

OLD CANALS NEAR SON KUL.

The well-grassed foothills of the Kok-tal range north of the Son Kul outlet bore the marks of ancient irrigating canals that gave us much surprise, as the region does not suffer from dryness to-day. The abundant pasture on the foothills and the piedmont slopes is testified to by the great number of cattle driven up there for the summer by the Kirghiz. The canals are now almost obliterated, yet they are indubitably of artificial origin. The Kirghiz seemed to know nothing about them. They have been so far filled by the creeping of waste from the upper slope that they appear as benches 5 or 10 feet wide, instead of as channels. They lead with gentle descent from a stream along a hillside at different levels. Gullies, more or less grassed over, often descend the slope below the canals, marking the paths of accidental overflows.

Similar nearly obliterated canals were seen on one of the northern spurs of the Kok-tal range as we descended from the Kum-ashu Pass into the Tuluk Valley. Their course was observed to better advantage the next day, when we stood on the large moraines on the north side of the valley and looked across to all the spurs on the other side at once. Three canals were then seen on one spur at different levels. The uppermost, estimated to be 700 feet above the Tuluk-su, passed around the ridge line of its spur and turned into the next ravine on the east. Another one on a neighboring spur ran out to the spur ridge, and then followed down the ridge into the main valley. As on the other side of the range, these old canals all started at a stream and led forward on the side of a spur, and down-slope gullies from the canals frequently marked the paths of overflows.

THE ISSIK KUL DISTRICT.

The carved standing stone, shown in fig. 80 was photographed by Mr. Huntington on the plain at the east end of Issik Kul. The following notes are from the same observer. Walls or mounds are found at ten or twelve places on the fertile piedmont plains northeast of the lake. They are generally arranged in lines running roughly north and south. Those that were examined consisted of a circular or oval wall of cobble stones, from 10 to 30 feet high, covered with earth. In the smaller examples the center also was filled with earth, so as to form a mound. In the larger examples the center was unfilled, and formed a hollow within the wall. The only clue as to the age of these monuments in relation to the history of Issik Kul was furnished by a small mound, 14 miles east of Sazanovka. The mound in question stands on the edge of the bluff, the base of which has been cut back by the 30-foot shoreline (the same shoreline is at 25 feet over the lake farther west), and the edge of the mound has thus been cut back so that one-third of its area is undermined and lost. The cobbles and bowlders of which the wall of the mound was made are scattered at the base of the bluff. It would thus appear that the mound-builders lived around Issik Kul before the 30-foot beach line was abandoned by the lake.