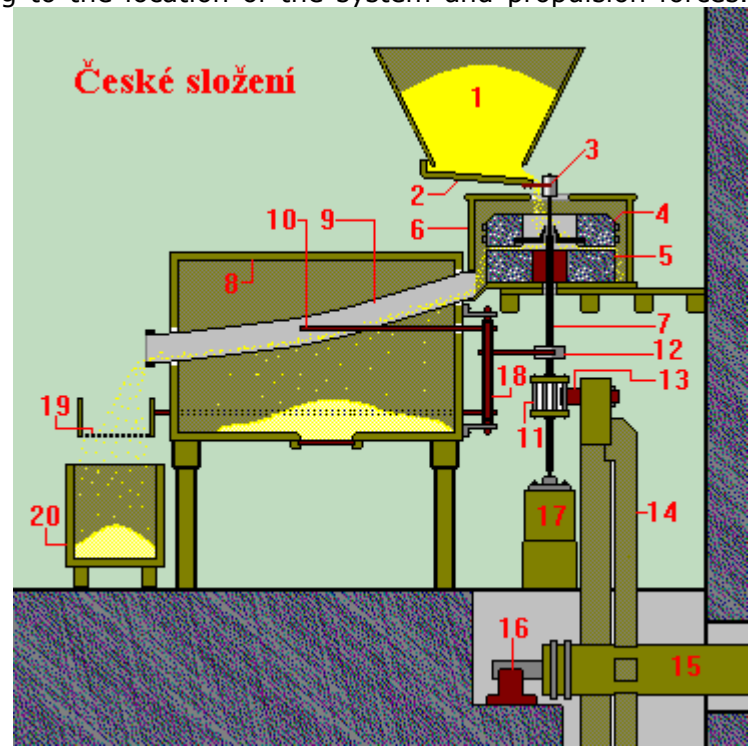
MILLING IN THE CZECH LANDS

Václav Hájek of Libočany mentions the first water mill in the Czech Republic. He writes about the establishment of the mill under the town and he also mentions the year 757 and a number of mills on Psovka.

Another written message is in the memorandum of Břevnovský monastery, built in 993 by Prince Boleslav II., who gave the monastery two mills under the Prague Castle as a present, along with the right to build other mills. The memorandum, however, is a younger fake, probably from the 13th century. Among the oldest credible pieces of information are the references about the mills in the Convent Hradiště above Jizera from the year 1100 and in Sázava monastery, dating from 1140. Mills were built mainly in monasteries, castles and fortresses from 12th to 16th century in Bohemia. Sovereign, nobility and the church institutions supported construction of mills as a source of certain incomes. It was probably in the 13th century when a mill primus was introduced, which ensures the privilege of the nobility for grinding mills and in its periodic payment for grinding. From the High Middle Ages, the castle mills were parts of the settlement around the caste, which were characterized by smaller size and had only one composition.

The basic structure of the medieval and modern timed grinding equipment is based on the Roman mill, where water and cog wheel is placed on a horizontal shaft and a pinion on the vertical metal shaft which extends through the bottom to the top of the stone and the stone bears the drum, which rotates. Grinding stones with hopper bin is located at the grinding floor laid on a massive beam line. Roman mill, which had stones with a diameter of 70 to 100 cm, corresponds to dimensions found in our medieval grinding stones. However, they were flat compared to the Roman and should no longer plow (carved a notch for mounting on the shaft) and recessed moulded as we know it from any further grinding natural stones - drums.

Czech mills were named according to the location of the system and propulsion forces. Water mills were divided into mills and river lamprey.



Brook mills were divided:

1) "KRCÁLEK", the smallest mill with or without a small reservoir, usually about one composition. The owner of such a mill used to be derisively called a loser or "krcálník" .

2) "DRNČÁK" mill on top of the water had mostly larger tank and 1-2 composition. Driven by the turf water, which is water from meadow or forest sources which pushes up from the turf. The miller was called "drncálník" .

3) "PODRYBNÍ" , is a mill under a bigger pond with 2-4 formations . Millers at these mills used to be called "Potočnik" or "malovodský ".

Riverine mills were:

1) TERRESTRIAL or OFFSHORE, built on the banks of the river. The miller was called "velkovodský"

2) "ON THE SHED" was built on an elongated, joint channel of the terrestrial mill built on stilts. The miller was called "bouďák".

3) ŠEJDOVNA, also on stilts, but next to the terrestrial of offshore mill. It was timbered to the riverbed. The miller was called šejdovník or šejdýř.

4) POVODNÍK, which was a mill at the bottom of the water, on a large river, its entire machine, water wheel "hubenáč" could be reduced during a small water and vice versa at a high water, it could be lifted up so that it could work at any water level.

