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## Stone And Architecture In The Flint Hills

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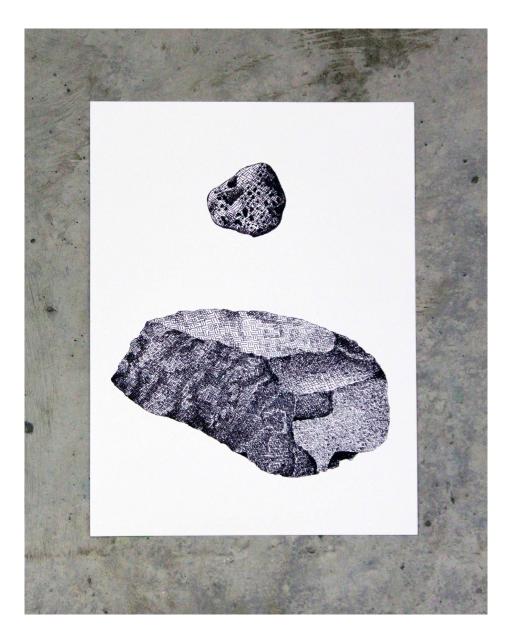
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*Heilagt Landslag I* Levi Robb

## STONE AND ARCHITECTURE IN THE FLINT HILLS

The lure of cheap land, fertile fields, and prime grazing acreage attracted many early settlers to the rolling Flint Hills.

New arrivals soon discovered the area's hidden wealth: abundant outcroppings of stone that could be used for long-lasting and goodlooking homes, public buildings, barns, and fences.

During the Permian period of the Paleozoic era (some 250 to 299 million years ago), the Flint Hills region, extending from Nebraska to Oklahoma, had been part of a shallow sea. Gradually, calcium carbonate accumulated, formed from decomposition of marine organisms and chemical precipitation. Over millions of years these sedimentary deposits hardened into vast formations of limestone.

In 1894, eminent Kansas geologist Charles Prosser named one of the most durable and desirable formations Cottonwood limestone. He found it in abundance along the Cottonwood River in Chase County, the Neosho River in Morris County, and in Wabaunsee County. Local quarry operators sometimes referred to this formation as Alma or Manhattan limestone. It was light gray or buff in color, had an average thickness of about six feet, and often contained chert. It could be cut into workable blocks from three to five feet in length. Stone masons found Cottonwood limestone strong and resistant to weathering. As a result, many buildings and bridges constructed with it have endured for nearly 150 years with only minor repairs.

In the Flint Hills region, workable Cottonwood deposits extended from southern Chase County to Wabaunsee County. These quarries were important to the economy of the area. In the late nineteenth century, Cottonwood limestone would become the most important source of building stone in Kansas. Even in neighboring Lyon and Greenwood counties where other formations were frequently used, limestone quarries were central to building and construction. Quarries created thousands of jobs, diversified the regional economy from farming and ranching, and contributed to the development of the national rail transportation network.

The well-known Beecher Bible and Rifle Church in Wabaunsee is an early example of Cottonwood limestone construction. In 1862, abolitionist emigrants from New England used local limestone to construct this Congregational church named for Henry Ward Beecher. This sturdy church is still used for services.

Two other excellent specimens of early Flint Hills construction with Cottonwood limestone are found in Council Grove, Morris County. There in late 1850, a twenty-five-man construction crew quarried, hauled, and fitted stone blocks to make an attractive, eight-room mission and school for Native American boys from the Kaw tribe. The famous Last Chance Store on the Santa Fe Trail in Council Grove was also built from Cottonwood limestone in 1857.

The Chase County Courthouse in Cottonwood Falls is one of the most beautiful examples of Cottonwood limestone construction in public buildings. Completed in October 1873, it features a French Renaissance style (Louis XIII) with a mansard roof and a cupola. It stands 113 feet from ground to top of the flagpole and has a two-story, black walnut circular staircase. The building is recognized as one of the architectural wonders of Kansas and is the oldest operating courthouse in Kansas.

Many of the stonecutters who came to Chase County to work on the courthouse remained to work on other stone projects and to develop the area's quarries. David Rettiger built the house and barn of the Spring Hill Ranch, now on the Tallgrass Prairie National Preserve, for rancher Stephen F. Jones in 1881. The home, constructed on a bluff in the Fox Creek valley, also has a mansard roof and dormer windows. It reflects some of the same Renaissance influences exhibited on the courthouse. Rettiger also constructed schoolhouses and office buildings in the area, including the Lower Fox Creek School on Highway 177 north of the Spring Hill Ranch.

