

Lucius

and

Thos

Journal

1810

Lewis  
and  
Went  
respecting  
his  
London

14 Jan<sup>y</sup> 1790

1. The stalks of the grapes contain an acid when they are pressed with the grapes they give the wine a roughness which is well known in port, but should not be sweet wines

2. Every acid checks fermentation a few unripe grapes will produce this effect and lead to bring on the acetous fermentation

3. Doubtless may be of use in the presence of sour grapes or extracting the acid which prevents fermentation - The acid seems to be

4. Brandy is added to claret and other weak wines to prevent the acetous fermentation.
5. A rapid fermentation produces tart wine - best - a slow fermentation produces sweet wine - a common and wine are a compromise -
6. In a vegetable it is the saccharine matter alone which ferments - a dry soil dry season &c will increase the saccharine matter and consequently promote fermentation hence tart wine -
7. That fermentation may go on in the best manner - The heat should be from 70 to 75 - below 55 impossible under 56 and above 90 ferment.

according to Doctor Bury -  
 - When the heat is low great the acetous fermentation comes on too rapidly - when too little there is a great deficiency in quantity -  
 - A proper degree of acidity necessary -  
 - Quantity - access to atmospheric air -  
 - Degree of the fermentation rapid -  
 - Heat - the motion of carts near a porter brew house hinders the beer -  
 - Lightning brings on the acetous fermentation with Electricity produce the same effect on fermenting liquor?

4. The first stage of fermentation is violent the second calms to this last succeeds the active fermentation - at the conclusion of this last is the time to distill small spirits - quantity of:

5. If a hhd. of wine is not quite full a white scum gathers on its surface if this is broken and mixed with the wine, it spoils it renders it musty - draw it off within a gallon or two of the bottom

6. The corks should be dipped in resin or beading before it is put into a bottle of wine -  
Q: should the bott be full?

7. A glass cork will stop a bottle of wine by giving it a twist which wears Corollation will not take off - Q: is not this an acid wine? by the cork to the wine?

8. Boiling the cork in water prevents the spoiling of the wine - Cork wood properly cured will never injure wine -

9. The white wine that has black specks for looks the best -

10. A glass of good wine held near the fire does not become

its Jason, bad with -

10. Shred in contact not injured by cold of the body in good -

11. Will not a cutting or cart promote its age

12. Should not the residue of the grapes be immediately distilled into brandy?

13. Will the cutting grapes with a knife produce any bad effects? - iron on shoes

14. The grapes are first removed & crushed by beams put into a box of wood and trod by a man with wooden shoes

They are then put into a canvas bag and pressed - Is not water applied in the process -

15. Even why are spirits put into a pot or cask?

16. Syrop renders spirits apparently weaker than they really are, reduced by water, lets down the spirit and dissolves the saccharine matter -

To prevent the effect of the strong wind - Evaporation - white water and roof - might not the roof and walls be covered by an Engine - That the roof

18. Apparatus for Experiments on Fermentation
- Two stills one Glass
  - The other copper from a quart to two Gall
  - Retorts and Receivers
  - Fermenting vessels of various forms
  - Thermometers - Hydro-
  - Hygrometers - Baromet.
  - Crucibles forceps &c
  - Two furnaces
  - Linn's Microscope

- Fruit
19. Cold produces a ferment in fruit - bring it to the fire -
20. What is the best method of cooling staves? by evaporation - Does this sudden alteration of temperature not injure the wine. Wine brought from a water cellar better preserved than by our artificial process -
21. Change on wine with the addition of fixed air make -
22. What effect do the different kinds of air produce on fermentation?

23. To what uses can the  
residuum of soap be  
applied? —

24. Principal white wines  
in Britain are  
White Madeira - Sherry

- Mountain - Malaga  
- White port - Vin de Graves  
- Fyaf - Lisbon - Chateau  
- France -

red Charet - Port - Burgundy

25. Burgundy turns rosy  
in the bottle - comes over  
from France both in wood  
and bottle - Champagne  
only in bottles —

26. Madeira is sent out  
to the West and East Indies  
and brought back again  
In return it will not the  
same degree of heat with  
the same motion for  
some produce the same  
effect? —

27. In the present system  
of brewing, the malt is  
too fine ground, the mash  
is made with too hot water

commonly about 170 it falls  
to 140. whereas it should begin  
at 130 and rise to 160 -

