

# Greeks Used Modern Swimming Stroke

*Archæology—Athletics*

By JANE STAFFORD

They swam the "crawl" 2,000 years ago in Greece. The beautiful maidens and youths of that country practised the same strokes in their elaborate marble pools that American girls and boys are learning and using in tiled pools today.

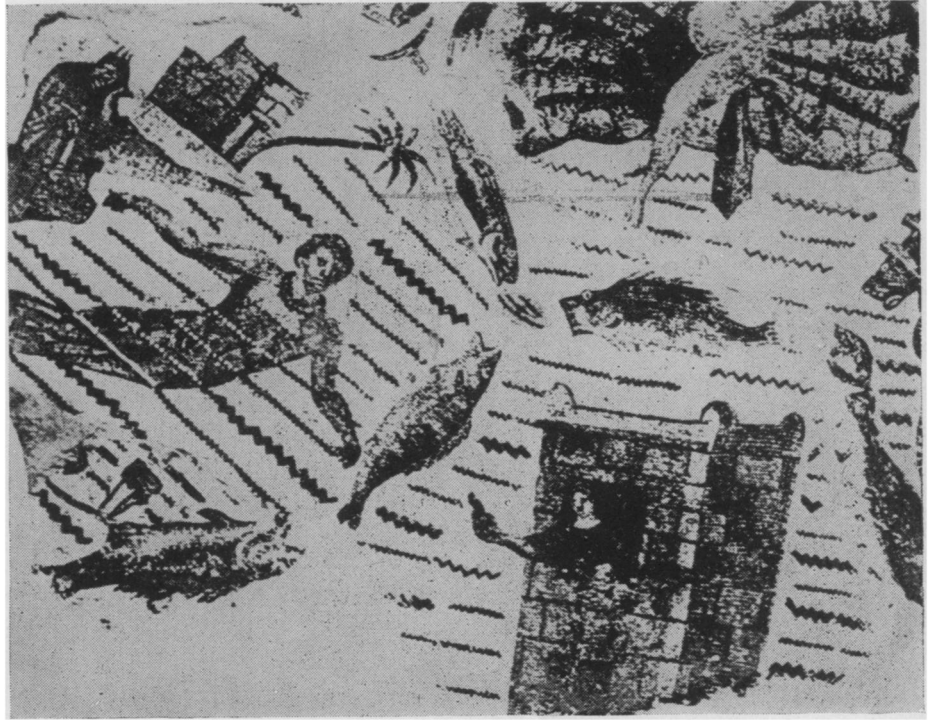
Ancient Greek heroes, both legendary and actual, Egyptian soldiers of the time of Rameses II, Assyrians who lived in the biblical city of Nineveh, Greek and Roman bathing beauties of the earliest times and even Venus herself all used a swimming stroke almost identical with the overhand stroke popular today. The double crawl with trudgeon or scissors kick, only recently imported from Australia, was known 3,000 years ago and was used exclusively by all the peoples of ancient times.

In fact the symbol for swimming in Egyptian picture-writing of that time was a man's head and arms in the position of an overhand stroke. Those who were not good swimmers had inflated skins, the ancient equivalent of inner tubes or water-wings, to help them along.

Even the modern flapper's one-piece bathing suit has, for ease of movement and extreme of style, nothing on the costume of the ancient Grecian ladies, who tucked their permanent waves into becoming caps and plunged right into their pools altogether free from hampering suits of any kind.

When Leander, famous hero of Greek mythology, swam the Hellespont, hundreds of years before the birth of Christ, he used practically the same stroke that is being used to break world's swimming records today. This Greek youth defied the gods by courting one of their priestesses, Hero by name. For punishment she was imprisoned in a lonely tower on the other side of the Dardanelles, and every night her faithful Leander swam the treacherous strait to be with her.

