

NORTH KURGAN.

We see a town with houses of crude bricks being founded when the valley was filling with alluvium. The people are already cultivators of wheat and barley. They make without a wheel an interesting pottery with geometric designs, use mealing-stones for grinding, and spindle-whorls for spinning some vegetable or animal yarn. They make small implements of flint similar to the flint parts of the sickles of the prehistoric Egyptians and inhabitants of Susa. We see them beginning early the process of the domestication of animals, developing long-horned cattle out of the great wild *Bos namadicus*, a large horned sheep out of the wild bighorn, and a pig from the local wild hog. As the settlement rises slowly above the surrounding plain, the filling-in of the valley ceases, and cutting-down begins, and parallel with the progress of the conditions that deepen the valley goes the stunting of the sheep and cattle till there becomes established a breed of small-horned sheep and one of short-horned cattle.

About this time this people disappears and is replaced by newcomers who bring a new culture, including a more advanced technique in the making and painting of hand-made pottery. While a few finds of ornaments of copper showed that their predecessors had a slight knowledge of this metal, this new people had more of it. They, too, made the same simple flaked-flint implements as their predecessors, but, like those, they had neither arrow-heads nor spear-points nor celts of stone. Their only weapons of stone were mace-heads and slingstones. Like them, too, they had the work of the lapidary, vessels of marble and alabaster and beads of stone, including carnelian and turquoise, to which they added beads of lapis lazuli. With these people came the shepherd-dog, camel, and goat; and it is noteworthy that towards the end of this culture, in the then advanced period of cutting down of the valley, the sheep became transformed into a hornless breed.

SOUTH KURGAN COPPER CULTURE.

After a greater or less interval after the end of the upper culture on its northern neighbor, an interval that does not appear on plate 5, when the valley was again filling with silts, the South Kurgan was founded by a people who seem to have been ethnically related to the former from the fact that, like both of their predecessors on the oasis, they buried children under the floors of their dwellings in the same contracted position lying on one side. They made their pottery on the wheel without painted ornament and with an advanced potter's workmanship. They had a fully developed knowledge of copper, as shown in ornaments and various implements and weapons. As in the previous cultures, their copper contained, whether accidentally or intentionally, sufficient arsenic or antimony, or both, to give it hardness; though towards the end of the culture small amounts of tin appear sporadically and evidently as unintentional constituents. Relations with the Chaldean and Armenian spheres of influence appear now, as shown by the appearance of finely formed flint and obsidian arrow-points, and, towards the end, by terra-cotta figurines of Ishtar (Beltis) and by the winged and bird-headed lion.

This copper culture flourishes till the valley has again begun to be cut down, and then disappears, to be followed by a period of non-occupation, which is represented only by 8 feet of formless débris of wastage, in which occasional rough hand-made pottery seems to indicate occasional occupation by nomads.