relations will occur in consequence of the alterations in the level of the river. So long as the spring freshets are running in full flood, a considerably greater volume flows into the lake than at the time of our visit. If the river drops subsequently at a sufficiently rapid rate to the level *b*—*b'*, a portion of the water will flow back out of the lake, in order to restore the equilibrium. But when the river drops slowly and gradually, the lake subsides at the same rate, *b b' c'' c'''*, while the current in the canal grows slow, or else entirely ceases.

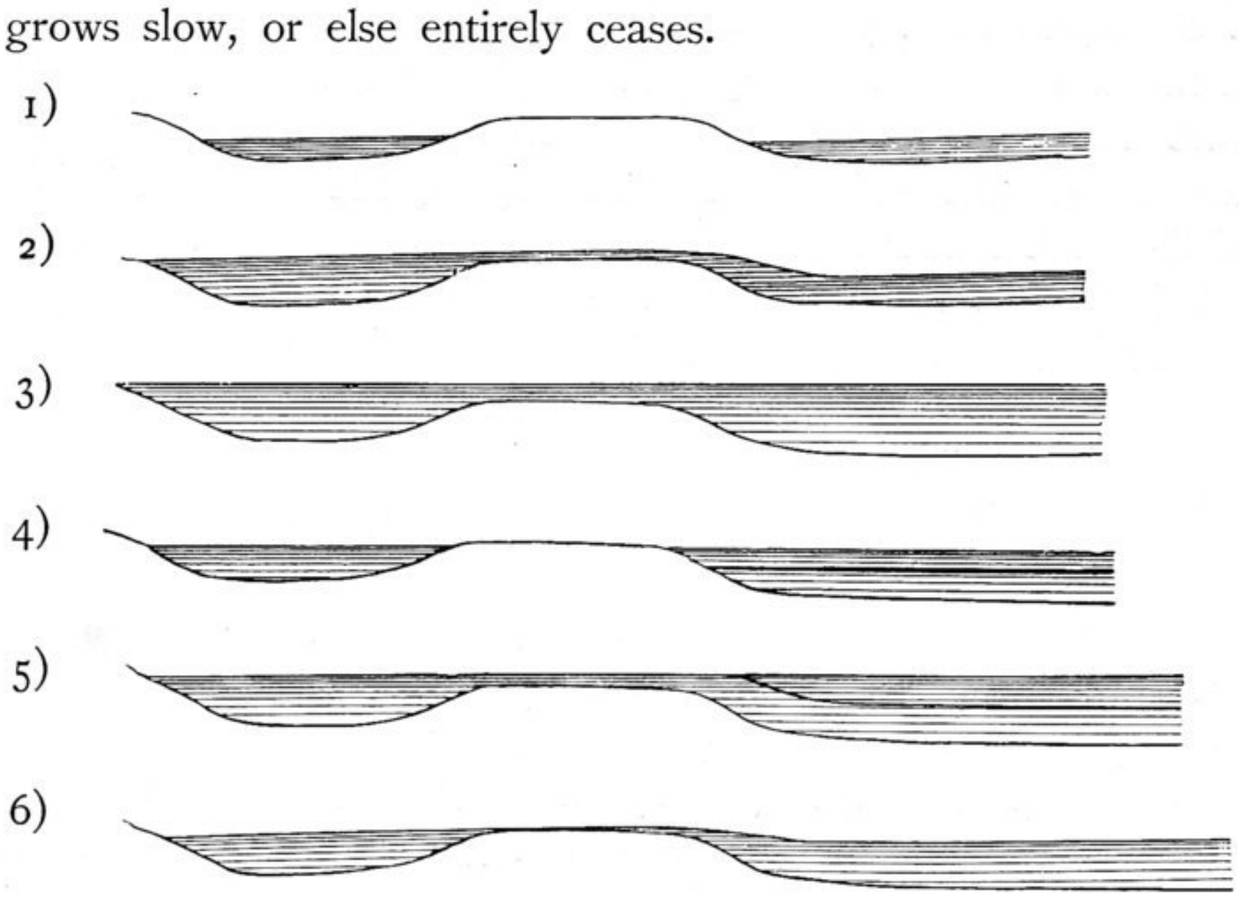

Fig. 229.

The subjoined diagram (229) will illustrate the different phases in the changes of level. (1) At this stadium the river is at its lowest ebb about the 1st August; the canal is then entirely dry, and the lake completely cut off from the river, and in consequence of this it shrinks daily. (2) In the end of September or the beginning of October comes the high flood, and the Tarim rises to its absolute maximum; the water rushes with torrential violence, probably with several dozen of cubic meters in the second, into the lake. (3) Very soon the lake is filled, and in the beginning of November it stands at the same level as the river, notwithstanding the suction which is set up through evaporation. (4) When the frost comes, both river and lake become icebound, and in the beginning of December the lake is again cut off from the river, if for no other reason, then certainly for this, that the connecting canal is frozen to the bottom. (5) The *mus-suji* or flood from the break-up and melting of the ice in March again causes the river to rise, and the lake-basin to fill again, until we once more reach the position of level which we found on 20th May. But at that date the river was dropping every day. If now the river, after dropping say about half a meter, then remains for some time stationary, whilst the level of the lake gradually falls in consequence of the continuous evaporation — and at this season of the year it is especially active — until it gets below the level of the river; then (6) its aspiratory power is likewise increased, and the current through the canal becomes more lively. This cycle is repeated annually, though subject to infinite variations in conse-