

David Nicholson's Liquid Bread®

About the well known circa 1890-1915 cobalt-blue export-shape beer bottle, beginning with a short summary of the history of "liquid bread" - beer.

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Antiquity?

"With hekt (beer) the Ka (spirit) is kept in balance with the liver and blood... Hekt is the liquid of happy blood and body. — Ancient Egyptian physician

We don't know when, where or by whom the first beer (or "**liquid bread**" as it is often called) was brewed. Although an exact date for the discovery of that first brew is not known, some historians believe it occurred 10,000 years or more ago in Mesopotamia (modern-day Iraq), when a jar containing bread became soaked with water and the resulting "slop" began to ferment. Someone then most likely had the curiosity to sample the resulting liquid and found it not only tasty but that it imparted a slightly euphoric feeling akin to that experienced by drinking their fruit and honey wines.

Whenever that first beer may have been sipped, Sumerian cuneiform tablets and Egyptian hieroglyphics dating back more than 5,000 years allude to beer's production. And it is known that Egyptian pharaohs provided their laborers with "...a daily ration of four loaves of bread and two jugs of beer."

"I have reached this grave out of my own possession, without taking anything away from anyone. Every man who worked for me was paid. They did it for beer and bread." — Engraving on Ancient Egyptian tomb

While no one can say for certain who made the first beer, we do know that many ancient civilizations, including the Babylonians, Assyrians, Egyptians, Hebrews, Chinese, Africans, Incas, Teutons and Saxons, had discovered the secret of brewing.

The preparation of beer in ancient times was similar to brewing procedures used today.

"First a grain was malted. Different grains were used by different cultures to brew beer. In Africa, beers were made

from millet, maize and cassava. In North America, persimmon was used. Corn was the preferred grain among most indigenous South American peoples, though sweet potatoes were used in Brazil, and agaves in Mexico. Rice was predominantly used in Japan; even sake is sometimes considered a type of beer. In other parts of Asia, sorghum was used, while wheat was commonly used to brew beer in China."
—David M. Kiefer (*Chemistry Chronicles*)

After being malted, the grain was dampened with water and allowed to germinate. Natural enzymes converted some of the starches into fermentable sugars and the resulting malt was heated to dry it. Frequently, the dried malt was formed into small, lightly baked loaves. When a batch of fresh beer was to be brewed, these beer breads would be crumbled, mixed with cereals, and soaked in water. This mash was allowed to ferment. After fermentation, a liquid containing between 6 and 12% alcohol was filtered from the mash. (The Sumerians and Egyptians made at least two-dozen different types of beers. Ancient texts reveal the lyrical names given to the beers" "joy-bringer," "heavenly," and "beautiful-good.")

"I lived from beer of black wheat, and drank from beer of white wheat." — Engraving on Ancient Egyptian tomb

For thousands of years, brewing was originally seen as the domain of women. As an example, Egyptian men were strictly prohibited from brewing beer, and the female brewer-priestesses enjoyed a very exalted status in Egyptian society.

Also, in ancient Egypt beer played an important part in marriages. If a young man offered a lady a sip of beer, they were considered engaged to be married.

Dark Ages

Throughout history beer has been

thought of and brewed both as a food product ("liquid bread") and as a beverage. As Roman control over Europe faded and Europe entered the Dark Ages, Christian monasteries became the primary centers of knowledge and learning. Advancements in agriculture, science and technology made the monasteries places of advancements in brewing as well.

After the fall of Rome, brewing continued for some years as a household task during the early years of the Dark Ages. Then the traditions of brewing were carried on and thrived under the Catholic Church during the latter years of the Dark Ages.

Beer was a very important product for Europe's medieval monasteries. Nearly every monastery in medieval Europe contained a brewery that served not only the monks but also pilgrims and the surrounding villages (perhaps as an inducement for attending mass). The monks brewed beer – which is little more than "liquid bread" – primarily as a source of sustenance during their religious fasting periods.

