THE HISTORY OF GOGGLES

Venetian coral divers wearing goggles in the 16th Century.

The introduction of goggles to competitive swimming in the late 1960's is widely regarded as one of the greatest transformational technological advances in the history of the sport. Prior to their introduction, the amount of time swimmers could spend training, and distance swum was limited by the harmful effects of chlorine or salt water on the eyes.

Today, it's hard to imagine swimming without goggles, but anyone whose career began before 1970 will remember the terrible chlorine burn, visual haze and tear spells that were part of competitive swimming. Eyewash hardly helped. It was terrible, but somehow swimmers accepted it as a small price to pay for the rewards received.

The history of swimming goggles dates back at least to the 14th Century, when writers described Persian pearl divers using goggles with windows made of the polished layer of tortoise shells. That these goggles were possibly imported to Mediterranean countries can be deduced from the 16th Century illustration of Venetian coral divers using goggles (above).

Goggles mysteriously disappeared from use, possibly because enslaved American Indian and African divers, who did most of the world's commercial diving from the 16th Century onward, did not use goggles.

Polynesian skin divers were known to use bamboo or goggles carved of wood. Originally, these goggles had no lenses, but trapped air when the face was down, forming an air bubble over the eye that enabled the divers to see clearly when submerged. With the introduction of glass, the Polynesians added lenses.

Thomas Burgess is believed to be the first competitive swimmer to use goggles when he became the second person to swim across the English Channel in 1911. The motorcycle type goggle he used was not watertight, but as he used the breaststroke for the entire swim, it served the purpose of protecting his eyes from salt water spray and waves.

The first patent utilizing the modern goggle design was registered by C. P. Tropman in 1916. One of the uses Tropman claimed was for underwater swimming, but there is no documentation proving that the goggles were ever made or used for this purpose.

In 1926, Gertrude Ederle became the first woman to swim across the English Channel, and the first to swim the crawl stroke the entire distance. To protect her eyes from the salt water, her sister Margaret sealed the motorcycle goggles with paraffin, making them water tight.
In the 1930's the popularity of skin diving, and later, after the introduction of scuba diving, brought great advances in underwater mask and goggle designs. However, none of these recreational products were deemed suitable for competitive swimming.

In 1936, a Walter Farrell patented a goggle for use as an underwater eye protector, and in 1940, Popular Science Magazine printed plans for wooden goggles, based on the old Polynesian goggle. In the 1940's and 1950's, open water swimmers, such as Florence Chadwick, used large rubber double lens goggles. But goggles still weren't used in the pool.

The first advertisements for practical competitive swimming goggles appeared in Swimming World Magazine, in 1968. But goggles didn’t become an immediate hit. There was not the variety of goggles that exists today. It was one goggle fits all, but the goggles didn’t fit all faces. Some swimmers found them uncomfortable or couldn’t keep them on doing starts or turns. And because the rules viewed goggles as a training equipment like fins, pull buoys or kickboards, they weren’t permitted in meets. Even after the interpretation was changed to permit goggles, very few swimmers attempted to use them in competition.

The first person to use goggles in international pool competition is believed to be Great Britain’s David Wilkie, at the 1970 Commonwealth Games. Today, goggles are a multimillion dollar accessory business and virtually every swimmer sports a head cap and goggles in meets, but Hall of Famer David Wilkie was the first.