Inuit model Kayak - Greenland 1934

This Inuit working model of a kayak was brought back from Greenland by Christopher Dalgety. He explained its workings to me, many years ago and I hope I have remembered everything correctly.

The model is 22 inches long, and is made of the same materials as a full size kayak and includes all the accessories that would be used on a seal hunt.

The components used to be fully working but, due to its age some of the rawhide thongs have become too brittle to risk working them. It demonstrates some remarkably ingenious technology using only the most basic materials that were available: Skins, rawhide, narwhal and walrus tusks, and bone. Also small amounts of iron and, most valuable and rare, wood.

A. Hide "apron": fixed to the kayak at its base and with a drawstring at the top to keep the occupant as dry as possible.

B. A "cradle" which holds the coiled rawhide "rope" (C) above and clear of the clutter on the deck.

C. Rawhide rope which joins the harpoon head (K) to the inflated sealskin float (L).

D. Straps across the deck to which the various accessories are attached.

E. Holster for rifle (F)

F. Rifle.

G. Spear for finishing off the seal.

H. Wood harpoon shaft with white bone bobble on end.

J. Bone "sticks" which tuck under straps (D) and can slip out very easily when necessary.

K. The steel tipped ivory head of the harpoon, has two sharpened bone barbs at the back and fits onto the narwhal tusk point (L).

L. The Narwhal tusk point fits onto the bone bearing M.

M. A bone bearing with a nipple onto which L fits. The

bearing is fixed to the wooden shaft with a tight but slightly elastic rawhide binding.

O. This toggle with a hole which is attached to the harpoon rope is fitted tightly over the peg (P). Then the rope is pulled hard sideways and clipped over peg Q. The result is that the head (K), narwhal tusk and wooden shaft all now form a single rigid weapon.

S. Is the throwing stick. The bone end (T) is hinged forward over the curved peg at T and clips down onto the peg at U.

In operation, the reason for all this apparent complexity becomes revealed:

The harpoon is thrown using the the throwing stick which effectively adds a whole extra joint to the thrower's arm increasing velocity very significantly. The harpoon flies through the air unravelling the rawhide rope from its cradle. The point of the harpoon enters the animal.

The weight of the harpoon and movement of the animal will cause the joint between L & M to bend. This immediately allows the shaft to become detached. The head K is now in the animal and it rotates ninety degrees and will be fixed there like a toggle. If, as is likely, the animal is wounded, it will depart at speed. As it gets to the end of the harpoon rope, the large inflated sealskin is released from the kayak. The kayak is safe from being pulled under.

The harpoon shaft made of valuable wood floats vertically in the water, made more visible by the white bobble on its end, it awaits collection. The wounded animal is greatly hampered by being attached to the sealskin float and tires quickly. When the hunter catches up with it, he kills it with the spear.

The spear also has a "break" point like the harpoon but is not so complex. It too will float vertically in the water.