with no little the advantage of it in value. They are hardy, and less susceptible to diseases and parasites than sheep.

The success of goat farming lies chiefly in feeding the kids up to the second month. After that, they shift for themselves.

The flesh of the kids is a delicacy worthy of place on the most epicurean bill of fare; and the milk of the ewes is particularly rich and nutritious; and as a cosmetic is unsurpassed. All in all, there is much to be learned and much to be enjoyed on a California goat-ranch.

Salinas, Cal.

## ABORIGINAL ART IN OBSIDIAN.

BY H. C. MEREDITH.



in the Indian woman of certain California tribes the art impulse found expression in the ornate basket which has made her famous, so in the Indian man it found outlet in some equally extraordinary artifects of obsidian. This is particularly true of the aborigines who once peopled the lower San Joaquin and Sacramento valleys. Their ideals found more perfect expression in form, line and

color, in textiles and in stone, than did those of the Coast Range and They were less given to the warpath and the hunting Sierra tribes. trail. They had more leisure and more comfort; and the art instinct had among them a better chance of development. Theirs were the un\_ dying streams, the abundance of fish; the countless water-fowl with eggs and young; the swarms of crickets; the vast bands of elk and deer that our American pioneers still found in these valleys; the acorns on thousands of burdened oaks. What the mountain Indian gained by the long journey, the swift chase, the armed raid, indulgent Nature dropped in the lap of the valley Indian. He was neither invader nor invaded. Hunting was so tame that it took little of his vitality. He had time and content to think. And he did think-and feel. The women wove baskets that it is no absurdity to call poems-the most exquisite baskets known to man. The men chipped stone as I believe it was never chipped elsewhere in America.

The resultant workmanship in these lines was art, even by the white man's canons. His artifects not only ministered to his utilities; they fulfilled his esthetic tastes. As compared with other ancient village-sites in central California, those of this locality show a far smaller proportion of broken or ill-made specimens, chips and the single finds which indicate the loss of an arrow, in hunting or otherwise.

In 150 arrows taken from a local site, only 10 were ordinary and but three crude. Among 100 carved obsidian objects from the same site, none were crude, though a few were doubtless unfinished.

18. Barr Collection; actual size.



(' M Davis Eng. Co.

All actual size. Arrowheads from writer's collection. Two lower "curves" from

Barr collection; rest from writer's.

The serrations are a striking feature of all the specimens shown, save

one which is not of obsidian. These Indians did not attempt serration, so far as I know, except in obsidian. Artistic arrows of jasper, agate and tossil wood are found along with these curious "curves" but never serrated. In the series of six arrows, the four smaller are from near Sacramento, the two larger from near Stockton. The "spears" are of a series of eight in the writer's collection and were found all together 20 miles west of Stockton. The other arrows are from an ancient burial place within the limits of this city.

The curved artifects are found at Stockton, and here only.\* Some of them have not only the simple curve, shown by the illustration, but a compound or lateral curve.

No. 16, for instance, is bent to the left till its point is far out of line.

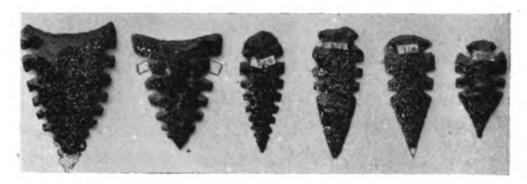
A more exact acquaintance with the miscalled "Digger Indian" will make him a more interesting creature than he has been. Instead of the most debased of Indian culture-types, he may yet appear not only the most harmless of American Indians, but among the Writer's comparison.



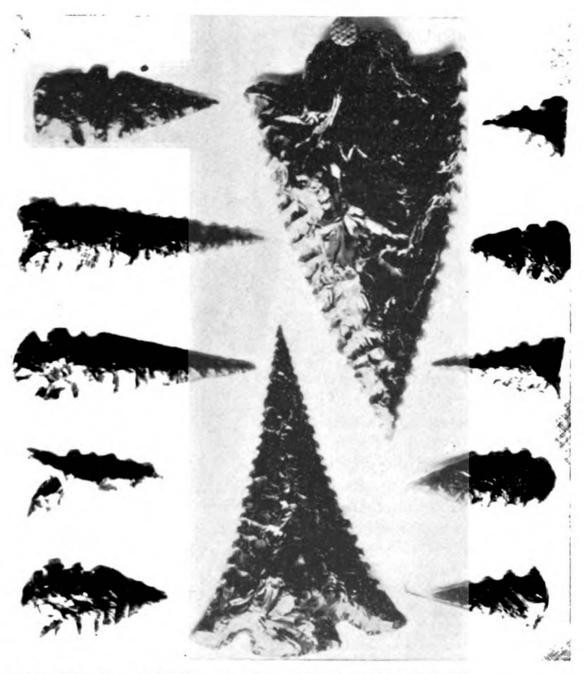
C. M. Davis Eng. Co.
Writer's collection; two-thirds natural size.

Stockton Cal.

<sup>&</sup>quot;Mr. Meredith's "curves" have made considerable trouble among unread or untraveled collectors. As a simple matter of fact, they are merely artifects made of that shape, because that shape is the natural cleavage of the nodular obsidian accessible to those Indians. As they couldn't depend on its breaking straight, they worked it as it did break, and made their knives thus sickle-shaped. As every expert knows, this shape is peculiarly effective for certain kinds of cutting; but the Indian adopted it simply because his material forced him to. Like most discoveries, it was purely empiric. As to serration, the reason the Indian serrated obsidian and no other stone is merely that obsidian is the only stone that can be serrated, practically. There is no doubt in my mind of the authenticity of any of the specimens shown in these cuts. "Curves" have also been found in Inyo county, Cal.—ED.



Barr Collection; actual size



C. M. Davis Eng. Co. Collection of writer and J. A. Barr; actual size.