- Two long boiled part of the spi-  
rit fine off - The juice of the  
hop should be extracted from  
and not put into the boiling  
liquor - The present cooking  
takes too long - The liquor  
should be cooled off at  
once - The barley in  
the field should be divided  
into three kinds -

- Instead of grinding the  
malt it should be bruised

- Too much water is put  
to the malt at first it  
must be evaporated by a

addition heating a quarter  
of an hour in sufficient liqu-  
or the ingredients -  
- would it be better to  
confine the Vap. per  
fermenting liquor in body  
works

28. Many casks and some  
the best composition for  
refining <sup>white</sup> wines - give  
the best quantity? -

29. What brown paper  
employed to line Madras  
and other ports in  
the West Indies -

30. Madras perfectly  
soon recovered by ex-  
posed to the sun  
with the bung & lashed  
in Jamaica - The wine  
was of the best sort. -

31. A Gentleman would take  
9 samples of wine with  
numbers marked with  
afterwards go into the cellar

and point of the cork from  
whence the sample fixed was  
drawn

32. Take two wines e.g.  
Claret and Sherry give  
a person two glasses each  
then blind fold him and  
he will hardly distinguish  
which is which

33. In the spring when the  
wines begin to shoot  
a fermentation takes place  
in the wine - some wines  
a sort of fermentation every  
year - give the cause -

34. Will washed roof keep  
the house cooler than  
other covering - wet

35. Best wines are made without either muscades, Peacockstone or brandy -
36. What is the best time to apply brandy, Peacockstone or Peacockstone to wine -
37. In what manner does giving top operate in giving down skins -
38. Can the pressure be so great as to force from the seed of the grape any matter that may injure the wine? —
39. Some think the mucilaginous parts of a plant are only fermentable -

40. If Gum Arabic is put to yeast it instantly checks the fermentation -
41. It is probable that the saccharine acid produces the acetic - for Honey which has no saccharine will be a long time in producing any acid -
42. Mentha or Bannan steeped and brewed in an iron pot when put into new wine will make it taste soon like old, Indian corn and much also used -

43. Leaven when put into  
worts will bring on the ac-  
cious fermentation —

44. Cata viva thrown into  
a cask where the fer-  
ment over, rendered it sour.

45. In the Autumn there  
is a kind of deadness and  
flatness in wine, like to  
what takes place in the  
annual creation —

46. Good Sherry always  
precipitates a white  
substance, <sup>long</sup> however long  
kept, this is a proof of wine  
being good —

47. A cask of wine covered  
with salt preserved it —

48. Milk and in quantity  
of wine, it kills the  
sour —

49. The sulphur burnt  
in the cask promotes  
the fermentation, brings  
up muddy matter from  
the bottom, if great care  
is not taken the acetous  
comes on —

50. If a cask which has  
had wine remaining empty  
by till dry in afterward,  
filled with wine, it re-  
ceives a herbe, and last

51. After the cask is washed  
it is burned with the  
bung down, till all the

water run out, should  
any water remain, the  
wine becomes musty. —

52. The above casks can  
only be pumped by  
brandy &c. The cask  
without this will com-  
municate a taste to  
all the wines for any  
time after. —

53. The mustum is received  
from the press into an  
open tub out of this  
it is filled by a funnel  
into the cask, which  
is left unstoppered to 20 days  
or so. The bung is put  
into the cask and  
rolled to some distance. —

~~It~~ sometimes it is  
removed to a convenient  
distance on a cart. —

54. The casks are carried  
to the cellar, sometimes  
left at the cellar Door  
in the sun with the  
rain. — The cellar is  
second floor. — The casks  
are supported on wood

55. In Malaga the  
mustum is put in  
Earthen jars which  
will hold 200 Gall  
when fermented it is  
carried to the cask in  
skins. —

36. No wine commences  
kept long on its own  
sediment the sediment  
at first is of white is off  
and a hunt —

57. The best pump  
to raise water for about  
20 feet — 50 to 60 but

58. When rum works  
a black colour, it is  
at first discharged by re-  
counting it, afterward by  
milk, then by the  
marine acid which  
last is best —

59. A stalk divided into  
inches is put into the  
fermenting vessel to  
determine the rise, at  
a certain height they  
begin to reach it off, i.e. w<sup>h</sup>  
the liquor begins to de-  
scend —

60. In making starch  
the Ferme is converted  
into starch the Gummy  
part is thrown away —  
This best is not soluble  
in water but after some  
time a fermentation  
takes place, when the starch  
falls to the bottom and  
the Gummy dissolves in the W<sup>h</sup> —

