ON BRIDGES.

REMARKS*

ON THE BRIDGE AT WANDIPORE.—PAGE 49.

* The construction of this Bridge differs widely from all others that are cited in this work. We shall make a few remarks on its formation. First, that part of the Bridge, which is of the greatest span, is composed of four ribs, or arms, two on each side, one of which is inserted in every pier, each side of the door-ways, in the two abutments. Each arm is made up of four logs in depth; projecting over each other in equal succession. The span between the two abutments is one hundred and twelve feet in the clear, which, if divided into three equal parts, would furnish thirty-seven feet four inches to each part, but allowing each side arm to project forty feet from each abutment, then the length of each log composing one rib will be as follows: The undermost log will project from the abutment ten feet, the second, or next, above twenty feet, the third log thirty feet, and the fourth log forty feet; each projecting over his fellow ten feet. As the butt end of each log is placed in the stone abutment, at an altitude of at least five degrees, they furnish a strength, for such a small distance as forty feet, far more than the proportion needed, so long as the logs remain sound. And the historian from whom we have extracted the account in Page 49, informs us, that, at the period when he passed over this Bridge, it had then been erected more than one hundred and forty years; though the logs were all of Fir. What a strange contrast with the Bridges of art erected in the United States of America! But, it is not too late, if we are not too wise to learn of the ancients, as far as they excel, how to build Bridges. We purpose in the sequel of this work to show, that though the above Bridge does indubitably possess, from sundry causes, a considerable strength, for a plan so simple to furnish, yet that a rib of the same length, built on the author's patent plan for Bridges, with one sixth part of the timber here used, will not only be much stronger for its intended purpose, but will, also, be able