One large monastery in Switzerland had three breweries, each adjacent to a bakery. Brewing and baking, in fact, were closely related activities in ancient and medieval times. The monasteries did much to advance cleanliness as a necessity for preparing good beer and to generally improve the brewing process.

Middle Ages

When brewing began to take hold in Europe during the 11th century, hops was used in brewing because it improved the flavor of beer. Before hops beer there was gruit beer and many different herbs were used in the historic brewing of gruit. There are three that were most commonly used: Sweet Gale (Bog Myrtle), Yarrow (*Achillea millefolium*) and Wild or Marsh Rosemary (*ledum palustre*) – they made gruit beer taste variable and not very pleasant.

By the 13th century, beer making was an important commercial enterprise and component of trade in Germany, Austria and

England. Hops were first widely used both for flavor and as a preservative. Hops made beer a more tasty drink, with a flavor closer to that of contemporary beer. It is possible that hops, the dried flowers of a vine-like plant, were added to the brew mix even before the birth of Christ, but the record is not clear. By the 9th century at least, hops were probably a common part of the fermenting mixture, although the earliest definite reference dates to 12th century Germany. By the 13th century, mention of their use is widespread in German reports. Use spread south into France and, more slowly, into England during the 15th century.

Later in the Middle Ages, relatively large, independent breweries began to spring up in bigger towns. (The Bayerische Staatsbrauerei Weihenstephan, still in operation today in Freising, Germany, dates to about 1040.)

Renaissance

It is suggested that religion played a key role in the rise of hops as a dominant ingredient of beer beginning in the 16th century along with the Protestant Movement against the Catholic Church:

“One of the key reasons the Protestants rejected the Catholic Church was because of the un-Christlike, self-indulgent, occasionally hedonistic lifestyle of the Catholic clergy. The highly inebriating and aphrodisiacal gruit ales were seen as one cause of this malady. Hops, on the other hand, (allegedly) diminish sex drive and cause the drinker to become drowsy.” – Michael Jackson

As Protestantism swept through Europe, so did the use of hops in the production of beer. The “Reinheitsgebot” – the Bavarian beer purity law – was enacted in 1516 prohibiting the brewing of beer with any ingredients other than barley, hops, yeast and water. Although no longer enforced, many German brewers still hold to this principle. Religion is not the only suggested cause of the “hop revolution.” Experts also agree that merchants of hopped beer also aided the cause to gain an economic advantage against gruit merchants. By the 18th century, the (hops) revolution was complete and hops had effectively replaced gruit as the primary herb in beer.

Brewers used a top-fermentation process in which the yeast would rise to the top

of the vat. In the 15th century, German brewers developed a process in which fermentation occurred at the bottom of the vat. Beer made by the bottom fermentation method was usually aged to give it a milder taste and clearer appearance. It was named “lager” – a derivative of the German word *lagern*, which means, “to store.” Lager beers soon reigned supreme in continental Europe (and later in North America). But the British remained partial to traditional, heavier-flavored top-fermented brews such as ale, stout, and porter.

“Englishmen are like their own beer”
Frothy on top, dregs on the bottom, the
middle excellent.” — Voltaire

Beer in Early Colonial America

When the Pilgrims set forth for America in 1620, they planned to settle somewhere near the Hudson River but because of uncertain navigation and autumn storms, they made their first landfall at Cape Cod. Rather than proceeding farther down the coast, they decided to remain at nearby Plymouth Rock, “...our victuals being much spent, especially our Beere.”

Not long after the Puritans, who came next, settled the Massachusetts Bay Colony in 1630, and enacted laws regulating the price to be charged for beer in taverns or inns and requiring brewers to be licensed by the court.

Brewing arrived early to Britain’s American colonies. The first settlers in Virginia complained repeatedly about being forced to drink the local water that they considered unsanitary and disease-inducing.

