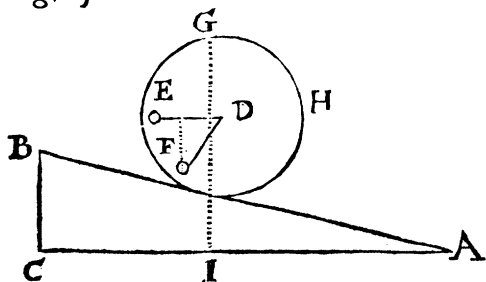


*A New Invention of a Clock ascending on a Plain inclin'd:
By Mr. De Gennes, an Officer belonging to the Sea. Ex-
tracted out of the Journal Des Scavans.*

WE have formerly seen Clocks, that never go, but when they are applied upon a Plain inclin'd. But we never yet saw any Clocks that wind up again of themselves upon the same Plain. There is to be seen in Mr. *Cospi's* Study, a Wooden Wheel, which works the same effect upon a Plain Inclin'd, invented by Mr. *Bondoni*, a *Florentine* Secretary to the said Marquis. But in regard M. *Legati* doth not unfold this secret; and for that M. de *Gennes* having found out the same, hath succesfully apply'd it to a Clock; the mannr hereof, which he communicated unto me, *Fig. 5.*



I shall here impart. *Fig. 5.* represents the inside of the Machine placed upon a Plain Inclin'd. The whole Invention consists in a Weight, which causes the Machine to play after the following manner.

The Circle *F G H* being placed upon a Plain Inclin'd, *A B* is divided into two unequal parts by the Line *G I*. To restore to the least Secture its equilibrium there is fastned to the extremity of the Radius *D F*, a Weight *E*. which is sufficiently heavy to recover what the lesser Secture loses by its situation, That a Wheel or Clock may thus stand not only in equilibrium, but also ascend upward, there is placed in the middle of the Clock a Drum, which encloses the spring of the Pendulum, upon which Drum is fasten'd the Radius *D F*. For thus the spring being mounted, enforces the Drum to turn, and so to raise the Weight, which it cannot raise, without its becoming more heavy, in regard that coming to the point *E*. it is farther from the Centre, than when it was in *F*. and thus all the Wheel turns on that side as the spring gives way.

M. de *Gennes* doth not here give direction how the Wheels that compose the Clock are to be made, because there

that no Clock-maker that doth not understand how to apply the force of a spring to the motion of a Clock.

A New Engin to make Linen-Cloth without the help of an Artificer, presented to the Royal Academy, by Monsieur de Gennes, an Officer belonging to the Sea. Extracted out of the Journal de Scavans

THis Engin is no other than a Mill, to which are apply'd all the parts of a Weavers ordinary Loom-

This Mill is compos'd of four principal parts, that is to say, the Serpent *AA*, two Footsteps or Treddles *BB*, one Clapper *C*, and two Arms *DDDD*.

The Serpent or Iron Barr *AA* has two Elbows *EE*, where-to the ends of the Ropes are fix'd that raise and put down the Foot steps *BB*. *FF* are two fourths of a Circle, that successively rest upon two Arches or Bows of Iron *GG*, which are above the Clapper *C*. to raise it. *HH* are two Teeth of Iron, added to the Serpent making an Angle of 25 degrees with *FF* and *KK*, which serve to put down a *Bascule* or *Sweep* which is in the Arm that carries the Shuttle. The Footsteps or Treddles differ in nothing from those which are usually made use of, only the Cords that hold them pendent from the ground are fixed in the Elbows of the Serpent, which in turning raises and puts them down by the help of two little pullies, upon which the Ropes turn.

The Clapper is supported between two Pillars with a Rope double twisted, which makes it to make a kind of a Spring, and causes it naturally to give forwards to beat the Cloth.

LM is one of the Arms which pass freely into the Canal or Pipe *NN*, supported by four Pillars of Wood *OOOO*. The Motion of it proceeds from the following Parts. *P Q* is a *Bascule* which, though unequally divided by its supporter *R*, is yet in *Equilibrio*, the end *PR* being made to weigh exactly as much as *R Q*.

At the Extremity of this *Bascule* is ty'd a Cord which passes through the Pully *S*, and terminates at the Extremity of the Arm, where it is fastned to a little *Bowle M*. At the other Extremity of the same Arm that is to say towards *L*, is