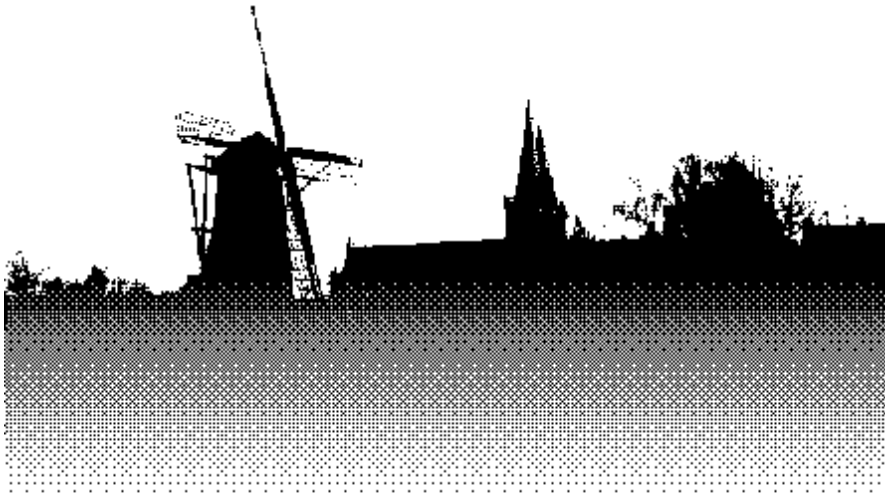
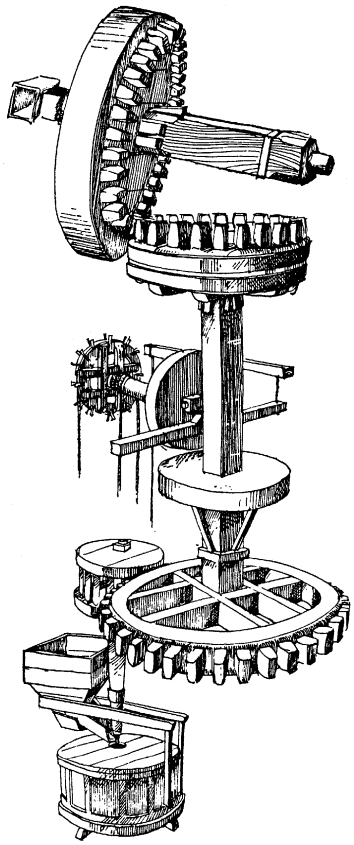
The History of the Kriemhild-Mill

During the 15th century people converted the palisades around the town to brick-build walls, towers and gates. The northern town border became the most fortified with a wall high about 7m!
The fortification of Xanten was heavily damaged by the war of 1618-1648, and the township grew poor. Merchands, goods and mob invaded through the demolished circle of walls. The township lost by this way a lot of its customs-income.
With that reason they rebuild the walls, unfortunately without restoring the public balance.
On the wall there were still existing several small watchtowers, which got to used as prison (Thefts Tower). At least there was a Nightwatchmans-, a Swineherds-, a Poor-People-Hunter Tower. Chasing the poor was one of the famoust tasks of the police. As beeing public employees they got the right of a public dwelling. Thus they had to live in one of the dark and moisturious towers.
After the war of 1756-1763 the township was that poverished that they sold the towers to interested citisans. Those who only wanted to use the bricks, had to close the wall inplace to prevent invasion of `problems`.
The policemans tower was wrecked, the Swineherds Towers is still til nowadays used as dwelling.
In 1778 the Nightwatchmans Tower was sold to the merchand Gerhard Schless. He converted it to a garden-house. His son Heinrich decided to use it commercially by constructing a windmill with oilmill machinery.
Therefor he erected on the torso a conical body with galery and a boatshaped hat.
Later he sold this mill to the family of Hermann, millers famous arround in the lower Rhine. They sold it to the merchand Böll, who ran a ropery at this place. He again endowed it to the township in the early

