





Topsy Turbo asked Wild Willy Wind to help her with a history project for school.

Wild Willy Wind had travelled all around the world and was very keen to help.



First they went to Ohio in America to see Professor Brush and the wind turbine he built in 1887 to charge batteries and make electricity for his big house.



Next Wild Willy Wind whisked Topsy off to Askov in Denmark to meet scientist Poul Ia Cour and look at his 1890 wind turbines which provided electricity to the whole village.

Poul la Cour

La Cour's turbine

"This scientist was very clever," said Wild Willy Wind, "because he found out that fewer blades spin faster."





Topsy was starting to get a little dizzy but Wild Willy Wind picked her up in a cloud and they were off again to go and see the first vertical axis wind turbine. Even though she was a little dizzy, Topsy was beginning to enjoy her history project especially when she met Frenchman George Darrieus who had built the "egg-beater" windmill in 1931.



"I liked the egg-beater," said Topsy as she was whirled away to Yalta in Russia to see the first horizontal wind turbine built in 1931.



This turbine was just like the ones we have today, with the sails (we call them 'blades') at right angles to the 30m high shaft (that we call tower').



"No time to hang about," said Wild Willy Wind.

"We are on the way to Vermont in America to see the first megawatt wind turbine built in 1941".

Sketch of the 1941 Smith-Putnam turbine

"Look at those big blades," said Topsy, *"now everyone can get connected."*



Smith-Putnam Wind Turbine The world's first mega-watt wind turbine built on Grandpa's Knob in Vermont USA By this time Topsy had lots and lots of notes about the history of wind turbines and was frantically stuffing papers into her school bag before Wild Willy Wind took off back to Denmark in 1956 to see the Gedser wind turbine built by Johannes Juul.



"Why is this one different to the others," asked Topsy.

"Because it included emergency aerodynamic tip breaks," replied Wild Willy Wind.



"Oh dear," said Topsy, "this is getting very technical." "I am only little, and I think I have enough words now for my project." "OK," said Willy Wind, "we have got most of the history done. From the 1980s the wind turbines did not change much, they just got better."

Then Wild Willy Wind whisked Topsy back around the world back to her home.

"Wild Willy Wind certainly knows all about wind turbines"

thought Topsy,



"Maybe that's because it's his real job."

Pati Duyckers 25 May 2020 To learn more about the people in this story and their turbines go to the links below:

- Professor Charles F. Brush:...<u>http://xn--drmstrre-64ad.dk/wp-content/wind/miller/windpower%20web/en/pictures/brush.htm</u>
- Poul la Cour:...<u>https://www.guideservicedanmark.dk/history-time/la-cour-poul-en</u> / <u>https://en.wikipedia.org/wiki/Poul_la_Cour</u>
- Joe and Marcellus Jacobs:...http://www.jacobswind.net/history
- George Darrieus:...<u>http://www.wind-works.org/cms/index.php?id=715</u> / <u>https://en.wikipedia.org/wiki/Darrieus_wind_turbine</u>
- Yalta Wind Turbine:... <u>https://www.sutori.com/item/yalta-wind-turbine-1931-ismail-the-horizontal-wind-turbine-is-used-in-yalta /</u>
- Smith-Putnam Wind Turbine:
- <u>https://en.wikipedia.org/wiki/Smith%E2%80%93Putnam_wind_turbine_/http://www.wind-works.org/cms/index.php?id=223</u>
- Gedser Wind Turbine:... <u>http://xn--drmstrre-64ad.dk/wp-</u> content/wind/miller/windpower%20web/en/pictures/juul.htm
- Johannes Juul:... https://aeolians.net/2019/03/05/wind-works-johannes-juul-1949-1962/ /



About the Author

I am a woman in my mid-eighties who retired from the workplace to live on a sheep farm in rural New South Wales. Rural life here is very enjoyable, despite drought, bushfire or unusual weather. One has to take adversity in one's stride and I am fortunate to be an arm's length away from the recent disasters. I notice the things that happen around the farm and make up short stories about them that kids would enjoy. Because I have a scientific background I tend to research my ideas as thoroughly as I can. But it is all good fun.

https://www.shortkidstories.com/authors/pati-duyckers/

TOPSY TURBO's HISTORY PROJECT

This is a story about a young wind turbine Topsy, and her travels around the world with Wild Willy Wind as she learns about the history of wind turbines

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