

are frequently seen, their number varies from 2 to 4 (Fig. 1). In about 40% cases there is unequal disjunction of chromosomes and a trivalent is seen at each pole (Fig. 2). The second division also shows lagging chromosomes. Pollen viability is about 80%.

The above-mentioned irregularity suggests the plant to be a segmental allohexaploid. The low frequency of multivalents is suggestive of genome differentiation.

The authors wish to express their grateful thanks to U.G.C. for financial assistance.

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ANIMAL FOSSIL AND EARLY STONE AGE TOOLS FROM GANGAPUR ON THE GODAVARI RIVER (NASIK DIST., MAHARASHTRA STATE)

AMONGST the several sites yielding Early Stone Age artefacts in the Godavari drainage area, including the valleys of its tributaries like the Pravara, are the localities near Gangapur village, about 10 km. NW of Nasik. From the stratified deposits of gravel, sand, and clays exposed hereabouts, during the construction of an earthen dam in 1951, Dr. Sankalia¹ discovered Early palaeolithic tools, consisting of handaxes, cleavers, scrapers and flakes made of the basalt rock (Deccan Trap). Practically all the artefacts were obtained from the gravel conglomerate, or at its junction with the sands and clays. No fossil was, however, found in these deposits. In fact, the only known fossil-bearing localities on this river near Gangapur are at Nandur-Madhmeshwar situated at the confluence of the Godavari and the Kadva approximately 50 km. east of Nasik.² Even at Nandur-Madhmeshwar the fossils have been mostly found in the river-bed. Besides, no early palaeolithic implement has been reported from this area, the tools found here being of Middle and Late Stone Ages.

In 1956 Sovani³ re-examined the river between Gangapur and Eklahre for a stretch of 25 km. The only site yielding early palaeoliths was in the river section near Gangapur. His collection of twelve specimens, comprising handaxes, cleavers, and flakes, was obtained

from the coarse pebbly conglomerate resting on the trap rock and covered by another gravel and silt. The artefacts were of advanced type similar to those from Nevasa on the same river.

In a short visit to the Gangapur site in December, 1965, the present authors examined a part of the right bank of the Godavari River for about 200 m. The section close to the river had exposed weathered trap rock at the base overlain successively by red clay, gravel, sand, brown clay, and black soil. From the junction of the gravel bed and the underlying clay sand half a dozen palaeoliths were extracted. It was from the same horizon that a thoroughly mineralised fragmentary mandible of *Bos namadicus* was obtained (Fig. 1). The fossil



FIG. 1. Fragmentary mandible of *Bos*.

was completely embedded in the gravel. This was the first time an animal fossil along with the Early Stone Age artefacts has been found in the upper Godavari valley. This fossil, on the parallel evidence from the Narmada, may denote Middle Pleistocene horizon for the tool-bearing gravel. The entire palaeolithic collection consists of six cleavers, twelve flakes and three scrapers. The artefacts show advanced Acheulian forms.

The unrolled character of the tools and the fossil and their juxtaposition in the same layer shows that they are in their original site and have not undergone any transportation and hence are mostly undisplaced from their original place of deposition.

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