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THE USE OF THE ATLATL ON LAKE PATZCUARO,  
MICHOACAN

By M. W. STIRLING

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# THE USE OF THE ATLATL ON LAKE PATZCUARO, MICHUACAN

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By M. W. STIRLING

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## INTRODUCTION

In 1944, while engaged in archeological work for the National Geographic Society and the Smithsonian Institution, I visited Lake Patzcuaro in the State of Michoacan with Richard Stewart of the National Geographic Society. We took the opportunity of accompanying a small group of Tarascan Indians from the village of Janitzio, on a coot-hunting trip on the lake. The pictures that illustrate this article were taken by Stewart, who also made a kodachrome motion-picture record of the hunt.

## USE OF THE ATLATL

As is well known to ethnologists, the use of the atlatl, or spear thrower, still persists on Lake Patzcuaro. The term "atlatl" is, of course, an Aztec word. The Tarascans call it "phatamu." Once employed throughout the Americas as the principal weapon of the aborigines, it was used many centuries before the bow and arrow. Curiously enough at the beginning of the 16th century when Europeans reached the New World, with the exception of a few scattered areas the spear thrower was extensively used only in the two most civilized regions, Middle America and Peru. This seems paradoxical at first glance, but the reason may be that in these regions of intensive agriculture, hunting had become unimportant, while to the wild tribes the superiority of the bow and arrow as a hunting weapon was more apparent.

That the atlatl was an effective weapon in warfare, as used by the Peruvians and Mexicans, is amply attested in the early Spanish chronicles. It is even possible that in close combat it was superior to the bow and arrow. Very elaborate carved spear throwers, embellished with gold and semiprecious stones, were used by military leaders in both Mexico and Peru.

It was not long after the Conquest that the atlatl went out of use as a weapon of war, but it persisted until recent years as a hunting

implement among the Aztecs in the region of Xochimilco in the Valley of Mexico, and among the Tarascans on Lake Patzcuaro. Probably the only other region in the New World where the spear thrower has not entirely gone out of use is among the Nunivak Eskimo of western Alaska. Interestingly enough, here, too, it is used only for aquatic hunting, principally of birds but sometimes of sea otter and small seals. For land hunting the Nunivak use the bow and arrow. The hunting techniques in these two widely separated regions are very similar. The Eskimo approach a flock of "sitting" birds as closely as possible. As the flock rises from the water they launch the multi-pronged spear into its midst. The Tarascans do the same.

On Lake Patzcuaro, coots or mudhens are quite numerous and are hunted at almost any time. In the fall, migrating ducks of many species come to the lake in quantities, and this is the time most of the hunting is done.

On October 31, according to George Foster,<sup>1</sup> a large communal hunt is conducted. On this date as many as a thousand canoes, each containing several men, gather near Janitzio, the island village. The hunters form two large concentric rings with the canoes around the largest concentration of ducks. Those in the inner group approach and launch their spears simultaneously as the flock rises. The remaining ducks fly a short distance and usually alight in the space between the two rings. The outer ring then converges and repeats the attack. On this particular hunt thousands of ducks are killed. Except for this one day, duck hunting is an individual affair, from one to four canoes in a line stalking the birds.

On the occasion that Stewart and I went out as observers, there were two hunting canoes, each with a single occupant. The target was a large flock of coots. We approached very slowly, the canoes close together, stopping to drift from time to time. When we were within about 30 yards of the flock, the birds became uneasy and took flight. As they left the water, the two hunters rose to their feet and launched their spears into the mass of birds. On the first approach, one coot was hit, the other throw was a miss. Each hunter has two spears, and if the approach is close enough, he quickly throws the second.

The birds alighted about 300 yards away and we made a second approach. This time each man got a bird. We tried two more approaches, but by now the birds had grown wary and we could not get within range, so the hunters gave up.