After the Civil War the growth of the nation's rail network created a strong demand for limestone and incentives for quarry operators to expand. The Atchison, Topeka, and Santa Fe Railroad reached Chase County in 1871, and within twenty years it extended from Chicago to the Gulf and West coasts with connections to the Mexican Central Railroad.

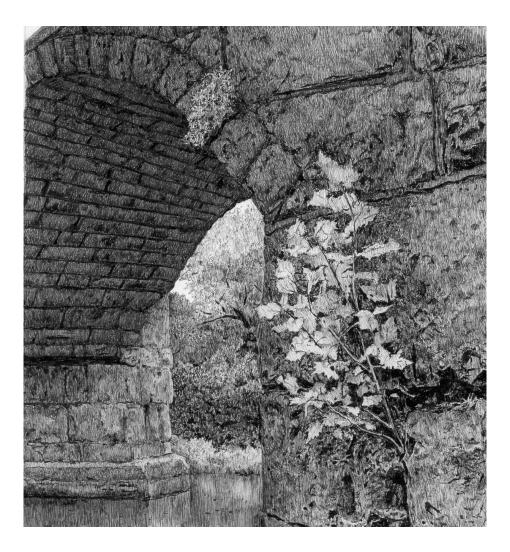


Horizon Stone Bill McBride

Much of the Santa Fe construction was done by Barnaby "Big Barney" Lantry. He came to Chase County in 1877 from Wisconsin where he had been building railroads. An energetic businessman, Lantry soon became the leading Kansas shipper of stone products. He produced limestone for construction of the Santa Fe Railroad to El Paso and expanded his business to include stone bridges, railroad stations, and roundhouses. In 1879, the press reported that he had become the largest contractor in the West.

Lantry and his sons built the cog railway up Pikes Peak; erected the famous Montezuma Hotel in Las Vegas, New Mexico; and even remodeled the area around San Francisco Bay to facilitate the transfer of ocean freight to rail cars. The firm also constructed the Mexican Central Railway from El Paso to Mexico City. In many projects Lantry used Chase County workers and Cottonwood limestone. At the time of his death in 1895, Barney Lantry was considered the richest man in Kansas.

Another Chase County quarry owner, Phil Santy, constructed the gracefully proportioned, twin-arch limestone bridge across the Cottonwood River at Clements. Although no longer in use, the bridge,



Stone Bridge and Sapling Gary Gackstatter finished in 1888, is considered one of the most beautiful limestone bridges in Kansas. Still intact, it spans 175 feet over the Cottonwood River, rising forty feet above water level, and is ten feet wide. It is a masterpiece of design and construction.

Chase County quarries also supplied Cottonwood limestone for the south and west wings of the Kansas State Capitol in Topeka, the Memorial Campanile at the University of Kansas, and the Eisenhower Presidential Library at Abilene.

In Wabaunsee County the railroad boom occurred a decade later in the mid-1880s. The arrival of the Chicago, Kansas, and Nebraska Railroad, a subsidiary of Rock Island, produced a surge in building construction and quarry expansion. John Joseph Fox, an Iowa railroad contractor, developed a large quarry southwest of Alma and employed seventy-five to one hundred men cutting stone for rail stations and bridges across Kansas, Nebraska, Oklahoma, and Texas.

Cottonwood limestone was extensively used in reconstructing downtown Alma. The Brandt Hotel (1887), completed to accommodate railroad workers and travelers, is an example of Italianate architecture applied to a commercial building. The Limerick block (1888), done in Romanesque style, contained the city hall. By 1891, local newspapers described Alma as the "City of Native Stone." One even hailed it as the "Queen City of Kansas."

Native limestone was used to construct two small bridges on the east and southeast sides of Lake Wabaunsee and many of the dry-land rock fences that dot the rolling countryside. Settlers of German ancestry used the Cottonwood limestone outcroppings to build beautiful stone fences and durable homes and barns for their stock and storage. Travelers can still find attractive stone fences and buildings along Mill Creek southeast of Alma and on the Native Stone Scenic Byway in Wabaunsee and Riley counties.

Late in the nineteenth century, barbed wire and Portland cement would replace limestone in many uses, but present-day visitors to the Flint Hills can find many long-lasting, elegant buildings and bridges constructed from the beautiful limestone of the region.

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