61. A Cran with a <sup>sliding</sup> move-  
able piston greatly  
expedites the work —

62. A piston of two leas  
with work a each &c —

63. Small stills require  
more fire than large ones  
in proportion — a copy  
fire in every still —

64. In Distilling water 50  
Gall. of water ~~with~~ in the  
refrigeratory will <sup>be</sup> raised  
to the boiling point by the  
combustion of 5 Gall. in  
20 minutes —

65. In Distilling rum from  
sugar in the West Indies  
the spirit is about ten p.  
Cent of the whole quantity  
— In Mull in G. Brit: 15

66. In 5 or 6 Days the Malt  
ferment, great attention must  
be paid to the time — The  
breath from the Vess: to the  
aculous fermentation is every  
repeated

67. The works of stills by  
travelling frequently get loose  
— plugs better —

68. The vessels of stills should  
be broader and shallower  
than at present — Thus

69. Their boaters have fins  
surrounding the slit - they  
should not rise to the top

70. A safety valve - worm  
wid - the smallness of the  
hole of the worm has frequently  
been found the head of the slit  
to be blown off.

71. The worm of a slit may  
be formed of thin plates  
glued near each other  
- made of the best conductor  
of heat - copper better  
than pewter, iron or lead

72. Composition for a  
freezing mixture  
Strong Ferric Sulph. acid. two parts

Distilled water. 1 mixed and  
reduced to the temperature of  
the atmosphere.

Of this mixture . . . . . 3

Glue's Salt in powder 4

Nitrous Am: ditto 3 1/2

The best first add the Glue  
stirring in well, then the Am:

73. 5 Gallons of water

Distilling with heat the  
residuality as much as  
25 Gall' boiling thrown into  
it, steam containing five  
times

74. Derivation of the word  
slum, probably from Slum  
inverted - part of the word  
mushum - or Slum which

in high Dutch cognacs  
made - or blown in season  
hebes, Obtusum -

75. Suppose fermentet  
stopped what is the best  
means to revive it, what  
the difference between the  
first and second product

76. Does the same degree  
of heat answer all wines

77. Now is the ground pre-  
pared - what are the  
proper fermentations?

78. Will not too great

inspire heat that will  
and impoverish the bran-  
dy -

78. Would not brandy distilled  
from the <sup>groser</sup> turn it self be  
richer and better than  
from the residuum?

79. Malt liquors of all  
kinds may probably be  
made in as great or greater  
perfection in Spain as in  
Great - Spanish Potatoes

80. Now is the olive extracted  
from Olives?

81. Spanish Sweet fruits

and vegetable - the richest  
and best for Distillation

Q2. Has a hydrometer been  
applied to the measuring  
of wines?

Q3. What kinds of Glasses  
is made use of for measuring  
brandy in France? is  
it Glasses or the residue  
of the pressure the French  
make use of -

Q4. Does the greater or  
less pressure of the  
col. of wine produce any  
alteration in its quality?

Q5. What quantity of water  
is put to the residuum  
of the pressure how long  
is the substance allowed  
to ferment, is it moved  
much before or after  
mentation -

Q6. To judge of wine it  
must be bottled out  
of Glasses of the same  
dimension and shape

Q7. To judge of wine by  
the smell you must  
not be near the fire  
or in a current of  
air - when near the  
fire turn your back on  
the fire -

88. In making red wine  
is any artifice used  
of colouring the wine  
besides that of pressing  
the grape?

89. Is there any mode of taking  
the dark colour from white  
wines without injuring  
the wine?

90. Is there any mode of  
restoring the <sup>and</sup> quality of  
the wine without giving  
the colour?

91. Prunings of the same  
degree of acidity are yet  
some times extremely useful

in the quality. Strongly useful

92. When wine is great  
being and with a little  
being it best?

93. If red port is pruned  
the wine is than the un-  
pruned part more red  
and strong the same  
with vinegar —

94. Prunings is distilled from  
Mollasses mixed with the  
scumming of the Sugar  
Rais — These ferment with  
addition in 8 or 10 days  
temperature <sup>of the house</sup> from about  
90 — down to 40 or 50.

from Dung. Rum but  
was distilled - The best  
rum is said to be made  
from the juice of the cane  
when a field is burnt,  
which often happens in  
the West Indies, the leaves  
only are consumed, the  
cane are pressed into sugar  
but in a few days the le-  
aves come down they are then  
distilled -

93. A siphon with Dutton  
to ascertain the Gall.

Drawn out or remaining  
in the Cork - Method  
of fixing it - Nose cork  
- Fan with small holes

96. Can dull insipid wine  
be restored by fixed air?

97. Is there any other sub-  
stance besides water that  
a wine cask should be  
worked with previous to fix-  
ing in the wine?