“If barley be wanted to make into malt, we must be content and think it no fault, for we can make liquor to sweeten our lips, of pumpkins and parsnips and walnut tree chips.” — Popular song from the 17th century, Colonial America

When the Dutch settled along the Hudson River in the 1620s, they were also quick to establish beer-making facilities. A 1660 map of New Amsterdam shows at least six brew houses in the town, which had only about 1,500 inhabitants. At least a couple of the breweries also contained distilleries. In Pennsylvania, William Penn established a brewery at his manor house near Philadelphia in 1683, shortly after the colony was established.

“What event is more awfully important to an English Colony than the erection of its first brewhouse?” — Rev. Sidney Smith (1771-1844)

Pre-Revolutionary America enjoyed one of the highest beer consumption rates in American history, because beer played no small part in the evolution of America from a widely dispersed group of small settlements dependent upon England for survival into a network of self-reliant and independent colonies. As the population increased, so did the need for “liquid bread” (beer) as a key source of nutrition and refreshment – the colonists continued to avoid water at all costs. Americans still drank great quantities of English beer during colonial times. However, as buying imported beer became increasingly cost-prohibitive for most Americans, the demand for locally brewed beer grew stronger. This meant the need for new breweries, which required equipment and raw materials to produce their beer. America’s burgeoning brewing industry in turn fostered the growth of local agriculture and industry and further economic growth.

“In wine there is wisdom. In beer is strength. In water bacteria.”—Anon.

After Independence

By the time of the Revolution, brewing was a thriving business in the American colonies, especially in New England and the Middle Atlantic colonies. These areas, in fact, had a prosperous trade in malt beverages with the southern colonies. Many of the founding fathers had ties to brewing. Samuel Adams’ family fortune was based on making malt, George Washington had a brew house at Mount Vernon, and Thomas Jefferson made beer at Monticello.

Until well into the 19th century, most malt beverages consumed in the United States were ales, porters, or stouts brewed in the British top-fermented tradition. By mid-century, however, increased immigration from Germany brought bottom-fermenting yeasts that produced lager beer. Among brewers with German origins who became highly successful in the United States were Jacob Ruppert and the brothers Frederick and Maximilian Schaefer in New York City; Valentin Blatz, Joseph Schlitz, and Frederick Miller in Milwaukee; Eberhard Anheuser and Adolphus Busch in St. Louis; and Adolph Coors in Colorado.

By the Civil War, German-inspired lager output exceeded that of ale and porter.

Anheuser-Busch

In the mid-1800s, Eberhard Anheuser [Figure 1] was a successful manufacturer of soap and candles in St. Louis, Missouri. In 1859, he financed a loan to a struggling neighborhood brewery called The Bavarian Brewery, which was started by George Schneider in 1852.



Figure 1

When the brewery faltered in 1860, Anheuser and a partner, William O'Dench, bought the interests of minority creditors rather than see the brewery go under. They reorganized the company and resumed production under the name E. Anheuser & Company.

In 1857, eighteen-year old Adolphus Busch [Figure 2], the second youngest of 22 children, immigrated to the United States from Germany to join his three brothers in St. Louis. Although his brother had started the John B. Busch Brewing Company in Washington, Missouri, Adolphus opted to enter



Figure 2

into a partnership with Ernst Wattenberg to sell brewing supplies. It was through that business that Adolphus met his wife, whose father would be his future partner. Adolphus Busch and Lily Anheuser married in 1861. In 1865, the two beer companies merged, with Adolphus as equal partner with Eberhard Anheuser.

In 1876, Busch and his friend Carl Conrad, a liquor importer, developed a "Bohemian-style" lager, inspired after a trip to the Bohemia region of Europe (Czech Republic). Brewers in that region generally named a beer after their town with the suffix "er." Beers produced in the town of Pizen, for example, were called pizners, or pilsners. Busch and Conrad had visited another town, only 65 miles south of Pizen, also known for its breweries – Bomische Budweis, which became Ceske Budejovice in 1918. Beer has been brewed in Ceske Budejovice since King Premys II Otakar founded it as Budiwoyz in 1245. The German name of the town is Budweis. The name "Budweiser" is a locative, meaning "of Budweis."