Ancient literature which tells the story of these two lovers does not mention how Leander fought his way through the stormy waters that lay between him and his love, but Professor James E. Dunlap, of the University of Michigan, has discovered pictures and mosaics showing Leander swimming with what is undeniably an overhand stroke very similar to the modern crawl, even to the trudgeon kick of the legs.



*LEANDER swimming the Hellespont as depicted in an old African mosaic*

One picture showing Leander swimming was taken from the mosaic decoration of a great public bath at Henchir-Thina, the ancient Thenae, in the province of Byzacium in northern Africa. This bath, discovered and excavated in 1904, dates from the end of the second century of our era, reports Professor Dunlap in *Art and Archaeology*. Under the great central dome of the *frigidarium*, which was the room containing the cold water pool, is the mosaic, circular in shape, seven and one-half meters in diameter.

This mosaic depicts various marine groups. In the lower left-hand corner among the fish and waves, Leander swims toward the right, where Hero is leaning out of her tower with a lamp to light him on his way. On the shore behind him is the squat tower of Abydos, his home, and sitting near it is the disconsolate old king. Leander is undoubtedly in the position of one swimming an overhand stroke, declares Professor Dunlap. The extended left arm has begun the downward stroke, while the right, trailing far behind, is ready to be lifted out of the water. Although the feet are destroyed, the legs show clearly the position that the modern swimmer uses in the crawl. Further indication that Leander used a typical double

crawl is seen on continued examination of the picture, which shows Leander's head and shoulders lifted well out of the water with his body in an oblique, somewhat curved position, identical with that taken in the side-to-side roll of the double crawl, as we know it today.

Another picture of Hero and Leander was found in Pompeii. The essential features are the same, reports Professor Dunlap. Leander is swimming toward the right in the same manner as in the north African mosaic.

While Leander was a purely legendary hero and no one really knows exactly how he swam or if he swam at all, the people living at the time these mosaics and pictures were made must have used an overhand stroke, is Professor Dunlap's contention. In practically every picture, whether a mosaic, a frieze or a painting on pottery, swimming figures are shown in this characteristic pose.

A famous vase by Andocides, which is now in the Louvre at Paris, is decorated with a scene from a women's bathing establishment. That this was an indoor pool is evident from the pillar, giving support to the roof, and from the bathing caps hanging on the wall. These caps are the only trace of bathing costume worn. (Turn to next page)

## Greeks Used Modern Swimming Strokes—*Continued*

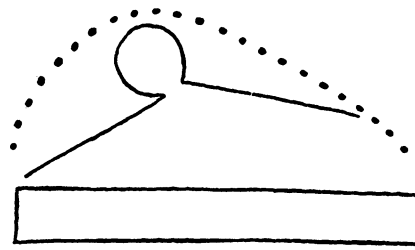
Two of the women are on the side of the pool, one just leaving, the other waiting to enter the water. A third is shown swimming. The artist has put two fish into the picture, to make it clear that she is swimming, and not reclining on dry land. She is quite evidently using an overhand stroke. Her right arm is extended above her head, while the left is back, palm turned down at the completion of the pull, or ready to lift from the water for the beginning of the next stroke. The swimmer is on her side, her face above the surface of the water and turned toward her companion who seems to be calling back to her. The feet of the swimmer are close together, toes pointing downward, with the knees slightly bent. On the diving platform the fourth woman stands, just ready to plunge into the pool.

Roman women also practised the art of swimming, and they, too, judging from pictures that have been found, used an overhand stroke. From a wall painting at Herculaneum comes a picture of a swimming figure that is so clear in outline and so free from irrelevant detail that it serves as an excellent standard for comparison of artistic representations of this kind, according to Professor Dunlap.

The figure is a woman who is on her left side, swimming toward the right, but with her face toward the spectator. Unlike swimming figures in Egyptian and Assyrian pictures, this swimmer's body is shown in an oblique position, gently and gracefully curved, with the head nearly vertical and held well out of the water. Her left arm, stretched far forward, is ready to begin the downward and backward pull, while the right arm is extended far back to the end of the stroke. Her feet are apart, with the right leg forward and a little lower in the water than the left, which is bent back and flexed slightly at the knee. Without doubt the artist intended to portray an overhand stroke with accompanying scissors stroke of the legs, such as many women swimmers of today are using.

