

**184. *Brief Report of the Results of the Second
Excavation at Ku-hsiang-tung Near Harbin,
Manchoukuo.***

By Shigeyasu TOKUNAGA and Nobuo NAORA.

(Comm. by H. YABE, M.I.A., Dec. 12, 1934.)

As to the authors' excavation of the ancient articles of palaeolithic age at Ku-hsiang-tung near Harbin in 1933 a report has been announced both in the Proceedings of the Imperial Academy, IX., No. 8 and No. 10, and in the Report of the First Scientific Expedition to Manchoukuo.

In June, 1934, the donation from the Cultural Work Bureau of the Foreign Office enabled the authors to explore and investigate once more the ancient relics and fossils at the said locality and at an extending region along the northern part of the Wan-chuan-ho.

In 1933 we excavated the spots easier of unearthing, while in 1934 a great deal of labour and large expenses were required for the projected investigations; in many cases we had to unearth the muddy land generally of 2-3 metres thick before reaching a fossil stratum containing therein human artifacts, too.

Beginning in June of the year, forty days were spent in the present excavation, and in which eight hundred white Russian labourers in the number of a day's work were employed. All the time fifteen Manchoukuo soldiers protected us against the supposed attack of the outlaws haunting the locality, where we were engaged in the excavation, and a lot of facilities was afforded for the excavation by the devotional assistance of S. Ota and H. Makita, to whom greatly we are indebted.

No sufficient arrangements and investigation have yet been made as to the fossils and other specimens dug out in the present excavation, anyhow the number of the fossil mammal-bone pieces we discovered amounts to about a thousand, inclusive of a large number of Palaeolithic implements. These pieces and implements are not only by far more in number, but too of more interest than those unearthed in 1933.

As for the human artifacts of the present discoveries, there are large and crude implements of basalt, as fig. 1 shows, and also there are very small pieces of chert and quartz. Moreover, among the discoveries there are a number of stone implements similar in size to those of the first excavation. And among so many bone pieces there

are several tusks of *Elephas primigenius*, the tips of which being polished in the vertical way, as fig. 3 shows.

The majority of the bone implements are either such pieces as harpoons and spear-heads perhaps used for lancing (fig. 4). Shallow cup of the articulating portion of limb bones, or at the articular face of vertebral centrum seems to have often been utilized as water-holding utensil.

Judging from the characteristics obtained from the human artifacts, compared with those of Europe, it can safely be said that the age of the above mentioned stratum corresponds either, if older, to that of Mousterian, or if newer, to Aurignacian.

The majority of the fossil mammals are, like those of the former discoveries, *Equus*, *Bos* and *Rhinoceros*: however, it is noteworthy that the present fossils include a number of Carnivora species. Moreover we have got a few remains of Pisces, Insecta, and Aves. All of the fossils and artifacts dealt in this paper are now under study, and will before long be announced. The following are the chief mammalian fossils excavated in the present expedition:—

