

PRICE ONE SHILLING.

THE SPIRIT TRADERS'  
AND  
LICENSED VICTUALLERS'  
REDUCING TABLE.

THE ONLY CORRECT REDUCING TABLE PUBLISHED  
SUITABLE TO SMALL AS WELL AS LARGE OPERATIONS.



ii  
**GREENLEES BROTHERS, 29 & 31, Commercial Street, London ;  
Hanover Street, George Square, Glasgow ; and Distilleries, Campbeltown, N.B.**

A QUARTER of a century ago Scotch whisky, now the most popular of beverages, was very little known in this country. In London and the South of England, in fact, it was seldom used at all, the Irish product having been almost exclusively consumed by those who drank whisky. Thanks to Messrs. Greenlees Brothers, Scotch whisky is now consumed to a greater extent than any other spirit, and it has in fact almost become the national beverage of this country. Their London premises have a frontage of 63 feet and depth of 84 feet and consists of 10 floors, of which nine are used for storage and bottling, while on the ground floor there are handsome and extensive offices, where numerous clerks are employed in keeping the accounts of the firm. The bonded stock books kept here, of which there are sixteen, each represent a value of £20,000.

The work of the establishment is almost entirely done by machinery, to supply the motive power for which there is a steam engine and boiler on the basement floor. The engine works the lift, the bottle-washing machinery, the agitators in the vats by which the whiskies are blended, the rotary bottle-filling machines, each of which operate upon eight bottles at a time, filling the required quantity into each bottle with perfect accuracy ; it also works the steam corking machines, recently introduced, with great gain in economy and speed, the work of corking having previously been accomplished by men at a much slower rate. It also works the cork-pressing and testing machine, through which all corks are passed. A steam jet from the boiler heats the water for washing bottles, the machinery for which is the most improved and perfect extant. The boiler also provides steam for cleansing casks and moistening labels. The latter is a very simple and ingenious process, and has the advantage of preserving the labels spotless, though damped by steam. They are immediately affixed to the bottles requiring but a few seconds to dry, while by the old-fashioned method, in which paste is used, they require often a whole day ; they are then wrapped in paper before being packed away in racks and cases, the whole process being most expeditious. By the side of each vat is fitted a filter, in which is used a purified paper pulp, scientifically devised, through which all the whisky passes before being filled into bottles or casks. This process removes all sediment, and turns it out in the most brilliant and perfect condition possible. The vats are all filled by gravitation, the whisky in casks as received from bond being taken up by the lift to floors above, where the casks are turned bung down, over huge copper troughs sunk into the floor, thus enabling them to empty several casks at the same time, and a vat of 1,200 gallons is filled in a little over 15 minutes. Large as these vats are all are fitted with gauge glasses and marked scales, resembling large thermometers, upon which scales can be read in a moment the quantity of liquor in each vat, thus greatly facilitating the taking of stock. It is only a matter of a few minutes to Messrs. Greenlees Brothers to take the whole stock in all their vats, this being done just as easily as the temperature can be read on a thermometer scale. The advantage of this system is very great, both in saving time, as well as all the usual waste in running whisky from one vat to another ; the latter operation, whether it is to transfer 100 or 500 gallons, simply entails the turning on of a tap, and a glance at the gauges while the spirits are running, the whole operation being accomplished without a can being used, a drop spilt, or the whisky exposed to the air in any way, and in far less time than by pumps or cans ; the gauge on the receiving vat also checking that in the larger vat from which spirits are run. In fact, every useful appliance that modern invention has contrived to facilitate the process of bottling, etc., is in operation at the establishment in Commercial Street, where there are seventeen vats, varying from 310 to 1,200 gallons, and having a total capacity of 10,000 gallons. But extensive as are the premises of the firm in London, they have a far larger establishment in Glasgow. This is their bonded warehouse, which has a frontage in Osborne Street and King Street of no less than 705 feet. The buildings have been

periodically increased, until they now cover an area of 64,908 square feet, or nearly an acre-and-a-half. Even these immense premises are insufficient, and still further extensions are being carried out. The warehouses are at present capable of storing 15,416 casks, and 10,000 dozen cased whisky. They also contain huge vats for blending and bottling, which have altogether a capacity of 16,881 gallons. The extent of the home and export trade of the Firm may be judged by the fact that a 7,000-gallon blend is a matter of almost every-day occurrence. Great attention is paid to the perfect blending of these large quantities of whisky, which is accomplished by the Patent Propeller Agitators, fitted in each vat and worked by steam power, in which process the different descriptions of whisky are completely mingled. The pumping of the whisky into the vats for blending in bond is accomplished with extraordinary rapidity by a steam pump, which, by means of double-suction empties two casks, each containing 120 gallons, in one minute and twenty-two seconds.

