

**FIGURE P12-1****Problem 12-9**

- ^{**†}12-9 Link 2 in Figure P12-1 rotates at 500 rpm. The links are steel with cross sections of 1 x 2 in. Half of the 29-lb weight of the laybar and reed are supported by the linkage at point B. Design counterweights to force balance the linkage and determine its change in peak torque versus the unbalanced condition. See Problem 11-13 (p. 563) for more information on the overall mechanism.

* Answers in Appendix F.

† These problems are suited to solution using *Mathcad*, *Matlab*, or *TKSolver* equation solver programs.