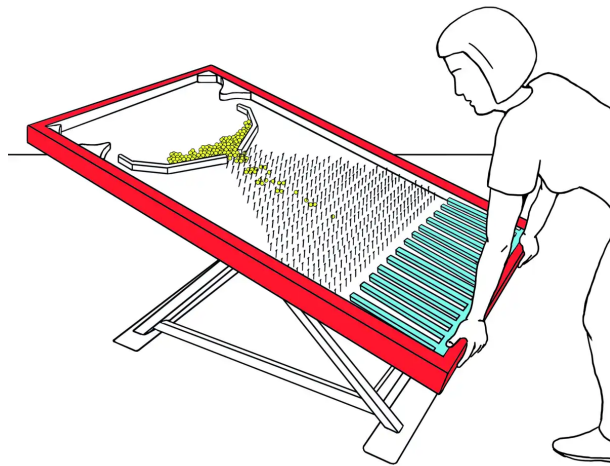


Galton board

Can you predict which slot the one silver ball will land in?



Tilt the board to bring all balls to the back reservoir.

Tilt the board frontwards and let the balls roll across the nail field.

Observe where the balls are heading to.

More balls fall into the central slots than into the ones further right and left. The distribution looks like a bell shape. It's called the Binomial distribution.

This device is named after the English scientist Francis Galton. In theory every ball has a probability of 50% to fall right or left whenever it hits a nail. In reality many balls will jump further outwards resulting in a curve that is higher at the fringes than expected.

Taking many rows of nails, many balls and many slots you will get approximately a continuous distribution – the well known Gauss distribution.