



FIGURE P11-10

Problem 11-17 Power hacksaw. Adapted from P. H. Hill and W. P. Rule. (1960). *Mechanisms: Analysis and Design*, with permission.

†11-17 Figure P11-10 shows a power hacksaw that operates at 50 rpm. The crank is 75 mm, the coupler is 170 mm, and its offset is 45 mm. Find the pin forces, slider side loads, and driving torque over one revolution for a cutting force of 250 N in the forward direction and 50 N during the return stroke.

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