

AD

APRIL 2002 • NO. 6

AMERICAN DISTILLER: A SOURCE OF INFORMATION ON THE DISTILLING PROCESS



The American Distilling Institute^c

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American Distiller is the journal of the **American Distilling Institute**. It is published bi-weekly as an electronic newsletter in PDF file format, and e-mailed to all ADI members and AD subscribers. A printed and mailed version of the newsletter is available for an additional fee.

The ADI is the collective voice of the new generation of progressive beverage, medical and aromatic distillers, and is dedicated to the mission of disseminating professional information on the distilling process. The ADI has filed for a designation as a 501(c) Non Profit Corporation.

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AD will promote distilling and discussion concerning Distillation, Pot Stills, Column Stills Whisky, Malt Whisky, Blended Scotch Whisky, Bourbon, Rye Whisky, Vodka, Gin, Grappa, Eau de Vie, Schnapps, Calvados, Brandy, Apple Brandy, Apple Jack, Liqueur, Cognac, Armagnac, Rum, Tequila and Cordials.

On the Trail of Marc, Grappa, Trester

by Hrayr Berberoglu

Difficult to find outside of the region of production with names such as marc, grappa, trester, and often mispronounced, all are heady, earthy-tasting clear distillates derived from the pressed skins and pips of grapes. Some producers use stalks, too, but most prefer to leave them out.

French age their marc and let it acquire a rich tawny color. Marc de Champagne, Marc de Bordeaux, Marc de Bourgogne and Marc d'Alsace, are relatively famous and enjoy a certain popularity in France, but some bottles are also exported to the USA, UK, Germany, Canada, and even Japan.

Marc is an earthy, robust, distillate, high-alcohol (40 -50%) product some connoisseurs like after a heavy meal, or in their coffee.

You can also put a splash in your morning espresso, if you work at home or have the privilege of working in a “creative” environment, or pair it with Epoisses, a most flavorful, French cheese, or use it to flame your game birds for extra flavor. Marc is very flexible; you can even use it in citrus sorbets.

Aubert de Villaine, the manager of Domaine de la Romanee-Conti, arguably the most venerable of all Burgundy wineries, declared marc to be the “fifth wheel of the winemakers cart”.

Be that as it may, the fact remains that refined marc is the result of long aging. Cognac and Armagnac are distilled wine, and must be aged a minimum of two, often much longer. Marc becomes tame and smooth after 12 years or longer since it originates from a byproduct — the skins and pips of grapes.

In Burgundy, distillers clarify their marc by adding a small quantity of milk resulting in a smooth, polished and refined product, that only a few marc from other regions can match.

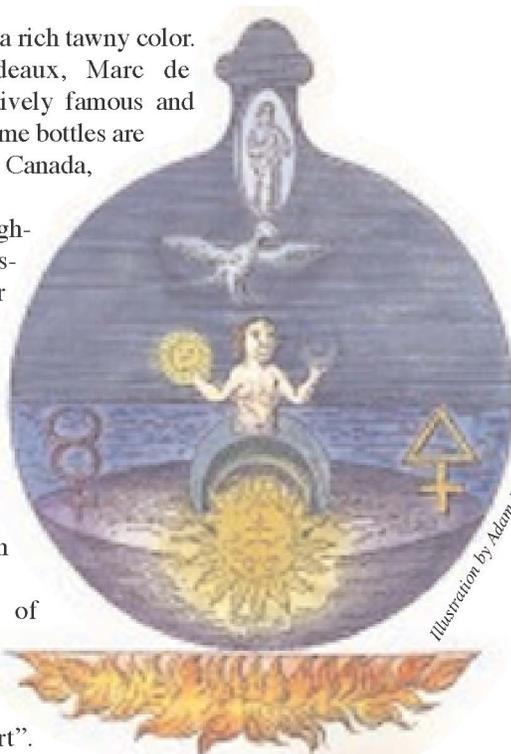


Illustration by Adam McLean

Domaine de la Romanee-Conti, Dujac, M. Gaunoux, Roulot and Clos de Tarte are a few of the better Marc de Bourgogne distillers. If you happen to be in Cotes du Rhone and dine in a fine restaurant, ask the sommelier whether he has the marc of Chateau Grillet, the smallest and single-owner appellation of France (9.5 acres).