The casks in the bond are stacked in such a way that any single one can be withdrawn without disturbing the others. Puncheons and butts are stored at the bottom, above them are hogsheds, and uppermost are quarter-casks and octaves. A perfect register is kept in what they term their *Stow* book, all tiers being lettered and numbered, and by a single reference to this book, they are able to turn out any cask from bond in about the same time as the clearing clerk could fill in his clearing papers, the position of every cask of the many thousands lying in the bond being thus recorded. This, it will be seen, places them far before many of the old style of warehouses and docks, where delays are so general and work done very slowly. The arches are so well ventilated that perfect dryness is secured, and a cool, equable temperature maintained. The loss by evaporation is therefore reduced to a minimum.

The monthly turnover at the Glasgow establishment alone is 72,000 gallons, and the quantity of whisky stored on the premises amounts to considerably over half a million gallons. The firm have their own cooperage for making and repairing casks, selecting and using only the very best oak staves. The seasoning of their casks—the importance of which is so great, affecting, as it does, the perfect maturing of the whiskies put into them, and in order to prevent any possible taint of wood, so objectionable to real connoisseurs—is done by means of patent steam machinery specially designed for the purpose, and used by no other firm in Scotland. It is capable of seasoning casks as large as 130 gallons, and will operate on two such casks simultaneously. The firm have just opened some handsome and commodious new offices in Hanover Street, George Square, Glasgow, in consequence of the old offices being inadequate for their increasing trade.

The vast quantities of whisky that Messrs Greenlees Brothers are continuously distributing throughout the world are drawn from the principal Highland distilleries. Of these the three Campbeltown distilleries are the most important. They are worked by Mr. Samuel Greenlees, one of the London partners, who has been resident in Campbeltown since the death of his father. The three distilleries have an output of about half a million gallons of whisky a year. The largest of them is the Hazelburn distillery, which covers three acres of ground. Water is brought from Crosshill Loch for mashing, while for other purposes there are two wells of the purest spring water. There are three granaries, capable of storing 10,000 quarters of barley, and five malt barns with tiled and concrete floors. The heads of the stills are composed of thirty-two chambers or tubes, terminating in a dome just before passing into the worm. By means of this ingenious contrivance, a large proportion of the fusel oil is thrown back into the still, and only the pure spirit passes into the worm.

To Messrs. Greenlees Brothers belongs the credit of having made the trade in Scotch whisky, and of having introduced that beverage to the British public in a wholesome and agreeable form, blended with the utmost nicety and judgment, so that delicacy of flavour and absolute purity are, as far as possible, combined.

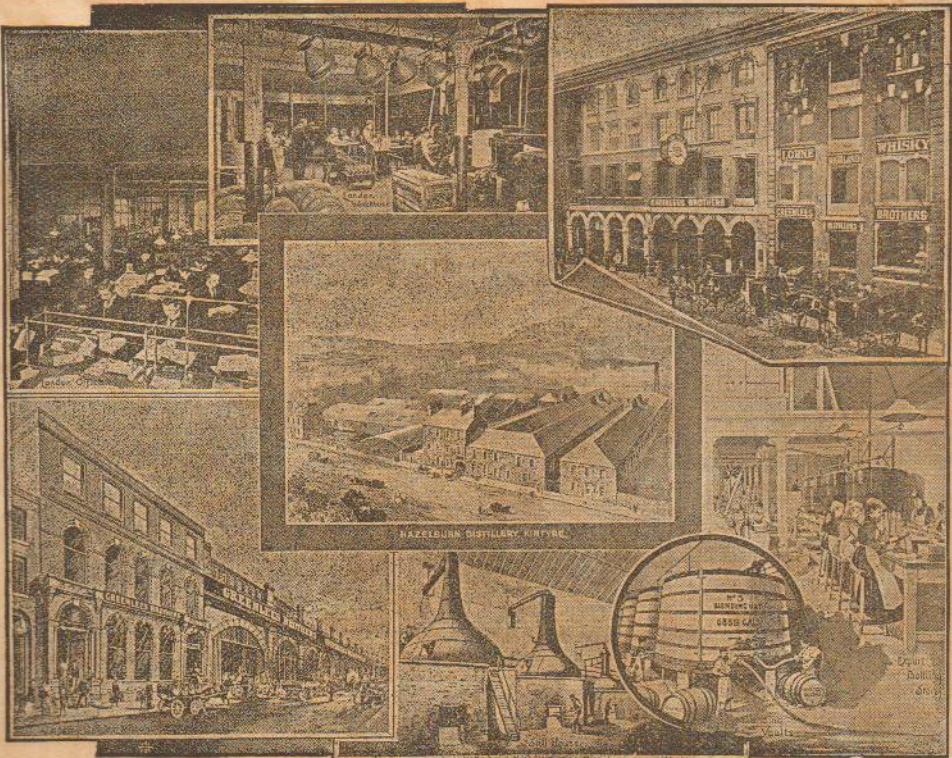


# GREENLEES BROTHERS,

HIGHLAND WHISKY DISTILLERS  
AND  
BLENDERS OF FINE OLD & THOROUGHLY  
MATURED WHISKIES.

