UNCATEGORIZED

CLOCKWORKS

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Do you know how a mechanical clock works? Here is my attempt to explain this to my children:

[MEDIA=20]

The power (the white solid wheel at 4 o'clock) is attached to a series of wheels (black, green, pink) that finally carry the hands.

The clock would run as fast as possible if the power wheel would not limited by a second set of wheels (blue, yellow, red) leading to white escapement, that is leading to a periodic repetitive action allowing the power to escape in small bursts rather than drain away all at once.

The trick is with the special form of the white escapement wheel at 12 o'clock which lifts up the pallet arbor periodically. The pallet arbor has 2 pallets, which enter the spaces between the wheel teeth; it rocks back and forth in a consistent way is it also connected to a pendulum. As each tooth moves in and out of the teeth, it allows the wheel to turn in repetitive actions.

More clocks photos at human clock; we will need this principle at a later stage.