5) NAVAL - ŠKRTNICE, was built on two deep barge. Water flowed directly under the wheel. These mills were built on three rafts. The miller was called lodičák.

Previously, everything that was driven by water, or water wheel was called a mill. Therefore, it was common for such an establishment to be named **mills**:

- flour
- hailstone
- fountain (Jahelka)
- sugar
- diligent (wood saws)
- tanning (tannery)
- hamerní (ironworks)
- washboard (washboard)
- ore (mineral crusher)
- pump (Water Pumps)

Today, the mill is called the set of machines for grinding materials. Mill is often a building in which these machines are. There may be plenty of kinds of mills because there are a lot of different kinds of milling, processing of raw materials which are used in a lot of fields - from grain mills, saline mills, graphite, mills for raw materials for ceramic, powder, clean paint industry or paper mills.

Milling was very difficult because the miller had to be able not only to grind corn, but also build a mill. He was supposed to know the wood processing and final processing of millstones. Miller had to be able to bring water to the mill, thus he must have had the basic knowledge of hydrology, water flows and measurement. Most of the knowledge, however, was based only on empirical experience of previous generations.

Millers were in the Middle Ages unrelated to their financial circumstances. At that time, most of them subordinated to the sovereign, secular or ecclesiastical lords, so that to the owners of the mills. The responsibilities of these millers were also grinding for monastery or nobility. Owners of mills were villages in the High Middle Ages. Later, especially after the Hussite wars, self-employed millers appeared.

Regarding the history and water power, the most widespread were clearly grain mills. Therefore, milling is a very old craft. It was caused by a pervasive agricultural production and at the same time it was difficult to transport grain at longer distances at a time when there was not sufficiently interrelated rail and road network. The mill was perhaps in every major village. If hydrological conditions allowed, it was the water mill. If hydrological conditions did not allow it, our ancestors built a windmill or wind generator powered by animal power - a treadmill. In poor regions, there was nothing, so that people had to work there.

Mills were divided on trade and wage mills

The capacity of the mills was during the first republic, with regard to the elimination of undesirable competitive practices, limited by **contingentation**. By these limitations, a uniform labour and employment in all mills were provided. On July 13, 1934 Cs. grain company was established. It regulated and governed the trade in flour, other mill products and some feed. It had a share capital of 50 million crowns, which were subscribed to various professional organizations, including milling companies.

Number of employees of the mill

... was followed by its size. The staff who knew how to mill and other issues grew at the mills. (they knew how to work with wood and the machine and the bakery). Normally, they worked under the direction of a mill owner - Mr. "father" Miller team consisting of: chief miller, brewer´s assistant and powder. But there were poor mills, where all the work had the miller stand up for himself, with only sporadic help of his wife or minor child.

Miller

....called **The father** was a miller by trade, who owned the mill or at least he was its tenant. He was the main person managing the operation. In larger mills he was in charge of particular commercial matters, commercial and investment development. In smaller mills he operated machines and ground.

Millers were highly **educated people** who had extensive knowledge of mechanics, engineering, hydrology, hydrodynamics, chemistry, and later electrical engineering. They dominated in bricklaying, joinery, carpentry, harness and metalwork. In addition, they had to be good farmers and prudent traders.

The size of the mill and the importance of its position was also reflected by its naming. Colleagues then referred to him as a :

• big water mill,

- small water mill,
- potočník,
- pettifoggers (mill on a small creek)
- pettifoggers on heaven (the mill ditch running just after the rain)
- drcálník (on a small creek just below the spring) .

Millers held an **important place in the community**, whether it was given by their wisdom, education, wealth or both. They were very often elected as mayors, judges, etc.

The downside trades were **frequent accidents**. There were finger or limb amputation and some of these accidents had death ending. Millers suffered occupational diseases - lung soiling, and because they had to stay in a noisy grinding plant, they used to be deaf. Wet, cold and hard work was the cause of rheumatic conditions, damage of their joints and spine.

Millers associated into the **guild**. It was abolished in 1859 and in 1883 milling was declared as **free trades** (it could have been operated without any knowledge), the milling industry started to decline in the country. Since 1931 milling has been declared as a craft trade. Technically proficient millers were associated in the Miller community. In later times, as the representatives of the bourgeoisie, they were often persecuted.

Chief miller

.....is an older miller who is trained and who directed the operation of the mill. He was particularly in charge of business. He received grain from the millers customers, he negotiated with them – what kinds of flours will they need and then weighed and dispensed.

To become a master miller, he had the test of a grinding mill building. He had to make a master piece and show it to the commission (mostly new water or cog wheel, shaft, pinion, plus circle or mount a millstone). In addition, he had to prove he was in the world to be experienced. If you had money, they could simplify the test. If you were poor, the commission would enjoy either getting you into a trouble or would not let you even pass the test. (corruption was, is and will be ...)