BONDED AND EXPORT WAREHOUSES—  
45 to 65, OSBORNE STREET, GLASGOW.

DISTILLERIES, ARGYLESHIRE.



Glimpses of GREENLEES BROTHERS Establishments.

LONDON, GLASGOW, & ARGYLESHIRE

SAMPLES AND PRICES ON APPLICATION TO—  
HEAD OFFICES AND STORES:

**29 & 31, COMMERCIAL STREET,**  
LONDON, E.

Telegraphic Address "GREENLEES BROTHERS,"

Telephone No. 2122.



THE ACADEMIE DE MÉDECINE DE FRANCE

HAS PLACED

# *Apollinaris*

(“The Queen of Table Waters”)

At the HEAD of ALL the  
WATERS examined for  
PURITY and FREEDOM  
from Disease Germs.

“Has a charm which Makers of Artificial Aerated Waters  
do not even dream of.”—*Morning Advertiser.*

Supplied under Royal Warrants

TO

HER MAJESTY THE QUEEN OF ENGLAND,

AND TO

H.R.H. THE PRINCE OF WALES.

THE APOLLINARIS COMPANY, LTD.

4, STRATFORD PLACE, OXFORD STREET, LONDON, W.



# THE SPIRIT TRADERS' AND LICENSED VICTUALLERS' REDUCING TABLE.

Specially computed with reference to the CONTRACTION IN BULK which results from the addition of Water to Spirits.

COL. J. B. KEENE, *late Inspector-General H.M. Customs, & author of the "Handbook of Hydrometry,"* writes:—" . . . I trust the work will be as popular as it is certainly useful" (See page 7.)

PUBLISHED BY  
**M. & T. M. SHERIDAN, 71, Eastcheap, London, E.C.**

Agents:—L. LUMLEY & CO., 1, America Square, Minories, London, E.C.

New Edition, 250 pages. **THE AGENCY LIST** Net Price 3/6, by Post 3/10  
AND  
**HANDBOOK OF THE WINE & SPIRIT TRADE.**

*Contains the most complete and authentic Lists of the*

SHIPPERS OF WINES, SPIRITS LIQUEURS, &c., represented in this country, with Agents of each, &c.  
AGENTS OR REPRESENTATIVE HOUSES of the Foreign and Home Trade in Wines & Spirits in the U.K.  
DISTILLERIES OF THE UNITED KINGDOM, Proprietorship, and Agents representing each, &c., &c.  
PRINCIPAL WHISKY BLENDEES of the United Kingdom, with Agents where represented, &c.  
PRINCIPAL RECTIFYING DISTILLERS of the United Kingdom, with Agents where represented.

ALSO CONTAINS AN INDEXED

Regd.] **DIRECTORY OF WHISKY BRANDS & BLENDS,** [Copyright.  
*Containing over 1,500 Brands with Proprietorship of each, &c.*

"No Wine Merchant, Hotel Keeper, Licensed Victualler or Spirit Grocer should be without  
this unique and most valuable guide to the vast and ever-increasing number of Proprietary  
Whiskies now being pushed into consumption throughout the kingdom."

**THE CUSTOMS TARIFFS on WINES, SPIRITS, BEER, &c.,** in all Foreign Countries & Colonies.  
**AN EPITOME OF CUSTOM HOUSE WORK** for Importers and Bonders of Wines and Spirits.  
**OPERATIONS IN BOND.**—Yatting, Blending, Fining, Fortifying, Bottling, Grogging, &c., &c.  
**SEVERAL PAGES OF USEFUL TRADE TABLES,** Relative Cost of Wines, Spirits, &c.

**AN EPITOME OF THE LICENSING LAWS FOR ALL LICENSED TRADERS,**

*Full Circular of Contents sent on application.*

PUBLISHED BY  
**M. & T. M. SHERIDAN, 71, Eastcheap, London, E.C.**





# CHAMPAGNE.

## JACQUESSON & FILS.

DRY PERFECTION

  
*Jacquesson & Fils.*

MAISON FONDÉE EN 1798.

SPECIAL CUVÉE "MARQUETTERIE"  
VINTAGE 1899.

"Brut-Naturel"

 SPECIAL CUVÉE  
1889

Established 1798.

REPOSE.

LONDON OFFICES: 36, GREAT TOWER STREET, E.C



## INDEX.

	Page
Equivalents, in pints, of tenths used in Tables ...	8
General Hints on Reducing Spirits ...	8
Obscuration in Spirits ...	8
General Tables for reducing to 25 underproof ...	9
Table for reducing from 25 u.p. to lower strengths	53
Table for reducing strong spirits to proof ...	53
Table for reducing Gin ...	55
Legislation on the reducing and sale of Spirits ...	57
The Sale of Food and Drugs Acts ...	58
Rules for raising the strengths of Spirits, &c., &c.	58

## INTRODUCTION.

The intention of the Publishers in this work is to supply a Reducing Table fulfilling conditions which are not to be found combined in any other table in use in the trade, namely:—

- (1) To take into calculation the contraction in bulk which takes place when spirit and water are put together.
- (2) To arrange the calculated examples in such a manner as to make the table readily adaptable to small as well as to large reducing operations.