98. The Spanish Bull  
of about 132 Gallons  
is divided into 30 arrows  
to divide the Syphon  
in the same proportion  
one but contains from  
48 to fifty dozens bottles

99. A movable scale  
applied to the one leg  
of a Syphon with an-  
other the purpose of a  
Division on the leg —

100. Whether the addition  
of hard water to putrescent  
grapes would not ~~improve~~  
improve them —

101. Would salt water  
be proper for washing  
casks? —

102. Whether vinegar or  
any other acids added  
to putrescent grapes would  
produce better spirit?

103. An old Vinograd has  
fine leaves but better  
grapes —

104. To extract the pectin  
or quality of the al-  
mond and whether  
it can be preserved  
in what manner?

105. Whether the scum  
on the surface of fer-  
menting wine can be  
preserved and what  
use it may be ap-  
plied to —

106. A new vineyard  
will improve an old  
craying one - where is it  
communicated through  
the earth or by the air?

107. A Hydrometer to  
determine the degree of  
consistence of the must.

108. To inject different kinds  
of wood with mercury  
to ascertain the pores

109. What is the best wood  
and best made of several  
kinds for wine corks -

110. Microscopic exami-  
nation of wines -

111. Will a gentle pressure  
or the more ready  
evaporation of fixed air  
be of service in fermenting  
wine? - a small syphon  
with the lower end in  
water -

112. If the grapes touch  
the ground they never  
become putrescent till  
it rains - sometimes  
two years in Spain for  
2 or 3 months

113. Is it possible to  
defend the grapes in  
a rainy season?

114. Apparatus for trying  
the <sup>gravity</sup> ~~conduct~~ of air —

115. To suppose *calx viva*  
the useful in tart grapes  
by extracting fixed air, with  
not much alkalis in  
more putrefaction grapes.

116. To prepare out of  
tartar —

117. To try whether the acid  
or alkali is most pre-  
dominant in the juice  
of the grape. Shows

118. A Thermometer  
applied to the head

of a Mill would serve  
to regulate the heat proper  
for distillation of various  
Substances —

119. Many sweetish short  
wine is improved in  
bottles, but some more  
perfectly fermented in  
from heat in casks —

120. The more perfect the  
wine the more need  
of rest —

121. Process for different  
perfumes —

Essential oil of roses  
the finest and dearest of all  
perfumes —

To 40 Lit Rows add 60 Lt  
water let the stems be cut  
close off — mix the mass well  
with the hands — put it  
into a still and raise the  
heat gently — when the water  
begins to grow hot and steam  
to rise put on the head of  
the still, take well with paper  
and put cold water in the  
refrigeratory at top — keep  
the fire at a moderate  
when the still is hot and  
the impregnated water begins  
to come over, lower by gentle  
degrees the fire, keep on till

about 30 Lit water has come over  
which will be done in four or 5  
hours — this water is put in other  
dry pounds of rose and pressed  
or twenty pounds brought  
over — The rose water thus made  
and Colubale will be highly  
scented with roses. it is then  
poured into pans and left ex-  
posed to the fresh air through the  
night — The essence will be formed  
in the morning congealed and  
subsiding on the top — It must  
be taken off with a thin shell  
or Strainer, when a certain  
quantity has thus been obtained  
the water and feces must be  
separated from the clear essence  
the essence congeals with a  
small degree of cold the water is  
then run off — heat the essence

and the juice with sublimed.

