

Historical Biorefining (Biorefinery)

Mainly in southern Germany, Austria and western Czechia, these stones can be found distributed in the landscape. The stones were used since the 8th century to collect pitch tar, creosote or wood vinegar (pyroligneous acid). The process is similar to wood carbonization and the liquid products were (are) used as lubricant, firebrand, pharmaceuticals and for sealing (e.g. woody barrels).

Production:

The flat and inclined stones ("Pechölsteine", German) were grooved in order to allow flow off and collection of the liquids. Wood (preferentially resin rich pine or beech wood) is piled in the center of the stone. This pile is sealed (exclusion of oxygen) with turf (the green inside) and lit on the top at midday. Depending on size the process takes 12 to 48 hours. First the golden-yellowish oil was collected, later the tarry pitch.

Fotos: Anita Buchart

Actor (Pechoelbrenner):
Friedrich
Frühwirth

Use:

The golden-yellowish oil was named "healthful" (Heilsam, German) and was only presented not soled. Mixed with butter and oil it was frequently used as ointment. Wood creosote has been used as a disinfectant, a laxative, and a cough treatment. Hippokrates recommended a aqueous pitch extract to prevent ulcerating of wounds and Caelus Aurelianus introduced the pitch-band-aid in the 1st century AD. The tarry oil was used for firebrand, sealing or mixed with lard as lubricant.

Links:

<http://www.st-thomas.at/index.aspx?rubriknr=1657>
(German)

<http://en.wikipedia.org/wiki/Creosote>

For a modern approach see Max Planck downloads

Fotos:

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Traditional
European Medicine (TEH)