Term Paper

KENTUCKY BOURBON WHISKEY

John C. Goodlett

I want to git back
To the oldtime hills,
Whar the corn juice runs
Frum the old distills.
I want to get back-
Yes; the good Lord knows,
I want to git back
Whar the bluegrass grows,
Back in old Kentucky

- James Tandy Ellis

The origin of the use of fermented beverages is hidden in the fog of antiquity. No one can attempt to say when man discovered the natural phenomenom of fermentation but the comfort and warmth derived from the alcohol thus formed must have been sought after in a time of many discomforts and famine. At any rate, we find wine and beer mentioned in our earliest historical records, and the divine origin of alcohol was celebrated for thousands of years among civilized and primitive peoples. Osiris, the Egyptian god of the underworld and judge of the dead was also god of alcoholic beverages. The Greek god of drama and wine was Dionysus, and his Roman counterpart was Bacchus. The ancient Hindu god of all arts and drinking was Varuna.

The ninth chapter of Genesis calmly states that Noah, after the flood, became a husbandman and planted a vineyard; and in the next verse "drank of the wine and was drunken". This seems to indicate that the art of wine making was known before the Flood.

Probably the miracle of fermentation was first observed when primitive man developed enough foresight to see the advantage of collecting and storing food in times of abundance to carry him through lean periods. The wild yeasts so abundant in the air would wreak havoc with any stored fruits. The subtle change brought

about and its effects on the human body would indeed have been enough to cause an ignorant and superstitious people to consider it a miracle.

At any rate we do know that almost every possible plant source of sugar and starch has been used sometime or other in the world to provide alcoholic beverages - fruits, berries, roots, and stems.

The use of fermented drinks had apparently been going on for thousands of years before some observant man discovered that the very life of the wine could be separated from the body of the liquid by distillation. The time and location of this discovery too is obscure, although it probably occurred in one of the ancient Near Eastern civilizations. Some authorities state that it was known and practiced in China hundreds of years before Christ. Arrack, distilled from palm sap, has been known since 800 B.C. in India. Since much evidence points to the fact that distillation was introduced into Europe by Arabian physicians, some people believe that Arabia was the country of its origin. However, the ancient Egyptians were interested in alchemy since before the time of Christ, and the Arabians probably learned the process from them.

The process of distillation is so simple that more than one discovery could have occurred. The early Celts and

Irish certainly knew of it, and St. Patrick, who died in 461 A.D. is supposed to have taught the Irish distilling.

In the New World the Aztecs and tribes of the southwestern U. S. seem to have known about distillation in Pre-Columbian times. All Indian tribes had fermented drinks and used maple syrup, malted and fermented corn, acorns, chestnuts, and chinguapins as sources of starch. Columbus' son, writing in 1571, stated that his father had reported an Indian drink made from maguey, which was boiled with water and spices. Fermented maguey makes pulgue, which makes mescal if distilled. Therefore, Columbus may have tasted mescal.

It is quite possible, therefore, that distilled beverages were discovered independently in the Old and New Worlds, or even in several regions within the Old World. But it appears that an Egyptian origin could explain all appearances of the process in the Old World.

As to distillation in general, the early Greeks certainly knew of distillation of sea water, and extracted turpentine and cedar oil for use as drugs. Dioscorides separated mercury from cinnabar in a crude still. But to say that the arrack of India previously mentioned was actually distilled is pure conjecture. The Falernian

wine of the Romans, described as inflammable, might have been distilled, since a content of 25% alcohol is necessary for burning, but the added drugs and spices may have been inflammable. At any rate, no word of wine distillation came down from the Romans.

A Scotsman, Neil Gunn, in his book, Whisky and Scotland, advances the theory that the early Celts learned of the distillation of spirits before Christ, and even taught the Arabians. He even mentions that St. Patrick, supposed to have taught the Irish distillation, was born in Scotland, near Dumbarton on the Clyde.

The first real evidence of any knowledge of separation of alcohol is found in the writings of Master Salernus, who died in 1167, and the first book on distillation was written by one Arnold de Villanova, who died in 1311. This was one of the earliest printed books, published in Venice in 1478.

From this evidence, we can safely assume that distillation of spirits was known in Europe during the 14th century. The early practitioners of distillation were the alchemists, who were highly respected scientists in their time. In their searches for a method of transmuting base metal into gold and a universal remedy for all diseases, their "philosophical furnaces", a term they

applied to their alembics and water baths, were a source of many weird and varied products. It is not surprising that they thought spirits the sure cure of all diseases, or that most of their medicinal preparations contained alcohol. Aqua vitae, water of life, which was the first name given to alcohol, reflects the important position the substance held.

Many of the early works on alchemy contained references to the proper method of preparing spirits, always wrapped in mystic terminology and much hokus-pokus, William Y - Worth, a medieval alchemist, described distillation as follows:

"Distillation imports no more than a dropping down by little and little; but the use and end thereof, is in the first place to Extract the Spirituality from bodies, when macerated or opened by Fermentation, so that we may truly say this art is for changing of gross and thick bodies into a thin and Spiritual Nature, by which action the pure Effluria are separated from the more terrene, Faetid, and impure Faeces; and that only by the help of heat; they being thereby resolved into a Vapour, are elevated to the Helm, where they are in part condensed by the cold, which is fully accomplished, as they run out of the Beck into the Worm, through the Refrigerating

Tub, and so become clear and lucid".

