

of the tables that have been prepared, can now determine the height of a place above the level of the sea by the barometer as accurately as its horizontal distance from any fixed point, by the ordinary rules of trigonometry.

The experiment performed upon the Puy de Dome, under the direction of Pascal, may be readily made by any person who possesses an airpump and the usual pneumatic apparatus. If a barometer tube, not less than thirty inches in length, be filled with mercury, and inverted in a cup containing the same metal, the fluid contained in the tube will immediately fall to



Experiment showing the influence of the atmosphere on the mercurial column.

such a height as to balance exactly the pressure of a column of atmospheric air. But let the cup in which the mercury tube is placed be put under the receiver of an airpump, and as the process of exhaustion goes on, the mercurial column will decrease in height; and, could a perfect vacuum be produced, the mercury contained in the tube would be entirely discharged into the cup.