The approach is made with the canoe pointed toward the flock. When the hunter is ready to throw, he quickly stands erect, with his

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<sup>1</sup> Empire's children: The people of Tzintzuntzan, by George M. Foster, Inst. Social Anthrop., Publ. No. 6, Washington, 1948.



left foot forward. The shaft of the spear is grasped near the middle and lifted by the left hand. At the same time the atlatl is grasped in the right hand, the index and middle fingers are inserted through the two holes, and the remaining fingers and the thumb grasp the handle. The spur is instantly engaged in the hollow at the butt of the spear shaft, the spear is lifted by the left hand to shoulder height and parallel to the water. In this position the shaft is released by the left hand and launched by the right with a sweeping overhand motion. The shaft is steadied in position, parallel to the long axis of the canoe until the instant the throw is started, the thumb and fingers grasping the atlatl handle.

### DESCRIPTION OF THE ATLATL

The shaft of the spear is made from the giant reed (*Arundo donax*), an introduced species from Asia Minor that is now widespread in the Western Hemisphere.<sup>2</sup>

In aboriginal times it is probable that the native cane, *Gynerium sagittatum* called caña brava, was used. However, this is much heavier than the introduced species and its use was probably abandoned when the lighter cane became available. This is not only easier to throw, but it floats. It is cut at the butt of the shaft just below one of the joints, so as to leave a hollow receptacle for the spur of the atlatl. The forepart is cut about 6 inches from the joint. Into the opening thus formed are inserted the three wires, whose wide-spreading points form the leister. The entire shaft is about 9 feet long.

The atlatl itself is carved from "palo azul" wood and is about 24 inches in length. It is concave on the under side and convex on the upper so that in cross section it is more or less U-shaped. Just before the handle it becomes broad and flat so as to admit the two finger holes. The handle itself is rectanguloid to cylindrical in cross section. The upper end of the grooved under surface ends in the spur which engages the butt of the spear. Above this on the upper surface is a larger spur, or hook, which is used to retrieve the floating spears from the water.

The manufacture of atlatls is carried on by a few specialists in Janitzio who sell them to the hunters for about a peso to a peso and a half. The spears are sold for about the same amount.

Atlatls are frequently depicted in the native codices and at still earlier periods in carvings on stone monuments, both by the Aztecs and the Maya.<sup>3</sup>

Invariably these are represented as very much shorter than the Tarascan specimens, but I believe that this is the result of artistic conventionalization. More than a dozen elaborately carved and

<sup>2</sup> Botanical identifications by Dr. F. A. McClure, of the Department of Botany, U. S. National Museum.

<sup>3</sup> The atlatl or spear-thrower of the ancient Mexicans, by Zelia Nuttall, Archeol. and Ethnol. Pap., Peabody Museum, Harvard University, vol. I, No. 3, 1891.

decorated Mexican atlatls have been preserved from the time of the Conquest.<sup>4</sup>

These vary in length from a little over 20 inches to 24 $\frac{3}{8}$  inches, which makes them approximately of the same proportions as the Tarascan examples. It is probable that the efficiency of the implement would be impaired if it varied too much from the 20- to 24-inch range.

In addition to these actual examples of early atlatls, there are a good many descriptions written by 16th-century chroniclers, which, together with the native illustrations, show that at least three types of atlatl were utilized.

The spears, too, are described with some frequency by the early writers. Torquemada records a tradition in which Huitzilopochtli, god of war, gave the Aztecs the weapons with which they fought, "long spears made of cane stalks and tipped with obsidian, which they threw with a certain implement called 'atlatl.' "

The anonymous conqueror, who was one of the recorders of the Cortez Conquest, speaks of "spears thrown by a crossbow made of another piece of wood. These spears were tipped with obsidian, or with very sharp strong fish bones. Some had three points and inflicted three wounds at once."

Zelia Nuttall makes an interesting observation as to the possible derivation of the term "atlatl": "Considering that the original use of the atlatl was in aquatic chase by the *atlatl*, or fishermen, whose name is a synthesis of *atl*, water, and *tlacatl* men, I venture the suggestion that the word "atlatl" may primarily have been a synthesis formed with the verbal noun *tlatlacani*, thrower, and *atl*, water. This would give the word *atlatlacani* meaning 'water thrower.' "

It seems clear that the atlatl and spear, as used on Lake Patzcuaro today, is in almost every respect the same implement that was used in pre-Columbian times. The iron prongs now used in place of fish bones, or fire-hardened wood, are about the only concession to modern times. It can be assumed that the methods of using this interesting device are also the same as those employed five centuries ago.

