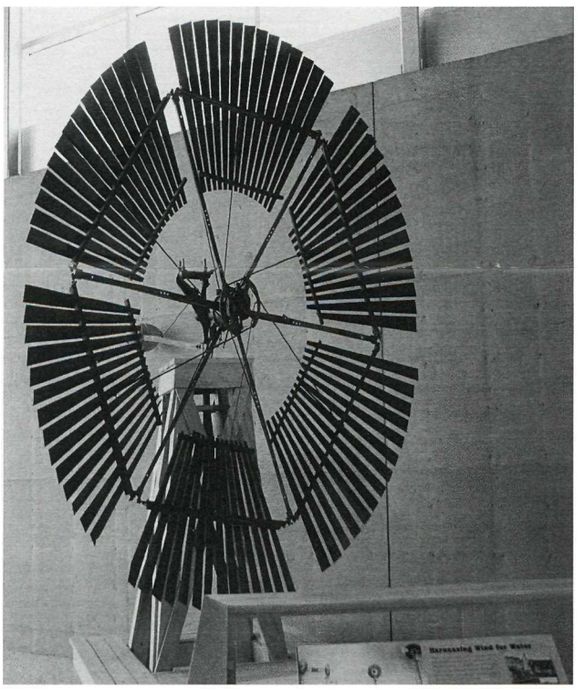
The Monitor Vaneless: A Windmill Named for an Ironclad



Introduction

Many who claimed land under the Homestead Act settled in harsh environments where they had to adapt and innovate in order to survive. Homesteader ingenuity was responsible for many new inventions or improvements on older ideas. The latter was the case with windmills on the Great Plains.

The windmill you see before you is a 10-foot Monitor Vaneless windmill. This particular windmill has been part of Homestead National Monument of America's museum collection for many years. It was previously displayed at the old visitor center (now the Homestead Education Center). The head of the windmill is original; the tower was constructed in 2007 for this display. Journey to the downstairs exhibit area to learn more about how windmills work, why they were so important to homesteaders, and modern innovations like wind turbines.

This windmill was donated to Homestead National Monument of America by John Whittler of DeWitt, Nebraska, in the early 1960s.

History of the Monitor Vaneless

Invented in 12th or 13th-century Europe, windmills first appeared in the present-day U.S. in the 1620s. The original Monitor Vaneless was the first windmill sold by the Baker Manufacturing Company of Evansville, Wisconsin. It was named "Monitor" for the famous Civil War ironclad ship the USS *Monitor*. The company produced the first Monitor Vaneless in 1875 and by 1879 was producing up to 70 windmills per month.

The Monitor Vaneless was manufactured in 10-foot and 12-foot models and is a relatively simple windmill. The 10-foot "Model L" had six sections; the 12-foot "Model M" had eight sections. During the 1870s and 1880s, the Monitor Vaneless was made in a pattern without a counterweight. In 1892, a spherical balance weight was added. Following this improvement, the windmill was produced with few design changes for the next 20 years. The football-shaped counterweight like the one on this windmill was introduced in 1918. John S. Baker, son of the company's founder Allen S. Baker, patented the Monitor Vaneless design on January 1, 1918—exactly 55 years after the Homestead Act became effective and necessitated mass production of windmills in the United States.

The Model L and Model M Monitors are easily identified by their distinctively-shaped counterweights, rocker arm ironwork, and two large coiled governor springs at the wheel hub. Though the Baker Manufacturing Company remains in existence, the last wooden Monitor Vaneless windmills were produced in the early 1940s.

The Importance of Windmills to Homesteaders

Water was a critical resource to homesteaders. They needed it to cook, bathe, drink, water crops and animals, wash clothes, and more. In the 30 homesteading states, however, many did not have creeks or rivers flowing through their homesteads. Acquiring water became an important task. Windmills made this job much easier by taking advantage of the gusting winds so common on the Great Plains. Windmills were often among homesteaders' most prized possessions and are prominent in many photographs of homesteading families, including the one at right. Today, windmills remain a common sight in many parts of the Plains.