Ambrose Cooper, writing in the 1700's, expressed it more simply:

"Distillation is the art of separating, or drawing off the spirituous, aqueous, and oleaginous Parts of a mixt Body from the grosser, and more terrestrial Parts, by means of Fire, and condensing them again by Cold.... By the distillation of Spirits is to be understood the Art by which all inflammable Spirits, Brandies, Rums, Arracks, and the like are procured from vegetable Substances, by means of a previous Fermentation, and a subsequent Treatment of the fermented Liquor by the Alembick, or Pot Still, with the proper Worm and Refrigeratory."

In spite of the widespread use of distilled spirits in Europe as a medicine, it did not become popular as a beverage until the sixteenth century because of the mystery and expense surrounding recovery of the essence. The alchemists apparently knew a good thing when they saw it.

The Aqua Vitae obtained by a seven-fold rectification was "considered very valuable medicine in the cure of epilepsy, diseases proceeding from frigidity, wounds and punctures of the nerves, syncope, gangrene and putrescence". For colic was recommended a mixture of aniseed, cummin,

cinnamon, mace, cloves, nutmegs, galangal, Calamus Aromaticus, orange rind, and bayberries, macerated, steeped in Malaga wine for forty-eight hours, and distilled. "This water being drank to the quantity of an ounce or two at a time doth ease the gripings of the belly and stomach very much".

John French's The Art of Distillation, published in 1667, gives this recipe for Aqua Vitae:

"Take of what wine you please, put it into a copper still, two parts of three being empty, distill it with a worm, until no more spirit comes off, then this spirit will serve for the making of any spirits out of vegetables; but if thou wouldest have it stronger, distill it again, and half will remain behind as an insipid flegm: but if thou wouldest have it yet stronger, distill it again, for every distillation will leave behind one moity of flegm or thereabout; so shalt thou have a most pure and strong Spirits of Wine."

Long before Europeans began to use beverage spirits, the Scotch and Irish were making alcholoic distillates from malt. When the British under Henry II marched into Ireland in the 12th century, the Irish were quite familiar with grain alcholic beverages. Irish usquebaugh, from which our word whiskey was derived, is actually a cordial.

The following is an old formula for usquebaugh:

"Take a gallon of small Aqua vitae, put it into a Glass vessel; put thereto a quart of canary sack, two pounds of Raisins of the Sun stoned, but not washed, two ounces of Dates stoned, and the white skins thereof pulled out, two ounces of cinnamon grossely bruised, four good nutmegs bruised, once ounce of best English Licorish sliced and bruised; stop the vessels very close, close, and let them infuse in a cold place six or eight days, then let the liquor run through a bag called Manica Hippocratis made of white cotton."

This remarkable mixture, distilled, produced a medicine which "cureth the infirmities of the lungs, warmeth the Stomack, and causeth Expectoration." The cotton bag, through which the liquor was run, contained saffron, a very popular ingredient of usquebaugh.

The real Irish whiskey was called potheen, and was nothing more than the raw white spirits fresh from the pot stills. The "white lightning" of our Southern mountaineers is essentially the same, and the searing acids and fusel oils made it a formidable drink. Irish soldiers as early as 1350 were given potheen before battle, and their ailments were certainly nothing more than mental anguish.

On the European continent itself, the transition

from medicine to beverage was easily accomplished. It isn't hard to imagine that the many cure-alls of the alchemists containing spirits caused many an epidemic of colic, and much demand for sweat-producing medicines, when the patients found a form not too reminiscent of horse hair or snake oil. The beverage industry came into its own after its divorce from alchemy.

Little is actually known about early distilled beverages in Europe except from tax records. In 17th century England the manufacture of whiskey was encouraged by a discriminatory tax on malt liquors, but during the Cromwellian rebellion a tax of 8 pence per gallon was placed on all distilled spirits made in England and Wales. Earlier than this, in 1556, the British Government imposed the death penalty for all distillation in Ireland, except by the nobility. This founded the first widespread moonshining, is still going on. After the Restoration, the 8 pence tax was reduced to 4 and eventually Charles II reduced it to 2 pence. From that time to the present, the tax has increased steadily, with only a few fluctuations. By 1730, the tax laws had become so complicated that the whiskey industry almost disappreared and Parliament completely revised its regulations.

In spite of many obstacles, the infant whiskey

industry generally flourished because of the great popularity of its product. In 1694, fewer than 6 million people in Great Britain consumed 900,000 gallons of spirits. In 1743, 6,200,000 people consumed 5 million gallons of spirits - almost 1 gallon per person. During the same period, illegal manufacture of whiskey amounted to 3 or 4 times that amount. Between 1811 and 1813, nearly 20,000 "stills" were destroyed in Great Britain. Many young and hardy distillers left Britain in disgust and came to America, where they helped to establish the industry and later had tax troubles all over again.

In colonial America, from the time of the earliest settlers, fermented drinks of all kinds were popular, including those made from maple sugar, pumpkins, parsnips, fruits, and nuts. Grape, currant and elderberry wine, peachy and perry from peaches and pears, and beer from persimmons and sassafras found wide use. But early in the 18th century the colonies switched more and more to distilled drinks, especially rum, probably because they were more effective against the rigorous American climate.

It is amazing that the early history of distillation in this country was so poorly documented. The first rum, the first rye whiskey, and even the first Bourbon whiskey of Kentucky is in a fuzz of doubt. We do know that the first spirits made from grain in the United States was

made on Staten Island in 1640 by Willem Kieft, then Director General of the Dutch Colony of New Netherland. This still made spirits from both corn and rye, under the direction of one Wilhelm Hendricksen. Kieft also established the first liquor tax in this country - two guilders on each half rat of beer.