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<sup>4</sup> The wood carver's art in ancient Mexico, by Marshall H. Saville, Mus. Amer. Indians, Heye Foundation, Contr., vol. 9, 1925.

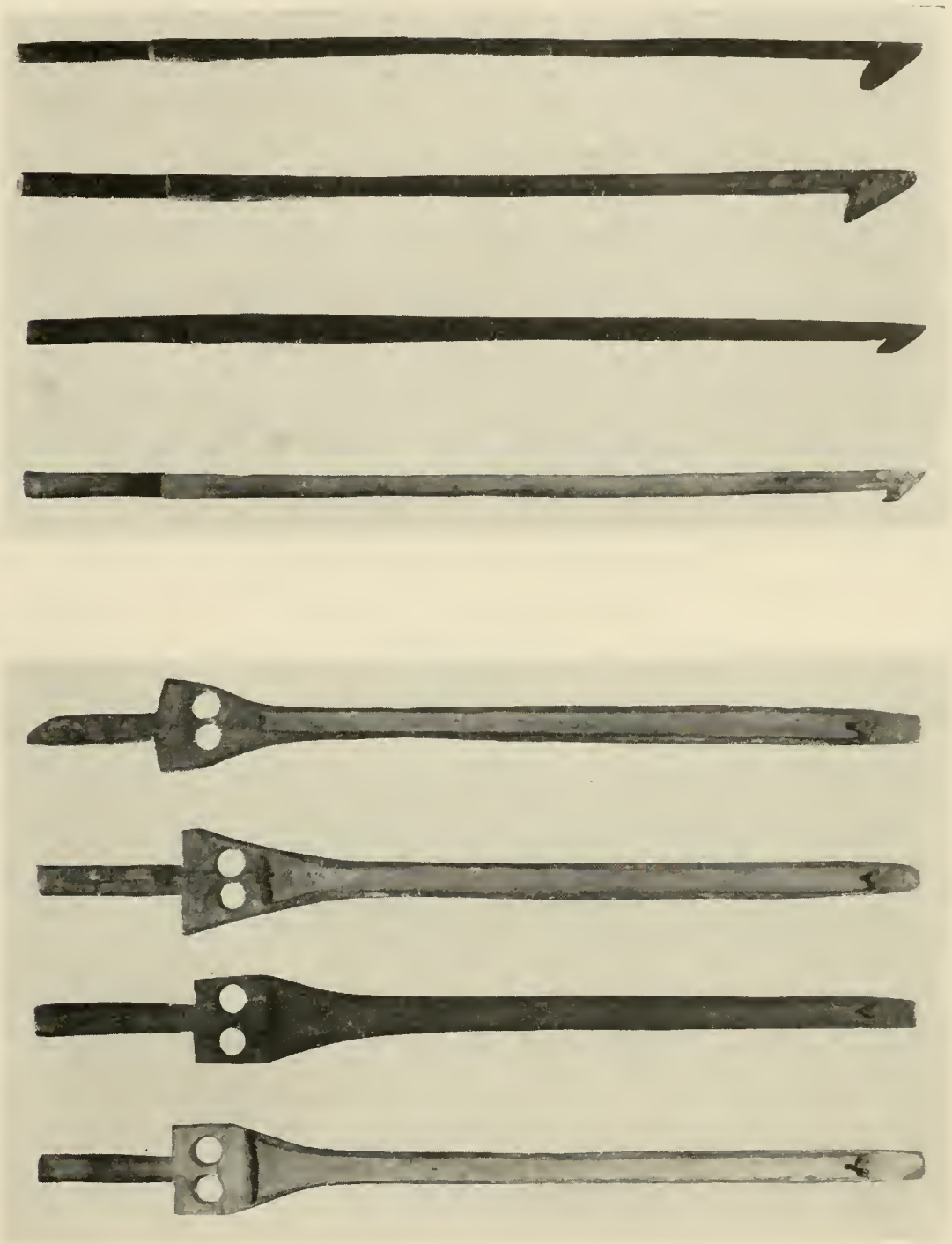




Preparing to throw spear. *a*, First position. *b*, Method of engaging the spear.



Preparing to throw spear. *a*, Second position. *b*, Final position.



Four atlatls from Janitzio. Front and profile.