

America's First *Sail*Road

In 1830, steam engines pushed ships and sails powered railroads.

During the first years that railroads were being tested in America, inventors experimented with various ways to propel the cars along the track. Horses pulled passenger cars loaded with dozens of people at speeds up to 10 miles per hour down the track. During one of these experiments, "Two dogs attached to a car trotted off with a load of six persons."

But surely, one of the most exciting trials was conducted when a group of inventors tried to sail a railroad car filled with passengers along six miles of the first set of rails used by the South Carolina Railroad Company.

Charleston Courier,
March 20, 1830

"On the 22d of January, 1830, a car which had been constructed to be propelled by a sail, was carried along at the rate of 20 miles an hour; the whole length of the rail [six miles]."

The preparations for sailing were very hastily got up, and of course were not of the best kind; owing to this circumstance the experiment afforded high sport.



The wind blew very fresh from about northeast which, as a sailor would say, was 'abeam,' and would drive the car either way with equal speed. When going at the rate of about twelve miles an hour and loaded with fifteen passengers, the mast went by the board, with the sail and rigging attached, carrying with them several of the crew. The wreck was described by several friendly shipmasters, who kindly rendered assistance in rigging a jury mast, and the car was again soon put under way.

...it was ascertained that the car would sail within four points of the wind...when a northwester' was blowing, it would be dragged out to the farther end of the Mount Clair embankment, and come back, literally with flying colors."

William Wirt

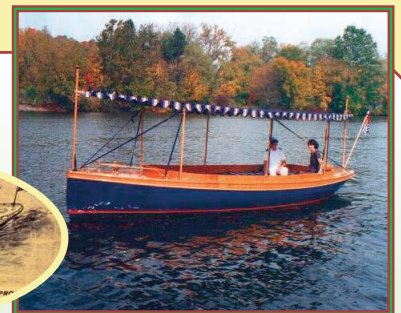
Wind-powered railroad locomotion quickly lost out to the more reliable—and controllable—power of the steam engine. And the "sailroad"? The sailroad was relegated to the "Great idea—wrong time, wrong place" page of our history books. (And, on most railroads today, dogs get to ride inside the cars.)

Hybrid Boats: A New Breed

The wind-powered sail is still the quietest and cheapest (and many will say the most reliable) form of propulsion for watercraft, but this ancient form of eco-friendly power may soon have some real competition.

In the past few years, a new breed of automobile motor has been getting a lot of attention in America. The hybrid car, powered by an electric motor, assisted by a conventional gasoline engine, is one of the most popular types of propulsion for new cars. The motor uses less fuel and burns it much more efficiently. And now, although engineers are still perfecting the technology, the maritime industry is taking a lead as with this new type of cleaner, quieter engine.

Hybrid-powered boats are being constructed in boatyards across the country. Charles Houghton recently led a group



Courtesy Chuck Houghton,
ELCO Electric Launch Company, Athens NY

of investors to revive the Elco Electric Launch Company which now installs hybrids in their elegant, "Edwardian picnic launches".

Hybrid engine technology is progressing rapidly. Today these motors are primarily installed in smaller, slower, recreational craft, but there might soon be a time when larger hybrid engines will power ferries and even ocean-going cargo vessels.