

**FIGURE 3-35**

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

- 6-75 Figure 3-35 shows a Stephenson's sixbar mechanism. Find all its instant centers in the position shown:
- In part (a) of the figure.
 - In part (b) of the figure.
- 6-76 Find the angular velocity of link 6 of the linkage in Figure 3-35 with $\theta_2 = 90^\circ$ assuming $\omega_2 = 10$ rad/sec CCW.
- Using a graphical method (use a compass and straightedge to draw the linkage with link 2 at 90°).
 - Using the method of instant centers (use a compass and straightedge to draw the linkage with link 2 at 90°).
 - Using an analytical method.
- 6-77 Write a computer program or use an equation solver such as *Mathcad*, *Matlab*, or *TKSolver* to calculate and plot the angular velocity of link 6 in the sixbar linkage of Figure 3-35 as a function of θ_2 for a constant $\omega_2 = 1$ rad/sec CCW.