Carnivora:—

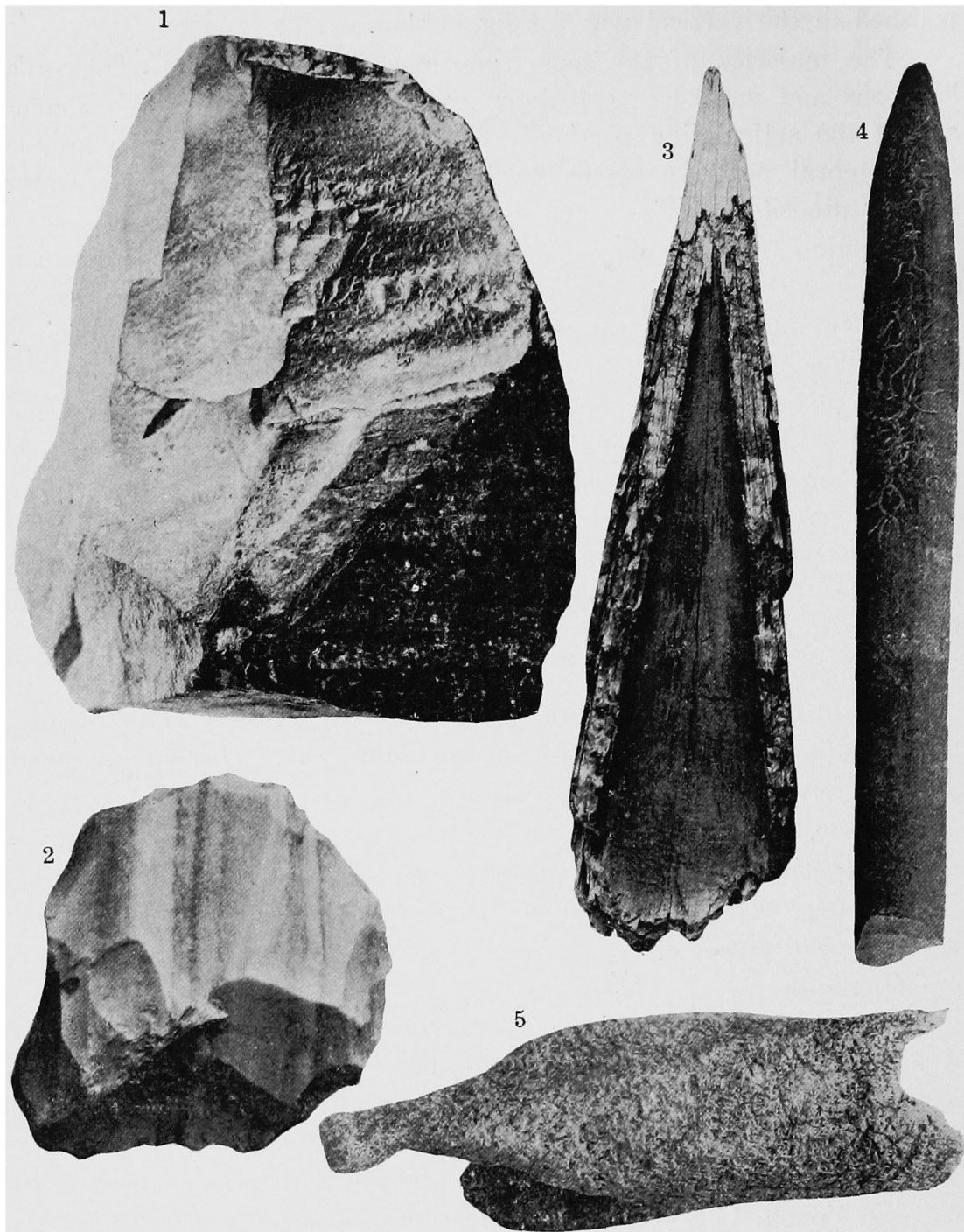
Canis lupus L., *Canis* sp., *Vulpes* sp., *Mustela* (*Putorius*) sp., *Taxidea* sp., *Hyaena ultima* Mat. var., *Hyaena* sp., *Felis* cfr. *tigris* L., *Felis* sp.

Rodentia:—

Pseudosciurus sp. ?, *Tamias* sp., *Arvicola* sp., *Microtus* sp., *Siphneus* sp., *Ochotona* sp., *Citellus mongolicus* Milne-Edw., *Chalidomys* sp.

Ungulata:—

Rhinoceros tichorhinus Cuv., *Rhinoceros* sp., *Equus hemionus* Pallas var., *Equus caballus* L., *Equus* cfr. *ferus* Pallas, *Moschus* sp., *Capreolus manchuricus* Lyd., *Capreolus* sp., *Rusa* cfr. *elegans* Teil. et Piv., *Rusa* sp., *Pseudaxis grayi* Zd. var., *Pseudaxis* sp., *Alces alces* L., *Cervus* (*Euryceros*) *pachyosteus* Young, *Cervus* (*Euryceros*) *ordosianus* Young, *Cervus elaphus* L., *Cervus xanthopygus* Milne-Edw., *Megaceros* sp., *Cervus* (*Sika*) *nippon manchuricus* Swin., *Palaeotragus* sp. ?, *Cervus* sp., *Gazella prjewalskyi* Büch., *Sus leucomystax continentalis* Neg., *Sus* cfr. *lydekkeri* Zd., *Sus* sp., *Bubalus teilhardi* Young, *Bubalus* sp., *Bison priscus* Boj., *Bison* sp., *Bos primigenius* Boj., *Bos* cfr. *taurus* L., *Bibos* sp.



Figs. 1-2. Stone implements.
Figs. 3-5. Bone implements.

Fig. 2. $\times 2\frac{1}{2}$ nat. size.
Other figures in nat. size.

Proboscidea :—

Elephas primigenius Blum. var.

All the discoveries we made in the present expedition have been unearthed at the same geological horizon as those dug out in 1933, and the artifacts and the fossils, as is mentioned in the report of the first excavation, were inbedded in a scattered condition in the same stratum of sandy clay.