To fulfil the former condition all estimations have been made on the basis of the combined *weights* of alcohol and water in admixture. The spirit gravities or relative weights have, for the purposes of the table, been referred to at a temperature of 62° F.—the temperature at which the Imperial Gallon is fixed by statute. (41 & 42 Vic. Ch 49).

The second condition is fulfilled by showing at a glance the *correct quantity of water required to reduce each gallon of spirit up to 70 gallons*, which may be said to cover the largest hogshead in ordinary use in the trade. When the spirits to be reduced exceed 70 gallons, the extension above 70 gallons affords easy data for arriving at the quantity of water required for the largest operations.

For example—to reduce 160 gallons from 20 overproof to 25 underproof, a reference to page 29 will show:—

62·3 gallons water for 100 gallons.  
37·4 " " " " 60 "

99·7 or 99½ gallons water required.

Thus with the very little trouble entailed in this simple addition of the quantities, seen at a glance on the same page, the table is adaptable up to any quantity.

## TABLES AND SLIDE RULES BASED ON BULK ERRONEOUS.

The tables and reducing slide Rules ordinarily in use are based on bulk, and failing to take any account of contraction, are incorrect and misleading.

COLONEL J. B. KEENE, late Inspector-General of H.M. Customs, and author of the Handbook of Hydrometry" exposes this serious defect in existing tables and rules where he states in his work:—"The unchangeability of the combined *weights* of alcohol and water gives a means of estimating the quantity of water required to reduce spirits better than the rules *founded on bulk as those ordinarily in use are*. These rules merely give the difference between the bulk at the present strength and that which will result when the operation is completed as being the amount of water to be added. This is, however, *always more or less in deficiency of the quantity necessary*. Thus 100 gallons of spirit at 67 overproof if reduced to proof would have a bulk of 167 gallons, and the rules in use would give 67 gallons as the water requisite, whereas it would require about 5 gallons more in reality." Thus a retailer relying on the old tables under-estimates the water necessary to add, and so loses considerably in his sales. For example, in a cask of Whisky there may be contraction of 2 or 3 gallons, and the loss would be equal to the retail price of that quantity. It must be noted, too, that this error by under-estimation and consequent loss, equally results from relying on the Reducing Slide Rules at present used in the Trade, all of which fail to allow for contraction in bulk.

The condemnation of the bulk theory as a basis for reducing calculations implied in this extract from the best recognised authority on the subject, has been a strong incentive to the publication of this Table, many pages of which, before its issue, were submitted to Colonel Keene for examination and revision. The following extract from Colonel Keene's letter stating the result of his scrutiny is satisfactory:—"I have no doubt *all* the Table is correctly estimated, and I trust the work will prove as popular as it is certainly useful."

## WHAT IS CONTRACTION OF BULK?

It is a well known scientific fact that when any two miscible liquids of *different densities* are put together, the combined bulk is less than double the bulk expressed separately. To make up 100 gallons of proof spirit by mixing water (density 1·000) with pure alcohol, (density :7938) the following quantities of each would be required.—

Pure alcohol ... 57·06 gallons.  
Distilled water ... 46 68 "

These quantities figure up 103·74 gallons which, after contraction in bulk, becomes 100 gallons, the contraction being equal to 3·74 gallons. This contraction is due to the interpenetration or marrying of the different sized globules or molecules which compose spirit and water. The stronger the spirit, *i.e.* the more remote in density from water, the greater the rate of contraction and *vice versa*. In order to allow contraction to be complete after reducing spirits, it is advisable not to try strength until at least twelve hours have elapsed from addition of the water. In the case of strong spirits a lapse of 24 hours is desirable; but in no case should the strength be taken immediately or soon after reducing.

**GAUGING, TESTING & VALUATIONS for periodical Stock-taking, Transfers, &c.** See page 54.



## EQUIVALENTS OF TENTHS IN PINTS.

All the quantities of water shown throughout this Table have been accurately calculated to the *half-tenth* (.05) of a gallon, less than a half-tenth being, as a rule, shown as the next lower, and more than a half-tenth as the next higher tenth. The rejection of fractions less than .05 in calculations will not affect results to an extent exceeding a single sub-division of hydrometer strength indication.

The following are the equivalents in pints, to the quarter pint, of tenths used in the Table :—

Gallons.		
.05 (half-tenths)	=	$\frac{1}{2}$ pint.
.1 (one tenth)	=	$\frac{3}{4}$ pint.
.2 (two tenths)	=	1 $\frac{1}{2}$ pints.
.3 (three tenths)	=	2 $\frac{1}{2}$ pints.
.4 (four tenths)	=	3 $\frac{1}{4}$ pints.
.5 (five tenths)	=	4 pints.
.6 (six tenths)	=	4 $\frac{3}{4}$ pints.
.7 (seven tenths)	=	5 $\frac{3}{4}$ pints.
.8 (eight tenths)	=	6 $\frac{3}{4}$ pints.
.9 (nine tenths)	=	7 $\frac{1}{4}$ pints.
1.0 (one gallon)	=	8 pints.

