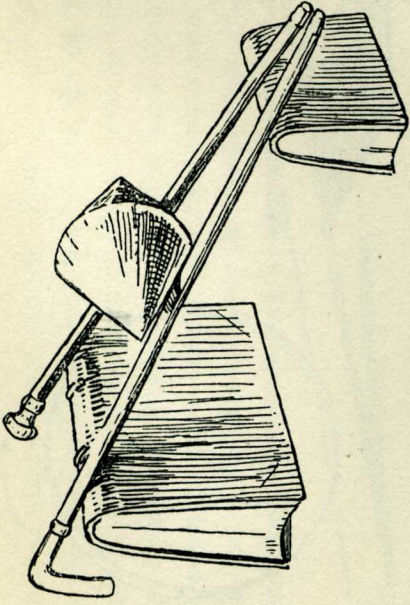


It is a curious illusion. Although the parts of the cone in contact with the sticks pass upwards to the upper ends, the axis of the cone in which the centre of gravity lies will be seen to fall in level in virtue of the geometrical nature of the guides.



34. BODY ROLLING UP INCLINED RAILS.

ALL bodies tend to move so that the centre of gravity occupies the lowest possible position. This fundamental principle is verified by the following experiment, which at first sight seems to contradict it.

Glue together by their bases two conical lamp shades, or two cones of the same size made out of cardboard, so as to form a double cone. Form an inclined plane with two sticks resting on two books of different height, but with the sticks so arranged as to be further apart at the upper ends than at the lower. The angle contained between them may be readily adjusted by trial so that when the cone is placed on the lower part of the two sticks it will seem to advance upwards towards the upper ends.