

alluvial origin, as they slope with the stream at a rate of over 30 feet per mile and continue up its tributaries, and on the Trans-Alai side are composed of truncated fans sloping from high up in the mountains.

When the river flowed at its highest or 300-foot terrace-level (first glacial and part of first interglacial epoch), its wide valley-floor was continuous into Karategin. The 200-foot terraces are also continuous, forming a narrower stage, while the present outlet gorge, into which the river plunges in a torrent state, is carved in the 200-foot floor. This narrow gorge is cut in the strike of a southeasterly dipping series (hard limestone on the north, soft gypsiferous beds on the south) and continues for 15 miles, whereupon the valley opens out and its terraces widen into the broad grade-plains of Karategin.



Fig. 443.—A Galcha Beg of Karategin with his Hunting Eagle.

The Kizil Su valley of Karategin is, in a general way, 25 miles wide and over a mile deep, as measured from the lower passes of its border ranges—a valley on the large scale characteristic of the highlands of Asia. Flanking it on the north is a branch of the Alai, on the south the Peter-the-Great Range, whose giant ice-clad peaks stand 10,000 feet above the oases scattered along the terraces and grade plains of its ancient valley-floors. The southwestern half lies open to a scanty precipitation of moisture from storms born up the Oxus embayment to nourish a moderate pasture over the grade-plains and flanking mountains below their snow. And there even grain is raised in fields patching the high slopes, with no irrigation; but the eastern half of the valley is barren of vegetation, a desolate land of sharp red and gray or black declivities rising from the dazzling gravel-plain of its "braided" stream. There the higher peaks of the Peter-the-Great Range are less often seen mantled with clouds than as naked pyramids of white outlined against an arid blue. Karategin is essentially desert.