



Fig. 640.20 Compression Members Under Stress: A cigar shape (A) (with radials short and compact) under pressure in its long axes goes to squash shape (B) (radials long and separating) or to banana shape (C) (radials longer and collecting). Note that on the squash the stretching edge gets thinner and breaks. The cigar (D) has only one neutral axis: axial or polar exaggerated asymmetry. The sphere (E) has an infinity of equi-neutral axes: symmetry. The disc (F) has only one neutral axis: equatorially exaggerated asymmetry. Compression columns (G) tend toward axes of ever lesser radius. As columns become longer in respect to their cross section (slenderness ratio) they tend to flex and break into two shorter columns in an attempt to restore a desirable slenderness ratio.