"So far as the Romans are concerned, the archæological evidence for the common employment of the overhand stroke is corroborated by literary references," observes Professor Dunlap.

Artistic convention may have colored the evidence from these ancient mosaics, paintings and reliefs, suggests Professor Dunlap. "No artist, unless seeking a reputation as a caricaturist, would think of depicting Le-



EGYPTIAN SYMBOL for the word  
"swim"

ander, for example, in the attitude of a leaping frog. If he did so, the pitiful hero of the tale would receive nothing but ridicule." Even in some scenes which are intentionally amusing, where a bit of the grotesque would be quite in keeping, the swimmers are shown using the graceful overhand style.

The remarkable similarity among the swimming figures and the fact that nymphs reclining on the backs of sea beasts are shown in the swimming position lend further support to the idea that the Roman artists used a conventional pose for their swimmers.

This method of swimming was not confined to Greece and Rome alone. The Egyptians and other peoples who lived along the banks of the Nile were also swimmers. In fact the Egyptians have left records of this achievement. A nobleman of the Middle Kingdom (2160 to 1780 B. C.) proudly recorded the fact that his children took their swimming lessons with the children of the king. Unfortunately he does not mention what strokes they learned, possibly because there was only one way of swimming known at that time.

Reliefs discovered at the ancient Biblical city of Nineveh shed light on the swimming practices of the Assyrians of an early period. Apparently the Assyrians were not such proficient swimmers as the Egyptians, for whenever possible, they used inflated skins to buoy them up in the water, just as small children and inexperienced adults use waterwings or inner tubes today. In the army these skins were carried as part of the regular equipment of Assyrian soldiers, just as modern soldiers carry gas masks. They could, of course, be folded up and would take very little room in the pack.

From Nineveh comes a frieze showing a group of soldiers crossing the Euphrates river. In this group we have, from left to right, first, a soldier kneeling on the bank, blowing up a skin, before entering the water. Next

is a soldier who has already taken to the water. He is supported on one of these skins, which he seems to blow into as he goes along. He is using his legs and one free arm to propel himself. Ahead of him one more accomplished soldier swims without any life preserver to aid him. He is pushing vigorously for the farther shore, using an overhand stroke. His body is flat in the water, the line of the shoulders horizontal, with the head raised above the surface and facing toward the shore ahead of him. The arms are not in so characteristic a position as in some of the other pictures, but close examination shows that the palm of one hand is turned up, that of the other being turned down. The two arms are obviously not employed similarly, as in the breast stroke, but in different movements, such as are natural to an overhand style of swimming. Probably the right hand, palm upturned, is making the first part of the backward and downward stroke, while the left has just finished a stroke, or is being lifted from the water to begin the next one. The legs of this man and of the one swimming with the inflated skin are slightly separated in a vertical direction, with the toes turned downward. Apparently these soldiers abandoned their clothing to facilitate their progress through the water.

"The most striking peculiarity of the Assyrian overhand stroke, as represented in the reliefs, was that the swimmer did not roll from side to side as he used first one arm and then the other, but maintained his body in a constant horizontal position," points out Professor Dunlap. As this position, if held as rigidly as the reliefs suggest, would make swimming very difficult, it seems reasonable to assume that the Assyrian swimmers did turn their bodies somewhat in the water, even if they did not do so on stone.

A number of other mosaics were studied by Professor Dunlap. Some of these depict life along the Nile, some are fishing and swimming scenes, one shows cupids at play. In all cases, the swimming figures, whether human, divine or semi-divine, are shown using some sort of overhand stroke. Whenever the figure is clearly seen, the stroke is found to be almost identical with the now popular crawl, or at least with the less vigorous but equally "modern" side-stroke used in pools all over America and Europe.