We have found, by calculating, the absolute weight of such a voussoir, and even supposing it to be considerably increased, that it will weigh at most between seven or eight thousand pounds or seven thousand five hundred. The weight, then, resting on one of the piers, most loaded, having ten voussoirs to support, will be charged only with the weight of seventy-five thousand pounds; a weight, however, which, on account of the position of the voussoirs, will exert a pressure of one hundred and fifteen thousand pounds; but we shall suppose it to be even one hundred and twenty thousand. There is reason therefore to conclude, from this calculation, that such a Bridge would not only have strength to support itself, but also to bear, without any danger of breaking, the most ponderous burthens: it even appears that it would not be necessary to make the pieces of timber so strong.

If the expense of such a Bridge be compared with that attending the common method, it will perhaps be found to be much less; for one of these voussoirs will contain no more than one hundred and forty or one hundred and fifty square feet of timber, which, at the rate of two shillings per foot, would be only fifteen pounds; so that the twenty-