POST MILLS AND TOWER MILLS

"Post Mills" were built such that the whole body of the mill was supported on a single pole or "post" made from a massive piece of timber, and was rotated so the sails could face the wind by manually lifting and moving the "tail pole" into the position required.

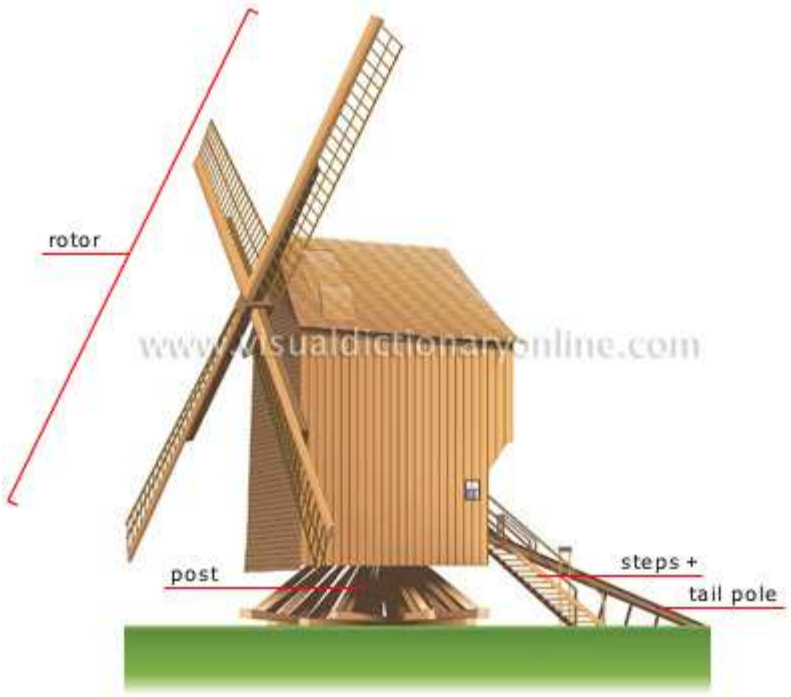
As opposed to "Post Mills", "Tower" and "Smock" mills were built with all their machinery inside a solid, fixed body, topped with a rotatable cap on which the windshaft and sails were mounted, and which was the only part of the mill that needed to be turned to face into the wind.

The difference between a "Tower" mill and a "Smock" mill was that the main shell or body was constructed of brick or stone in the case of a "Tower" while a "Smock" mill's body was constructed using a light wooden frame covered with thatch or weatherboarding, though they can sometimes be found where the light body has been built onto a brick or stone base.

The following drawings and descriptions come from, and with the permission of, the "Merriam-Webster Visual Online Dictionary" website at - http://visual.merriam-webster.com/index.php

The difference between a "Post" and "Tower" mill can easily be seen from the illustrations that follow.

POST MILL The mill body pivots on a vertical axis when a tail pole is activated by the miller.



POST Structure on which the windmill rests and turns.

TAIL POLE Orientation device opposite the rotor; it is activated by a winch and turns to keep the sails in the direction of the wind.

STEP Structural element for accessing the inside of the windmill.

ROTOR Part of the windmill that turns; it consists of rotating blades, which drive the windmill machinery.

TOWER MILL (or SMOCK MILL) The tower mill appeared later than the post mill; it consists of a usually circular, stationary body and a roof that rotates with the help of a fantail.

STOCK	Wooden arm to which the sail frame is attached.
SAIL	Wooden structure that is attached to the stock; the force of the wind turns it to drive the rotor.
WINDSHAFT	Cylindrical part on which the sails turn; it transmits the movement of the rotor to the windmill machinery.
CAP	Movable upper part of the tower that contains the rotor; it turns to position the sails facing the wind.
TOWER	Structure that supports the cap; it houses all the machinery for milling grain.
FLOOR	Level for accessing the inside of the mill; grain is usually stored at its base.
GALLERY	Passageway used to move around the mill floor.
FRAME	All the sailbars forming the outline of the sail.
FANTAIL	Orientation device that is attached to the cap, allowing it to rotate to keep the sails in the direction of the wind.
HEMLATH	Thick wooden sailbar on the side of the frame that keeps the narrower sailbars inside the sail.
SAILBAR	Elongated piece of wood that forms a sail.
SAIL CLOTH	Cloth attached to a sail that collects wind energy; a large sail cloth is used for weak winds and a small sail cloth for strong winds.