

Fig. 621.10 Falling Sticks: Six Vectors Provide Minimum Stability:

- A. Stick standing alone is free to fall in any direction.
- B. Two sticks: free to fall in any direction.
- C. Two sticks joined: free to fall in two directions and to slide apart at bases.
- D. Three sticks: free to fall in any direction.
- E. Three sticks joined: only free to slide apart at bases.
- F. Four sticks: a propped-up triangle_the prop is free to slide out.
- G. Five members: two triangles may collapse as with a hinge action.
- H. Six members: complete multidimensional stability_the tetrahedron.