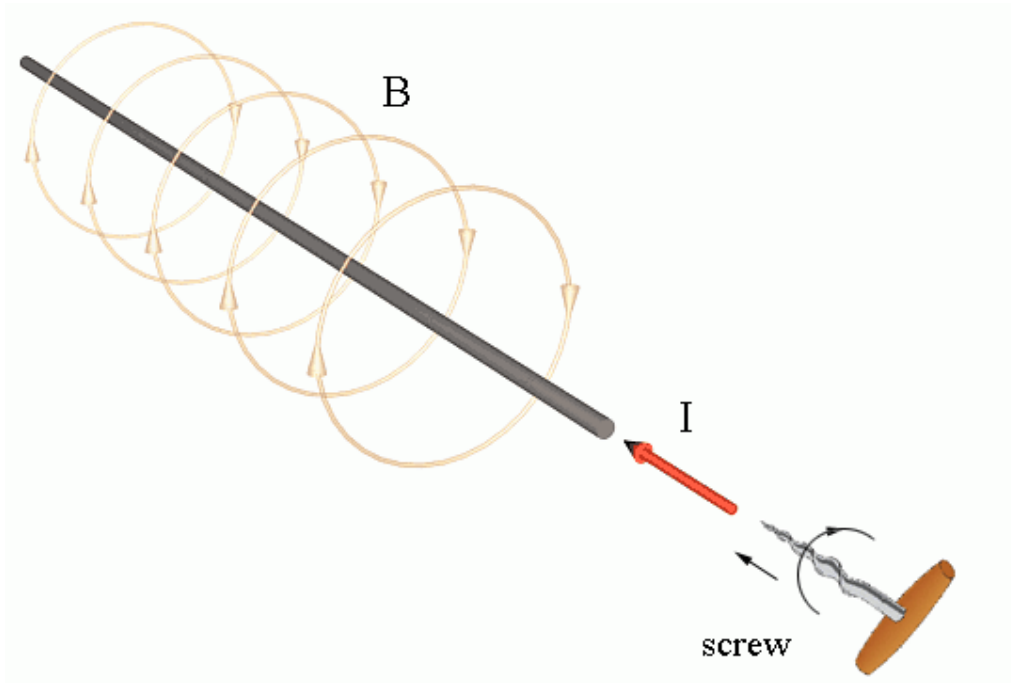


Maxwell's screw rule

1.



In physics, a rule formulated by Scottish physicist James Maxwell that predicts the direction of the magnetic field produced around a wire carrying electric current. It states that if a right-handed screw is turned so that it moves forwards in the same direction as the conventional current, its direction of rotation will give the direction of the magnetic field.

(from <http://encyclopedia.farlex.com/Maxwell's%20screw%20rule>)

2.

Suppose you need to find direction for vector C. Where vector C is cross product of two vector A and B (remember, vector C is always perpendicular to the plane built on the vectors A and B):

$$\vec{C} = \vec{A} \times \vec{B}$$

Imagine rolling vector A around the perpendicular vector (direction currently unknown) towards B.

Screw rule. If you point a screw and turn it in the same rotational direction as the imaginary path, the direction the screw moves is the direction of the vector C

