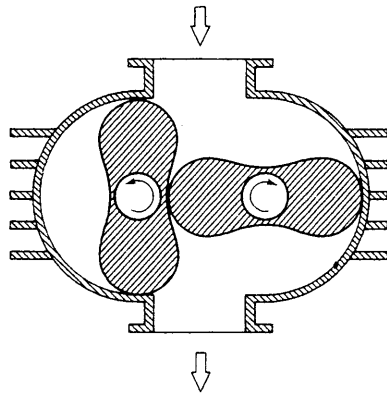
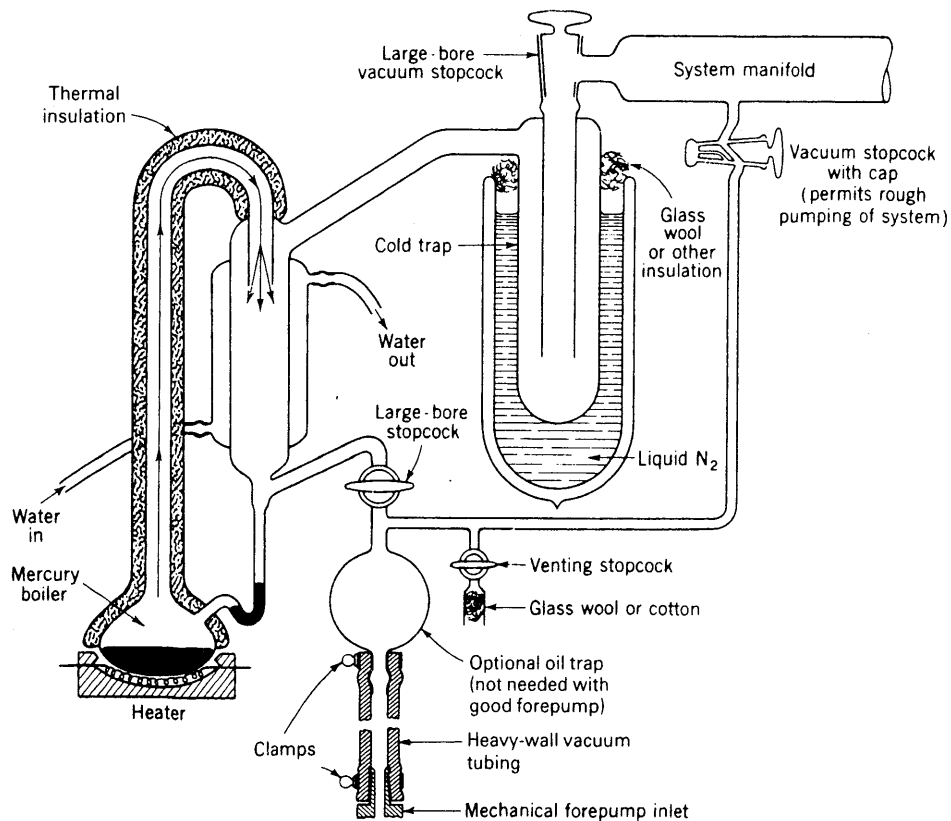


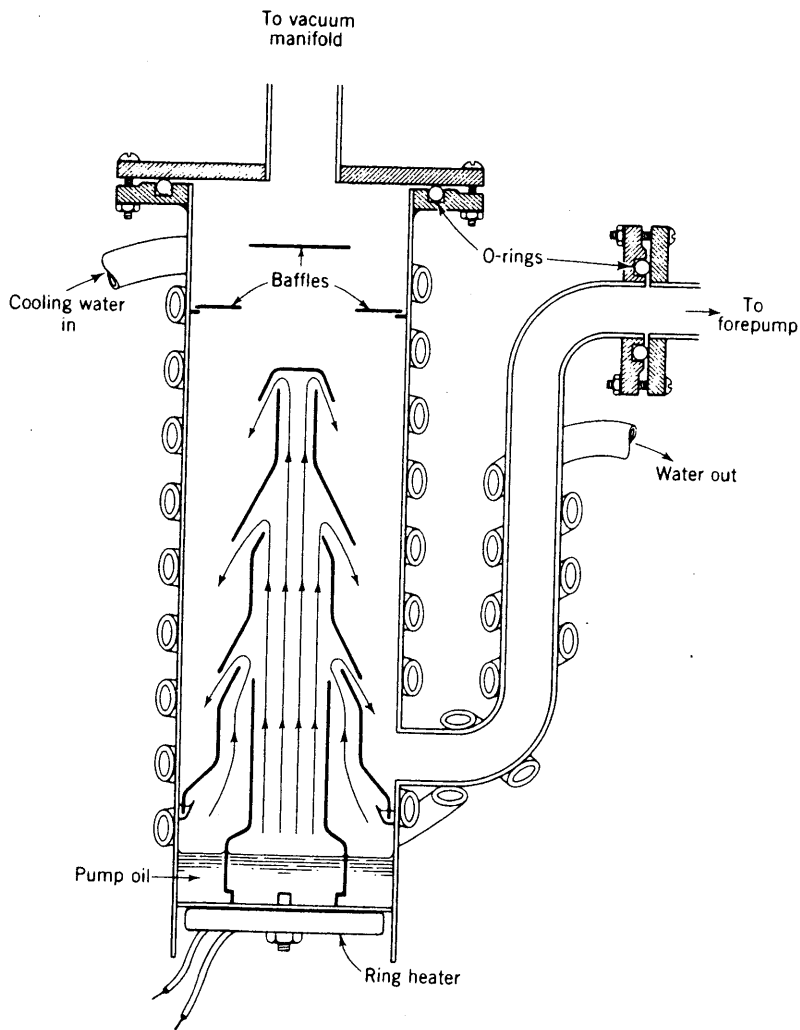
**FIGURE 2**  
Schematic diagram of a rotary oil pump similar to the Welch Duo-Seal; based on the Gaede oil pump design.

**FIGURE 3**  
Roots blower.





**FIGURE 4**  
 Typical all-glass mercury diffusion pump, shown with appropriate connections to the vacuum manifold and to the mechanical forepump. To avoid the use of mercury, a glass or metal oil diffusion pump is preferred, but the arrangement of the other components remains the same.



**FIGURE 5**  
 Schematic drawing of a multistage, all-metal oil diffusion pump. The arrows indicate the flow of oil vapor.

