CHAPTER III.

LIST OF MEMBERS.

In the following list of members will be found the names of all the parts, both of wood and iron, in the bridges with which this treatise deals. Its use will be explained in Chapter XIV. It is inserted here so that those unacquainted with bridge designing may inform themselves as to the names of all the parts of a bridge before proceeding farther. This they can do by consulting the Glossary, and referring to the plates there indicated. The author would advise students, before proceeding to Chapter IV., to study closely Plates I.–IV., so as to obtain a general idea of how bridges are constructed.

LIST OF MEMBERS IN A WROUGHT-IRON HIGHWAY-BRIDGE.

MAIN PORTIONS.

Channel Bars. — Top chords, batter braces, bottom chords, posts, upper lateral struts, end lower lateral struts, upper portal struts, lower portal struts, hip verticals in pony trusses.

Plates. — Top chords, batter braces.

I-Beams. — Floor beams, intermediate struts, end lower lateral struts, bottom chords.

Bars and Rods. — Main diagonals, counters, hip verticals, upper lateral rods, lower lateral rods, vibration rods at portals, vibration rods on posts, chord bars.

Angle Iron. — Side bracing, end lower lateral struts.

Iron hand railing.

Floor beams.

DETAILS.

Stay Plates. — Top chords, batter braces, ends of posts, mid-