The impact of rum on early American history is staggering. It greatly affected the economic and social structure, and had no small part in the Revolution. Rum had been made in Barbados as early as 1650, using the abundant sugar cane as source material. Rum is mentioned in the records of the General Court of Massachusetts for May, 1657. West Indian planters made a high quality rum which sold at a premium price in the colonies, but a much more profitable trade grew up from shipments of crude molasses to the distilleries that sprang into existence in New England. The famous three-cornered trade came into being: New England ships picked up the crude molasses in the West Indies, carried it to colonial ports, picked up rum produced in the American distilleries and shipped it to Africa to trade for prime slaves which were taken to the West Indies and exchanged for molasses. Ironically enough, these slaves worked in the sugar cane plantations producing molasses to buy more slaves. The

profits of the New England distillers and shipowners were enormous.

"Demon Rum" became tremendously popular in the colonies. Twelve million gallons a year went into flip (made with beef, sugar, eggs, spices and rum and heated with a red-hot loggerhead), toddy, punch and hot buttered rum. In 1750, at the height of the rum trade, Massachusetts had 63 distilleries, and Newport, Rhode Island, alone had 30. 900 vessels traded in rum out of Boston. In 1783, 7,194,600 gallons of molasses were imported into the United States. Most New Englanders went to their graves, "full of years, honor, simplicity, and rum."

But all things come to an end. Mother England observed the booming prosperity of the colonies and saw a beautiful source of new revenue. In 1733. Parliament passed the first Molasses Act, putting a prohibitive tax on cheap French and Dutch rum and molasses. Only expensive British West Indian rum and molasses could be imported duty-free. Other products were taxed at the rate of 9 pence per gallon of rum and sixpence per gallon of molasses. This act could have ruined the trade of the New England colonies, but was not enforced, and the merchants ignored it. In 1763, Parliament passed the

Sugar Act, which reduced duties but put teeth in the enforcement measures. Revenue cutters were installed in American ports, clearance was required of ships trading in the West Indies, and Writs of Assistance permitted search of ships and warehouses. If England's desire was to gain a fair revenue from a profitable business without any attempt to antagonize the colonists, she made a serious blunder. H. Fred Willkie has an unusual slant on this matter:

"The outraged protests against interference with Private Enterprise were the first unified opposition to absentee rule in America. Out of them grew the organized defiance of the later Stamp Act and the Townshend Acts that led to the Revolution. Many of the most highly respected citizens, who became leaders in the Revolution, were associated with rum-smuggling, notably John Hancock, Samuel Adams and Peter Faneuil....Paul Revere's famous ride began as a warning to Hancock and Adams, whose revolutionary ideas as well as their successful rum-running had not endeared them to the British. On his way, he was pursued by two British troopers and he took refuge in the home of Issac Hall, Captain of the Medford Minute Men, who owned a rum distillery. After a few stirrup cups of old Medford rum which 'would have made a rabbit bite a

bulldog', he went on with his ride and this time spread the alarm through the entire countryside.

The palmy days of the New England Rum industry declined after abolition of African slave trading in 1808. The popularity of rum diminished, even though it remained very cheap (25 to 50 cents a gallon until 1800), and whiskey consumption increased. Since rum was not a true native drink because of the necessity of importing molasses, whiskey made from grain surpluses was destined to become the national beverage spirits. So it was only natural that with a decline in demand for rum, New England with no grain surplus must lose its importance as a distilling center. By 1888, the 22 rum distilleries operating in Boston in 1798 had shrunk to 3. Of course, The Revolution's effect on trade with the West Indies helped put the skids under the industry.

However, a big factor in decline of rum's popularity was the great westward migration after the Revolution. The sturdy English, Irish, and Scotch immigrants carried with them the tradition of making whiskey from grain mash, and the Germans who settled in Pennsylvanie and Maryland had known the value of rye whiskey for centuries. Throughout the interior distillers turned to grain as a source of alcohol because the molasses for rum was impossible to move overland. Rye soon became a bumper crop in Pennsylvania

and Maryland, and farther south and west corn was abundant. Thus the spirits industry pattern was set long before any framwork of custom appeared.

It is a common legend that George Washington began the production of rye whiskey in America at Mount Vernon. One of his managers was a Scotsman named James Anderson, who was familiar with whiskey making. Washington permitted him to grow rye for whiskey on one of his poorer farms, and the Mount Vernon distillery soon had an excellent reputation for good whiskey. Woodward states that in 1798 Washington's net profit was 83 pounds, with 155 gallons of whiskey still on hand. Anderson later moved to Maryland and established the rye whiskey industry there.

The growing pains of the brand new republic became immediately evidence upon the close of the Revolution. As happens after all wars, thousands of little men who had been bogged down in boredom and trivia felt the urge to do something different. The broadening of outlook of the farmer-soldiers and their unwillingness to return to old routines provided exactly the required impetus for an expansion of the colonies. With the collapse of of the Continental currency in 1780, and shortage of hard money, city life was too uncertain and people

traveled into the western territories where they could provide for themselves by their own efforts.

The people who settled in western Pennsylvanie and the southern highlands found themselves faced with a very difficult transportation problem. The great Appalachain Mountain chain which had been so long a barrier to westward migration very effectively cut them off from the coastal cities. Roads were almost non-existent, and the great Ohio-Mississippi River network was soon effectively blocked asan outlet for goods by the Spanish, who were in disagreement with the new Republic. The only mode of movement of goods was by pack horse, a notoriously inefficient and slow process.

