

## INVENTIONS FOR PROCURING THE NECESSARY MEANS OF SUBSISTENCE.

Of the contrivances here in question THE KAYAK WITH ITS APPERTENANT IMPLEMENTS AND WEAPONS no doubt occupies the first rank. The Inland Eskimo of Alaska like his Indian neighbours carries on his fishery in the rivers by means of his BIRCHBARK CANOE. In settling at the river-mouth he has exchanged the birchbark for sealskin to cover the wooden framework of his skiff and at the same time furnish it with a deck to protect it against the waves of the sea. This is simply the origin of the kayak, but only in its first stage of development. The deck alone thus procured was not sufficient; the sea washing over it would soon fill the kayak through the hole, in which its occupant is sitting, if his clothing did not at the same time close the opening around him. This ADAPTATION OF THE CLOTHING is tried by degrees in various ways throughout the Eskimo countries, but it does not attain its perfection except in Greenland where it forms in connection with the kayak itself a watertight cover for the whole body excepting the face. Only in that country it enables the kayaker to be capsized or so to speak being rolled unhurt by the waves, while in Alaska it serves as much to protect him against rain as against the sea.

The second necessary implement, THE DOUBLE-BLADED PADDLE of which the middle part makes the handle, in the same way makes its appearance very gradually. In Southern Alaska it is unknown among the Eskimo proper who have continued to use the onebladed Indian canoe paddle; it is not until we are north of the Yukon river that we find the first specimens of it, but still accompanied by the other, even on the same kayak. At Point Barrow the onebladed paddle still serves for ordinary