

MISCELLANEOUS OBSERVATIONS ON THE LOWLAND PLAINS.

In the region of Osh there are several high, rugged mountains of crystalline limestone rising as monadnocks from the waste of the plain. The Syr Darya, where crossed between Khokan and Schust, was found to flow but a few feet below the level of the plains. The ruins of the ancient town of Ak-si are being cut by the river meandering, but no definite data as to change of level or relations was obtained. The waste of the plains on the northern border has been tilted up toward the mountains, dissected in its upper portions, and buried in its lower portions, in a manner similar to the southern border.



Fig. 119.—The sharp peaks south of the Alai Crest. Taken from a peak some versts east of Katin-Art Pass.

CONCLUSION.

The results of the Pamir expedition have shown that the correlation of the recent geology of the mountains and the plains in the field we covered is not only possible, but practicable, to attempt. We have already found a general connection between magnitude of the valley carving brought about by orogenic movements and distribution of corresponding depositions on the plains, and have, to a certain extent, found the glacial division of time in which these movements took place. When we consider the few days in which all this was found out, it seems that more detailed work on the terraces and dislocating zones ought to yield remarkably analytic results.

If work is to be continued in this field, the following plan is suggested:

1. A detailed study of Sok Darya Valley, which heads in the two large glaciers in the heart of the Alai range and flows north on to the lowland plains of Fergana.
2. Having found the relations of terraces to moraines and to the border of the plains in the Sok Darya Valley, proceed to study the great longitudinal valley of the Zerafshan, where artifacts are extremely abundant. Then, if definite relations of artifacts to alluvium, to terraces, to moraines, are found, time units may be projected to erosion, and deposition units determined in the first valley.
3. It would be of great interest to correlate the old expansion of Great Kara Kul with the glacial advances, and to make volumetric and surface area determinations of each expansion and its sediments. A few approximate profiles would do this.
4. A careful study of the Great Alai Valley, and an attempt to determine the thickness and age of its glacial debris and of the waste filling it. The entrance of the gorge at its outlet might be a good point of attack.