

slightly curved and has a chamfer for the thumb. There is no attempt at cementing or seizing or ratcheting on the tang. The bond is in effect a very ancient connective done in iron. Length,  $7\frac{1}{2}$  inches.

Example Cat. No. 150715 (a), in the U. S. National Museum, is similar to the foregoing excepting that the blade is straight and there is a slight carving at the outer end of the handle. The handle in both of these specimens seems to be left hand, inasmuch as the bevel and curve of the blade and the chamfer fit the left hand and do not fit the right. The great number of whittling knives of this species in eastern Asia raises some interesting questions of the method of intrusion of the Iron Age into the aboriginal life of the Western World.

In the area between Bering Strait and the Aleutian Islands, under the influence of Russian traders and the whaling industry, great numbers of carver's knives in endless variety are found. The largest collection from this region has been made by Mr. E. W. Nelson, and the forms of whittling knives, carving knives, and etching knives will be found fully illustrated in Mr. Nelson's work.

A large and interesting series of curved knives were collected by von Schrenck about the mouth of the Amoor River and northward, and are now in the Imperial Museum at Moscow. These knives represent all of the different classes spoken of in this paper, to wit: Knives with straight blades, for ordinary domestic purposes; those with long curve, for ordinary whittling; those with abrupt curve at the end, as in the farrier's knife, for excavating canoes and boxes; and those with sharp points, for engraving on hard substances. The handles are either plain or ornamented and have a short or a long bevel for the thumb. Those which have a decided sidewise curve are always fitted to the right hand and cut toward the person (fig. 17).

#### CONCLUSION.

I find that in the employment of the curved knife the Eskimo, the Canadian tribes, together with their kindred on the northern boundary of the United States; and, more than all, the North Pacific tribes on both sides of the ocean have exhausted the possibilities of an implement that has been in the hands of some only a century or two.

The arts of all these tribes were bettered and not degraded by the curved knife. In every case they were immensely improved. The form of knife with straight, short blade made it possible for the northern and western tribes to become better carvers and engravers. Before the possession of iron there is meager evidence that either of these areas possessed other than the most trivial carvings in hard material. Their best results were in soft wood and slate, by means of beaver tooth or shark's tooth knives.

The curved knife serves to confirm the opinion that as soon as any process or device came within the scope of a people's intelligence they have mastered it and brought it to a climax, from which time on new ideas and new inventions replaced the old.