

**FIGURE P2-24**

Problems 2-65 to 2-67

- 2-65 Figure P2-24a shows the seat and seat-back of a reclining chair with the linkage that connects them to the chair frame. Draw its kinematic diagram and determine its mobility with respect to the frame of the chair.
- 2-66 Figure P2-24b shows the mechanism used to extend the foot support on a reclining chair. Draw its kinematic diagram and determine its mobility with respect to the frame of the chair.
- 2-67 Figure P2-24b shows the mechanism used to extend the foot support on a reclining chair. Number the links, starting with 1. (*Hint*: Don't forget the "ground" link.) Letter the joints alphabetically, starting with A.
- Using the link numbers, describe each link as binary, ternary, etc.
 - Using the joint letters, determine each joint's order.
 - Using the joint letters, determine whether each is a half or full joint.