In wholesale measurements and measurements in bond as shown on permits, the  $\frac{1}{4}$  gallon,  $\frac{1}{2}$  gallon and  $\frac{3}{4}$  gallon are expressed as 0.2, 0.5 & 0.7 respectively.

## HINTS ON REDUCING SPIRITS.

These hints are intended to apply more to the ordinary operations of the distributing Wine and Spirit Merchant and Licensed Victualler, than to larger operations in bond or otherwise of the Wholesale Dealer. So far as they apply, however, they can be read with advantage by the latter.

**Time to reduce.**—A not uncommon and very mistaken custom amongst retail traders on receipt of a cask or casks of Spirits from the wholesale dealers is, instead of breaking down the entire quantity at once on receipt, to draw off and reduce such small quantities only as are needed for current demands. We cannot too strongly condemn such an unintelligent and wasteful practice. It must be evident that whilst a cask of spirits lies in a cellar at full strength and on ullage, it is rapidly losing in liquid or strength, or in both by natural evaporation, the loss being proportionate to the strength of the spirit and the condition of the cellar. Each drawing off too, enlarges or renews the surface of the liquid exposed to evaporation, and in a very short time there will be considerable loss. Bearing in mind that every duty-paid gallon of spirits at full strength may represent from 15/- to 25/-, the folly of storing at full strength, and of the practice referred to, must be manifest. On the other hand if the breaking down be done at time of receipt, the loss through subsequent evaporation would be comparatively slight, as the weaker a spirit is, the less liable it is to lose in strength. We therefore strongly recommend that all spirits should be broken down to or near sale strength as soon after receipt as possible, and stock casks should be always available for the purpose. If the stock casks on hand be too small to contain the whole of the reduced bulk, any quantity left in the original should also be broken down.

**Water to reduce with.**—Ordinary undistilled or unboiled water should not be used to break down spirits. Some waters contain organic impurities which would seriously impair the bouquet of, and be otherwise deleterious to spirits. Distilling or boiling removes or renders innocuous such impurities. All waters contain natural inorganic salts—the amount of such salts varying in different localities. In and around London, for instance, the prevalence of lime in water renders it quite unfit for reducing purposes if not previously distilled or boiled, as the lime in the water would produce cloudiness in the reduced spirit. This evil results to a greater or less degree in the case of all water if used in its natural state. We therefore recommend distilled or previously-boiled water—used quite cold—in all cases. The former is no doubt preferable, but on the strict understanding that it be used soon after distillation, and before it has had much contact with the air—especially the vitiated air of the ordinary cellar. In the process of distilling, water is deprived of *all* its natural complement of inorganic constituents, and when it is subsequently exposed it has a great tendency to absorb impurities from the surrounding atmosphere. It is more easily liable to decomposition too, and may get slightly foul with very little exposure. Therefore, distilled water should be used freshly distilled only for reducing spirits. Boiled water is a good substitute for distilled water, and many practical men consider it safer to use, and not inferior for reducing purposes. To bring it to the proper condition it should be well boiled, and then allowed to remain in boilers or tanks, or if drawn off into cooling vessels, to remain there until all the lime and other inorganic salts have time to precipitate. Prolonged boiling ensures precipitation and increases brightness. It should be then carefully drawn off from taps placed well above the deposit on the bottom of the vessel. A few of the largest Wholesale Whisky Blenders have special plant for producing an excellent water in this manner for their customers' use, and small traders are advised to order supplies with their spirits, rather than attempt the process of distilling or boiling.

**Strengths to reduce to.**—Although 25 u.p. and 35 up. are the limits stated in the Sale of Food and Drugs Amendment Act, 1879, for the maximum reducing of spirits, we think it well to recommend that, unless the spirit be for immediate sale these limits should not be quite reached, as with time the strength naturally falls and there is a risk of an infringement in that event. For Whisky, Brandy and Rum 24 u.p., and for Gin 33 or 34 u.p. would be safe strengths, as affording a margin for a fall of strength by natural evaporation.

## “OBSCURATION” IN SPIRITS.

Some misconception may still prevail as to what “Obscuration” really is, and how it is affected by breaking down the spirit in which it is present, such as Brandy, Rum, &c. Obscuration is defined by the Customs laws as “the amount of proof spirit hidden or ‘obscured’ by matter in solution in a spirituous

[Continued on page 56.]



