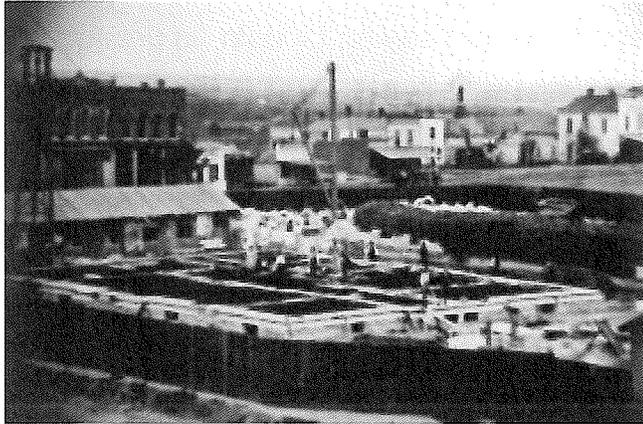


Jim McKee: Windmills and water in Lincoln



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The first settlers in the tiny village of Lancaster, which would later become Lincoln, had little problem in obtaining water. Salt Creek south of O Street provided water not infused with salt and even hosted large and supposedly tasty buffalo fish, while Oak Creek had no saline characteristics until it was well within the salt basin. Wells, however, were a different story, as virtually all dug wells produced salty, alkali water not suitable for drinking. At least one

article announced that Lancaster County was fortunate in that "living streams passed through every precinct."

It is probable that the first windmills in Nebraska were purchased by the Union Pacific Railroad to quench the voracious thirst of steam engines and easily could pump water from 75-foot depths. By the 1870s, the Nebraska Farmer was writing about and advertising windmills for use by ranchers and farmers, and within a decade many small Nebraska towns sported a windmill and stock tank dead in the middle of the village's busiest intersection.

Towns, such as College View, well into the 1890s, put these strategic windmill/well sites in the center of the business district streets to provide water for farmers visiting their stores, households without their own wells and more and more to provide water to fight fires where there were no water mains.

With the move of the capital from Omaha in 1867, one problem that had already been forecast was when one Capital Commissioner favored Ashland over Lancaster as he doubted whether the latter community could provide sufficient water for the larger city, which was bound to grow around the capital.

By 1870, Lincoln had grown in three years from a population of 30 to 2,000, and the water question already was becoming crucial. A letter in the Daily State Journal suggested water be piped from Oak Creek or that an artesian well be drilled on Market Square to fill a series of cisterns scattered through the community. John Eaton was summarily hired to drill a hopefully clear-water artesian well in Market Square, the block bounded by Ninth, 10th, O and P streets. Ultimately, just as he reached the maximum depth he could drill, an artesian flow was produced; unfortunately it furnished only salt water.

One thing Eaton had proved was that there was a fresh-water vein, about a foot thick, that ran from the north to around Denton. All one had to do was drill to the exact depth to avoid the salt water and install a windmill or pump to bring potable water to the surface.

By the late 1880s, about a dozen wells with windmills had been installed. Blocks 37, 33, 43, 45, 42, 67, the university and state penitentiary all sprouted "prairie flowers," as some

termed windmills.

In October of 1884, it was noted that Lincoln, with a population of 20,000, had six public cisterns averaging 900 barrels of capacity, mostly supplied by windmill pumps. These cisterns were built mainly in the middle of the intersection, first at 11 and N, 13th and N, and Ninth and P streets, then in other downtown locations.

In 1884, the U. S. Department of the Interior published a report saying Lincoln "is preparing to build waterworks." True to its prediction, the first piped water in the city flowed on April 28, 1885 from water pumped at the city's 1882 Sixth and F streets well. This well, which ultimately would furnish a million gallons of water per day, was built in the corner of Lincoln Park (now Cooper Park). Water was supplied to a standpipe to provide pressure and then sent through 11 miles of pipe.

An attempt to drill a second well in Lincoln Park failed when water was removed from the aquifer so quickly that adjoining salt water was sucked into the pumps. It was abandoned for a new and distant well, known as the Rice Pumping Station, on the south edge of N Street near Antelope Creek.

In 1890, test wells were sunk at 30th and A, Sixth and C, and Fifth and Hatch streets. The 30th and A streets location proved the best and pumped no salt water. All of these new wells eschewed windmills in favor of coal-fired pumps, and windmills one by one were retired.

About 1922, Charles Ammon moved from David City where he had a small chain of hardware stores and operated the Easy Manufacturing Co. In Lincoln, Ammon acquired the Yale & Hopewell Co. at 2045 Y St., which manufactured, among other items, windmills. The windmill was renamed the Easy Windmill, which not only sold under its own name but furnished Montgomery Ward with the Air King windmill that was supplied in dwindling numbers until 1938. After the Great Depression, the Ammons bought the neighboring Cushman Co., where sales were slipping, and merged the two concerns under the Cushman Motor Works name.

One of the last windmills put into use in Lincoln was the duo built by the N.Y.A. and W.P.A. in the early 1930s to water trees being planted for Pioneers Park. When the wells, almost immediately, began pumping salt water, the wells and windmills were abandoned.

Today, farmers and ranchers continue to use windmills to draw water, particularly when electricity is not conveniently available. The word "windmill" today more often is used interchangeably with the wind turbine with the city of Lincoln's two major generators north of the city and small experimental turbine on the northeast corner of 84th Street and Nebraska 2.

Oh, and that singular vote for Ashland as capital site proved prophetic as virtually all of Lincoln's water is now pumped from Ashland.