ity must furnish, imperiously call for the interference of art, to make up the deficiency that nature in this instance has produced. The author has by this his proposed plan done away the necessity in general of building any part of the abutments of a Bridge on said plan in water, and by which circumstance nine tenths of the difficulties, and also the expense, that in general occurs, in the erection of the abutments and piers of Bridges on the old delusive plan, is totally avoided. But he is also aware that some particular local circumstance may occur which may render it somewhat impolitic to build the abutments of his Bridge wholly out of the water, according to his first wish and intention. He therefore considers it of no small importance, that a remedy in every way suitable be provided, whereby the said abutments may be erected even in situations the most unfavourable, with far greater certainty, and speed, than any other heretofore built on the usual plans.

PROP. 6.

(Plate 4, fig 11, and 12, is the section of two abutments for Bridges on the author’s improved plans for building on Infirm strata, either in or out of the water. Illustrating by two examples the shape suitable to the under part of abutments resting on different degrees of infirm strata, that shall be equal to prevent either abutment from sinking more, than may be previously ascertained, by demonstrative rule.)