France is the only country producing marc. In neighboring Italy many wineries distill grappa. It is much the same as in France except that Italians think aging “weakens” the “fire” of the grappa.

In the past, grappa was a “fierce” distillate, rough and burning. It was mostly meant for laborers tilling the land or working the vineyards. Some 20 years ago, a few small distilleries thought of refining the traditional age-old grappa by distilling it using steam rather than fire. Nonino was the first and most successful of, and to this day is the market leader of refined beautifully packaged “varietal” grappas of Chardonnay, Merlot and Pinot Bianco. Others produce grappa di Barolo or grappa di Barbaresco (Piedmont), Lombards are also well known for their white wine grappas.

Today grappa, at least in northern Italy, has been elevated to a sophisticated after-dinner drink packaged in outlandish, sometimes stunning bottles. Prices escalate accordingly.

If you ever come across grappa di Barolo or Grappa di Barbaresco by Ceretto in Piedmont, buy it without questioning quality, but watch the price!

Some Chianti producers distill grappa, but usually refrain from marketing it! They prefer using their product in Tuscany. Germans call their marc *trester* and each region produces its own style.

Some are better than others, but most importantly it is the grape variety that matters. Riesling seems to produce the best because of its high acidity.

Often in poor vintages, *trester*, or for that matter, marc, tastes better than in good vintages. In the US, grappa is catching on with small producers in California and Oregon.

Surprisingly, Argentine and Chilean wineries prefer to use pomace as a fertilizer on their vineyards, as do South Africans, Australians and North Americans.

As the old saying goes, “One man’s trash is another man’s treasure”.

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Book Reviews

compiled by Tony Ackland

n *Moonshine made simple and still makers manual*, by Byron Ford. Published by Fermetech Wholesalers (Nov 2000), 19 Petone St., Wellington, NZ. ISBN 0-473-07404-4. If you want to buy a copy, I’m sure Pete at brubarn@xtra.co.nz would oblige. It covers discussion on making essential oils, fermentation and distillation, still making, purification and flavouring, and gasohol for the car. There are several recipes for “HokiNooki” moonshine. It’s written around New Zealand and Australian distilling. It’s an OK introductory book, but nothing special, and some information is misleading.

n The newest version of *The Distillation of Alcohol — A Professional Guide to Amateur Distillers* by John Stone and Michael Nixon is excellent. Available from their Web site (Making Gin & Vodka) either electronically for US\$8 or printed for US\$18. ISBN 0473-06608-4. Detailed still design (reflux and essential oil designs) and operating instructions, as well as a heap of the “whys” and “hows” answered.

n *Practical Distiller* by Leonard Monzert, circa 1889. Reprinted by Lindsay Publications, Inc. The author, Leonard Monzert, was a professional distiller and rectifier. This is a valuable reference book for any small distiller or anyone interested in a view from the American pre-prohibition era. Monzert’s book is simply and concisely written to include the basic construction and operation of

both pot and column stills. The 1889 writing of this book is an important aspect of this publication as well. In distillation history the coffee continuous column patent still had just come into use. Its greater capacity and economy dominated the traditional pot still for the first time in industrial production. This new still gives birth to the first blended whiskey. The excitement towards modern distillation is palpable in this treatise from the golden age of industrialism. Monzert’s work contains many traditional formulas, including several that are, for various reasons, no longer in production. One is “Red Ratafia” liqueur a cordial made of red cherries, black cherries, raspberries, strawberries, brown sugar, neutral spirits, cinnamon, mace and cloves. Another is “Absinthe Suisse” made with long wormwood, short wormwood, green anise, long fennel, star anise, coriander, hyssop and neutral spirits. Instructions included for essences and botanical extraction are as valuable today as when they were first written. Also of interest is a diagram of the poteen still used by the “Irish peasantry”. The greatest value of this book is that it gives a complete manual overview of alcohol production. This enables any small producer to perform tasks by hand until more proper equipment can be afforded.

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Vodka: Its History and Significance

by Alan S. Dikty

“Vodka shall be taxed at a rate of two kopecks per bucketful.”

– 18th-century Czarist government excise tax regulation.

