

## Pascal's Demonstrator



**Purpose:** To demonstrate how Pascal's Principle can be used to gain mechanical advantage.

**Location:** room 136, shelf O4

This simple apparatus shows not only that pressure is transmitted, undiminished, to every portion of an enclosed liquid, but also that mechanical advantage can be gained by using pistons of two different cross sectional areas. This principle was used by Pascal to invent the hydraulic lift and the syringe. The device can be used with weights to demonstrate the hydraulic lift principle. Ask students to calculate the mechanical advantage given that the areas of the two pistons are 1.8 sq. cm. and 4.9 sq. cm.