

## THE FASHIONING OF FLINT.

By FRANK EAMES

Archæology, while demanding as much of the student as any exact science, must accept from its devotees certain conclusions arrived at after the last thread of circumstantial evidence has been disentangled in an honest effort to determine its value. Such conclusions add much to the sum of human knowledge, if supported by clear reasoning upon a solid basis of fact.

If we were to reject the testimony of those who make such obscure subjects their life work, we must at once become rank and case-hardened skeptics—hurlers of criticism, lacking in knowledge intensified, and lacking in appreciation of those devoted to the science of historical reconstruction.

Unfortunately the aboriginal peoples of the northern portion of the Western Hemisphere have left as the only written records of their arts or modes of existence merely a few crude pictorial attempts on skin, all of which are modern. As a consequence we must base our historical inferences upon evidence obtained from the study of what remains to us of their primitive weapons, tools and utensils.

By the title for this paper the writer has no intention of creating the impression that he is about to lift the curtain that has so long hidden the activities of primitive man; he is particularly desirous that his statements, outside of quotations, should be taken rather as suggesting that the native people of this continent employed more than one method in the working of flint into a finished artifact.

To accept the theory that the flaking method was employed exclusively, is to imply that there is no need for further investigation. Much has been said and written upon this subject. Different opinions have been advanced, which still seem to leave this interesting topic an open question.

A Mr. C. A. Willoughby placed an article with the publishers of a very popular magazine twenty-five years ago in which he asks the reader to visit—in imagination—an ancient arrow-maker's "shop."

"Seated upon a mat, beautifully dyed in divers colours, in front of his round, bark-covered lodge, and surrounded by a circle of stone chips, we find him employed. He is naked to the waist, and encircling his neck is a necklace of many strings of finely wrought beads, made from shells, intermingled with those of copper, hammered from native ore. By the arrow-maker's side is a leathern pouch, filled with flakes of precious stones, and in his hand he holds an implement of bone or horn and which he 'values above all price and will not part with.' Let us watch him as he works. Taking a flake from the pouch at his side, he places it in his left hand, which is protected by a piece of leather. He holds it down with two or more fingers of the same hand, and, placing the bone punch against a point on the convex side, with a sudden pressure he flakes off a chip below each projecting point that is pressed. The flake is then turned and chipped in the same manner from the opposite side. This process he repeats till a perfect arrow-head is obtained.

"Sometimes a "striker" was employed by these artisans. Sitting in front, with a mallet of hard wood, this man struck a chisel on the upper end, flaking off a chip as already described. As they worked both the holder and striker sang, and the blows of the mallet were given in time to the music.