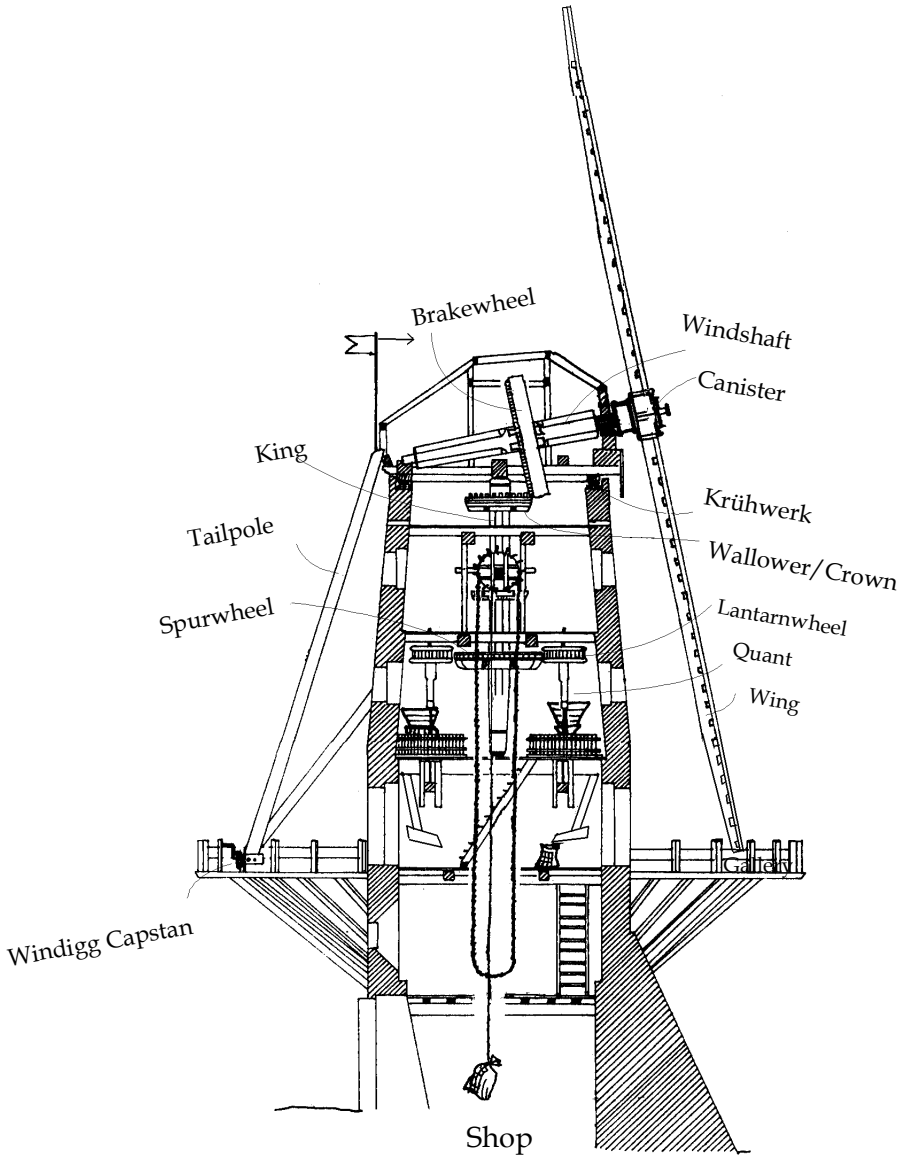


years of the 19th century.
Mills erect on former watchtowers (as in Rees, Kempen, Zons) were called "Bear-Mills" because of their typical shape like a standing bear.



Mechanical function

The mill is driven by a large iron cross, consisting of 4 wings. The wings themselves are a combined construction of old Dutch type and modern jib leader board.
The wind-leading edge of each wing has an aerodynamically calculated jib like the sailboats. The other side of the wing, the trailing edge, is fitted with a framework of old dutch type with short bars and longitudinal hemlaths to bear the cotton sails. The both edges are set with a changing pitch from +2 until -20 degrees along the wing. The tip of the leading board is constructed with shutters working as an air brake. They prevent the mill from running too fast.
If the wind is blowing harder we can reef the sails at the tips (Dagger point), to half-long (Sword point), to first reefs, or remove them completely. Then it runs only with the jib.
The wing stocks are mortised in a cast iron canister fitted to the originally oak windshaft in the cap of the mill. Formerly the windshaft was completely made of oak, but rot caused serious problems at the poll end.
Two trochitechalk stones (Ardenne-marmel) bear the windshaft at the neck and the end.
The windshaft bears the oaken brake wheel. Round the outside edge of this wheel passes an iron band (formerly wooden blocks). A very heavy lever tires the brake band under friction around the brake wheel. With the help of a winch the miller pulls the lever up until it reaches a catch. Sitting in the catch the brake is lifted and the wind can run the machinery.
The brake wheel drives a much smaller wallower (the Crown). Its vertical axle, the upright shaft (called the King) runs down to another big wheel at its


Brakewheel
Windshaft
Canister
King
Krühwerk
Tailpole
Wallower/Crown
Spurwheel
Lantarnwheel
Quant
Wing
Gallery
Windigg Capstan
Shop

bottom end, the great spur wheel. As this shaft is positioned exactly in the center of the body it can run several tools, here infact two pair of stones and the sack hoist.
The cap itsself is not fixed on the body but can be turned on 50 iron spur rolls. This is managed by a tailpole, a long oak beam attached to the cap of the mill. At its bottom end just some feet above the galery, the tailpole bears the winding capstan. With the help of an anchor chain and a winding iron rope the miller can adjust the whole cap right towards the wind.
The great spur wheel drives the two (here at the moment only one) lantarn wheels or lantarn pinions. Their vertical axle, the quant with a crotch at its bottom end drives the heavy runner stone. The runner stone turns on a spindle, which leads through a hole in the bedstone down on an adjustable bridge tree (one floor below). The runner stone is thus suspended just above the bedstone, so close that when it turns it will crush and cut up grain between itself and the bedstone, but not so close as to touch it.
The stones are to be dressed on their working surfaces, ie the grooves (furrows and lands) are recut if they are worn off.
The skill of the miller is to manage the power of the wind in accordance to the tasks the mill has to fullfill: Setting different planes of sails grinding different qualities of grain (hard wheat or soft rye) with adjusted fineness of meal. Al that has to happen without breaking the wings, spilling the sails, grinding the stones, burning the brake or crunching the miller.

This text is in construction. See later for complete informations and plates on our web-site: www.xanten.de/muehle