plenty and capital scarce; and where improvements must necessarily be of a more temporary character.

With this view of the subject, I have given considerable attention to the details of wooden bridges; and, with a good deal of investigation and experiment, have arranged plans which are confidently believed to possess important advantages over the plans generally in use.

The preceding few pages have been transcribed from the author’s original and first essay upon bridge building; and are introduced here, not on account of any practical value they may possess in the present state of progress in the science of bridge construction. But they may possess some little interest as marking about the starting point of the construction and use of Iron Truss Bridges.

If the estimates above exhibited, of the cost of iron bridges, appear small and inadequate, under the lights furnished by the experience of a quarter of a century, much allowance may be claimed on account of the change of times and circumstances within the period in question. And, when it is borne in mind that the author actually contracted for, and built iron railroad bridges of 40 and 50 feet span, for $10, and of 146 feet for $30 per foot, the estimates above given may not seem entirely preposterous, although much higher prices are obtained for bridges of like dimensions at the present day.

PRACTICAL DETAILS.

LXXXV. In preceding pages I have endeavored to give a short and comprehensive general view of the