

fluctuating level of the water in the Sindree Lake. Its length appears to correspond with that of this depression; but its width is said to vary from two to ten or sixteen miles, that is to say, the whole tract from the Sindree depression to the margin of the *laana* or Runn near Raoma-ka-bazaar has been looked upon as elevated, apparently because no abrupt slope such as exists to the south was observed on the north side of the **Allah Bund**.

Captain **Baker**, the only person who records the existence of any northerly slope, says that it is very gradual, and that the bottom of the dry channel crossing this **bund** or mound was 7 feet higher than some salt water pools, remaining in the same channel further up nearer to Raoma-ka-bazaar; but as he gives the depths of other parts of the channel as varying from 12 to 20 feet, this may not be extraordinary.

To decide this point of the real or apparent elevation of the **Allah Bund** and explain existing discrepancies, some further levelling would be necessary. Mere inspection of the ground, as described by Shaik Kasim, could add little or nothing to what is already known; and though the opinion of Sir A. Burnes and Captain Baker's detailed section should carry weight, the great fact of the Indus flood finding its way into the Sindree basin by following the old channel across a belt of elevation four, or sixteen, miles in breadth, instead of accumulating on the upper side of the obstruction and finding a new passage round one end, is worthy of consideration. This fact becomes intelligible only (in case of the mound having been really upheaved) on the supposition that a greater fall than the height of the mound existed between it and the Sind margin before the earthquake; and that after the general elevation of the intervening space, sufficient fall still remained to enable the stream to follow its old direction.

Taking the height of the mound at about 20 feet as given by Captain **Baker**, and allowing the distance from the Sind edge of the Runn to be so much as ten miles, this would give the old fall as something

more than 2 feet per mile or double that of the whole of the Indus from Attock to the sea.* If the height of the mound be supposed even half of that stated by Captain Baker, bringing it to the amount recorded by Lyell, the fall of 1 foot per mile would still seem too great for the old river to have had before the earthquake; and further, as the Koree or Pooraun was replenished by distributories of the Indus, its fall, according to Mr. Fergusson, may not have been more than six inches to the mile, while if the general flatness of the locality be considered, it was probably much less.

Had the former channel of the river possessed any considerable depth where the Allah Bund was formed, this ought to be deducted from the assumed elevation, but Burnes says, (p. 312), 'above Sindree it filled with mud and dried up.' From this it would appear hardly possible that after the presumed elevation of the Allah Bund, the country still retained sufficient slope to allow of the Indus flood of 1826 following the old channel southwards, and the fact of its being elevated to any considerable extent becomes somewhat doubtful.

The sectional profile supplied by Captain Baker shows the summit of the Allah Bund to be at the same level as the bank of the Goonee (a tributary to the Pooraun river) where the Mora Bund has been constructed thirty-seven miles to the northward of the former place. From this Mora Bund the bank is shown to decline regularly until within about four miles of the Sindree depression, when it commences to rise to the Allah Bund, gaining there a height of about 19 feet above its lowest point; so that if the channel of the river had become filled up, as Burnes states, before the earthquake, this profile would lead to the supposition that an obstruction 19 feet in height and four miles in width was insufficient to divert the river from its old channel,

* Mr. Fergusson's paper on recent changes in the delta of the Ganges, page 325, &c. Quarterly Journal, Geological Society, London, April 1st, 1863.

while there appears to have been nothing to prevent its turning aside over the lower ground to the east or west.

If the old channel was not entirely filled up, but a passage of some 6 or 8 feet deep remained open, this would still leave the obstruction so much higher than the river bank above that it seems hardly possible for the stream to have avoided seeking another course, unless the country to the east and west of the river is much higher than would appear likely from its situation.

From the amount of detail given in Captain Baker's profile section, it seems to have been very carefully constructed, but the difficulty still remains that, if correct, the country on each side of the Lower Pooraun cannot be flat; or if it be so, the stream must have preferred to ascend a rising ground, opening a new channel across it 20 feet deep and four miles long, rather than to seek the lowest level in the neighbourhood.

On the whole, while it is impossible to assert that some trifling elevation may not have taken place, it seems improbable that this amounted to 'throwing up a bund' 10, 15, 18, or 20½ feet in height.

Otherwise, if the maximum *subsidence* at Sindree took place along a somewhat irregular line corresponding to the place of the Allah Bund, and leaving the level of the ground to the northward but slightly, if at all, altered, then a bank or scarp, like that of the Allah Bund, might naturally result, its length being conterminous with that of the depression and its height marking the amount of this depression. Seen from Sindree, within the depressed area, rising beyond the widely spreading inundation, such a bank would assume the appearance of a low hill, and present a marked feature in a view which had previously been bounded by a distant line to all appearance as level as the horizon of the sea itself.