One can easily imagine the frustrated rage of the settlers, having found themselves in a region of great soil fertility with crop surpluses on their hands and no way to benefit by their wealth. There are many accounts by early Kentucky pioneers that show awe at the richness of the land. The Bluegrass Region of Kentucky was especially bountiful. It was covered by unbroken canebrakes, mighty forests, and abundant game. The substratum was the so-called blue limestone of lower Silurian or Cambrian formation, and furnished many essential minerals for vigorous plant growth. As a consequence, central Kentucky

was rapidly settled after the Revolution, largely by people of Scotch and Irish descent who came over the Cumberland mountains, through Cumberland Gap by way of the Wilderness Road from Virginia and North Carolina.

The early Kentucky pioneers quite naturally turned to growing corn as their principal crop, since wheat required many more implements and more cultivation. A corn crop needed only the roughest clearing of the wilderness, and satisfied all needs as a cereal. As a consequence hundreds of small water powered grist mills sprang up and the millers did a flourishing business with the wilderness farmers grinding their corn into celicious yellow cornmeal. The corn had little other than domestic use value, since the lack of roads and the closed Mississippi waterway prevented its shipment over the mountains to the east or export from New Orleans. Thomas D. Clark in his The Kentucky states that in the period 1775-1792 Kentucky corn and small grain fields produced huge quantities of excellent grain, but there was no market for the raw products, and the demand for bread was easily supplied.

This condition soon led to a great surplus of corn and corn meal in the hands of the millers and left the farmers with full cribs and fields of corn shucks.

Kentucky was not unique in this respect; Pennsylvania especially was troubled with the same problem, although its chief surplus was rye.

The solution was astoundingly simple - convert

the excess grain into whiskey. The people were familiar with the technique by heritage, and corn or rye in the form of whiskey had many advantages. It was easily divisible, improved with age, and quickly became the standard medium of exchange in a land where hard money was scarce. If a farmer converted corn into whiskey, a horse, which could carry only 4 bushels in solid form, could carry 24 bushels in liquid form. Corn was worth about $.50 per bushel, and whiskey $1. - 2 per gallon. One bushel of corn would produce 3-5 gallons of whiskey. Thus the Kentucky whiskey business began. Pennsylvanie rye whiskey had a roughly parallel development, but will not be considered further in this paper.

No one knows who made the first whiskey in Kentucky, or even where it was made. Harrodsburg, in Mercer County, the first permanent settlement in Kentucky (1774) feels that its first settlers would have done some distilling, but there are no records. Nelson, Scott, Mason, Bourbon, Jefferson, and Logan counties make similar claims. Early Kentucky historians usually give Evan Williams of Louisville, in Jefferson County, credit for making the first whiskey in Kentucky in 1783. In The State of Kentucky, a Filson Club publication of 1892,

we find this account:

"In 1783, Evan Williams erected a small distillery on the river (Ohio) at the foot of Fifth Street, in Louisville. Here he distilled whisky from corn, and the dwellers among the ponds at the falls thought his product a good medicine for chills and fever, though a very bad whisky. Williams, as a manufacturer of whisky, claimed the right to sell his product without license, but in March, 1788, he was indicted by the grand jury for this offenee".

This account also makes him the first bootlegger as well.

Bourbon county claims that Jacob Spears and Capt. John Hamilton made the first whiskey in Kentucky, but Collins, the Kentucky historian has this to say:

"The first distillery in Bourbon County was near where the manufactory of W. H. Thomas stood in 1869, and was erected about 1790 by Jacob Spears, and others, from Pennsylvania.... Others claim that Capt. John Hamilton who ran away from Pennsylvania on account of his participation in the "whisky insurrection" distilled in this region before Spears."

That makes Spears too late, and Hamilton later still, since the whiskey rebellion was several years later (1794).

Actually, knowledge of the first distillery producing whiskey in Kentucky is not of paramount importance, since Bourbon in the strict sense is more than just whiskey made in Kentucky. Bourbon is the result of a particular technique which most authorities now agree was originated by the Reverend Elijah Craig, a Baptist minister of Georgetown, in Scott County. He made the first "genuine, old-fashioned, hand-made, sour-mash Bourbon" from a mash containing at least fifty percent corn. Collins flatly states that "the first Bourbon whisky was made in 1789, at Georgetown, at the fulling mill at Royal Spring." This mill was operated by the Rev. Elijah Craig. Regarding this rather startling business of the Rev. Craig, William H. Perrin wrote in his History of Bourbon, Scott, Harrison, and Nicholas Counties, Kentucky that it was a time "when it was considered as honorable a business as any other manufacturing enterprise a man could engage in. Even preachers did not deem it derogatory to their high calling to lend their countenance to its manufacture, engage in it themselves, or drink a little of it occasionally 'for the stomach's sake' ". Craig is also credited with the accidental discovery of the use of charred barrels to mellow the biting raw spirits, change it to a golden color, and remove foreign constituents in the aging process.

The name Bourbon whiskey is derived from Bourbon County, Kentucky, and the fact that Rev. Elijah Craig made the first Bourbon whiskey in Scott County is not incompatible with that explanation. Kentucky territory was once a part of Fincastle County, Virginia and was later named Kentucky County. In 1780 the General Assembly of Virginia divided Kentucky County into Fayette, Jefferson, and Lincoln Counties. In 1785 Bourbon County was split off from Fayette County, and at that time comprised about twenty of the present counties of Kentucky. At the time Elijah Craig made the first Bourbon whiskey Scott County was a part of Bourbon County.

