

These questions arise: What is the explanation of this valley, of which a part has no trunk-stream? Was it ever a true river-valley? Is it the lower portion of a valley of which the head-waters have been captured by a higher branch of the Oxus? Was it possibly the valley of the Kizil Su, now captured at Obu-garm by the Vaksh River?

East of the open plains the valley-floor has been uplifted and dissected by the Hyak Darya, which plays the part of a true trunk-stream for that portion. Following it up to about 18 miles above Faizabad, we find the channel made by this stream, at first deep with high terraces, decreases in depth and finally opens out onto the ancient valley-floor again. Here the floor is a sweeping concave about 3 miles wide between the mountain sides, with spacious tributary fans and talus cones, and there are no terraces. It stands at an elevation of 6,100 feet and forms a rich summer pasture, resorted to by Usbeg nomads.

The remarkable fact about this floor is that it continues rising east beyond the heading tributaries of its stream, and we thus confront another portion of the valley with no trunk-stream. For 3 miles it is a wide grass plain with not even a tributary descending to its borders. Then, while it is still rising east, there begin

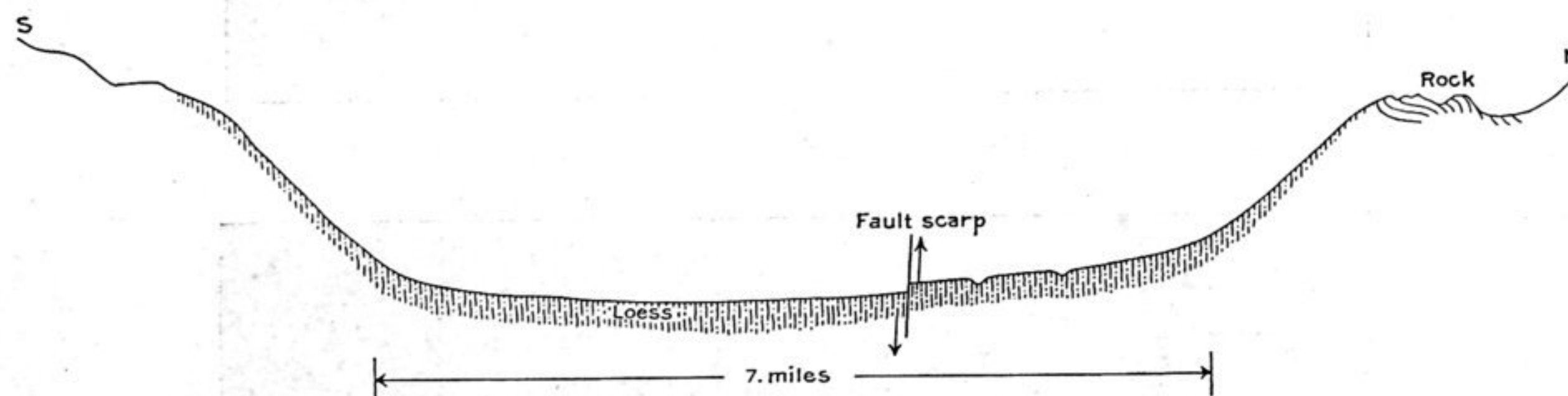


Fig. 450.—Cross-profile of the Hissar Valley.

gully systems developed back into it from a stream which joins the Kizil Su near Obu-garm. These gullies join into a gorge deepening rapidly with terraces inclining east, while the old floor above apparently still rises east. The gorge finally develops into a canyon 2,000 feet deep in hard limestone and softer rocks; then widens again at Obu-garm and debouches into the Kizil Su with a total depth of 3,000 feet.

The high-grade plains or first-stage terraces of the Kizil Su appear to have a height of about 3,000 feet at this point, and, if so, conform with the old uplifted floor of the Hissar valley. Here there is no doubt that the gorge of Obu-garm has captured the head of the Hissar valley. The valley at the divide is so broad that it must have been formed by a large stream. It is possible that the Kizil Su was that stream and that the mountain movements that first broke up the mature topography wrought this change in its course.

In connection with the valley of Hissar it is important to know the valley form of its northern tributaries. One of these, the Sardai-miona, was briefly studied in descending from Kak Pass over the Hissar Mountains. For 40 miles it is a gorge over 2,000 feet deep, of which the last 25 miles narrows to a granite