




Rites of Spring, Summer & Autumn

LAGER AND THE BIRTH OF
THE BAVARIAN BEER GARDEN

BY FRANZ D. HOFER



It was one of those days when the sunbaked paving stones of Munich radiated an infernal heat. We needed a beer, and quickly. It just so happened that the Augustiner-Keller beer garden was a short walk away from the center of town. Away we went.

The summer heat melted away the moment we crossed the threshold into the beer garden. We threaded our way past stalls selling bratwurst and pretzels to a counter where a barkeep was tapping beer straight from the barrel. Frothing beers in hand, we headed into the beer garden to partake of a venerable tradition: an *al fresco* Maß (liter) of beer in the shade of the chestnut trees.

This sublime rite of the warmer months blossomed in nineteenth-century Bavaria. In 1812, King Maximilian Joseph of Bavaria profoundly shaped beer garden culture with a Solomon-like decree that diffused tensions between Munich's innkeepers and brewers. The dispute had its roots in a set of liberalizing reforms that Maximilian had enacted, first as duke, and then as king. Some of these reforms favored private brewers, and breweries began to proliferate along the Isar River. During the summer months, the citizens of Munich took to spending more time at the beer cellars on the banks of the Isar, preferring these shaded groves to the stuffy inns where the beer was less fresh.

Innkeepers were incensed. They petitioned their good King Max, an epicurean friend of brewers and innkeepers alike, to intervene. On 4 January 1812, he decreed that brewers could keep right on selling their beer fresh from the cellars beneath their leafy gardens. But in a nod to the innkeepers, he limited beer gardens to the sale of beer and bread.

WHAT'S IN A DATE? ST. GEORGE, ST. MICHAEL, AND THE BIRTH OF LAGER

Now, as for those beer cellars that gave rise to beer gardens? Beer gardens in Bavaria and beyond are difficult to imagine without lager. The history of both are tightly interwoven.

In brewing lore of yore, the Feast of St. George on 23 April marked the historical end of the brewing season. The sealing of the brew kettles for the summer influenced both the evolution of lager beers and the leafy beer gardens where Bavarians drink them. →



their ice-laden cellars. From there, it wasn't an enormous leap from the cellar to the shade. Gradually, enterprising brewers began setting out tables and chairs under the leafy canopy shading their cellars, and voilà: the beer garden.²

THE SUMMER BREWING PROHIBITION: NATURE MEETS CULTURE

Lager is a relatively recent phenomenon in the history of beer, a phenomenon that benefited from the convergence of natural and cultural forces. Brewers came to realize that fermentation and maturation in cold cellars resulted in cleaner-tasting beer. As scientists later confirmed, cooler fermentation temperatures between 4 and 10 Celsius inhibit the production of microbes that ruin beer. Top-fermenting yeast (what we now call ale yeast) goes dormant at these temperatures, which favored the evolution of bottom-fermenting strains of yeast. Conversely, ale yeast is happiest above 15 Celsius, but so, too, are the microbes that can turn beer sour.

Bottom-fermenting yeast might not have carried the day in Bavaria if not for the dynamics of power and culture. Bavarian authorities were initially reluctant to embrace bottom-fermented beer, and the Munich city council even continued to obligate brewers to brew top-fermented beer (ale) as late as 1502. But this antipathy toward bottom-fermented beer soon faded, for even the authorities knew a good beer when they tasted one.

Promulgated by Dukes Wilhelm IV and Ludwig X as part of the Bavarian State Ordinance of 1516, the "Reinheitsgebot" (Purity Law) implicitly fosters the development of bottom-fermented lager by stipulating the maximum prices for beer sold during the summer (Sommerbier, also called Märzen) and winter (Winterbier).³ A key passage prescribes that a Maß (roughly a liter) of beer could cost up to one pfennig from Michaelmas in September through the Feast of St. George in April, while beer sold during the summer could cost up to two pfennigs.

Why is this important? Thanks to their advisors, the dukes were aware that the beer brewed in springtime required more malt, more hops, and more time to mature in cold cellars so that it would hold up over the summer months. It was only fair that brewers could charge more for these higher-quality Märzen beers that had been fermented cool and lagered cold for several weeks or months.

