U. S. TREASURY DEPT. REGULATIONS
No. 60 relative to intoxicating liquor on page 63, Section 610 reads: "The penalties against the manufacture of liquor without a permit do not apply to any person for manufacturing non-intoxicating cider and fruit juices exclusively for use in the home."

Section 611. If intended for other than immediate beverage use or if intended for other than home use, only as vinegar, such cider and fruit juices must be sterilized and sealed or otherwise preserved.

Therefore Grape Juice may be lawfully obtained for either immediate beverage use or for the production of vinegar in the home. Prohibition has placed restrictions on the fruit and fruit juice industries. Help us protect these valuable industries by preventing abuse of the privileges granted by the above sections, which can easily be done by confining your operations to your home.
THE FIRST AND MOST IMPORTANT OPERATION IS TO REMOVE THE BUNG IMMEDIATELY WHEN THE JUICE IS RECEIVED.

Place the barrel on a box or other suitable rack with the bungstave up. Now bore a hole in the bung or chisel it out being careful not to injure the bunghole rim.

Examine the barrel for leakage and if there is any have same noted on the delivery receipt.

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This Grape Juice is absolutely pure and conforms to all state and national pure food laws. The legal restrictions are such that it must be delivered to you with an alcoholic content of less than $\frac{1}{4}$ of 1%. When kept in a cool place it will remain sweet and unfermented for several weeks.

The juice is naturally a little tart. The addition of sugar and water in the amounts recommended in the following formula produces a more palatable beverage.

FORMULA FOR THE CONCORD OR CATAWBA

<table>
<thead>
<tr>
<th>Type</th>
<th>Amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>TART</td>
<td>Use $\frac{3}{4}$ lb sugar and 1 quart of water for each gallon of juice.</td>
</tr>
<tr>
<td>MEDIUM SWEET</td>
<td>Use 1$\frac{1}{2}$ lb sugar and 1 pint of water for each gallon of juice.</td>
</tr>
<tr>
<td>SWEET</td>
<td>Use 2 lbs sugar and 1 pint of water for each gallon of juice.</td>
</tr>
</tbody>
</table>
EQUIPMENT

Provide additional containers: the one gallon or five gallon glass bottles. (The kind used for distilled water) are ideal containers. Also provide about 8 feet of \( \frac{3}{8} \) inch diameter rubber tubing for siphoning off the juice. Use pure granulated cane sugar and preferably distilled water. Avoid using tin or metal containers for storing the juice.

METHOD

Siphon off about \( \frac{1}{4} \) or 25\% of the contents of the barrel into a separate container. Then add the required amount of sugar to the barrel and also to the separate container. Weigh it out and pour it in dry. Measure out the proper amount of water and add it to both containers. It is not necessary to dissolve the sugar in the water. This is optional with you.

For example: On a 20 gallon keg of Concord or Catawba \( \frac{1}{4} \) of 20 is 5 (amount to be siphoned off), 20 minus 5 leaves 15 (amount left in keg). To make it TART, refer to formula. You would have to add about 11 lbs of sugar and 3\( \frac{3}{4} \) gallons water to the keg, and about 4 lbs of sugar and 1\( \frac{1}{4} \) gallons water to the separate container.
You can prevent fermentation by bottling the juice and pasteurizing it in the bottles. Place the bottles in a kettle nearly immersed with water. Heat to 160 degrees Fahrenheit for about 30 minutes. Then securely crown or cork the bottles while they are still hot.

But if you do not pasteurize the juice and fermentation develops before you have used it up, you can still use it for vinegar. This of course requires time and further treatment. First the juice must undergo the alcoholic fermentation which requires from 6 weeks to 3 months depending on the temperature and the amount of sugar added. The right temperature is about 70 degrees Fahrenheit. Allow space for fermentation, at least 2 inches in the barrel. The bunghole should be closed with absorbent cotton to keep out flies or foul air. A ventilating bung is more sanitary, which consists of rubber tubing fitted carefully in a small hole bored in a bung plug. The tubing must not extend into the liquid, while the other end should lead into a jar of water which should be changed occasionally. Fermentation is readily recognized by the increased turbidity of the liquid, formation of gas bubbles and changed taste. Fermentation is usually complete when the wine is quiet. It should then be filled up with the excess originally drawn off and bunged tight. After the juice is clear it should be siphoned off the lees, the barrel cleaned out and the juice put back into the clean barrel. Now the juice should be removed to the fruit cellar or other cool part of the basement and chilled. This removes the excess cream of tar- ter which improves the quality. The barrel should always be kept filled and bunged tight. Once you tap the barrel it must be siphoned into smaller containers, jugs or bottles to retain the delicate rich flavor.
After the juice is two years old, all that is necessary to make vinegar is to expose it in shallow pans or in a barrel partly filled and left open.

