

and harpoons, with the additional velocity imparted by the throwing-stick. It must not be forgotten, also, that the kyak is a very frail, unsteady thing, and therefore not much of the momentum of the body can be utilized, as it is by the Northwest Indians in making a lunge with a heavy shaft. The throwing-stick is also said by some arctic voyagers to be useful in giving directness of aim. Perhaps no other savage device comes so near in this respect to a gun barrel or the groove of a bow-gun. Its greatest advantages, however, are the firm grip which it gives in handling a harpoon or dart, and the longer time which it permits the hunter to apply the force of his arm to the propulsion of his weapon. Having practiced with a throwing-stick somewhat, I have imagined also that there was a certain amount of leverage acquired by the particular method of holding the stick and straightening the arm, as in a toggle joint. That implement, which seems so simple, and which is usually mentioned and dismissed in a word, possesses several marks or organs, which help to distinguish the locality in which each form occurs, as well as to define the associations of the implement as regards the weapon thrown from it and the game pursued. These marks are:

1. Shape, or general outline in face and side view, and size.
2. Handle, the part grasped in the hand.
3. Thumb-groove or thumb-lock, provision for the firm and comfortable insertion of the phalanx and ball of the thumb.
4. Finger-grooves, provision for each finger according to its use in the manipulation of the implement.
5. Finger-pegs, little plugs of wood or ivory to give more certain grip for the fingers and to prevent their slipping. The devices for the fingers are the more necessary where the hands are cold and everything is covered with grease.
6. Finger-tip cavities, excavations on the front face of the implement, into which the tips of the three last fingers descend to assist in grasping and to afford a rest on the back of these fingers for the weapon shaft.
7. Index-finger cavity or hole, provision for the insertion of the index finger, which plays a very important part in the use of the throwing-stick.
8. Spear shaft groove, in which the shaft of the weapon lies, as an arrow or bolt in the groove of a bow-gun.
9. Hook or spur, provision for seizing the butt end of the weapon while it is being launched. These may be ridges left in the wood by excavation, or pieces of wood, bone, ivory, &c., inserted. The size and shape of this part, and the manner of insertion, are also worthy of notice.
10. Edges: this feature is allied to the form and not to the function of the implement.
11. Faces: upper, on which the weapon rests; lower, into which the index finger is inserted.