ON THE TRAIL OF JOSEF GROLL

- REDISCOVERING AUTHENTIC BOHEMIAN MALT AND BEER

SABINE WEYERMANN, E-MAIL: SABINE.WEYERMANN@WEYERMANN.DE

One of the greatest luminaries ever in the history of beer is also, it seems, one of the least known: His name is Josef Groll, a Bavarian brewmaster, born on 23 August, 1813, in the small village of Vilshofen in the Bavarian Forest, northeast of Munich.

At age 29, Josef had a job interview with Martin Stelzer, the head of the Měšťanský Pivovar (Burgher Brewery) of Plzeň (Pilsen) in Bohemia - a meeting that would not only take Josef abroad on a three-year contract, but, more significantly, would change the world of beer forever! Within a few months after settling into his new place of employment, Josef did something that nobody had done before: On 5 October, 1842, he mashed in the world's first-ever blond lager, now known as the Pilsner. The new beer was first served to the public under the name of Plzeňský Prazdroj (Pilsner Urquell) on 11 November, 1842. Today, this brew has become the foundation, in one form or another, of perhaps 95 per cent of all the beers made in the world!

For centuries, virtually all beers made in Bohemia had been - contrary to today's perception - dark, not blond, just like those in neighbouring Bavaria. Perhaps the most authentic present-day example of that traditional Bohemian Dunkel is the Tmavy Lezák 13° served at the historic Prague brewpub of Pivovar U Fleků, where brewmaster Ivan Chramosil reigns supreme.

Mr. Chramosil's Dunkel is a soft and satisfying, full-bodied brew, opaque in appearance and fruity in the nose, with a firm head and a malty-sweet aromatic finish. It is the only beer brewed at the pub, and it is made largely the old way, in a fine copper decoction brewhouse. It is cellared for primary fermentation in open wooden fermenters. As a concession to modernity, however, it is lagered in steel tanks where it is kräusened for effervescence. The water is untreated and soft, the hop is indigenous Saaz, and the malt is from local enzyme-rich barley.

The Měšťanský Pivovar made a similar brew when Josef Groll arrived there in 1842. The only problem: The brewery had been plagued by infections and the people of Pilsen were thumbing their noses at it. Poor Josef's assignment from Mr. Stelzer was to find a fix and to save the Měšťanský Pivovar from ruin. What went on in Josef's mind that compelled him to take the direction that he chose, we just don't know. But we do know that part of his solution was a new strain of lager yeast, which - rumour has it - he enticed a Bavarian monk to smuggle across the border.



The malting floor at Ferdinand Brewery and Malting Company



Germination

This was illegal in those days, because the Bavarian legislature tried to jealously guard the market advantage enjoyed by Bavaria's superior beers.

Josef's second line of attack was in the malt department. It was around that time that indirect-heated kilns – first patented by its inventor Daniel Wheeler in England in 1817 - were being adopted, albeit slowly, in central Europe. This new technique allowed for the malt to be blow-dried by hot air instead of over hot, smoky fires. It also meant that malt - and beer - could, henceforth, be made clean-tasting and of predictable colour and flavour. Importantly, Josef recognised, such malt could be used to make a blond lager.

As maltsters, it is this part of Groll's innovation that interests us the most. We decided that if this malt could still be made the old way today, it would a valuable addition to the Weyermann® malt portfolio of about 80 varieties. Especially for artisanal brewers of heirloom-style beers, such malt, we reasoned, could be of great use. Our search finally led us to the Ferdinand Brewery and Malting Company in Benešov, Bohemia, half way between Prague and České Budějovice.

The Ferdinand malt house dates from 1878 and very little has changed there since that time. Especially the malting floor made of Solnhofen tiles, the traditional floor material for central European floor maltings, as well as the two-tier kiln heated indirectly by steam were still very much in their original condition. On the moist floor, the barley germinates for several days at temperatures below 14 °C (57 °F). In the kiln, it stays in the top tier for 24 hours at a temperature of slightly above 50 °C (122 °F) before it is dropped past movable fins onto the bottom tier, where it stays for about eight to nine hours at a

temperature of slightly below 84 °C (183 °F). These are classic pale malt kilning temperatures, at which DMS and its precursors are properly driven off and the malt acquires excellent flavour characteristics. Because both kiln tiers have the same heat source, the bottom tier for the final kilning is naturally hotter than the top tier for the slow initial drying. We were convinced!

Today, Ferdinand makes our Weyermann® Floor-Malted Bohemian Pilsner Malt under contract. That malt has a colour rating of 3 to 4 EBC (1.7 to 2.1 °L). It has great kernel homogeneity and protein values between 10 and 11 per cent. It is also slightly under-modified by today's standards, with Hartung values between 32 and 34 (compared to 38 for modern malts). This malt is richly aromatic and makes beers - both lagers and ales - with a rustic flavour, a substantial mouthfeel and, if used for 100 per cent of the grain bill, a wonderfully deep-golden hue.

The two spring barley varieties used at Ferdinand, Tolar and Bojos, are grown by local contract farmers. They, too, hark back to an earlier time because they are genetic descendants of Hana, the barley variety used by Josef Groll in his first mash of Plzeňský Prazdroj. Hana is rarely planted today, but was considered the best brewing barley available anywhere during Groll's time.

As for Groll, when his contract with the Měšťanský Pivovar was up on 30 April, 1845, he returned to his home village of Vilshofen, where he eventually inherited his father's brewery. On 22 October, 1887, at age 74, he died in complete obscurity with a beer in his hand in his favourite local pub, the Wolferstetter Keller. Throughout his entire life, Josef Groll probably never realised the unique and consequential revolution in beer-making for which he had been responsible.