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Windmills

Lead: Evoking visions of the charming Dutch countryside, the tilting object of slightly confused Spanish knights, and fights between green power and wealthy islanders, one of things that modernized rural America was the windmill.

Intro: *A Moment in Time* with Dan Roberts

Content: In 1854, Daniel Halladay, a New England inventor, submitted a patent application for a self-regulating windmill, an ingenious device that automatically closed its

blades during high winds so as to protect itself from damage. According to essayist Stuart Leuthner, this inaugurated the era of the American windmill.

Most of the continent west of the Mississippi Valley lacks reliable sources of surface water. Ranchers and farmers were forced to draw underground water for human consumption, herds of cattle and sheep and irrigation for at least limited types of crops. From the middle of the 19th century, however, increasingly efficient windmills changed that equation and helped transform rural areas by automating the pumping process. If the plains were dry, they did have one thing in

abundance and that was wind. Across the West farmers and ranchers would dig wells and wind would spin up the water for thirsty livestock. Cattle and sheep could be grazed over ever more wide-spread areas because of the presence of stock tanks fed by largely untended mechanical windmills

By the 1930s, electricity had come to rural America and windmills, for a time, went out of fashion. In recent decades, however, they have enjoyed something of a renaissance, partly out of environmental concerns, but also because wind power driving modern efficient windmills can provide more cost-effective power in remote locations.

**At the University of Richmond,
this is Dan Roberts.**

Resources

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www.windmills.net

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