abundance, especially in the Southern States of the Union. One or two tribes of the Muskhogean stock and the Cherokees employ this weapon for killing birds in swampy places. The Choctaws about New Orleans make still a compound blow-tube by fastening four or five reeds together after the manner of the Pandean pipe. In Mexico and Central America this weapon was common. In tropical South America, however, much care was bestowed upon the manufacture of two varieties of Zarabatana constructed of two pieces of wood grooved and fitted together and the Pucuna made by inserting one tube inside of another and tamping the intervening places with wax.

From the inventor's point of view, the blow-tube with the dart, driven to the mark by the elasticity of the breath, should be the antecedent and parent of the gun, pistol, and cannon.* Historically the archer was the father of the cannonier. It is doubtful whether the inventors of gunpowder ever saw an American or Malayan blow-tube.

The universal projecting device of North America was the bow for propelling arrows and barbed harpoons. It is found in its simplest form in the south and east and becomes more complicated as we travel westward and northward. The following types are to be distinguished:

First. The plain or "self" bow, made of a single piece of hard, elastic wood, in each locality the best that could be found. (Plates LXI–LXIII.)

Second. The compound bow made of two or more pieces of wood, baleen, antler, horn or bone fastened together. (Plates LXII, LXIV, LXV.)

Third. The sinew-lined bow, consisting of a single piece of yew or other wood, on the back of which shredded sinew is plastered by means of glue. (Plates LXI–LXIII.)

Fourth. The sinew-corded bow used almost exclusively by the Eskimo. They are made from drift and other wood and backed with finely twisted or braided sinew cord and reinforced with wedges, splints, and bridges. (Plates LXV–LXXIII.)

Each one of these four types may be sub-divided according to the region or tribe. Every location furnishes a species of wood or material best suited for the bow-maker, and this has its effect upon the structure of the weapon. The game to be killed is another cause of variation. The tribal fashions, and material, and game, bring to pass a goodly number of special forms of bows which will now have to be studied in more detail, commencing at the south where the structure is simplest and proceeding to the north where it is most complex. Associated with each type and structure and region of the bow was its appropriate arrow. Nothing could be more intimate than this relationship. It might almost with safety be said that the arrows of each culture region could be shot with little effect from the bows of another region.

Again, excepting the little piercer at the end, which does the killing, the arrow shaft and feathers and nock really belong to the bow, that is, to the manual or operative part before mentioned.

---

* It is worthy of note, that *etymologically* "cannon," is a derivative from the Greek καννα—a reed.