Errata for Second Printing of
Fundamentals of Structural Stability

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Page Description

5   In the line just below Eq. (4), the "and" should not be there.

38   The Q and the associated arrow should be removed from Fig. 2.11.

60   Add comment after Eq. (41): "Here, as the imperfection goes to zero, because of the antisymmetric boundary condition, the critical load $(4\pi^2 EI/L^2)$ is thus associated with the second buckling mode instead of the first."

69   Eq. (68) should read

$$w_{,xx} + \frac{Pw}{EI}\left(1 + \frac{nP}{GA}\right) = 0$$

83   Immediately following Eq. (136), delete "for small strain."

83   The first of Eqs. (140) should be

$$\hat{\varepsilon} = (1 + \bar{\varepsilon})\left[\hat{\phi}_1 + \frac{1}{2}\left(\hat{\phi}_2^2 + \hat{\phi}_3^2\right)\right]$$

86   At the end of the paragraph that starts, "Four beam (1-D) variables..." should read, "...midsurface, and vectors are denoted with bold letters."

86   In Fig. 3.19, $\mathbf{b_3}$ should be $\mathbf{b}_3$.

89   Just before Eq. (160), "circumferential coordinate" should be replaced by "the contour coordinate."

89 The second of Eqs. (163) should be

$$B = \begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$$

92 Just before Eqs. (177), replace "...an equation of equilibrium of the form" with "...identification of an equivalent distributed load per unit area Q_2 such that"

92 Replace Fig. 3.22 with Fig. 1.

94 Replace "cruciform" with "doubly symmetric" at the top of the page and after Eq. (183).

94 The sentence starting the paragraph just before Eq. (185) should begin, "For example, for a restraint at the boundary...."

142 In Fig. 4.4b, the arrows at the top and bottom should be labeled P as in Fig. 4.4a.

167 There should be a plus at the beginning of the second line of Eq. (85).

183 The large "1" in the numerator of the right-hand side of the unnumbered equation just before Eq. (48) should be sized normally.

223 In Eq. (180), the last term should be $O\left(\dfrac{EAh^2\varepsilon^{*2}}{R^2}\right)$

224 In the first of Eqs. (181), the last term should be $O\left(\dfrac{EAh^2\varepsilon^*}{R^2}\right)$

224 In the second of Eqs. (181), the last term should be $O\left(\dfrac{EAh^3\varepsilon^*}{R^2}\right)$

224 The sixth line of text following Eqs. (181) should begin, "$\varepsilon^* = \max(\varepsilon, h\kappa_3) << 1...$"

225 The second line of text following Eqs. (190) should read, "...one must restrict ε to be small...."

232 In Eq. (232), M_3 should be $\hat{M}_3$.

237 In the second of Eqs. (19), the extra right parenthesis should be removed.

239 Just before Eq. (27), replace "thus" with "it follows that"

244 Just below Eq. (39), a $\pm$ is missing from 2.86059π.

246 Fig. 8.4 should be replaced by Fig. 2.

247 Fig. 8.5 caption should read, "Buckling boundary for a clamped shaft loaded by a semi-tangential twisting moment of magnitude qEI/ℓ and an axial compressive force pEI/ℓ^2."

255 The subscript 3 on the cancelled $\hat{F}_3$ at the end of the second of Eqs. (23) should be closer to the F to look like usual subscripted variables.

276 In Problem 3, omit the parenthetical quantity $\beta/4.01260$.

276 References in Problems 6 and 7 to a_1-a_2 (a's not bold) should be replaced with $\mathbf{a}_1$-$\mathbf{a}_2$ (a's bold).

291 In the beginning of the second line before Eq. (54), replace "how" with "now"

297 The symbol starting line 12 should be P, not p.

305 At the top of the page, before the text begins, insert, "where $k^2 = \overline{P}/EI$."

305 Just above Eq. 34, replace, "...nondimensional time $\tau = t\sqrt{EI/(m\ell^4)}$..." with "...nondimensional time $\tau = t\sqrt{EI/(\mu\ell^4)}$...."

