

## The Surprising History of Swim Fins



National Museum of American History, Owen Churchill Collection

**B**ifocals. Public libraries. Electricity. People associate Benjamin Franklin with these discoveries. What they may not know is that the 18th-century Renaissance man also developed the first swim fins. Constructed of two wooden palettes, these first fins were supposed to decrease what Franklin called “a laborious and fatiguing operation.” And, Franklin, who was one of the first swimmers in the New World, designed them for the hands, not the feet.

Not until the late 1930s, however, did fins become fully functional devices. Owen Churchill, an American inventor, and Louis de Corlieu, Churchill’s French counterpart, pioneered this effort. The U.S. Navy liked the design of Churchill’s fins; soon Navy SEALs were using them for underwater missions.

Today, swimmers around the

globe use fins in their training regimens. Doug Garcia, head coach for Washington State University Masters Swimming, employs fins with two main purposes in mind. “I have my beginner swimmers use them, if they’re having trouble maintaining good body position,” Garcia explains, “and then I try to wean them off the fins as soon as I can. I also have my advanced swimmers who are getting ready for a championship meet use them a month before the meet. They do sets with the fins, so they swim really fast, with the hope that the practice will translate into a really fast championship performance.”

Fins allow swimmers to improve their body position, kick strength and ankle flexibility, and to swim faster than they would naturally. Marc Lee, the Australia-based inventor and designer of Shinfin fins, says good fins “work with

swimmers’ natural swimming stroke.” If fins don’t work in this way, “they can do more harm than good.”

Over the past 300 years, fins have evolved from Franklin’s original model. “Fins have changed a lot in just the past 10 to 15 years,” Garcia observes. Now, more than ever, “there are a lot of fin options out there: long, short, foam, hard rubber, soft rubber,” he says. “Fifteen years ago, there was a variety of brands, but the same concept: the scuba diving fin.”

The selection of fin styles now available suits swimmers’ individual training needs. As Guy Edson, with the American Swimming Coaches Association in Fort Lauderdale, Fla., notes, “Some fins require that swimmers kick more. Others help swimmers to be faster.”

Both Edson and Garcia consider fins a training tool, but, as Garcia puts it, “any tool, from fins to the pull buoy, can

### FOOTNOTES

**>>> In Ben Franklin’s Own Words:** “I learnt early to swim well. I made two oval Palettes, each about ten inches long and six broad, with Hole for the Thumbs to hold them tightly in each hand, like Painter’s Palettes. In swimming I would hold them edgewise for forward and on the flat Side to draw them back ... They helped me swim much faster but fatigued my Wrist. I also fitted a sort of Sandals for the Soles of my Feet but found them unsatisfactory, observing that Motion required the inside of Feet and Ankles as well as Soles.” —*The Autobiography of Benjamin Franklin*, 1793

**>>> Churchill’s Improvement:** American inventor Owen Churchill saw Tahitian swimmers fasten woven leaves to their feet and watched as the leaves enhanced the swimmers’ speed. Churchill then designed his fins from vulcanized rubber. The Los Angeles-born innovator once said, “The feet and legs of a human being were not designed by nature for swimming ... and the use of my invention converts the feet into swimming members of correct hydrodynamic structure and design.”

**>>> Another Historical Contender:** Leonardo da Vinci also explored the concept of fins in 1400s Italy.

**>>> Controversies:** Some swim coaches consider swimmers’ using fins cheating, since they increase speed. Others trust only certain brands. Guy Edson with the American Swimming Coaches Association weighs in on the debates: “All swim coaches have different opinions about using fins. Some insist on using a specific brand because they’re convinced it works. Others don’t like fins at all. Coaches develop their own preferences based on their experiences and what they see.”

become a crutch.”

Nevertheless, Franklin’s contribution to the sport led to his posthumous induction into the International Swimming Hall of Fame in 1968. Fins found their niche and the innovation continues. <<<