SIPHONING

Tie hose to a small stick 1\(\frac{1}{2}\) inches from the end. Insert carefully in bunghole until stick touches bottom of the barrel. This will prevent drawing lees or sediment from the bottom of the barrel. A slight suction on the other end of the hose will cause the liquid to siphon.

CARE OF THE EMPTY BARREL

Immediately when the barrel is emptied it should be thoroughly cleaned out. First with a rinsing of cold water followed by a rinsing of hot water. Drain out the hot water and again rinse with cold water shaking the barrel thoroughly each time, until the water is clear. Leave it drain for several hours with the bung-stave down. Then burn a small stick of sulphur on paper in the barrel. Attach the sulphur to the wire and suspend it in the barrel after lighting. When it is through burning remove the wire and bung the barrel tight.

A little water sprinkled on the outside of the barrel occasionally will prevent the barrel drying out and the hoops from falling off. Water left in barrels a long time ruins them. If barrels are properly cleaned and in good condition they will be accepted for credit when returned, charges prepaid.

George F. Lonz
Middle Bass, Ohio.
DIRECTIONS

YOUR GRAPE JUICE HAS BEEN SHIPPED. THESE DIRECTIONS WILL ENABLE YOU TO GIVE IT THE PROPER ATTENTION.

IMMEDIATELY WHEN RECEIVED, PLACE THE BARREL ON A BOX OR SUITABLE RACK WITH THE BUNG-STAVE UP. NOW BORE A HOLE IN THE BUNG OR CHISEL IT OUT BEING CAREFUL NOT TO INJURE THE BUNGHOLE RIM. IF THERE IS ANY LEAKAGE HAVE SAME NOTED ON THE DELIVERY RECEIPT.

U. S. TREASURY DEPT. REGULATIONS No. 60 relative to Intoxicating liquor on page 63, Section 610 reads: "The penalties against the manufacture of liquor without a permit do not apply to any person for manufacturing non-intoxicating cider and fruit juices exclusively for use in the home."

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Lonz's GRAPE JUICE direct from the press is a delightful refreshing beverage. It is practically the PURE juice free from chemicals. The legal restrictions are such that it must be delivered within an alcoholic content of \( \frac{1}{4} \) of 1%. When kept in a cool place it will remain sweet and unfermented for several weeks.

TREATMENT

Lonz's Pure Grape Juice is naturally a little tart. The addition of sugar and water, not only increases the quantity, but reduces the acidity and makes the juice more palatable. You can vary the treatment to suit your taste.

To retain the natural tart flavor of the Delaware use \( \frac{1}{4} \) lb. sugar and 1 pint of water for each gallon of juice. For the Concord and Catawba use \( \frac{3}{4} \) lb. sugar and 1 qt. of water for a gallon of juice.

To retain a medium juice in which the acidity will not predominate. For the Delaware use 1 lb. sugar and 1 pint water per gallon of juice. For the Concord and Catawba use 1\( \frac{1}{2} \) lbs. Sugar and 1 qt. of water for each gallon of juice.

To retain a distinctly sweet juice, use 2 lbs. sugar for each gallon of the Delaware, no water, and 2\( \frac{1}{2} \) lbs. sugar and 1 pint of water for each gallon of Concord and Catawba.

Use pure granulated sugar and preferably distilled water. Avoid using tin or metal containers.

Dissolve the sugar in the water, heating hastens the solution. Next siphon off a portion of the juice into a separate container jug or keg. Add the sugar solution properly proportioned to both the original and additional container. Leave about two
inches space from the top of the liquid to the bottom of the bungstave.

You can prevent fermentation by bottling the juice and pasteurizing it in the bottles. Place the bottles in a kettle nearly immersed with water. Heat to 160 degrees Fahrenheit for about 30 minutes. Then securely crown or cork the bottles while they are still hot.

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After the juice is two years old, all that is necessary to make vinegar is to expose it in shallow pans or in a barrel partly filled and left open.

**SIPHONING**

Tie hose to a small stick 1½ inches from the end. Insert carefully in bunghole until stick touches bottom of the barrel. This will prevent drawing lees or sediment from the bottom of the barrel. A slight suction on the other end of the hose will cause the liquid to siphon.

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*George J. Lonz,*

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