Significantly, the dukes immediately follow this passage with another that explicitly names Märzen: "But whosoever brews

In the centuries before the invention of mechanical refrigeration, brewers sunk cellars on the grounds of their breweries or in nearby embankments, filling them with ice hewed in February and March from the still-frozen lakes of the region so they could store beer through the summer.

Even though monasteries had been storing their beer in cellars and caves since the Middle Ages, the sinking of cellars in Bavaria began to accelerate in response to a decree promulgated by Duke Albrecht V in 1553 banning summer brewing. One reason for this decree prohibiting brewing between the Feast of St. George (23 April) and the Feast of St. Michael (29 September) was a fear of summer fires caused by hot brew kettles. More importantly, by the early 1500s brewers and regulatory authorities had learned a fair amount about the salutary effects of cool fermentation and cold maturation on beer quality.

Cold storage in cellars—what we now call lagering—also helped brewers ensure a steady supply of fresh and stable beer during the summer months when their kettles were sealed. As a further means of keeping the temperature of their cellars cool, brewers planted broad-leafed and shallow-rooted horse chestnut trees above

or would otherwise have [for sale] a beer other than Märzen shall in no circumstance serve or sell this beer for more than one pfennig per Maß."⁴ What's more, this declaration, by limiting the price a brewer or innkeeper could charge for non-Märzen beer, implicitly discourages the brewing and sale of top-fermented beers.

Despite the vaunted "Reinheitsgebot," not all Bavarian beer was gold. The language of 1516 may have discouraged summer brewing (and its attendant bad beer), but it didn't explicitly prevent it. In response to persistent beer quality issues in the intervening decades, Duke Albrecht V proclaimed in 1539 that brewers were to provision the city of Munich with beer through September. What's more, they were "not permitted to brew beer after the Feast of St. George" in April.⁵ (It's worth noting that this ordinance also explicitly prescribed bottom fermentation.)

Language prohibiting summer brewing was eventually codified as part of the revised Bavarian law code of 1553. Duke Albrecht V's ordinance sought to limit the ever-present threat of spoiled beer. It also empowered authorities to make the rounds in the spring to seal the brew kettles. They didn't return until Michaelmas in the fall to break the seal.

The Bavaria-wide Sommersudverbot (summer brewing prohibition) of 1553 contributed much to the history of lager. In particular, by recognizing that beer brewed during the summer was much more susceptible to spoilage, the framers of the ordinance explicitly promoted robust bottom-fermented Märzen ("March beers") that would last the summer and keep Bavarians in beer till late September.

But how did we get to bottom-fermenting lager yeast? To answer that question, we need to step back about seventy years.

A DISPUTE BETWEEN BREWERS AND BAKERS OVER YEAST

At first blush, the Munich Baker-Brewer Dispute might look like a curious footnote in the annals of late medieval history. But this dispute, which flared up occasionally between 1481 and 1517, opens a window onto one of the most momentous shifts in brewing history, the emergence of lager. When we focus on what the decades-long dispute was all about, we notice something interesting: yeast. Not only does this dispute confirm that medieval brewers and bakers knew what yeast was, it also reveals that Munich's brewers were beginning to practice a new kind of brewing, one that involved cooler temperatures. Brewers soon

grasped that the resulting beer was resistant to souring during fermentation, kept longer, and, most importantly, tasted better.

This newfound knowledge didn't help bakers, who were obligated by charter to purchase their yeast from brewers. Unhappy with the yeast yielded by this hopped and bottom-fermented "Bohemian beer," the bakers lodged a complaint with the authorities in 1481.⁶ Among other things, the yeast's lower active temperature meant longer rise times for bakers, making it less efficient for baking than top-fermenting (ale) yeast.

The conflict surfaces sporadically in decrees and ordinances over the next several decades. One particular ducal proclamation stands out as a significant signpost on the road to lager. In 1500, the duke required brewers to set up a common cellar "where the different yeasts can be inspected at any time," signaling an awareness that the kind of beer played a role in the quality of yeast for bakers.⁷ The ordinance further obligated brewers to produce extra yeast "in the event of a yeast shortage during the hot months"—a clear indication that summer brewing was tapering off as brewers embraced cool fermentation and cold lagering.

