thin to an edge on the rounded border, are used constantly as knives to cut cordage, and for similar purposes (see fig. 250). Knives are also made of the spine of a Sting Ray (Trygon), and large pearl oyster shells ground smooth are used to dig with. Excellent oblong bags made of finely woven grass, and kept open by means of sticks placed inside



Fig. 250.—Knife made of a portion of a Pearl Oyster shell, Admiralty Islands.

are ornamented by long fringes and pendant strings, and have a handle and small mouth-opening (see Pl. I. fig. 5).

The Admiralty Islanders have no bows, slings, throwing sticks, ulas (Fiji), nor clubs. Their only weapons are lances or spears of several kinds, which are thrown with the unaided hand, not even with a cord, as in New Caledonia. They have no spears

like the Humboldt Bay men, Fijians, and others, to be used at close quarters, and no shields, though Jacobs mentions shields as in use at other parts of the group.

The principal weapon is a lance, formed of a small, usually flexible, shaft of tough wood, often a natural stem, with the bark trimmed off, to the thicker end of which is attached a heavy head of obsidian, which in size appears out of proportion to the light The obsidian lance heads are usually triangular in outline, but some often irregular (see Pl. G.). They are shaped by bold wide flaking. The points and edges are often slightly rechipped in order to sharpen them, but the original faces and angles are never worked up for the sake of symmetry or balance, but remain rough. Many lances have their edges and points sharp and perfect, though formed entirely by the original The hinder borders of the lance heads are simply rounded, and secured in a socket of wood attached to the end of the shaft by means of a cement, and by being bound round with fine twine. The socket is hollowed out in a separate piece of wood, and in order to facilitate the scooping-out process two slots are usually cut in its two opposite faces (see Pl. H. fig. 1, a, a', b, b'). The shaft of the lance is spliced into a V-shaped slot in the lower part of the socket-piece. A rounded strengthening piece is retained in the socket-piece, between the actual socket and the narrowed part of it, in which the slot for the shaft is cut. A very hard and solid gum is used to bed the lance head and the shaft in their respective positions, and to mass together the turns of fine twine which secure the whole. In some lances the entire socket-piece and the turns of binding twine are concealed by a thick even layer of the gum, whilst in others the gum is used more sparingly, and the turns of twine and wood of the socket piece are exposed to view. In the former class of lances ornamentation is effected by patterns being incised in the layer of gum, and these have no Coix lachryma seeds attached to them (see Pl. I. fig. 1). Lance heads ornamented in this fashion were possibly the only ones made at some former period by the islanders, all the older specimens of Admiralty Island lances in the various continental and British collections obtained before the Challenger's