Water required to reduce from **40 OVERPROOF** to strengths of:—

Galls. of Spirit	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	·4	·5	·6	·6	·65	·65	·7	·7	·7	·8	·8	·85	·9	·9
2	·85	1·0	1·2	1·2	1·3	1·3	1·4	1·4	1·4	1·6	1·7	1·7	1·8	1·8
3	1·3	1·5	1·7	1·9	1·9	2·0	2·0	2·1	2·2	2·3	2·5	2·6	2·6	2·7
4	1·7	2·0	2·3	2·5	2·5	2·6	2·7	2·8	2·9	3·1	3·3	3·4	3·5	3·6
5	2·1	2·5	2·9	3·1	3·2	3·3	3·4	3·5	3·6	3·9	4·1	4·2	4·4	4·5
6	2·5	3·0	3·5	3·7	3·8	3·9	4·1	4·2	4·3	4·7	5·0	5·1	5·3	5·4
7	3·0	3·5	4·1	4·3	4·5	4·6	4·7	4·9	5·0	5·5	5·8	5·9	6·1	6·3
8	3·4	4·0	4·7	5·0	5·1	5·3	5·4	5·6	5·7	6·3	6·6	6·8	7·0	7·2
9	3·8	4·5	5·3	5·6	5·8	5·9	6·1	6·3	6·5	7·1	7·5	7·6	7·9	8·1
10	4·2	5·0	5·8	6·2	6·4	6·6	6·8	7·0	7·2	7·8	8·3	8·5	8·8	9·0
11	4·7	5·5	6·4	6·8	7·0	7·2	7·5	7·7	7·9	8·6	9·1	9·3	9·6	9·9
12	5·1	6·0	7·0	7·4	7·7	7·9	8·1	8·4	8·6	9·4	9·9	10·2	10·5	10·8
13	5·5	6·5	7·6	8·1	8·3	8·5	8·8	9·1	9·3	10·2	10·8	11·0	11·4	11·7
14	5·9	7·0	8·2	8·7	8·9	9·2	9·5	9·8	10·1	11·0	11·6	11·9	12·3	12·7
15	6·4	7·5	8·8	9·3	9·6	9·9	10·2	10·5	10·8	11·8	12·5	12·7	13·2	13·6
16	6·8	8·0	9·4	9·9	10·2	10·5	10·9	11·2	11·5	12·6	13·3	13·6	14·0	14·5
17	7·2	8·5	9·9	10·5	10·8	11·2	11·6	11·9	12·2	13·4	14·1	14·4	14·9	15·4
18	7·6	9·0	10·5	11·2	11·5	11·8	12·2	12·6	13·0	14·1	15·0	15·3	15·8	16·3
19	8·1	9·5	11·1	11·8	12·1	12·5	12·9	13·3	13·7	14·9	15·8	16·1	16·7	17·2
20	8·5	10·0	11·7	12·4	12·8	13·2	13·6	14·0	14·4	15·7	16·6	17·0	17·5	18·1
21	8·9	10·5	12·3	13·0	13·4	13·8	14·3	14·7	15·1	16·5	17·4	17·8	18·4	19·0
22	9·3	11·0	12·9	13·6	14·1	14·5	14·9	15·4	15·8	17·3	18·3	18·7	19·3	19·9
23	9·8	11·6	13·5	14·3	14·7	15·1	15·6	16·1	16·6	18·0	19·1	19·5	20·2	20·8
24	10·2	12·0	14·0	14·9	15·3	15·8	16·3	16·8	17·3	18·8	19·9	20·4	21·1	21·7
25	10·6	12·5	14·6	15·5	16·0	16·4	17·0	17·6	18·0	19·6	20·7	21·2	21·9	22·6
26	11·0	13·0	15·2	16·1	16·6	17·1	17·6	18·2	18·7	20·4	21·6	22·1	22·8	23·5
27	11·4	13·5	15·8	16·7	17·2	17·7	18·3	18·9	19·4	21·2	22·4	23·0	23·7	24·4
28	11·9	14·0	16·4	17·4	17·9	18·4	19·0	19·6	20·2	22·0	23·2	23·8	24·6	25·3
29	12·3	14·5	17·0	18·0	18·5	19·1	19·7	20·3	20·9	22·8	24·1	24·7	25·4	26·2
30	12·7	15·0	17·5	18·6	19·2	19·7	20·4	21·0	21·6	23·5	24·9	25·5	26·2	27·1
31	13·2	15·5	18·1	19·2	19·8	20·4	21·0	21·7	22·3	24·3	25·7	26·4	27·1	28·0
32	13·6	16·0	18·7	19·8	20·4	21·0	21·7	22·4	23·0	25·1	26·5	27·2	28·0	28·9
33	14·0	16·5	19·3	20·5	21·1	21·7	22·4	23·1	23·8	25·9	27·4	28·1	29·0	29·8
34	14·4	17·0	19·9	21·1	21·7	22·4	23·1	23·8	24·5	26·7	28·2	28·9	29·8	30·7
35	14·8	17·5	20·5	21·7	22·4	23·0	23·8	24·5	25·2	27·5	29·0	29·8	30·7	31·6
36	15·3	18·0	21·1	22·3	23·0	23·7	24·4	25·2	25·9	28·2	29·8	30·7	31·6	32·5
37	15·7	18·5	21·6	22·9	23·6	24·3	25·1	25·9	26·6	29·0	30·7	31·5	32·5	33·4
38	16·1	19·0	22·2	23·6	24·3	25·0	25·8	26·6	27·4	29·8	31·5	32·4	33·3	34·3