If a chief miller was married, he had a flat of his own at the mill.

Brewer´s assistant

....is a miller´s journeyman trained in a mill craft. On small mills, he used to be only a hiring worker who walked from mill to mill. The substitution occurred mostly on Stephen (December 26). Brewer´s assistant could not terminate service until he had finished joint work. Before he left, he had to put things into managed class status. In larger operations, he was the tribal employee, and worked for a steady salary. He served all mills in the mill alone. The quality of flour produced by the mill was his responsibility.

Brewer´s assistant in bakery miller was called a **cheat**, if he manipulated grinding machines, he was called "**stupař**".

Powder

....miller's apprentice who was taught by a chief miller and Mr. father all the secrets of the mill trade. The two also had to ensure that the powder was not in unguarded moments abused by brewer´s assistants and other employees of the mill to work on

things unrelated to milling such as errands for personal use (for beer). In addition, the main duty of the powder was sweeping flour dust of mill equipment and floor that had to be " so clear that you could eat from it" (which was a necessity not only hygienic but especially anti-fire).

When the powder finished his studies, he had to do journeyman exam. He had to pass it in another mill. When he made it, he became a journeyman. Mostly, the site of a journeyman in his mill was occupied by someone else (by brewer´s assistant) so he became a journeyman and went abroad to find some experience. He went from mill to mill, looking for a job and helped temporarily for and unstable salary. Wandering was particularly common in small mills, where in a season more workers were needed. When the season was over, a lot of people were dismissed. When the journeyman was industrious and clever, he found on some mill space and became brewer´s assistant. Sometimes, however, he liked wandering and so he remained rather free countryman.

Countryman

....Miller’s helper, without a steady job, toured the region from mill to mill. He was always welcomed at the mill because he brought some news from the world. He went up mostly in the evening and then discussed what's new in politics, who was married or getting married and what new machines people bought. Sometimes he arranged marriages, selling of technology and real estate. The countryman knew the craft very well so as the mill practices, and so that he could lend a hand. He helped in the work of handling and maintenance because besides the knowledge of milling he also knew the axe craft. Miller paid him overnight diet and a modest reward. Countryman slept with mill domestic servants mostly in a servant´s room, but sometimes outside or in the barn. If a countryman was a smoker, there was a rule that he had to give his pipe and tobacco to a miller to avoid accidentally burning down the mill. He stayed at one place only in case there was enough work for him. Otherwise, he went away. He stayed for two or three days or for a month. Some countrymen stayed for longer. Those countrymen used to have their regular routes and their favorite mills, so millers already mostly knew in advance when they will arrive and who and they expected their help. Some have loose morals, some of them were responsible and the miller knew that they would be able to handle night grinding.

Some countrymen wandered down to the water, others opposite to the water with a contemptuous sneer that: „After water every single scum swims „. Most of them were single or widowed. They did not need to be young to travel to the region. It depended on their physical condition. Their emblem was the flat cap, a bag for personal items and a blanket neatly tangled up into a tube hanging on a strap at the waist. Often, to save shoes, they tied the laces and draped them over their shoulders and walked through the region just barefoot. Last countrymen roamed our homeland even in 1955.

Hatchet man

... is an expert at working with wood , an expert in the technical wooden buildings and wooden machinery. He used to be a permanent employee of the mill or he was hired for doing some construction or major repairs. There were hatchet men who were in charge of doing calculations of the performance and transfers. They could produce water as well as toothed wheels, pulleys and the whole machinery of smaller mills.

More than seventy years ago among those hatchet men belonged :
Reimund ... Vavřena of Pardubice , Josef Crow from Katowice , Peter Petrik of Sudoměřice , Frank Vasek of Hlinska , J. Světnička of steep u Pelhřimova , Antonín Křivský of Chlumu Hlinska , L.Chaloupka of Libchyně in Nove Mesto nad Metují , Karel wide of Pilsen, Pilbauer of Trhových Svin , Ulrich Hubka of clubs , Josef Žejdlík of Svratouch , Josef Mrazek from Olešnice , Josef Friml from Trebechovice , František Trautermann of Liběchov nad Labem , Franz Suchomel from the gallery , Matthew and Vojtěch Krninská of Řevňovic , Hofman and Kropáček of Rychnovska , John Sedlar of Kaunitz , Václav Petr from Mšena , Josef Pilar, Weishäupl , Bartholomew NYC genus of Solin Dobrušky ... and many others.

Hatchet workshop of father and son Vondráček of Dachov, including period instruments and equipment, as it was designed in the years 1860-1930, can be seen in the museum in Vysočina on Veselý Kopec at Hlinsko. The last part of this hatchet family line was a water wheel at the nearby King Pile , made in 1971.