The story is told that in A.D. 988 the Grand Prince of Kiev in what is now Ukraine decided that it was time for his people to convert from their pagan ways to one of the monotheistic religions that held sway in the civilized countries to the south. First came the Jewish rabbis. He listened to their arguments, was impressed, but ultimately sent them away after remarking that the followers of Judaism did not control any land. Next came the Moslem mullahs. Again he was impressed, both with their intellectual arguments and the success of Islam as a political and military force. But when he was told that Islam proscribed alcohol, he was dismayed and sent them away. Finally came the Christian priests, who informed him that not only could good Christians drink alcohol, but that wine was actually required for church rituals such as communion. That was good enough for the Grand Prince, and on his command his subjects converted en masse to Christianity.

The point of this historical anecdote is that the Slavic peoples of the north and their Scandinavian neighbors took alcoholic drinks very seriously. The extreme cold temperatures of winter inhibited the shipment of wines and beers, as these relatively low-proof beverages could freeze during transit. Until the introduction of distilling into Eastern Europe in the 1400s, strong drink was made by fermenting strong wines, meads and beers, freezing them, and then drawing off the alcoholic slush from the frozen water.

The earliest distilled spirit in Eastern Europe was made from mead (honey wine) or beer and was called perevara. vodka (from the Russian word voda, meaning water). The word vodka was originally used to describe grain distillates that were used for medicinal purposes. As distilling techniques improved, vodka (wodka in Polish) gradually came to be the accepted term for beverage spirit, regardless of its origin.

Vodka in Russia

Russians firmly believe that vodka was created in their land. Commercial production was established by the 14th century. In 1540 Czar Ivan the Terrible took a break from beheading his enemies and established the first government vodka monopoly. Distilling licenses were handled out to the boyars (the nobility) and all other distilleries were banned. Needless to say, moonshining became endemic.

Vodka production became an integral part of Russian society. Aristocratic landowners operated stills on their estates that

produced high-quality vodkas that were frequently flavored with everything from acorns to horseradish to mint. The czars maintained test distilleries at their country palaces where the first experiments in multiple redistillations were made. In 1780 a scientist at one such distillery invented the use of charcoal filtration to purify vodka.

By the 18th and well into the 19th century the Russian vodka industry was probably the most technologically advanced industry in the nation. New types of stills and production techniques from Western Europe were eagerly imported and utilized. State funding and control of vodka research continued. Under a 1902 law, “Moscow vodka,” a clear 40% ABV rye vodka without added flavorings and soft “living” (undistilled) water was established as the benchmark for Russian vodka.

The Soviet Union continued government control of vodka production. All distilleries became government-owned, and while the Communist Party apparatchiks continued to enjoy high-quality rye vodka, the proletariat masses had to make do with cheap spirits. The societal attitude toward such products could be best summed up by the curious fact that mass-produced vodka was sold in liter bottles with a non-screw cap. Once you opened the bottle it couldn’t be resealed. You had to drink it all in one session.

Vodka production in the current Russian Federation has returned to the pre-Revolutionary pattern. High-quality brands are once again being produced for the new social elite and export, while the popularly priced brands are still being consumed, well, like voda.

Vodka in Poland

The earliest written records of vodka production in Poland date from the 1400s, though some Polish historians claim that it was being produced around the southern city of Krakow at least a century earlier. Originally known as okowita (from the Latin aqua vita — water of life) it was used for a variety of purposes besides beverages. A 1534 medical text defined an aftershave lotion as being “vodka for washing the chin after shaving.” Herbal-infused vodkas were particularly popular as liniments for the aches and pains of life.

In 1546 King Jan Olbracht granted the right to distill and sell spirits to every adult citizen. The Polish aristocracy, taking a cue from their Russian peers, soon lobbied to have this privilege revoked and replaced by a royal decree that reserved to them the right to make vodka.

Commercial vodka distilleries were well established by the 18th century. By the mid-19th century a thriving export trade

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◆ Myths ◆ Surrounding Home Distilling

by John Stone

Home distilling suffers from bad press. For many people it is on a par with counterfeiting, wife-beating and child abuse! It's sleazy in the extreme, something no decent law-abiding citizen would ever dream of doing. It's also considered to be dangerous. These feelings are so ingrained in the social psyche that the law which prohibits it has become self-policing.