Dukes Wilhelm IV and Ludwig X finally put an end to the dispute in 1517. Recognizing how dramatically the realities of brewing had shifted, the dukes restricted the brewers' yeast-making privilege to the winter months, permitting the bakers to prepare yeast from April through August.

If the ducal decision handed down in 1517 reflected the rapid rise of lager beer, the proclamation of the Sommersudverbot two decades later in 1539 cemented the dukes' promotion of bottom-fermented beer. Ultimately, the revised Bavarian law code of 1553 extended this prohibition to the entire Bavarian realm.

Which brings us back full circle to the need for beer cellars—and eventually to the birth of the beer garden.

THE BEER GARDEN ON THE HILL

It may have taken awhile for the beer garden to arrive on the scene, but flourish it eventually did. A map of Munich's Haidhausen district from 1850 depicts beer cellars lining the streets of the Isar River's eastern embankment chock-a-block. To the right of the map, a legend lists forty-two Bierkellers that existed by 1803. Though not every Bierkeller



Photo © Getty/benedek



These magnificent and wildly popular Bierkellers may be fewer and farther between these days, and the Kellerstrasse that still runs through Haidhausen an echo of the district's halcyon past. Yet that doesn't mean Munich is devoid of shady groves for spring and summer drinking. Far from it. You'll still find historic beer cellars at places like the Hofbräu Keller and Paulaner's Salvator Keller (and many more in Franconia to the north), even if the beer garden has largely left its perch atop the cellar to leaf out across Bavaria's cities and countryside.

A NOTE ON SOURCES

All direct quotes are from secondary sources that draw upon archival material housed in the Bavarian State Archive and the City Archive of Munich. These sources include: Karin Hackel-Stehr, "Das Brauwesen in Bayern: vom 14. bis 16. Jahrhundert," Ph.D. diss. (1987); Michael Stephan, "Münchener Brauer zwischen Stadtrat und Landesherrn: Die Entwicklung der Münchener Braulehen vom Mittelalter bis 1814," in Eymold, (ed.), *Bier.Macht.München* (2016); and Astrid Assél and Christian Huber, *München und das Bier* (2009). Secondary sources on the early history of hops and bottom fermentation include Franz Meussdoeffler and Martin Zarnkow, "Biere des Mittelalters," in *Bier in Bayern* (2016), and Michael Nadler, "Reinheitsgebot und Staatssäckel," in *Bier in Bayern* (2016). I am also grateful to Matthias Trum and Christian Fiedler for their help in trying to find a bridge between the Sommersudverbot of 1553 and the later proliferation of beer gardens.

NOTES

1. I use the terms "beer cellar" and Bierkeller here interchangeably. The German plural of Bierkeller is Bierkeller, but I write the plural here as Bierkellers—apologies to any German speakers in the crowd. And with apologies to my Franconian friends, I use beer garden (Biergarten) and Bierkeller interchangeably as well.
2. If beer gardens were already popping up in Munich in the eighteenth century, their number exploded in the nineteenth century, thanks in no small part to King Maximilian's reforms. What's missing in the sources is a "bridge" from the Bavarian Sommersudverbot (summer brewing prohibition) of 1553 to the emergence of beer gardens in the 1700s in Bavaria and Franconia, which was absorbed into Bavaria between 1803 and 1806. The first records we have of beer gardens in the region date to 1728

boasted a beer garden, the concentration of beer cellars earned the district the nickname "Kellerstadt" (Cellar City).

