INDEX.

APPENDIX,  pages 122 to 250
ERRATA,  in OLD PRINT, See Original Pre-
face, p. iv;  also, pages 125 & 126.
    in NEW PRINT, See Back of New
    GENERAL TITLE-PAGE.
    in CENTRAL FORCES, correct as follows.

1. In lines 17 & 18, page 7,—for expression \( \frac{v^2}{R} \)
read... Centrifugal Force.
2. Line 20, same page, for \( R'^2 \), read \( R' \).

Fundamental Principles discussed,  Page 2 &c.
Analysis of Action upon, and Comparative Economy of,
    different forms of TRUSSING.  8 to 20
Easy practical Method of Analysis for Cancellated Trusses, 127 to 159
Decussion of Forces, in certain cases,  149—159
Inclination of Diagonals—most economical,  29—34, & 160—161
Depth of Truss, (ratio of Depth to Length,) 34—37, & 162—166
Relative economy of IRON & WOODEN BRIDGES,  39—44
    IRON BRIDGES. Strength of Iron,  51—66
    ARCH-TRUSS Bridges,  66—74, 186, & 200—209
    Cancellated Truss, (Truss with parallel Chords,) 75—82, & 210—217
    LINK Chords, and PLATE Chords  218—232
Wrought Iron Bridges, alluded to,  233—234
Wrought and Cast Iron Bridges, Comparison of Plans,  167.
Synopsis of the results of Comparison of said Trusses,  182.
COUNTER-BRACING, its effects and value,  187—193
    WOODEN BRIDGES; Strength of Timber, Positive,
Negative, Lateral, and to resist Cleavage,  93 to 98, and, 285.
Splicing Timber,  99—100
Wooden Trusses,  100, 118  235—243
MODULUS of Strength of Bridge trusses,  248—250