

## Forecasters of Quarrying

The need for good building stone was recognized by the Iowa pioneers. In his *Notes on Wisconsin Territory; Particularly with Reference to the Black Hawk Purchase, or Iowa District*, Lieutenant Albert Miller Lea was impressed with the prospects for good limestone quarries in 1835. As he rode with his mounted Dragoons up the Des Moines River valley, Lea noted much sandstone "suitable for building" while limestone seemed even more plentiful. Curiously, with the optimism of youth, Lea failed to recognize the possible need or use of stone in modern road building. "The country being so very open and free from mountains, artificial roads are little required. A few trees taken out of the way, where the routes much travelled traverse the narrow woods, and a few bridges thrown over the deeper creeks, is all the work necessary to give good roads in any direction."

Four years later, in 1839, John Plumbe, Jr., declared the "geological features" of Iowa were highly interesting; the country abounding with "rock" while even "marble quarries" had been discovered. Plumbe noted that the Maquoketa River was "bounded with high limestone bluffs, afford-

ing inexhaustible quarries of the best building material." Henry County, he declared, was also abundantly supplied with the best quality of limestone and freestone for building purposes. He described the location of Iowa City a beautiful one, noting in particular "a fine quarry of marble, of which the Capitol is to be constructed upon a very magnificent scale." Despite such outcroppings Plumbe felt that "what are generally termed builders' and field stone" were seldom seen.

When David Dale Owen made his survey of the leadmining area in 1839 he devoted considerable space to the limestone and sandstone quarries which lay open to the pioneers between Davenport and the northern limits of the lead mining region. He described the "cliff" limestone as "mural escarpments, exhibiting every variety of form" which gave to the "otherwise monotonous character of the landscape of Iowa a varied and picturesque appearance." He agreed with Plumbe that the Maquoketa quarries were excellent but felt the Iowa City marble, while beautiful, was not likely to "afford extensive marble quarries."

In the year Iowa achieved statehood John B. Newhall published *A Glimpse of Iowa in 1846*. Struck by the frequent ranges of "bluffs" or "calcareous strata of lime rock" along the margins of Iowa's rivers, Newhall did not overlook the mineral resources of individual counties. He found Johnson County "abundantly supplied with

excellent building material; both lime rock and superior clay for brick." He declared the Iowa City marble a "geological wonder" and carried a specimen to Europe where it created "extreme interest" in the British Museum in London. Newhall recorded that quarries of the "best building material abound in the bluffs of almost every stream" in Van Buren County and expressed the opinion that Wapello and other counties were equally fortunate.

When James Hall made his survey of the eastern half of Iowa between 1855 and 1857 he published a detailed account of his work by authority of the state legislature. By this time many quarries had been opened in Iowa and Hall carefully recorded the geological story they revealed. Nor did he forget history! In describing the Le Claire limestone above Davenport, Hall noted that this quarry provided much of the stone going into the piers of the historic first Mississippi River bridge at Davenport. Opened in 1856, this bridge later brought Abraham Lincoln to its defense when the steamboat *Effie Afton* was wrecked on one of its piers. Throughout the pages of his survey Hall records limestone quarries from which stone was taken to construct early bridge piers and erect homes.

The diversity of quarrying as it exists today stands in sharp contrast to the few uses made of stone before the Civil War. Prior to the Civil

War the emphasis was placed on lead mining, and coal was rapidly coming into prominence. Today highway construction — cement, blacktop, and gravel — requires huge quantities of stone from the numerous quarries that dot the face of Iowa. A tremendous amount of limestone is needed for agricultural purposes while the use of stone for buildings and bridges (except as it forms a part of cement, sand, and gravel) has become negligible. In 1953 Iowa ranked 33rd among the states in the production of minerals — cement, stone, sand and gravel, and coal ranking in that order in importance for the Hawkeye State. The presence of quarries is a vital economic factor in the construction of roads and highways.

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