DRAW BRIDGES.

CLXV. The present is undoubtedly distinguishable from all preceding periods of history, by the increased amount of locomotion, both of persons and property, which takes place both by land and water. Hence, the frequent crossing of one another by land and water lines of transit, as well as the crossing by the former of unnavigable waters, and of streets and ravines, creates a large demand for the construction of Bridges; which forms the special subject of the present volume.

Furthermore, as convenience often requires that these intersecting lines by land and water should occupy so nearly the same elevation that both cannot be used at the same moment, a necessity arises for the frequent construction of Draw Bridges, which may be temporarily withdrawn from over the water highway during the passage of water craft, and replaced for the transit of land vehicles.

Cases requiring the construction of draw bridges occur so frequently at the present day, that a treatise upon bridge construction may be considered somewhat incomplete, which does not embrace the construction of Draw Bridges, as well as stationary structures.

The subject of Draw Bridges having been omitted in the preceding edition of this work, it has come to the knowledge of the author that such omission has occasioned disappointment to some who have made use of the book. In consideration of this, as well as the fact that the author has originated some plans and devices which he believes to be valuable and useful in