Many people – including Busch and

Conrad – carried the beer recipes from Budweis around the world and in the late 1800s there were several breweries producing beers called Budweiser. Miller and Schlitz both produced Budweisers but, as the name became so strongly associated with Anheuser-Busch, they stopped it. In the U.S. the last other Budweiser producer was DuBois Brewing of Pittsburg, Pa., which stopped making the brand only in the late 1970s.



Figure 3

Busch and Conrad introduced "Budweiser Lager Bier" in St. Louis, brewed by E. Anheuser Co.'s Brewing Association, and bottled and distributed by Carl Conrad. The first bottles were paper labeled [Figure 3]. The Anheuser company was renamed Anheuser-Busch Brewing Association in 1879 [Figure 4], and Adolphus became president the following year, a position he was to hold for 33 years.



Figure 4

During the Civil War, Adolphus Busch briefly served at the rank of colonel in the Union Army. In addition to running the Anheuser-Busch Brewing Company, he was president of the South Side Bank, The Manufacturers' Railroad Company, and the St. Louis Refrigeration Company. He was a director also in many banking institutions in the Merchant's Bridge Company and the Terminal Railroad Company. He founded the Adolphus Busch Glass Company of St. Louis and Belleville, Ill., and the Streator Bottle and Glass Company of Streator, Ill.

"You can only drink 30 or 40 glasses of beer a day, no matter how rich you are."
— Colonel Adolphus Busch

Malt-Nutrine

Anheuser-Busch was involved in varied pharmaceutical activities in the late 1800s and early 1900s. One of the most famous of its pharmaceutical products was Malt-Nutrine in a stubby brown bottle [Figure 5, right]. It was "liquid bread" – a form of beer that had as its principal ingredients barley malt and hops. The original product contained 1.9% of alcohol and 14.5% solids.



According to its maker:

"Malt-Nutrine was highly esteemed by the medical profession and its popularity resulted mainly from the fact that doctors prescribed it for patients in need of building up their health, such as new mothers, convalescents, the anemic and aged." – Anheuser Busch

Anheuser-Busch was so confident of Malt-Nutrine's success that it established a separate sales department for the wholesale drug field. Numerous collectibles resulted in the years that this product was produced and sold (1890-1942). Around the turn of the 20th century a match safe was produced [Figure 6, right]; in 1905 a Vienna Art plate was issued to advertise the product [Figures 7-8]; in 1915 a "Name this picture" contest was held for doctors. The 12 ½" x 7 ½" sign shows a doctor walking briskly towards a lighted house. His shadow is a stork, suggesting the delivery of a baby in order [Figure 9]. The back of the card has the following text:



"This Little Picture, which we hope you will find suitable for hanging in your office or reception room, is one of a series that we will from time to time send the medical profession of the United States. You will observe that the picture has no name. 'Coming Events Cast



Figure 7, above; Figure 8, below.



Figure 9

Their Shadows Before' has been suggested as a title, what would you suggest? To the doctor who first gives the most appropriate title we will pay two hundred and fifty dollars (\$250) in gold. Prize will be awarded Sept. 1915. Answers will be duly acknowledged and the name of winner of the contest as well as the title selected will be mailed to each contestant. Address, Dr. Stork, Malt-Nutrine Department, Anheuser-Busch, St. Louis, Mo."

David Nicholson's Liquid Bread®

The preceding historical account lays the groundwork for the container featured in this article. The bottle has been a favorite of beer bottle collectors for 100 years. The circa-1890-1915 cobalt-blue export-shape pint (approximately 12-ounce) beer bottle

used to contain **David Nicholson's Liquid Bread®**. This bottle came in both "turn-mold" bottles with no vertical seam marks and "two-piece mold" bottles with horizontal turning ring marks [Figure 10]. Figure 11 shows the embossment on the bottom of the bottle that identifies the Adolphus Busch Glass Manufacturing Company – Belleville, Ill. (A.B.M. Co – Belleville, Ill.).

