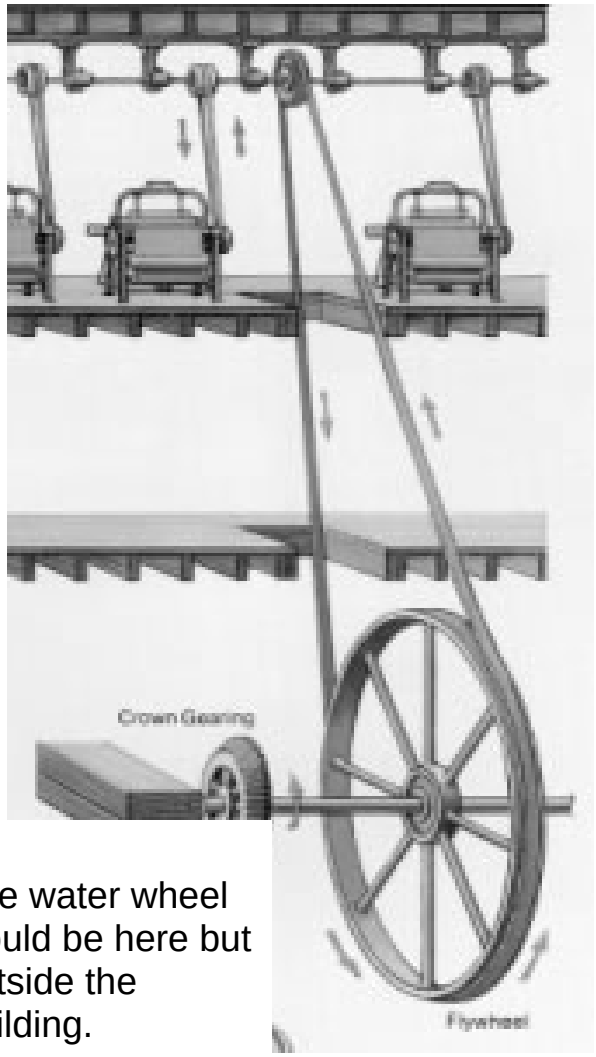
Using the power of the wheel

To get the power from the water wheel to the machines in the mill a system of belts and pulley wheels had to be used.

This is known as line shafting.



This shaft runs under the ceiling in the mill.

Can you see that the wheels are of different sizes? This was to be able to control the speed at which the machines ran.

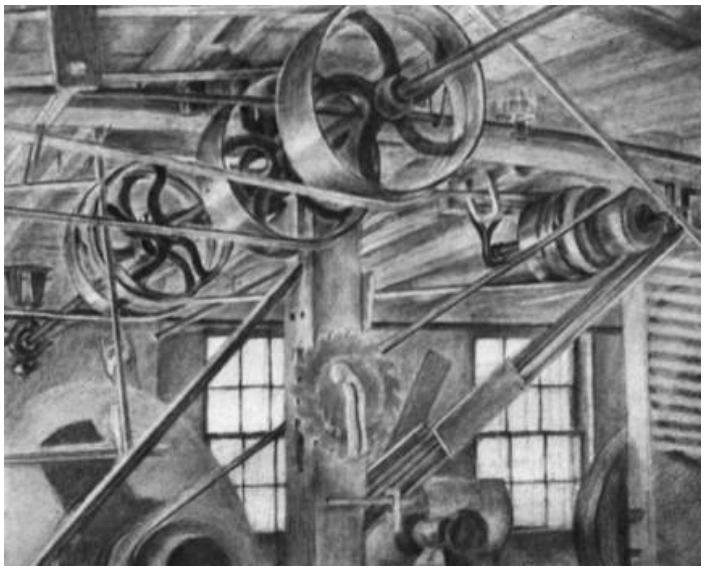
The belts were made of leather fastened with metal clips.

There was no guard over the belts and they were very dangerous.

The water wheel would be here but outside the building.

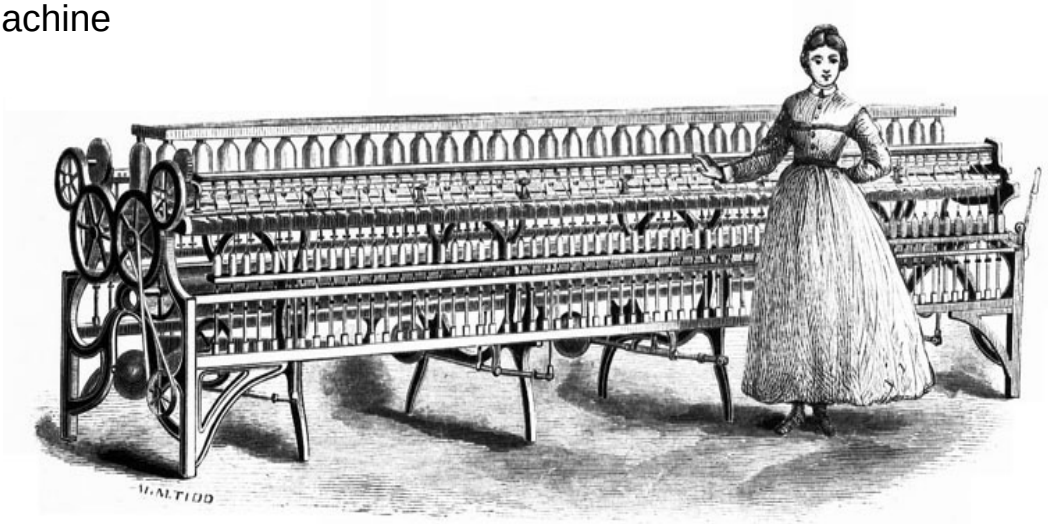
To see an animation of how all this worked but run by a steam engine go to

http://images.google.co.uk/imgres?imgurl=http://www.bbc.co.uk/history/british/victorians/images/launch_spinning_mill.jpg&imgrefurl=http://www.bbc.co.uk/history/british/victorians/launch_ani_spinning_mill.shtml&h=228&w=176&sz=9&hl=en&start=28&um=1&tbnid=H76xlkareo-RDM:&tbnh=108&tbnw=83&prev=/images%3Fq%3Dline%2Bshafting%26start%3D20%26ndsp%3D20%26svnum%3D10%26um%3D1%26hl%3Den%26sa%3DN



There would have been pulleys and belts like these all over the mill.

The belts would have gone round these wheels to drive this machine



FALES & JENKS' SPINNING FRAME.

To stop the machine the worker had to knock the belt off the drive pulley and on to another pulley that let it run free. These were called fast and loose pulleys because one held the belt fast (tightly) and the other one was free running.