The new Bourbon whiskey soon became famous all over the country, and was so superior to the old corn "likker" that Elijah Craig's process, with minor variations, was widely used. At first all corn whiskey sent back to the East was called Kentucky Bourbon by dealers to distinguish it from Pennsylvania Rye, and was not at all uniform in quality. It was not until after the Civil War that brand names were given to various whiskeys, and really distinctive products began to appear. Up until then whiskey was whiskey, and no one lost sleep over fusel oil or acid content.

By 1787 numerous small "copper fired stills" were in operation in the Bluegrass region, and the millers

and farmers who were engaged in distilling were enjoying prosperity. But a little dark cloud, familiar to all distillers, appeared in 1790, when Alexander Hamilton, the ambitious first Secretary of the Treasury, presented a plan to Congress to wipe out the debts of the American Confederation by payment of their face value. Throughout the Western Territories feeling ran high over this proposal, since the tax burden of the people was very light, and the freedom-loving settlers felt very little obligation to the Federal Government.

Hamilton turned Congress upside down with a second proposal to have the Federal Government assume all state obligations, no matter how "they were incurred", which amounted to 21 million dollars more. Congress balked, Hamilton and his Federalists balked, and Congress gave in.

When Hamilton presented his tax scheme to finance this towering debt, the little cloud became a thunderstorm, and the prosperous and happy days of distilling came to a screeching halt. The tax bill contained a separate enactment (An Act Repealing After the Last Day Of June Next, the Duties Thereinto Forelaid Upon Distilled Spirits Imported From Abroad, and Laying Others in their Stead: and also Upon Spirits Distilled within the United States, and for Appropriating the Same.

Approved March 3, 1791.) for an internal tax on whiskey, and the lid blew off in the West.

While the Kentucky distillers were very violently opposed to this tax, and some even refused to enter their stills as required by law, those of western Pennsylvania actively combated the law. Many had come to the United States to get away from just such peremptory excise taxes. During the next three years the distillers more or less successfully evaded the law. Tax collectors were tarred and feathered and their horses' ears cropped. Distillers who paid their taxes were considered traitors, and received threatening notices. The people could not understand why distillers should be taxed and the millers, who used the same grain, were not.

By 1794, conditions had become so bad in Pennsylvania that President Washington sent 15,000 militiamen from the nearby states under General Henry Lee to put down the insurrection. Washington himself went as far as Carlisle, and Hamilton went all the way. By the time the troops arrived. the rebellion had collapsed. Most of those involved fled the state, and the rest gave themselves up. Lee's huge army (larger than any Washington ever commanded at any one time against the British) rounded up 117 alleged insurrectionists, took them to Philadelphia where they were tried and all but two released. These two were

condemned to death, but President Washington pardoned them. The cost of this show of Federal authority was one and a half million dollars, but it saved the prestige of the Federal Government, and Kentucky gained many experienced distillers. Some of the militiamen stayed in Pennsylvania, and all had money to spend freely - no doubt much went into the hands of the illicit still operators.

The truly ridiculous part of the "Whiskey Rebellion" to present day distillers is that the horrid tax was only seven cents a gallon of production and 54 cents a gallon of still capacity. Present day tax per gallon of production is nine dollars.

Meanwhile the Kentucky distillers fumed and fretted over the new tax, but showed more restraint. Some evaded the law from the beginning but most made an honest effort to meet their obligations. To add insult to injury the law required that the tax be paid in cash, which was in very short supply in Kentucky at that time.

Col. Thomas Marshall was appointed inspector o f revenue for the Kentucky district and arrived in Kentucky to carry out his duties in the spring of 1792. He had the following notice printed in the Kentucky Gazette of Lexington, Kentucky:

NOTICE
TO THE DISTILLERS OF SPIRITS IN THE
DISTRICT OF KENTUCKY

Col. John Finnie is Collector of revenue for the county of Woodford and the Towns and Villages within the same. Mr. Thomas Carneal for the counties of Fayette, Bourbon, and Mason, and the towns and villages in the same.

Capt. Rodes Thompson and Mr. William Vawters for the counties of Mercer, Lincoln, and Madison, and the towns and villages in the same. Mr. William Sullivan for the counties of Jefferson and Nelson, and the towns and villages in the same. The above Gentlemen are possessed of the act of Congress for laying the excise on Stills and Distilled Spirits, and if applied to, will give the distillers any information relative thereto which they may wish to receive. Some of the distillers I am informed, pretend to say they are taught to believe that the excise is not to be collected in this district. From whence they derive their information I Cannot conceive; But do hereby inform them that the collectors will shortly be with them in order to collect it, and that those who are not provided with money, or show a disposition to oppose the execution of the law will be proceeded against as that law directs.

T. MARSHALL,
Inspector.

The Bluegrass distillers responded with a meeting in Lexington in May, 1792, which discussed the tax and drafted a resolution to send to Congress reaffirming the desperate economic condition of the distillers in the west and calling attention to the inequality of the whisky tax. The resolution ended with an urge for repeal, but it fell on deaf ears.

The desperate economic condition was quite real since Kentucky had no exports, with New Orleans port closed, and the wealth lay in land and goods not convertible into cash. As a result many distillers gave up and quit the business.

