There can be no question that the highland of the Bural-bas-tau was once part of a well-finished lowland of erosion, presumably a peneplain of subærial degradation. It must have gained its present altitude with comparative rapidity, and in geologically modern time; otherwise it would be more dissected to-day. When it still lay low, the lowland of which it was a part must have been much more extensive than the present area of the highland; for lowlands can not be worn down on resistant crystalline rocks without the very general reduction of all neighboring and quiescent structures. It thus becomes probable, from the consideration of this range alone, that many neighboring ranges have shared its history, and if they do not all to-day imitate its plateau-like form, it must be that they were somewhat less worn down in the previous cycle of erosion, or, like the Dongus-tau, already more consumed (owing to greater uplift or to weaker structure) in the present cycle, or both. This conclusion did not long remain a matter of speculation only, for at Son Kul and around Issik Kul we found many other ranges that supported it.

THE KOK-TAL RANGE AND THE SON KUL BASIN.

The steep-sided glacial troughs that we examined in the Kok-tal range northeast of Son Kul are eroded in a granitic upland of moderate relief that slopes toward the lake basin. The sloping upland was continued east of the lake, where it gradually descended to a broad granite floor, across which the lake outlet has cut an open trench, 75 or 100 feet deep. All this granite surface is to-day suffering dissection and gaining stronger relief. The lake outlet must fall rapidly in descending 3,000 feet to the Narin River, and a deep gorge will in time be cut along its course. The side streams from the north will, therefore, intrench themselves deeply, and the granite slope between them will be converted into a series of sharp spurs in the mature stage of the present cycle of erosion. The simple surface in which the glacial troughs and stream valleys have already been eroded is itself a surface of erosion, but it could not have been produced in its present attitude; it must have long stood lower and more nearly level. Its present elevated and inclined attitude must have been gained by a warping uplift in modern geological time. We are, therefore, disposed to look upon the sloping upland as once having made part of the peneplain that is more clearly proclaimed in the highland of the Bural-bas-tau. The basin of Son Kul is probably the result of warping or faulting the same peneplain. The northern slope of the Kok-tal range descends rapidly into the valley of the Tuluk, and its slope is sharply dissected by many side streams. When seen from the moraines in the Chalai range, north of the Tuluk, the crest of the Kok-tal has a rather even crest line, much more even than the serrate crest of the Chalai range itself.

THE RANGES NEAR ISSIK KUL.

The road through the gorges of the Juvan-arik gave us no sight of the mountain crests; but when we entered the open Kach-kar basin, the long slope of the Alexander range ascended northward from the farther side of the basin, and its general appearance at once suggested block-faulting. This suggestion was con-