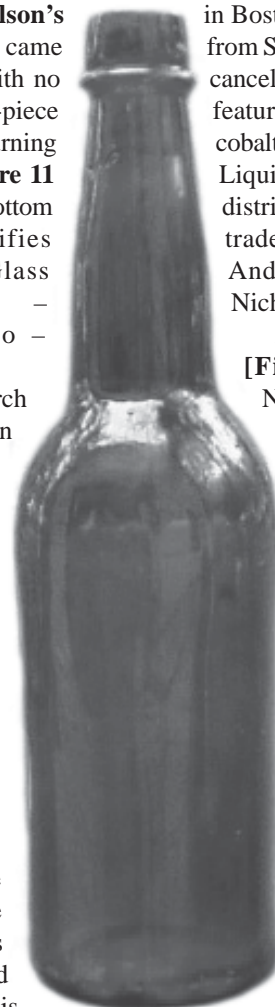
Recent and improved research has added to the little known history of David Nicholson's Liquid Bread. Collectors have known the unmarked cobalt blue bottle for many years. We now know for sure that it was used for the malt beverage made, under contract by Anheuser-Busch, for Dr. Nicholson. Like Malt-Nutrine, Liquid Bread was a "Pure Extract of malt and a delicious, effervescing table beverage." It is collector/historian consensus that they were one and the same product. The best available history of the product suggests that Anheuser-Busch sold generic Malt-Nutrine to St. Louis



Figure 11

physician, Dr. David Nicholson, (who was listed at 13 & 15 North 6th Street in 1905) for use as his trademarked proprietary product, "David Nicholson's Liquid Bread"®. Anheuser-Busch bottled Nicholson's malt beverage using a deep cobalt blue export-style beer bottle that was manufactured, according to the embossment ("A.B.G.M. Co.") on the bottle's bottom, by the Adolphus Busch Glass Manufacturing Company (1885 to 1928) of Belleville, Illinois. Figure 12 on the right features a rare specimen of the bottle with a complete label, from which a great deal of information, presented here, was gleaned.

Dr. Nicholson had a number of distributors for his Anheuser-Busch-bottled "Liquid Bread." There was one



in Boston as evidenced by an envelope from S. Pierce & Co. The envelope was cancelled "BOSTON MASS 1893" and features a lithograph of a fully labeled cobalt-blue bottle of David Nicholson's Liquid Bread [Figure 13]. Another distributor listed on the reverse of the trade card was in New York City. And, of course, there was David Nicholson himself in St. Louis.

A trade card from around 1900 [Figure 14] pictures David Nicholson's Liquid Bread and indicates that:

"...it came in cobalt blue export style beer bottles – a distinctly blue example is shown in the right hand of the nurse (or nun?) who is pouring the contents into a glass for consumption by the injured potentate with his arm apparently in a sling. Liquid Bread was a name for malt beverages which were purported to have health restoring qualities, though it was likely just plain old beer."

–Bill Lockhart: http://www.blm.gov/historic_bottles/beer.htm

The reverse of the tradecard [Figure 15] touts liquid bread by David Nicholson as:

"A Pure Extract of Malt...ripened by time and extracted from the finest selected materials within reach of purchase.

It is a wholesome and delicious effervescing table beverage.

In addition it is a remedial agent, of wide applicability and of sterling merit.

It is especially rich in Dianthus, a substance which is of the utmost service in converting the starch of the food into sugar and dextrin, and thus rendering it easily assimilable; it is therefore invaluable to Dyspeptics.

It is also an unsurpassed tonic; a promoter of appetite, a source of muscular strength, an augments of nervous energy and a fat-producing hydrocarbon.

To nursing mothers, to children naturally feeble and with vitality impaired by disease, to many troubled with nervous exhalation and insomnia, to convalescents suffering from malnutrition, to those threatened with



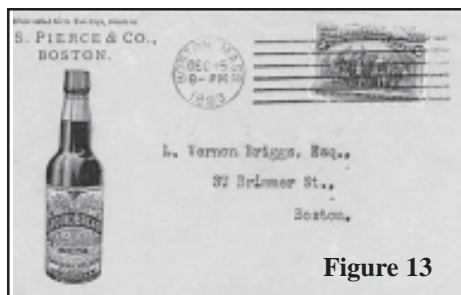


Figure 13

pulmonary trouble, and to those already affected with wasting diseases, such as cancer and consumption, it will be found indispensable.

