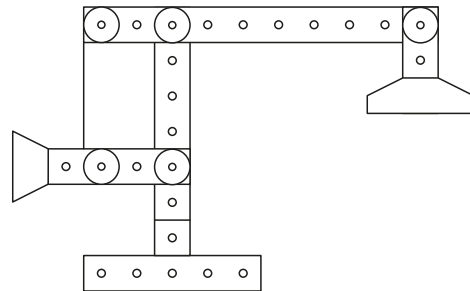
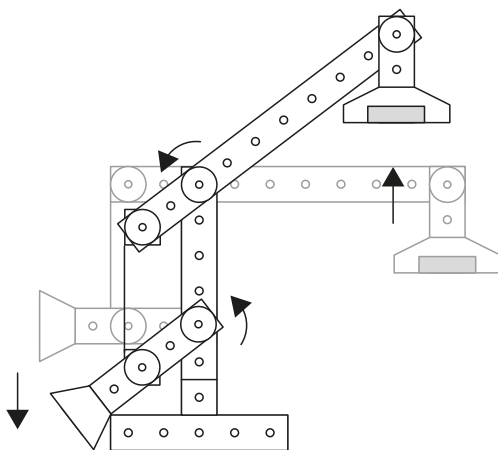


1. The folded TechCard Beam forms a 'channel beam' which is a shape used in real structures. The vertical sides of the beam make it rigid.

2. The linkage connects the handle to the arms and transfer forces between them.



3. When the handle is pushed down a pulling force is applied to the linkage which, in turn pulls the arms.



4. The hoist mechanism transforms a downward force into and upward force. Due to the position of the pivot on the arm the load travels much further than the applied force.

5. If properly set up, the force of gravity lowers the hoist arm. The handle is used to control the speed of the decent and to raise the arm.