feet span, no pier, fifteen feet wide, supported by two chains of inch and a quarter bar.

One over Potowmac above Federal City, of same dimensions with the last.

One do. over the Brandywine at Wilmington, 145 feet span, no pier, thirty feet wide, supported by four chains of inch and three-eighths bar. Two carriage-ways, and one foot-path.

One do. at Brownsville, Fayette County, one hundred and twenty feet long, eighteen feet wide, one inch and a quarter bar.

One do. near same place, one hundred and twelve feet long, fifteen feet wide, one inch and a quarter bar.

Having gone through the above description, and also examined the account of one of the Chain Bridges erected in the East-Indies, called Selo-cha-zum, page 47, we find, by comparing them together, they perfectly agree in the following essential particulars, viz.: the number of the chains, their inverted curve, the mode of fastening them in the ground, their horizontal platform, and the presumptive means of repairing, all prove similar.

But the Chain Bridge at Chuka-cha-zum, in the East-Indies, and an other like unto it at Durham, (see page 45) being built with seven chains, must of course be allowed to be of a better kind than those erected with two only.

Were the Chain Bridges erected of late in the United States the product of a new invention, the notorious defects contained in the system would remain the same. We shall now attempt to point out, in a few instances, wherein they exist.

It is an axiom that where a structure of any kind depends wholly on two parts, if one of those parts fail, and the other is not fully competent to support the whole, a downfall must ensue; hence we infer there can be no security in a Bridge wholly dependent on two chains, for the following obvious reasons.

First, the sudden vibratory motion which is created by even