By contrast, beer and wine making are seen as wholesome, bucolic activities handed down to us from long ago by poets, shepherds and simple country folk as they played their flutes and danced around the Maypole. Distilling on the other hand, carried out by chemical engineers in huge distilleries far removed from everyday life, conjures up an image of alchemists, necromancers, and unholy forces at work.

The curious thing about all this is that whereas both beer and wine making involve the production of alcohol, distilling doesn't. *Not a drop of alcohol is made during the distillation process* – never has been, never will be, and is incapable of doing so. Alcohol is made by fermentation, not by distillation.

So what's all the fuss about? What's behind this curious distinction between beer, wine and spirits? The root cause of it all is the sad fact that government officials are incapable of distinguishing between *concentration* and *amount*. Actually, many people have this problem, but with governments the consequences of ignorance are severe. It has led to the suppression of an innocuous hobby, to the imposition of swinging taxes on spirits, and to restrictions on advertising and sales outlets.

With the advent of the Internet people can no longer be fobbed off with a load of codswallop. To help this process

along we'll supply you with a few facts about distillation and dispose of a few myths at the same time.

Technical. Distilling involves nothing more than boiling a "beer" and collecting the vapor on a cold surface. Not a drop of alcohol is made and, in fact, a little is lost. The alcohol will be more concentrated it's true (some water has been removed) but there's no more alcohol.

Nothing is added during distillation so there can be nothing in a distilled spirit that wasn't in the original beer.

Beer and wine contain a multitude of chemicals, some of which are poisonous but which in low concentrations do no more harm than provide you with a splitting headache the following morning (if you've over-indulged). When the beer (or wine) is boiled the vapor contains all these compounds, both good and bad, but due to their different boiling points it is possible to separate them and selectively remove the worst ones. This, in fact, is the

very first step taken by distillers – they bleed off the volatile methanol, acetone, etc. and pour them down the drain. Following this, the distillation can be controlled to retain or reject any particular chemical and thereby modify the flavor. If all the non-alcoholic components (known as congeners) are removed from the beer you get pure ethyl alcohol which, when diluted to 40% with water, becomes vodka. By removing some, rather than all, you get whiskey, or brandy, or what-have-you. Whatever the spirit produced, the methanol, acetone, fusel oils, etc. have been removed, resulting in a less toxic beverage than either beer or wine. More concentrated but less toxic.



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Health. As far as is known, there is no recorded example of someone being poisoned by home-distilled spirits. It is a myth. So how does one explain the stories one hears about individuals or families being poisoned and dying as a result of consuming “moonshine”? It was not caused by the distillation. What had happened was that some unscrupulous moon shiner has topped off his liquor with rubbing alcohol, windshield washer fluid, paint remover, anti-freeze or any other pungent liquid he could lay his greedy hands on in order to increase his profits. Homemade and home distilled are two very different things, but there are those with an ax to grind who will try to frighten you into believing they’re the same.

Social. Strong drink! Demon rum! Whiskey has eight times as much alcohol *per unit volume* as beer, so it stands to reason that it is eight times as dangerous. Right? Just think about it ... have you ever heard of someone drinking a 12 oz. can of 40% spirits? Ridiculous! Don’t forget that the riotous behavior so characteristic of football hooligans in Europe is the result of drinking can-after-can-after-can of 5% beer until the *amount* of alcohol consumed is very large. It’s the *amount* that you consume, not the *concentration* of what you consume, that counts. It’s so obvious. Remember, too, that the vast majority of people pulled over by the police for drinking and driving have been drinking beer, not spirits. Alcohol concentration has nothing to do with it. It is the testosterone concentration that causes problems!

Financial. The fear that commercial distillers would lose sales, workers lose their jobs, and governments lose tax revenues if amateurs were allowed to distil their own spirits is a

major concern of governments. And particularly the loss of tax revenues, the thought of which brings government officials out in droves!

The fact is that in New Zealand, in the years leading up to the lifting of the ban on home distilling (1996) sales of spirits had been steadily declining. The same is true of many other countries. In Canada, for example, in the last 20 years the sales of spirits have been cut by 50%, and this at a time when the population has been increasing. It was found in New Zealand that, as soon as amateurs were free to distil their own spirits, there was an immediate and steady rise in commercial sales. Sales went *up* — not *down*! (There was also a consequent rise in tax revenues, of course!)

