

CENTENARIAN

Updating the science of the *PopSci* archives

BY BILL GOURGEY



riding the wind

• Merry-go-rounds were iconic in the hearts and minds of kiddos and grown-ups alike after the turn of the 20th century. Walt Disney cited the spinning spectacles as his inspiration for the Happiest Place on Earth, and carnival folk dubbed them “the First Ride.” During this golden age of carousels, *Popular Science* even offered readers instructions for building their own. But given that fewer than half of American homes had access to electricity at the time, that 1919 model got its power from the wind.

Before electrification in the late 19th century, manual cranks, pedals, mules, and, eventually, steam spun the whirling stages, which sported simple features like suspended seats and benches. Voltage allowed designers to introduce the classic bobbing horses, organ music, festive lights, and double decks.

But appetites for old-school thrills are on the rise. “Small is beautiful, and less complex is more fun,” says William Henry Dentzel III, a fifth-generation merry-go-round maker who runs the renowned Dentzel Carousel Company, whose credits include the King Arthur Carousel that’s been turning in the heart of Disneyland since it opened in 1955. While he admires the craftsmanship of the flashy attractions built by his forebears, he’s found that folks tend to prefer a more mechanical experience. His throwback offerings, which dot parks from California to Mississippi, are hand cranked, pulled by ropes, and pedal powered (sometimes by the riders

themselves). A crowdfunding campaign out of Venice, California, hopes to add a bike-pedaled version to Centennial Park.

While Dentzel’s a fan of grid-free electric carousels like the solar-charged models increasingly popular at conservation-minded zoos (he built the world’s first such ride in 2005), he believes that adding layers of technology is often a quick way around good mechanics. “Nowadays, we overengineer a lot of things because we can, and it ends up defeating the purpose of what we’re trying to do,” he says.

Still, even with his push toward greater simplicity, Dentzel has no plans to harness the wind. He does insist, however, on restoring something that a lot of carousel makers ditched late in the golden age: rings that patrons grab and toss to win prizes as they twirl. Wherever he’s installed that extra game, ridership has doubled. “Frankly, merry-go-rounds are pretty boring without them,” he says.

April 1919

After the close of World War I, the Allies counted more than 21 million tons of sunken ships and debris at the bottom of the ocean. As part of their salvage efforts, underwater blacksmiths wielded specialized torches that used a jet of air to clear the way for their steel-melting flames.