39	16·5	19·5	22·8	24·2	24·9	25·6	26·5	27·3	28·1	30·6	32·4	33·2	34·2	35·2
40	17·0	20·0	23·4	24·8	25·5	26·3	27·1	28·0	28·8	31·4	33·2	34·1	35·1	36·1
41	17·4	20·5	24·0	25·4	26·2	27·0	27·8	28·7	29·5	32·2	34·0	34·9	36·0	37·1
42	17·8	21·0	24·6	26·0	26·8	27·6	28·5	29·4	30·2	33·0	34·9	35·8	36·9	38·0
43	18·2	21·5	25·2	26·7	27·5	28·3	29·2	30·1	30·9	33·7	35·7	36·6	37·7	38·9
44	18·7	22·0	25·7	27·3	28·1	28·9	29·8	30·8	31·7	34·5	36·5	37·5	38·6	39·8
45	19·1	22·5	26·3	27·9	28·8	29·6	30·5	31·5	32·4	35·3	37·3	38·3	39·5	40·7
46	19·5	23·0	26·9	28·5	29·4	30·3	31·2	32·2	33·1	36·1	38·2	39·2	40·4	41·6
47	19·9	23·5	27·5	29·1	30·1	30·9	31·9	32·9	33·8	36·9	39·0	40·0	41·3	42·5
48	20·4	24·0	28·1	29·8	30·7	31·6	32·6	33·6	34·5	37·7	39·8	40·9	42·1	43·4
49	20·8	24·5	28·7	30·4	31·3	32·2	33·2	34·3	35·3	38·5	40·7	41·7	43·0	44·3
50	21·2	25·0	29·2	31·0	32·0	32·9	33·9	35·0	36·0	39·2	41·5	42·6	43·9	45·2
51	21·6	25·5	29·8	31·6	32·6	33·6	34·6	35·7	36·7	40·0	42·3	43·4	44·8	46·1
52	22·1	26·0	30·4	32·2	33·3	34·2	35·3	36·4	37·4	40·8	43·1	44·3	45·7	47·0
53	22·5	26·5	31·0	32·9	33·9	34·9	36·0	37·1	38·2	41·6	44·0	45·1	46·6	47·9
54	22·9	27·0	31·6	33·5	34·6	35·5	36·7	37·8	38·9	42·4	44·8	46·0	47·4	48·8
55	23·3	27·5	32·2	34·1	35·2	36·2	37·4	38·5	39·6	43·2	45·6	46·9	48·3	49·7
56	23·8	28·0	32·8	34·7	35·8	36·8	38·1	39·2	40·3	44·0	46·5	47·7	49·2	50·6
57	24·2	28·5	33·3	35·3	36·5	37·5	38·7	39·9	41·0	44·7	47·3	48·5	50·0	51·5
58	24·6	29·0	33·9	35·9	37·1	38·1	39·4	40·6	41·8	45·5	48·1	49·4	50·9	52·4
59	25·0	29·5	34·5	36·6	37·8	38·8	40·1	41·3	42·5	46·3	49·0	50·2	51·8	53·3
60	25·5	30·0	35·1	37·2	38·4	39·5	40·7	42·0	43·2	47·1	49·8	51·1	52·6	54·2
61	25·9	30·5	35·7	37·8	39·0	40·1	41·4	42·7	43·9	47·9	50·6	51·9	53·5	55·1
62	26·3	31·0	36·3	38·4	39·7	40·8	42·1	43·4	44·6	48·7	51·5	52·8	54·4	56·0
63	26·7	31·5	36·9	39·0	40·3	41·4	42·7	44·1	45·4	49·4	52·3	53·6	55·3	56·9
64	27·2	32·0	37·4	39·7	41·0	42·1	43·4	44·8	46·1	50·2	53·1	54·5	56·2	57·8
65	27·6	32·5	38·0	40·3	41·6	42·8	44·1	45·5	46·8	51·0	53·9	55·3	57·1	58·7
66	28·0	33·0	38·6	40·9	42·2	43·4	44·8	46·2	47·5	51·8	54·8	56·2	57·9	59·6
67	28·4	33·5	39·2	41·5	42·9	44·1	45·5	46·9	48·2	52·6	55·6	57·1	58·7	60·5
68	28·9	34·0	39·8	42·2	43·5	44·7	46·2	47·6	49·0	53·4	56·5	57·9	59·6	61·4
69	29·3	34·5	40·4	42·8	44·2	45·4	46·8	48·3	49·7	54·2	57·3	58·8	60·5	62·3
70	29·7	35·0	40·9	43·4	44·8	46·1	47·5	49·0	50·4	54·9	58·1	59·6	61·4	63·3
80	33·9	40·0	46·8	49·6	51·1	52·6	54·3	56·0	57·6	62·8	66·4	68·1	70·2	72·3
90	38·2	45·0	52·6	55·8	57·5	59·2	61·1	63·0	64·8	70·6	74·7	76·7	79·0	81·3
100	42·4	50·0	58·5	62·0	63·9	65·8	67·9	70·6	72·0	78·5	83·0	85·2	87·8	90·3
300	127·3	150·0	175·5	186·0	191·7	197·4	203·7	210·0	216·0	235·4	249·0	255·5	263·4	271·0
500	212·3	250·0	292·5	310·0	319·5	329·0	339·5	350·0	360·0	392·3	416·0	425·8	439·0	451·6