Most of the smaller mills had a chief miller, or a brewer´s assistant, who, at a relatively good level of a craftsmanship, could deal with serious repairs. This applied universally for all people who had similar professions and who lived in solitude .

Hatchet craft is currently still alive in its primitive form, although it is limited to a pair of dedicated people. A hatchet group led by Jiří Myška from Studnice near Hlinsko is an example of such a group of people who work by contemporary classic literature in old traditional way. Their work can be seen at the museum Vesely Kopec at Hlinsko. The work of their hands can be also seen even in Chacholice (mill). Ratibořice (mill and mangle), Vanov (mill with cascading wheels), Chrudim (waterworks) Střehom (mill) Zlaté Hory (mill and rising) It is even in Luxembourg in Asselborn (mill). The second group which is equally important is group of František Mikyška Petrovic at Sedlčany. Their wheels suggested by calculations spins in Kojetin, in Čertovka in Prague, in the garden in Sedlčansko, Źizkov in Kutná Hora, in Vojkov on Matthew mill, in Lužnice in the Swiss Birmensdorf and more are in production.

Salary of the village youth

In 1940 a chief miller had 5 crowns per hour, brewer´s assistant had 4,40 crowns (with a contingent of 150 wagons of milled grain per year). Insurance, food and accommodation were subtracted.

Millers were a peculiar part of the population and their rather exclusive position in the hierarchy of other crafts was also reflected in their social status. Milling belonged to the

so-called free trades and millers, among others, ensured trade in the village. Mills were also centres of education. People were exchanging information during milling.

With an increasing number of water mills and other facilities for water power, it was necessary to regulate relations between millers in the area of water rights. Therefore, since the Middle Ages there was a set of principles which the millers had to follow as a prevention before damaging other millers´ possession. For this purpose it was already established in the mid-14th century a choir of provincial sworn millers. They acted as experts in the field of water law, particularly surveying waterways, determining the extent of mill dams, assessing the technical condition of mills, etc. There were water rights disputes among the millers. The most frequent reason was limiting the inflow. Thus water brands were equipped, which determined the maximum height of impounded water. The first recorded message about the participation of sworn millers comes from the year 1440.

Specific case of such spoilage of water can be found in the land records púhonných 1540: L.1540 na zajtří st. Jeronym (10 Oct).

408 Sebastian from Weitmile in Chomutov drives the mayor and council and all the community of the town of Luna, here, Where Louny under these same cities have two mills and weirs on Vohra, upper and lower, that when the mills of weirs hold water up out of the assessment and sworn millers calibration and, moreover, the walls on the weirs do so on the water sluices damage and injury to the same Šebestián of Weitmile, and to Kostolopert town, village Lenešice, the village Březno, also outside the calibration and assessment of the damage in question having no justice.

Juxta: Insert attack on Monday before s.Vítem (14 Jun).

Jan Hřebecký butler. Standing on the morrow of St. Jerome.

Note: The town Kostolopert - means Postoloprty, ves Březno not the same as in Březno near Chomutov, but it is a village on the Ohře at Postoloprty, which was in the possession of Sebastian Weitmile in 1549

409 Šebestian Weitmile powers the mayor and council and all the community of the town of Luna, the Louny, where have these same two mills on the water in the dams in Ohře in that city, top and bottom, where weirs do not have any doors, so there is a free road after the Vohra has also a free passing, which used to be like that, and so the same people and cottar of the same Sebastian Weitmile from Kostoloprty and from other villages of the same wonderful Sebastian, injury happens, because the people from Louny are required to make gates of weirs.

Juxta: Insert attack, valet parking ut supra.
Note:
Půhon = subpoena
Juxta = additional entry relating to the original entry in the land records and written on the side of this entry

Ut supra = as above, a reference to the previous entry

At the beginning of the 16th century a larger mill cost from 1.000 to 1.200 meissen cents.

In the 16th century there were four categories of millers:

1) Millers "náchlební" - ie. hired for a salary

2) Millers "tenants" - a tenant for a pre-agreed amount of annual income

3) Millers "úroční" – a mill was sold for a lower amount, and he then had to pay an annual interest

4) Millers "privileged" - Miller was also the owner of the mill

Due to the wording of the entry in "veitmilovský" archive, where he talks about:

"a Mill of Korners in Březno" and the text of the privileges granted to the mill Březno 1405 the order of a commander Albrecht Dubé can reasonably be supposed that březenský mill, the mill was privileged, was privileged and belonged to the Körners. Another reason for this claim is the fact that Jan Körner from Krbice in 1551, when he already owned the whole Březno, donated the mill without compensation to the people in Březno