The government tax collectors were very patient, but by the middle of 1793, with few taxes collected, they despaired of collecting the amounts due, and called on President Washington for help. Washington issued a proclamation

on 15th September, and it was published in The Kentucky Gazette in November.

A PROCLAMATION

Whereas certain violent and unwarrantable proceedings have lately taken place tending to obstruct the operation of the laws of the United States for raising a revenue upon distilled spirits within the same, enacted pursuant to express authority delegated in the Constitution of the United States; which proceedings are subversive of good order, contrary to the duty that every citizen owes to his country and to the laws, and of a nature dangerous to the very being of the government:

And whereas such proceedings are the more unwarrantable by reason of the moderation which has been heretofore shown on the part of the government, and of the disposition which has been manifested by the legislature (who alone have authority to suspend the operation of the laws) to obviate causes of objection, and to render the laws as acceptable as possible: And whereas it is the particular duty of the Executive "to take care that the laws be faithfully executed"; and not only that duty, but the permanent interests and happiness of the people require, that every legal and necessary step should be pursued, as well as to prevent such violent and unwarrantable proceedings, as to bring to justice the infractors of the laws and secure obedience hereto.

Now therefore I, GEORGE WASHINGTON, President of the United States, do by these patents most earnestly admonish and exhort all persons whom it may concern, to refrain and desist from all unlawful combinations and proceedings whatsoever having for object or tending to obstruct the operation of the laws aforesaid; inasmuch as all lawful ways and means will be strictly put in execution for bringing to justice the infractors thereof and securing obedience thereto.

And I do moreover charge and require all Courts, Magistrates, and Officers whom it may concern, according to the duties of their several offices, to exert the powers in them respectively vested by law for the purpose aforesaid, hereby also enjoining and requiring all persons whomsoever, as they tender the welfare of their country, the just and due authority of government and the preservation of the public peace, to be aiding and assisting therein according to law.

In Testimony whereof I have caused the seal of

the United States to be affixed to these presents, and signed the same with my hand.

Done this fifteenth day of September, in the year of our Lord one thousand seven hundred and ninety-two, and of the independence of the United States the seventh.

G. WASHINGTON

By the President

Th. Jefferson

In the summer of 1793, another meeting of Kentucky distillers was held and the following resolution adopted:

At a meeting of sundry inhabitants of the State of Kentucky, in Lexington the 8th of July, 1793; to wit:

Richard Steele, Robert Sanders, John Hambleton, Daniel Barbee, William Trotter, Joseph Rogers, Thomas A. Thomson, and Peter Barnett; having taken into consideration the excise law, and the circumstances of our country, are of opinion, that collecting taxes under the excise law in specie only, will be oppressive to the people of this country, in our present situation, as we cannot carry our produce to market through the channel of the Mississippi Therefore we are of opinion, it is not improper to address, first the people of Kentucky; second, the legislature of this state, and thirdly, the Congress of the United States.

Friends and Countrymen.

We have taken into consideration the excise law passed by Congress, and are of opinion it is injust, because our nvaigation is kept (by the Spaniards) which is our natural and constitutional right; while the other states in the union have their ports open and can sell their produce for specie; and as allegiance and protection are reciprocal, the United States ought to see that we are equally protected in our trade before we are to be expected to pay equal taxes under the excise law in specie only. If we pay seven cents per gallon in Kentucky, when our navigation is stopped, it will be much more burdensome to us than it would be if our navigation was open.

If this be true, then it will follow of course, that the excise law is much more oppressive to the people of Kentucky than to those of the other states. It is the business of the legislature to find out ways and means to have justice down to all parts of the community. If we were

allowed to pay our taxes under the excise law in produce at a reasonable price, it would be more just, though not fully so; and if this was fully made known to the distillers before they were required to pay, they might make choice, either to pursue or quit the business.

We hope you will join us in our petitions to the legislature of this state, and also to Congress; and although we are informed our former petition or memorial to Congress concerning this business was laid on the table and neglected; yet we think it is probable they may hear and redress our grievances, if we could bring them to see our situation as it really is. That we are as a barrier to part of the other states against the savages, sustaining such damages as we do by their murdering and plundering our people to a very great amount every year -- Our trade being stopped, our country but very little improved, and of course we cannot have cider and beer as substitutes for spirits distilled, as the people have in the old country. It is to be hoped they will hear and redress our grievances.

Richard Steele, Ch.

Kentucky survived the troublous early days of the excise law without any open rebellion, and as time wore on gradually became resigned to the inevitability of taxes. However, the sending of troops into Pennsylvania upset the citizens of Kentucky and many predicted an invasion at any time by Federal armies.

Tax evasion became more and more common, each modification of the law serving only to cause more distillers to become disgusted with it. Although many cases of willful and negligent avoidance of payment were reported, it was not until 1798 that the Federal Courts seriously began to prosecute the offenders. The large number of indictments required several years to be heard.

Hamilton's stormy excise tax was repealed in 1800,

during Jefferson's administration, and with the exception of a wartime tax on whiskey during the War of 1812, the distilling industry was not taxed until 1862. During this period distilleries boomed in Kentucky and it became the greatest whiskey-producing State in the nation. By 1810, many parts of Kentucky had distilleries, and by 1825, Lexington, Harrodsburg, Lawrenceburg, Frankfort, Bardstown, and Louisville had from one to ten plants each. In 1810, according to Federal records, Massachusetts had 60 stills, producing over 3 million gallons of rum; Pennsylvania had 3594 stills producing over 6½ million gallons of whiskey; Indiana had 28 stills, producing 22,000 gallonsof whiskey; and Kentucky 2,000 stills producing well over 2 million gallons of whiskey.

