

“Ohio Industries: The Stone Industry”

By George H. Worthington,
President of the Cleveland Stone Company

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According to this article:

“The outcropping of two important geological formations, in territory near the southern shore of Lake Erie, between Cleveland and Sandusky, has formed the basis for a permanent and profitable industry. Ohio quarries have, during a period covering three-quarters of a century, furnished structural material for some of the most important building operations in the United States and Canada, hundreds of thousands of tons of heavy masonry for railroad construction, and thousands of miles of street curbing and flagging – these from the famous sandstone quarries of Berea, North Amherst, and Euclid. In addition, an inexhaustible supply of limestone from the quarries at Kelly’s Island, Marblehead, Sandusky, and other points furnishing a valuable commodity as a flux for melting iron at the furnaces in Cleveland and Valley districts....”

“The sandstone formation is a member of the lower carboniferous series...The principal quarries are located at Berea, North Amherst, Euclid, Grafton, Nickel Plate, Kipton, and Wakeman. At North Amherst, the gray ‘Canyon’ quarry, the largest in the worked, has a quarry face of over one and one-quarter linear miles and a depth of 196 feet....”

This article, which begins on the next page,
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OHIO INDUSTRIES

THE STONE INDUSTRY

BY GEORGE H. WORTHINGTON

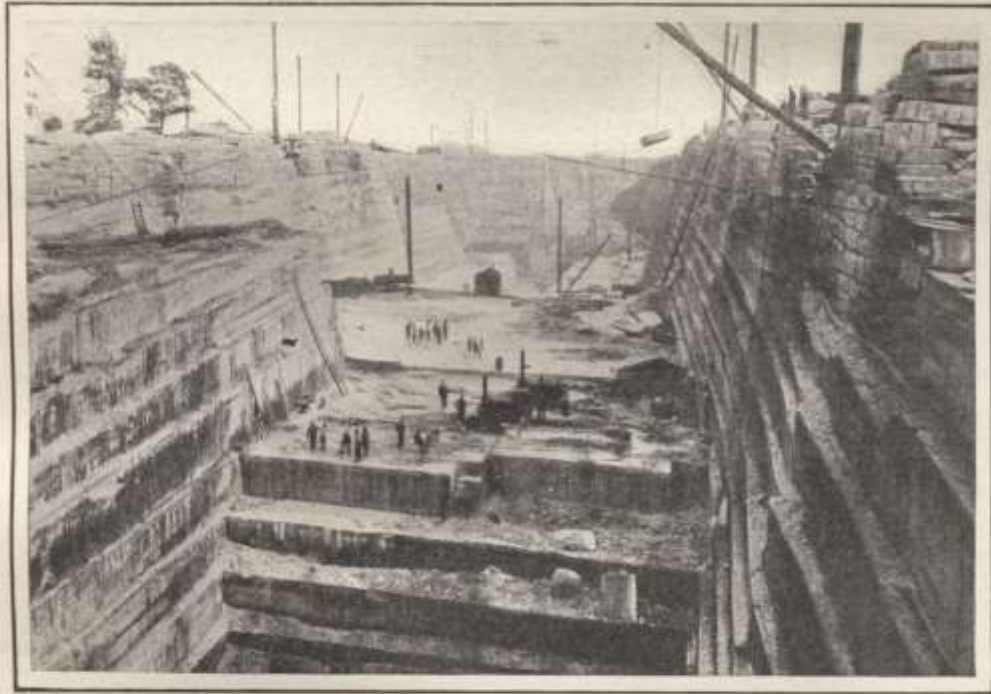
President of the Cleveland Stone Company

THE outcropping of two important geological formations, in territory near the southern shore of Lake Erie, between Cleveland and Sandusky, has formed the basis for a permanent and profitable industry. Ohio quarries have, during a period covering three-quarters of a century, furnished structural material for some of the most important building operations in the United States and Canada, hundreds of thousands of tons of heavy masonry for railroad construction, and thousands of miles of street curbing and flagging—these from the famous sandstone quarries of Berea, North Amherst, and Euclid. In addition, an inexhaustible supply of limestone from the quarries at Kelly's Island, Marblehead, Sandusky, and other points furnishes a valuable commodity as a flux for melting iron at the furnaces

from 140 to 196 feet in depth. From these quarries the shipments often aggregate from 200 to 300 cars of stone a day.

The merit of the Ohio sandstones lies in their silicious character. Analysis shows that they run about 97 per cent. pure silica, and, being well cemented, they are as resistant to weather as granite, and much less affected by the action of fire. They are of a light gray and buff color, and among the handsomest and most durable building stones known. They are well adapted for ornamentation, and the most elaborate design in carving can be executed in the highest relief, retaining clear-cut outlines through generations of time and exposure.

The Berea, the buff Amherst, and the gray "Canyon" sandstones have been used



View of the "Canyon" Quarry, Amherst, Ohio

in the Cleveland and Valley districts, as well as material for street paving, the construction of marine breakwaters, and all forms of structural work, except the superstructures of buildings. For the latter purpose the sandstones first mentioned occupy a leading place.

The sandstone formation is a member of the lower carboniferous series, homogeneous in texture, and composed of nearly pure silica. The principal quarries are located at Berea, North Amherst, Euclid, Grafton, Nickel Plate, Kipton, and Wakeman. At North Amherst, the gray "Canyon" quarry, the largest in the world, has a quarry face of over one and one-quarter linear miles and a depth of 196 feet, the rock running

in the construction of numerous post-office buildings erected by the Federal government throughout the country, in leading cities, from Texas to the Atlantic coast. They have been used in the construction of hundreds of municipal, county, and State buildings, schools, colleges, libraries, hospitals, hotels, churches, and residences. The group of the Dominion Parliament buildings at Ottawa, Canada, are of buff Amherst; the Bank of Montreal is of Berea sandstone; the Canadian Bank of Commerce at Winnipeg is of gray "Canyon"; a score of modern and historic buildings in Toronto are of buff Amherst; in the construction of other scores of buildings in New York, Chicago, Philadelphia, St. Louis, and as far west as

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Texas, these stones have been used. The second largest single stone arch-span in America, crossing Wheeling Creek at Wheeling, West Virginia, contains 9000 cubic yards of Berea stone.