A decade later, Joseph Pschorr began work on what would become Bavaria's largest Bierkeller. It took him over ten years to build, but upon completion it was christened with the epithet "Bierfestung," or "beer fortress." One contemporary described it as a colossal structure, "like a German oak with roots that reached deep into the ground."⁸

Not to be outdone, prominent Munich brewers built their own "beer castles," structures that locals and visitors alike compared to the palaces of the aristocracy. In an account from the 1840s, the Munich writer Ludwig Steub marveled at the "enormity of the majestic vaults" that "bore on their backs mighty buildings resembling manor houses and castles." Steub continued: "These castles rise up in the midst of a broad grange with numerous different features. Most striking are the many, many benches for thirsty guests in search of refreshment, all arranged in a painterly fashion under the canopy of old lindens and proud chestnuts."⁹ (One particularly fine example of this "castle architecture" that still exists is the Löwenbräu Keller just to the northwest of Munich's city center.)

in Munich and 1739 in Bamberg. (See Ursula Eymold, ed., *Bier.Macht. München*, p.161, and Christian Fiedler, *Bamberg: Die Wahre Hauptstadt des Bieres*, p.18.) Fiedler cites evidence of cellars used to store beer as early as 1697, and lists several breweries with beer cellars that show up in the records between 1708 and 1719 (Correspondence, 16 February 2023). We can thus assume that the practice of lagering beer was fairly widespread in Franconia by the 1700s. But absent hard evidence that people were serving and consuming beer in the groves atop beer cellars before that, we're left to conjecture that the seeds of the beer garden planted by the *Sommersudverbot* had to wait for an ideal set of historical convergences to sprout during the eighteenth century. If the forces of modernity—industrialization, urbanization, and a romanticizing of nature in the face of these rapid transitions—spurred the proliferation of beer gardens in the nineteenth century, the question still remains as to why they appeared in the first place, and rather belatedly at that. At any rate, the Bavaria-wide codification of the

- Sommersudverbot* in 1553 stimulated if not necessitated the expansion of lagering space in cellars throughout Bavaria, and possibly in neighboring lands like Franconia as well.
- Known as the Reinheitsgebot since the early twentieth century, this small section of the Bavarian law code is actually the culmination of over a century's worth of beer ordinances that appeared in cities across Bavaria, Franconia, and the Oberpfalz.
 - Jennifer McGavin, "German Reinheitsgebot Text and Translation." This source renders the Reinheitsgebot in modern German. Here as elsewhere, all English translations of German sources are mine.
 - See "A Note on Sources" at the end of this article.
 - Introduced into Munich around 1480 by Bohemian brewery hands, "Bohemian beer" involved both cooler temperatures and higher hopping rates than were common in Bavaria at the time. To be sure, hopped beer was already widely available in places like the Hansa cities of the thirteenth century, and sporadic references to bottom fermentation had cropped up in

- sources in Franconia and the Oberpfalz as early as the fourteenth century. But "Bohemian beer" is significant in that it constitutes one of our first records of hopped and bottom-fermented beer, the antecedent of today's lager.
- Recall that in 1502 the Munich city council had obligated brewers to brew top-fermented beer. The dynamics of the power struggle between the city council and the duke is beyond the scope of this article.
 - Cited in Eymold (ed.), *Bier.Macht. München*, p.160.
 - Ludwig Steub, *Allgemeine Zeitung* (23 July 1841), cited in *ibid*, p.160.

Franz D. Hofer experienced a beer conversion during his first study year abroad in Germany, where he learned that there was more to life than Labatt's. From that moment he began honing his appreciation of beer, stoking his passion even more after becoming a homebrewer in grad school. Franz is a cultural historian, beer judge, and author of the Tempest in a Tankard blog (tempestatankard.com). When not brewing, teaching, or writing, Franz enjoys hiking and cycling—preferably when there's beer involved along the way.



CELLAR SCIENCE

PREMIUM BEER YEAST

- Available in 12G & 500G
- Direct Pitch, No Need For A Starter
- No Oxygenation or Aeration Needed
- GABF Winning Beers
- High Viable Cell Counts

AVAILABLE AT
MOREBEER.COM



CELLARSCIENCE™ YEAST STRAINS:

- CALI
- ACID
- ENGLISH
- BAJA
- GERMAN
- BERLIN
- HAZY
- KÖLSCH
- NECTAR
- MONK
- VOSS
- SAISON
- HORNINDAL

SCAN QR

TO LEARN MORE & START SHOPPING!



#CellarScience