In 1819, New Orleans received over 200,000 gallons of whiskey per month from Kentucky. By the time it arrived there after the long trip down the Ohio and Mississippi rivers, the jouncing in the hot sun had aged it.

As the young Bourbon industry grew, certain names began to be associated with quality products. James Crow's distillery on Glenn's Creek in Franklin County produced the world famous Jim Crow Whiskey. Oscar Pepper later became his partner. W. and J. Taylor's Old Fire Copper Whiskey was much in demand. Such names as Dant, Wathen, and Beam emerged in connection with good Bourbon. After the Civil War many distilleries changed hands, and names

like Brown, Thompson, and Bernheim became famous.

The history of American distilling from the time of the Civil War until Prohibition is not nice to read. Corruption, dishonesty, monopolies, and wholesale moonshining seemed to be the rule.

A Whiskey Ring during Grant's administration conspired to defraud the government of taxes, and Grant's private secretary was involved with the dishonest distillers. Grant himself did not escape the taint of corruption, and he was accused of sharing in the profits.

Speculation became a big part of the whiskey business, distillers selling warehouse receipts to the speculators who bottled the whiskey as they pleased. Great monopolies gobbled up the small, independent distilleries, and themselves became involved in a bitter war toward the end of the century. Two major groups emerged, a group of Kentucky distillers who tried to make straight whiskeys the only standard, and denounced whiskey made in any other way than by the traditional pot-still methods as lacking in character. The other group was for the more uniform, more easily controlled product of straight whiskeys blended with alcohol made in patent stills.

In 1909, an Internal Revenue order permitting only straight whiskeys to be labeled whiskey, all others to be called imitation, was reversed. Whiskey was defined as

any volatile liquor distilled from grain, and standards of identity based upon current manufacturing processes for the different types of whiskey were established.

Passage of the Pure Food and Drug Act of 1906 with later Taft ruling did much to remove undesirable practices in the whiskey industry. Unlabeled barrel whiskey began to disappear and distinctive labels appeared, giving processes and materials as required by law. This made advertising possible, with no holds barred. By 1920, the beginning of Prohibition, blended whiskeys made up almost 70% of the whiskey market.

Prohibition, in part the fruits of years of shady dealings by the distillers, all but wiped them out. Its evils and benefits are not a part of this discussion, and no doubt will be heatedly fought over for years to come.

At any rate, with repeal of the Eighteenth Amendment in 1933, a different and somewhat chastened group of distillers cautiously emerged to rebuild. In Kentucky, a small core of old-time Bourbon distillers went to work with their traditional methods of making whiskey. These distilleries were mostly family concerns, which still used their jealously guarded secrets handed down from generation to generation to make an unhurried, superb, old-fashioned whiskey. They didn't have a chance.

A small number of large corporations with vast capital

and a very good propaganda machine gobbled up the small independent distilleries one by one or made contracts for their product. Today the number of independent distilleries is astoundingly small. Kentucky, supplying almost half the country's whiskey, has only 60 distilleries, 1400 fewer than in 1810.

Kentucky Bourbon, considered by many to be the finest product of the distillers art, no longer enjoys its former popularity. Because of the great expense involved in its aging process, it cannot compete in price with the cheaper blended whiskies, and the great advertising campaigns conducted in behalf of blended whiskeys have had their effect on the public's tastes. Since bottled-in-bond bourbon must age in bonded government warehouses for at least four years, loss of production during the last war will make true Bourbon scarce for several years to come.

The type of corn whiskey first made by the Rev. Elijah Craig that came to be known as Bourbon is essentially the same as that produced for centuries in Scotland and Ireland, and the process is still in use today in the smaller distilleries. Grain, generally eighty pounds corn to ten pounds of rye, was ground in a buhr-mill. The meal was then scalded in tubs and stirred with paddles. Sometimes, especially if water was not plentiful, hot, spent "beer" from a previous distillation

was used in place of water, and the hot "mash" was left overnight to begin a slightly sour fermentation. Ten pounds of malt, made by grinding germinated corn or barley - the germination having been halted by heat - was added to the cooled cooked grain, and as soon as the malt had converted the starch into sugar, yeast was added. The mixture was then allowed to germent from 72 to 96 hours, depending on the temperature. Then the "beer" was poured into a single-chambered, kettle-like copper still and boiled over a hardwood fire. The product was redistilled, and was known as "Double Distilled Fire Copper Sour Mash Bourbon". Good Kentucky Bourbon was never treated after the redistillation to raise its proof or remove the acids and fusel oils. Sometimes it was placed in charred oak barrels to "age", since distillers had found that this removed some of its sharpness, mellowed it, and gave it a golden color. Usually, however, it was sold as "white lightning" or colored with caramel.

In the early days, the chief by-product of the distilleries was hogs, which were fed on the spent beer or "slop". A still producing 35 proof gallons a day could maintain 300 hogs, but they had to be fed with care. Young pigs could not stand strong slop, and pregnant sows would lose their litters as a result of drinking it.

