$L_2 = 75$ mm
$L_3 = 170$ mm

FIGURE P2-15

Problem 2-34   Power hacksaw. *Adapted from P. H. Hill and W. P Rule. (1960). Mechanisms: Analysis and Design, with permission.*

2-34   Figure P2-15 shows a power hacksaw, used to cut metal. Link 5 pivots at O_5 and its weight forces the sawblade against the workpiece while the linkage moves the blade (link 4) back and forth within link 5 to cut the part. Sketch its kinematic diagram, determine its mobility and its type (i.e., is it a fourbar, a Watts sixbar, a Stephenson's sixbar, an eightbar, or what?)   Use reverse linkage transformation to determine its pure revolute-jointed equivalent linkage.