings recently completed and will take pride in their beauty and stability. Such construction will tend to reduce taxation and insurance due to the long life of the buildings.

Cincrete is not a cheap material, but is economical when the total cost of a building is considered. Economies are attained in the saving of labor and mortar as compared with brick walls, in labor and materials in stucco and plaster work, and in nailing wood trim. Plugs, grounds, stripping or furring are not required on Cincrete walls.

Johansen and Company, 503 Winnetka Avenue, Winnetka, Ill., representative of the Cincrete Products Corporation, Milwaukee, Wis., states that the manufacturer of Cincrete has a factory of large capacity and that scientific methods are used in producing and handling Cincrete building units of uniform quality, strength and dimension. A number of sizes of block are made to permit and make easy the building of walls of any thickness from three inch upward; also brick and reinforced lintels are made of Cincrete.

P. I. Johansen of Johansen and Company has striven to give prompt service to his customers, and has had the support of his principals in obtaining prompt deliveries. In the North Shore district, a number of beautiful and palatial homes have been built of Cincrete to the satisfaction of the owners.

In Milwaukee, thousands of buildings stand as enduring monuments to the vision and enterprise of the makers of Cincrete, and to the well founded faith of the architects and contractors who have respectively specified and used this modern quality building material.