In addition to building stone and curbing, these sandstones are also widely marketed in the various grades of grindstones which are widely used throughout the entire country and are also exported to a considerable extent. While the quarries of northern Ohio represent probably ninety per cent. of the output of the State, sandstone formations are also found along the Ohio River, and

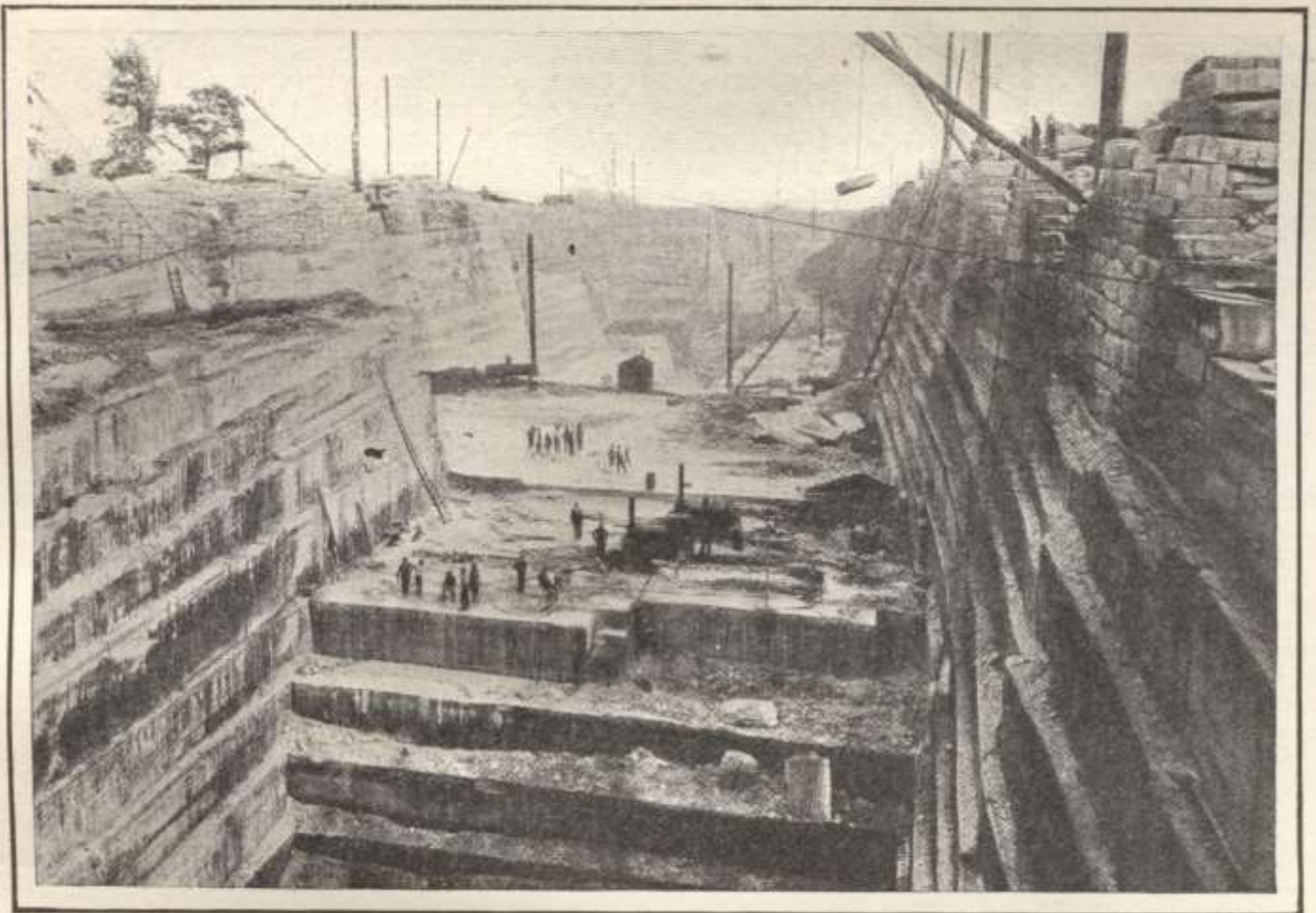
quarries in southern Ohio and other parts of the State are profitably operated.

The limestone formation is an outcropping of the famous Trenton limestone, a porous formation which, at a depth of 1200 to 1500 feet from the surface in northwestern Ohio, carries petroleum deposits, now being operated to the extent of about 1,800,000 barrels of crude oil per month. This rock reaches the surface, as previously stated, along the shores of Lake Erie, in the vicinity of Sandusky and on the cluster of islands dotting that body of water to the north.

The limestone quarries add greatly to the

sum total of the stone industry of the State. Like the sandstones, they, too, are found upon the surface at interior points at Dayton, Columbus, and at many points along the Big Four in Ohio.

In the aggregate, the annual output of the stone quarries of the State amounts to between \$5,000,000 and \$6,000,000 annually. The output has doubled within the last ten years. The supply is practically inexhaustible, and the demand increasing year by year. The actual capital invested in the production of sandstone and limestone in the State is estimated at over \$6,000,000.



View of the "Canyon" Quarry, Amherst, Ohio.