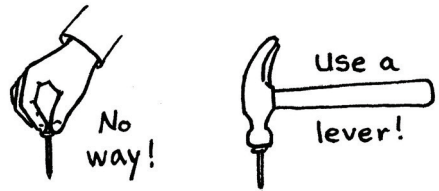


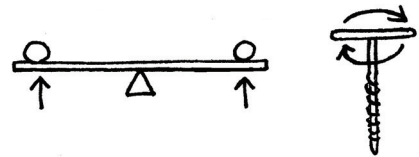
The Lever Rap

by Ellen J. McHenry

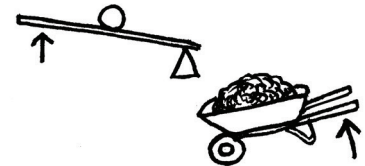
If you have a job that's hard to do,
Like pulling a nail or turning a screw;
Your fingers won't do it, so be very clever,
You need a machine that's called a lever.



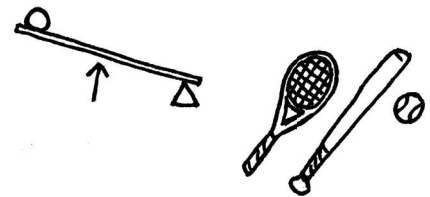
Levers come in classes: first, second, third.
Force, load and fulcrum are the key words.
In a first class lever, the fulcrum's in the middle.
If I seesaw with you, you seem to weigh little!



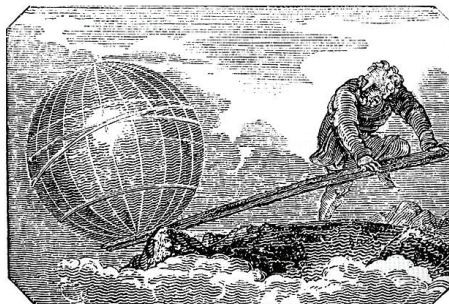
A second class lever has the fulcrum at one end;
The load's in the middle—give a ride to a friend
In a big wheelbarrow, where the force is your muscle,
If you call your friend "The Load," you'll get into a tussle!



If you want some speed to swat or bat,
The third class lever is where it's at.
The fulcrum's at one end, the load's at the other,
The force is in the middle. But don't hit your brother!



When you use any lever, you'll find, of course,
You can always trade distance for a gain in force.
If you make the lever long, moving loads is a snap.
And this is the end of the lever rap.



"Give me a lever long enough, and a fulcrum on which to place it, and I shall move the world!"
Archimedes (about 200 BC)