There were many little techniques in use by the early

distillers that are quite interesting. The corn was usually ground as fine as possible but the rye was usually only broken. The water or "slop" was added to the ground grain scalding hot, roughly 145 degrees. No thermometers were used. This served to gelatinize the starch and made its conversion to sugar possible. Preparing the malt was an important step and Michael Krafft, in his American Distiller, published in 1804, gives this recipe:

"Steep newly threshed barley in a stone trough for three days. Then lay it in heaps to let the water drain, turning it well with a shovel. In the "coming heap" let it lie for forty hours, watching it and turning it over after roots are put forth. Frequent turning over cools, dries and deadens the grain. Then put it in a high heap until it grows hot, perfecting its sweetness. Finally lay it over a Kiln with a hair cloth or wire under it, drying it over a slow fire."

Since each batch seldom exceeded a few bushels of grain, and no cooling facilities were available, the cooked grain was generally allowed to cool overnight to a temperature between "blood warm and scalding hot", before the malt was added. After conversion was complete, the mash was usually "back-yeasted" by adding some of a mash mixture that had been fermenting for several days and was ready to

be distilled.

Some distillers made an effort to remove some of the undesirable essential oils and acids by filtering the final product through charcoal and sand, or using wood ashes or quick lime in the still.

Without the use of any controls or instruments, it is not unusual that there was a great variation in the Bourbon produced. In fact, any uniformity of product at all is amazing.

Developments came in time, and with the general use of hydrometers, saccharmeters, thermometers, and scientifically designed fermenters the uncertainty as to the final outcome diminished.

Small distilleries today cook the milled grain at atmospheric pressure with steam (some cookers use live steam piped through the mash); and the cooking schedule is very definite, rising to 212 degrees Fahrenheit gradually and held at that temperature for a certain period. Cooling water is piped through the vessels to lower the temperature to 145 degrees which is the malting temperature. Ground malt and warm water at 145 degrees is then added and the mixture allowed to stand until conversion is complete. A controlled amount of spent beer is often added to the cooking water to increase the acidity of the mash, giving more contamination control, and also to reduce the viscosity of the cooked mash.

The yeast is carefully pampered, great care being taken to keep the cultures pure. After the mash has been converted it is pumped into the fermenters or "mash tubs" and the yeast added.

Careful checks are made on sugar content ("balling"), acid concentration, and acid content throughout mashing and fermenting.

The most modern plants today use continuous pressure cookers in mashing instead of batch atmospheric cooking, and the mash is continuously cooled by flashing in a vacuum and continuously converted by constant addition of a malt and water slurry.

The first step in distillation is the separation of the volatile constituents of the fermented mash - ethyl alcohol, esters, aldehydes, acids, and fusel oil and some water - from the grain solid. This is done in what is called the beer still and the crude distillate is called "first shots" or "hi-wine" and has a very objectionable flavor and odor. Most of this is due to thermal decomposition of yeast and grain during distillation and vacuum stills are coming into use which eliminate this. An alternate method is removal by activated charcoal.

The redistillation of the first shots produces the spirits from which the Bourbon is produced - along with certain objectionable by-products, most of which are removed by aging. Fusel oil, composed largely of two iso-

amyl alcohols, is the most undesirable contaminant.

The tax obligation occurs as soon as the spirits come into being, but the whiskey may be stored under bond and payment made on withdrawal. It is entered into bond at 100 proof (50% alcohol) and storage is in new charred oak barrels, where it is allowed to mature, usually from four to eight years.

Alcoholic spirits made from grain may be produced in any climate and by many different methods. In spite of this, the most famous beverage whiskeys of the world have only been manufactured in quite limited territories. Many unusual reasons have been given to explain the excellence of Kentucky Bourbon. The "character and association of Kentucky yeast germs" has been given credit, but many people think it is due to Kentucky's limestone water. Most early distillers believed this, and it may have some basis in fact. Col. E. H. Taylor, Jr. in an essay on distilling in Kentucky states:

"I do not believe that one can exaggerate the vital importance of a proper water in the manufacture of the finest grades of whiskey, and I am convinced that nowhere in the world can one find superior water for this purpose that in certain geological areas within the state of Kentucky". And further:

"All the authentic geological data show that the whiskies having the greatest reputation in the world,

wherever introduced, have been those produced from water percolating through the strata of bird's-eye limestone".

As evidence of the importance of water in the production of Bourbon whiskey, Col. Taylor gives the case of a distiller who moved away from Kentucky:

"Shields, one of the primitive Kentucky distillers, whose fame had expanded with his superior brand of Bourbon manufactured from the waters of the springs on Glen's Creek, transferred his plant to the locality of the rich corn fields of Illinois, expecting from the distillation of cheap corn to obtain a fortune. He came back disappointed. Illinois water refused to develop the fine whiskey he had made in the Bluegrass."

In the face of the history of Bourbon recounted in this paper, it appears more likely that Bourbon simply evolved as a result of lack of transportation; and aided by custom, tradition, and a backlog of know-how, the initial advantage of the early distillers was never overcome by distillers of other regions. Later, when the corn belt states began to produce such vast amounts of corn, the framework was too well set to move the entire industry. People were accustomed to Bourbon's being made in Kentucky, labor skilled in the manufacture of whiskey was plentiful, and capital investments in plants and machinery were quite large. And so today, we find an old

industry remaining at its point of origin, even though its raw materials, the grain, must be "imported" from the corn belt, adding an appreciable amount to the cost of production.

Bourbon has come of age, and today is a far cry from the early "Tarantula Juice" of the rivermen, the fiery white cure for all ailments. In the words of Colonel Taylor, "The time has come when the man who orders Scotch or Irish served him, when it is possible for him to secure one of Kentucky's genuine high grade Bourbons bottled in bond, presents himself as an amusing spectacle to the whiskey connoisseur."

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