as follows: the segment of the arc is exactly one-third part of a whole circle; its span on the level of the water, from one abutment to the other, is ninety-five feet, and its height twenty-four.*

**A BRIDGE IN SWITZERLAND,**
**CONSTRUCTED OF TIMBER.**

The late Bridge over the Rhine, at Schaffhausen, was of singular architecture, and worthy of particular attention. Several stone Bridges had been carried away by the rapidity of the torrent, when a carpenter of Appenzel offered to throw a wooden Bridge of a single arc across the river, which is nearly four hundred feet wide. The magistrates, however, required that it should consist of two arcs, and that the middle pier of the old Bridge should be employed for that purpose; but although the architect was obliged to obey, he contrived to leave it doubtful whether the Bridge was supported by the middle pier, and whether it would not have been equally safe if formed after his own plan. A man of the lightest weight felt it vibrate under him, though waggons heavily laden might pass over it without

* Vol. ii, p. 94