In every other respect it fully equals if it does not surpass the various similar preparations of Malt now before the public; but in especially two characteristics: the remarkably small quantity of Alcohol in its composition (less than 3 per cent) [6 proof] and its extreme palatability, the 'Liquid Bread' far excels them all. It is grateful to invalids with the most delicate stomachs, and taken with relish by ladies of the most fastidious palates."

David Nicholson's enterprise can be tracked historically to 1916 at which time it was sold to the Theo. Noel Company of Chicago, Illinois.

"Fill with mingled cream and amber, I will drain that glass again. Such hilarious visions clamber through the chambers of my brain. Quaintest thoughts—queerest fancies, come to life and fade away. What care I how times advances? I am drinking liquid bread today."—Edgar Allan Poe

The Modern Era of Brewing

The modern era of brewing evolved by the end of the 19th century with the advent of commercial refrigeration, automatic bottling, pasteurization and improved distribution. Brewers like Adolphus Busch and others were able to market and sell their beers nationally by the turn of the century, giving rise to America's great brewing dynasties.

The invention of mechanical refrigeration equipment allowed beer to be made during the hottest weather and stored without spoiling. Breweries were among the first plants to install industrial ice-making equipment in the 1870s and 1880s, and many brewers set up a lucrative side business selling ice to the public. Louis Pasteur's (1822-1895) studies of the nature



Figure 14

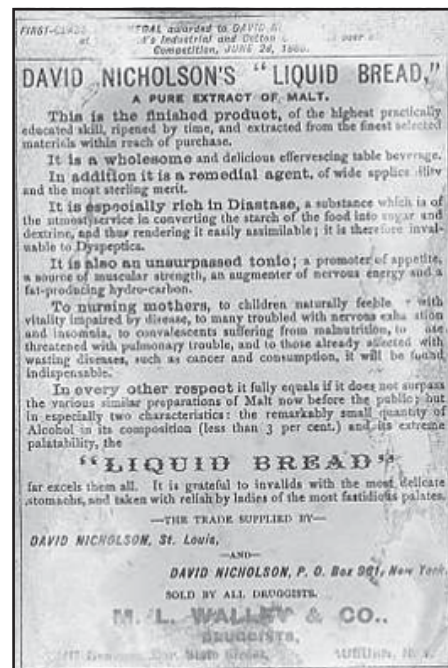


Figure 15

of yeast and the deleterious effect of bacteria, coupled with Emile Hansen's pioneering work, in 1883, on isolating pure strains of yeast, opened the door to brewing beer of consistent quality. Pasteurization of bottled beers permitted them to be stored longer and shipped farther.

A long era of consolidation and concentration began, broken only by the years of Prohibition: 1920-1933. By 1950, with production at a little under 80 million barrels, the number of breweries in the U. S. had fallen to about 400. Five large companies controlled about a quarter of the nation's sales, led by Anheuser-Busch with an annual capacity of 5.5 million barrels from its single brewery and followed by Schlitz, Pabst, Falstaff, and P. Ballentine.

Three goliath firms – Anheuser-Busch, Miller Brewing, and Adolph Coors – now share about 80% of the U. S. market. Anheuser-Busch alone with 12 breweries across the country holds nearly a 50% market share – one of their largest side businesses is Metal Container Corporation that makes more than 26 billion aluminum cans per year. They also produce aluminum cans for Pepsi-Cola and Coca-Cola. (Aluminum cans for beer, by the way, were first produced in 1935 by The American Can Company of Richmond, Virginia for the Krueger Brewing of Newark, New Jersey.)

It is good to note that with the advent of a multitude of microbreweries in recent years the beer industry maintains a healthy diversity.

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