


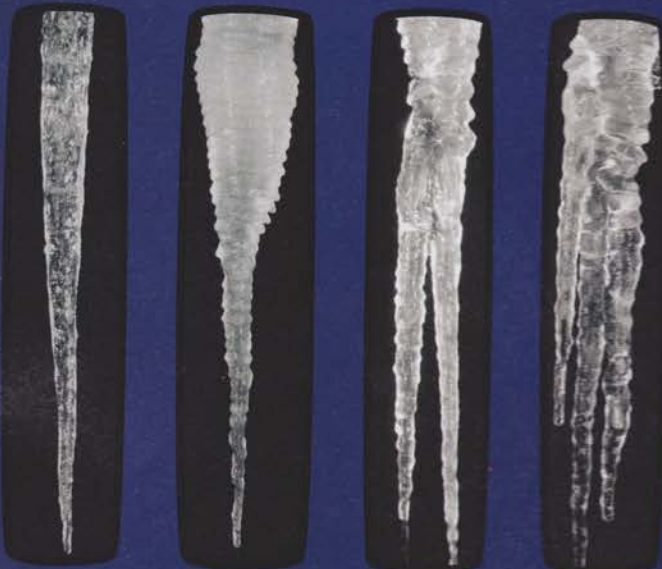
Ice Cold Science

Does science get any more fun than this? Researchers at the University of Toronto wondered if it was true that all icicles form into the same cone shape, like stalactites, from top to bottom. To find out, they photographed 93 icicles they grew in the lab.

In a refrigerated box (about the size of a mini-fridge), scientists Antony Chen and Stephen Morris grew icicles in different conditions. Temperatures in the box ranged between -7°C to -21°C , fans stirred the air, and the water used was either tap or purified. But wait — they also rotated the icicles like meat on a spit. One rotation took four minutes, which allowed the entire icicle equal growing conditions.

And guess what? While the original theory stated that still air produced ideal, cone-shaped icicles, this study showed the opposite. Icicles that grew in still air had multiple tips. Gently stirred air, however, led to cone-shaped icicles. Moving air coupled with purified water produced practically “perfect” icicles. Next up: the perfect snow cone? 


— Jude Isabella



It takes about 10 hours to grow an icicle in the lab. Knowing how icicles form is useful information if you're worried about things like ice on airplane wings.

Titanic Travel

To sail on the *Titanic*, you had a choice of first-, second-, and third-class cabins. To travel economy, \$36.25 paid your way but the big bucks — \$4,500 — got you the “Millionaire’s Suite” in first class. Sadly, passenger class was a factor in who survived the sinking.

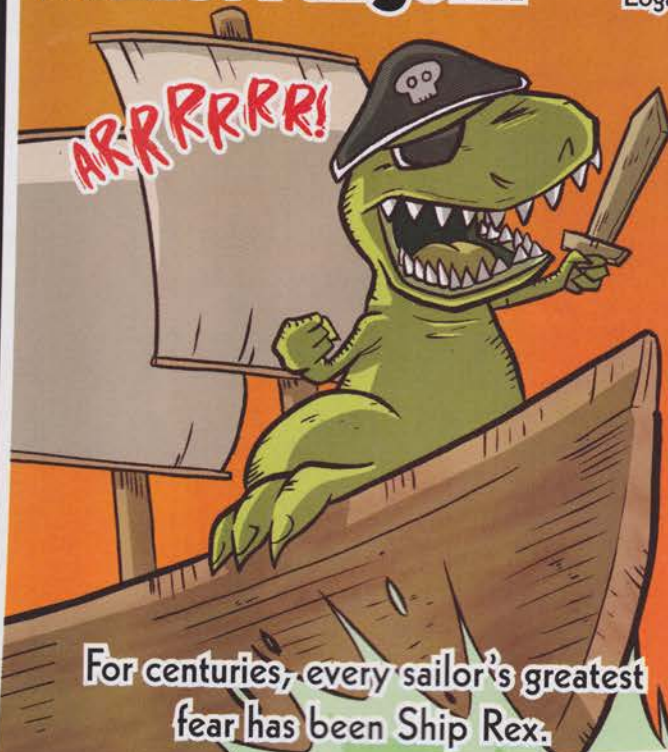
Researchers studying human behavior compared the *Titanic* sinking with the *Lusitania*, which sank three years later in 1915 and killed 1198 people. The situations were similar with crew, passengers, and lifeboats — one major difference was that the *Titanic* took over 2.5 hours to sink, and the *Lusitania* a mere 18 minutes. Their conclusion was that with enough time, accepted social behavior kicks in and the most vulnerable were taken care of — women, children — and the wealthy pulled rank. On the *Lusitania*, however, the young and fit — 16 to 35 year olds, either gender — survived in the largest numbers.  — Jude Isabella

	<i>Titanic</i>	<i>Lusitania</i>
Passengers	2207	1949
Total Survival Rate	32.0%	32.6%
Women Age 16-35	48% more likely to survive ¹	10% more likely to survive ¹
Children	15% more likely to survive ²	5% less likely to survive ²
First Class	44% more likely to survive ³	11% less likely to survive ³

Turn to page 22 to read about the *Titanic* and its resting place.

Planet Pangolin

by Sam Logan



For centuries, every sailor's greatest fear has been Ship Rex.