The reason for this surprising turn of events is attributed to the upsurge in interest in spirits as soon as it became a hobby. It was no longer a remote commercial enterprise but something for fun-loving youth and hobbyists to get their teeth into. The realization that hobby distilling poses no more problems than beer and wine making and should be afforded the same rights and freedoms is finally taking hold. The most notable example of this being in the United States where a bill has been tabled in Congress by Bart Stupak of Michigan (Bill H.R. 3249) which seeks to remove the current restrictions on home distilling.

So — it’s coming!

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The author has his Ph.D. from the University of London, England, and has published more than 70 scientific papers.

VODKA— CONTINUED FROM PAGE 3

had developed, with Polish vodkas, particularly those infused with small quantities of fruit spirit, being shipped throughout northern Europe and even into Russia

With the fall of Communism in the late 1980s, the vodka distilleries soon returned to private ownership. Nowadays high-quality Polish vodkas are exported throughout the world.

Vodka in Sweden

Vodka production in Sweden, which dates from the 15th century, has its origins in the local gunpowder industry where high-proof spirit (originally called *brännvin*) was used as a component of black powder for muskets. When distilleries were licensed to produce beverage alcohol (primarily spice-flavored *akvavit*, but also vodka), it was with the understanding that gunpowder makers had first priority over beverage consumers.

Home distilling was long a part of Swedish society. In 1830 there were over 175,000 registered stills in a country of less than three million people. This tradition, in a much diminished and illegal form, still continues to this day. Modern Swedish vodka is produced by the Vin & Sprit state monopoly.

Vodka in the United States

Vodka was first imported into the United States in significant quantities around the turn of the 20th century. Its market was immigrants from Eastern Europe. After the repeal of National Prohibition in 1933, the Heublein Company bought the rights to the Smirnoff brand of vodka from its White Russian emigre owners and relaunched vodka into the U.S. market. Sales languished until an enterprising liquor salesman in South Carolina started promoting it as “Smirnoff White Whisky – No taste. No smell.” Sales boomed and American vodka, after marking time during World War II, was on its way to marketing success. The first popular vodka-based cocktail was a combination of vodka and ginger ale called the Moscow mule. It was marketed with its own special copper mug, examples of which can still be found in the back shelves of liquor cabinets and flea markets of America.

Today vodka is the dominant white spirit in the United States, helped along by its versatility as a mixer and some very clever advertising campaigns. The most famous of these was the classic double entendre tag line: “Smirnoff – It leaves you breathless.”

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American Grappas

by Alan Moen

The making of grappa and marc is by no means confined to the Old World. Some of the very best are now produced in the United States, where one advantage may be (arguably) more consistently fine grapes.

In Alameda, California, Lance Winter, distiller at St. George Spirits, makes an exceptional Grappa of Zinfandel from grapes pressed by the neighboring Rosenblum Winery. This spirit has good varietal character, with a powerful, fruity spiciness.

To the north in Ukiah, Germain-Robin has produced several grappas in recent years from Vigonier, Merlot, Muscat, and Zinfandel grapes. All are remarkably clean and fruity, without the kerosene-like overtones of many grappas.

Another Ukiah producer (also in St. Helena) is Domaine Charbay, which makes Grappa di Marko. The distillery is owned by Karakasevic family.

The most prolific U.S. grappa and marc producer, however, is probably Steve McCarthy. His Clear Creek Distillery in Portland, Oregon regularly produces some five different ones, including an excellent Grappa Moscato, Marc de

Gewurztraminer, Grappa of Oregon Pinot Noir, Grappa di Pinot Grigio (Pinot Gris), and Grappa di Nebbiolo for the Cavatappi label of Seattle restaurateur Peter Dow. These spirits vary from 40-45 percent ABV.

BOOK REVIEWS — CONTINUED FROM PAGE 2

n *The Lore of Still Building*, by Kathleen Howard and Norman Gibat. This book gives a good range of cheap and easy stills that can be made from pressure cookers and other kitchen items. It also has a fair amount of information on using ethanol as a fuel. There is no ISBN number; to order try 741 North Countryline St, Fostoria, Ohio 44830-1004, ph (419) 435-0404, fax (419) 435-1844.

E V E N T S

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