

 $L_2 = 1.000$ $L_3 = 3.800$ $L_5 = 1.286$ $L_6 = 0.771$ $O_4B = 1.286$ $O_4D = 1.429$ $O_2O_4 = 3.857$ $O_2O_6 = 4.643$

FIGURE 3-35

Washing machine agitator mechanism - constant speed motor drives link 2 and agitator is oscillated by link 6 at O_6

- 7-65 Find the angular acceleration of link 6 of the linkage in Figure 3-35 (p. 143) when $\theta_2 = 90^{\circ}$ assuming constant $\omega_2 = 10$ rad/sec CCW.
 - a. Using a graphical method (use a compass and straightedge to draw the linkage with link 2 at 90°).
 - [†]b. Using an analytical method.
- [†]7-66 Write a computer program or use an equation solver such as *Mathcad*, *Matlab*, or *TKSolver* to calculate and plot the angular acceleration of link 6 in the sixbar linkage of Figure 3-35 (p. 143) as a function of θ_2 for a constant $\omega_2 = 1$ rad/sec CCW.

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