306 The numbers below the horizontal axis on Fig. 11.9 should be preceded by minus signs.

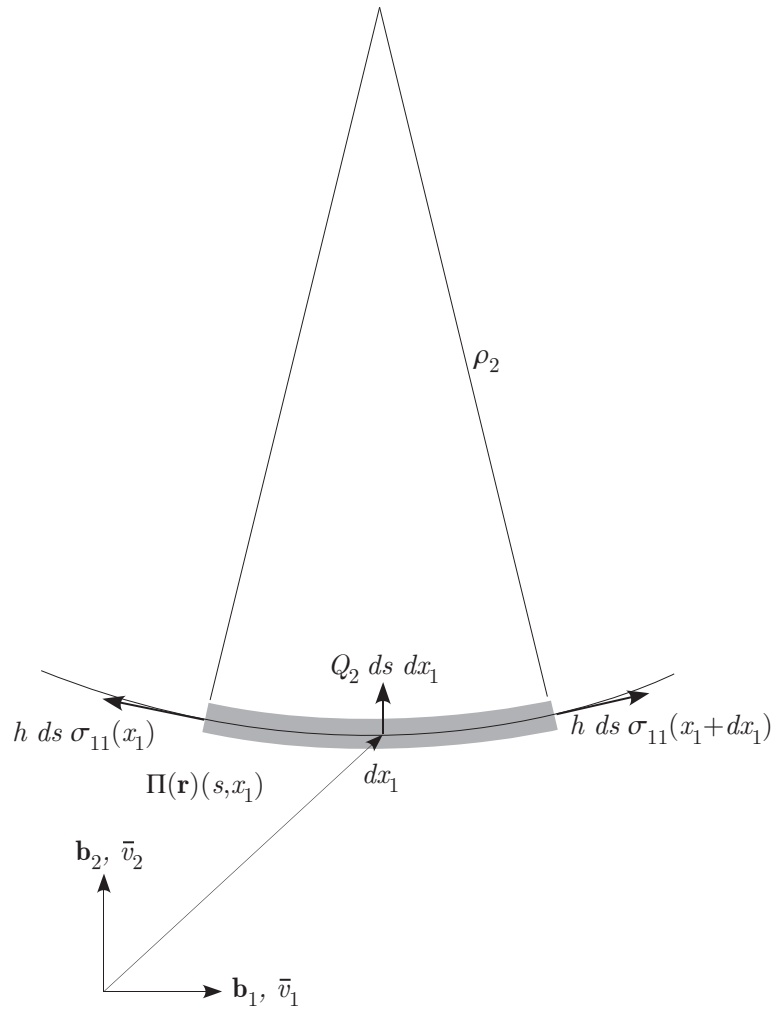309 The numbers below the horizontal axis on Fig. 11.11 should be preceded by minus signs.

ρ_2

$Q_2 \ ds \ dx_1$

$h \ ds \ \sigma_{11}(x_1)$

$h \ ds \ \sigma_{11}(x_1 + dx_1)$

$\Pi(\mathbf{r})(s, x_1)$

dx_1

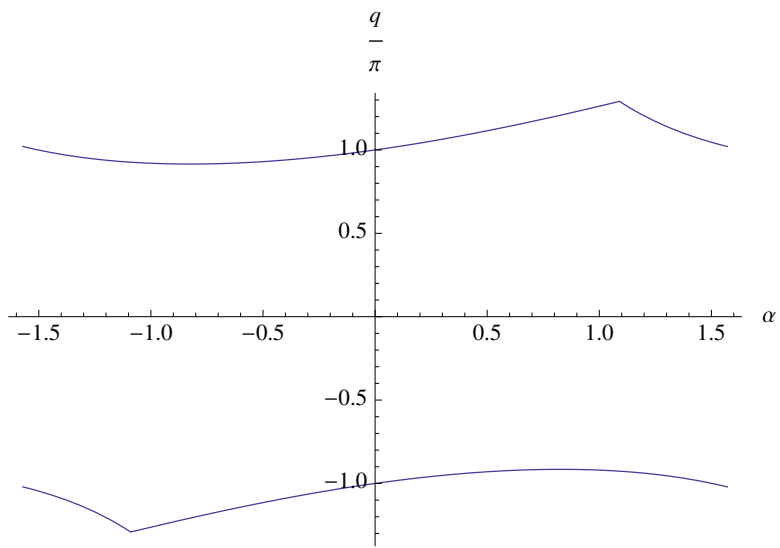$\mathbf{b}_2, \ \bar{v}_2$

$\mathbf{b}_1, \ \bar{v}_1$

Figure 1: Replacement for Fig. 3.22

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Figure 2: Replacement for Fig. 8.4