

Figure 2-6. Filling technique for volumetric pipet. Squeeze the bulb *before* applying it to the pipet. Use your index finger (not your thumb) to control the flow of liquid from the pipet.

To use the more expensive valve-type bulb (see Figure 2-5b), squeeze the valve of the bulb marked A, and simultaneously squeeze the large portion of the rubber bulb itself to expel air from the bulb. Press valve A a second time, release the pressure on the bulb, and attach the bulb to the top of the pipet. Insert the tip of the pipet under the surface of the liquid to be measured, and squeeze the valve marked S on the bulb, which will cause liquid to begin to be sucked into the pipet. When the liquid level has risen to an inch or two above the calibration mark of the pipet, stop squeezing valve S to stop the suction. Transfer the pipet to the vessel to receive the liquid, and press valve E to empty the pipet. The use of this sort of bulb generally requires considerable practice to develop proficiency.

When using either type of pipet, observe the following rules:

- 1. The pipet must be scrupulously clean before use: wash with soap and water, rinse with tap water, and then rinse with distilled water. If the pipet is clean enough for use, water will not bead up anywhere on the inside of the barrel.
- 2. To remove rinse water from the pipet (to prevent dilution of the solution to be measured), rinse the pipet with several small portions of the solution to be measured, discarding the rinsings in a waste beaker for disposal. It is not necessary to fill the pipet completely with the solution for rinsing.