- The quantity of Essential oil  
is very precarious, depending on  
the quality of the wax, season,  
and Skill of the Distiller

- one ounce of oil from 100 lb of  
of wax - sometimes only half  
an ounce - Hoffman uses two  
ounces - 3 Grams of 100 lb  
of leaves - The Colleges do not  
diminish the quantity, nor much  
augment the quantity - The oil  
principally from the leaves of  
the Stone - It is usual to add  
essences of sandal wood, a  
sweet grass and other matters  
to increase the quantity -

122. To prepare Salt  
of tartar from the  
tartar - Cream of tartar

123. Better Almonds yield  
an oil by the press as  
satisfactory as that from sweet  
Almonds - The cake distilled  
with pure water, with oil  
and water and with spirit  
of wine - The distilled water  
was scarcely better had <sup>the</sup>  
little small of almonds, and were  
pungent - The distilled spirit  
had scarce any ~~oil~~ -  
pungency, and different  
taste in smell or taste  
from the pure spirit one -  
played - Almonds digested  
in

in some water or spirit  
great part of the water is  
~~consumed~~ dissolved and part  
runs in distillation. The  
water which arises from the  
distillation of bitter almonds  
is ~~poisonous~~ to animals —

124. New casks are seasoned  
with fire, would not steam  
produce a better effect? —

125. Would not the distilled  
grated marine acid  
answer for washing casks?

126. Wine is said to be best  
for washing casks, the  
wine employed is rendered  
useless.

127. Mr. Cooper has a  
horn with which he  
pours cold water on the  
hot casks. —

128. A butt of Madeira  
kust by lying on the  
ground - kept up blowing

129. Neumann says that  
when part of a cask of  
wine is empty the re-  
maining wine becomes  
stronger than before. This  
is contrary to the opinion  
of the Marquis du Bouché  
who says that the spi-  
rituous part is carried  
off -

130. Will not boiling the  
staves in water be the  
best means of bonding them

and will not this process  
take off some of the bad  
qualities of the wood?  
- will the staves be rendered  
by boiling stouter -

131. In the cellar the casks  
are ranged over each other  
are the under and upper  
casks equally liable to  
to murrain? -

132. May not one use of  
the bitumens in smoking  
casks be to remove the  
bad taste of the wood?  
- Mustum is generally put  
into new casks - try  
old casks without smoking

133. In order to taste wine  
let the Glass be warm  
in the wine - out side

134. A person may be  
deceived in the Tasting  
of wine according as  
he stands with his back  
towards or from the fire

135. Spirit distilled with  
salt is rendered much  
stronger, the water lays  
hold of the salt and the  
spirit come over -

136. A wooden trough with  
a copper boiler in the  
middle will answer for

preparing the staves for drying  
- This used by Swedes and Dutch

137. Instead of mashing  
the cork with pumstone  
by spirit of wine Lamp  
or Shells like the other  
process -

138. Green tea with adaman  
the age of new seem best -  
as it is said than any  
strong that has yet been  
tried

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Calcutta March 1000

139. In brewing if the in-  
fering water be heated much  
above 160, the ale will be

ropy - It is better to begin  
with a lesser degree and raise  
it towards the end to 150 or  
20 -

140. The yeast should be put  
to the work about the temper-  
ature of 90° -

141. Spiritus Neri (Dulcis)  
added in small proportion  
to malt spirits gives them  
a flavour approaching to that  
of French brandy.

— London & Paris:  
142. Sp: N. D. is made as  
follows - Rectified spirit of  
wine 2 parts - Nitrous acid  
 $\frac{1}{2}$  part mix them by pouring

in the acid gently by small  
quantities at a time, and  
shaking the mixture - Distill  
with a gentle heat till 10 oz

- N. D. The Edul' Phen.  
Dulcis Thon - Rect. Spi: <sup>126</sup> 3  
Nitrous Acid 1

pour the acid very slowly &  
the wine agitator every ad-  
dition - Set by the vessel  
slightly covered for seven days.  
Distill in a water bath

are a great defect of the Achrom. Glass  
is the reflection from the different  
surfaces which must not be so.

- filled up with varnish
- (Dispensing power lost)
- Apparatus of plain Glass  
cannot be so great as is at-  
tributed -

37469  
2460

22401.40

149076

44930

92173740

~~6/3~~  
2/6

075604  
99919

0756070000  
075607

0799994313

Two Stills

Thermometers

Retorts Crucibles

Minnisepet +

Furnace

Syphon

Hydrometer - Mustum

Barometer -

Spaw water Machine

07404

23476

91344

72457

07071

4

Book  
 Newman's Chemistry Vol. 2  
 Newman's Oil  
 Honey on Iron  
 Charlatan on the Disease of  
 Corns and Principles of Corns  
 Dr. Hunter's Chemistry  
 Account of the Insects  
 Journal of Dr. Huxley 1786

6	1	0
7	5	3
2	9	4

9

18

97

36

15

659

825

792

766

156

207

213

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3656