Water required to reduce from **39 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	4	5	6	6	6	6.5	7	7	7	8	8	8.5	9	9
2	8	10	1.1	1.2	1.25	1.3	1.3	1.4	1.4	1.5	1.6	1.7	1.7	1.8
3	1.2	1.5	1.7	1.8	2.0	1.9	2.0	2.1	2.1	2.3	2.4	2.5	2.6	2.7
4	1.6	1.9	2.3	2.4	2.5	2.6	2.7	2.7	2.8	3.1	3.3	3.3	3.4	3.5
5	2.1	2.4	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.9	4.1	4.2	4.3	4.4
6	2.5	2.9	3.4	3.6	3.8	3.9	4.0	4.1	4.2	4.6	4.9	5.0	5.2	5.3
7	2.9	3.4	4.0	4.2	4.4	4.5	4.7	4.8	4.9	5.4	5.7	5.9	6.0	6.2
8	3.3	3.9	4.6	4.9	5.0	5.2	5.3	5.5	5.7	6.2	6.5	6.7	6.9	7.1
9	3.7	4.4	5.1	5.5	5.6	5.8	6.0	6.2	6.4	7.0	7.3	7.5	7.8	8.0
10	4.1	4.9	5.7	6.1	6.3	6.5	6.6	6.9	7.1	7.7	8.1	8.4	8.6	8.9
11	4.5	5.4	6.3	6.7	6.9	7.1	7.3	7.5	7.8	8.5	8.9	9.2	9.5	9.8
12	5.0	5.9	6.9	7.3	7.5	7.8	8.0	8.2	8.5	9.3	9.8	10.0	10.3	10.6
13	5.4	6.3	7.5	7.9	8.1	8.4	8.6	8.9	9.2	10.0	10.6	10.9	11.2	11.5
14	5.8	6.8	8.0	8.5	8.8	9.0	9.3	9.6	9.9	10.8	11.4	11.7	12.1	12.4
15	6.2	7.3	8.6	9.1	9.4	9.7	10.0	10.3	10.6	11.5	12.2	12.6	12.9	13.3
16	6.6	7.8	9.2	9.7	10.0	10.3	10.6	11.0	11.3	12.3	13.0	13.4	13.8	14.2
17	7.0	8.3	9.7	10.3	10.6	11.0	11.3	11.7	12.0	13.1	13.8	14.2	14.7	15.1
18	7.4	8.8	10.3	10.9	11.3	11.6	12.0	12.4	12.7	13.8	14.6	15.1	15.5	16.0
19	7.8	9.2	10.9	11.5	11.9	12.3	12.6	13.0	13.4	14.6	15.5	15.9	16.4	16.9
20	8.3	9.7	11.4	12.2	12.5	12.9	13.3	13.7	14.1	15.4	16.3	16.7	17.2	17.7
21	8.7	10.2	12.0	12.8	13.2	13.6	14.0	14.4	14.8	16.2	17.1	17.6	18.1	18.6
22	9.1	10.7	12.6	13.4	13.8	14.2	14.6	15.1	15.6	17.0	17.9	18.4	19.0	19.5
23	9.5	11.2	13.2	14.0	14.4	14.9	15.3	15.8	16.3	17.7	18.7	19.3	19.8	20.4
24	9.9	11.6	13.7	14.6	15.0	15.5	16.0	16.5	17.0	18.5	19.5	20.1	20.7	21.3
25	10.3	12.1	14.2	15.2	15.6	16.1	16.6	17.2	17.7	19.3	20.3	20.9	21.5	22.2
26	10.7	12.6	14.8	15.8	16.3	16.8	17.3	17.9	18.4	20.1	21.2	21.8	22.4	23.1
27	11.1	13.2	15.4	16.4	16.9	17.4	17.9	18.5	19.1	20.8	22.0	22.6	23.3	24.0
28	11.6	13.7	16.0	17.0	17.5	18.1	18.6	19.2	19.8	21.6	22.8	23.4	24.1	24.8
29	12.0	14.1	16.6	17.6	18.2	18.8	19.2	19.9	20.5	22.4	23.6	24.3	25.0	25.7
30	12.4	14.6	17.2	18.2	18.8	19.4	19.9	20.6	21.2	23.2	24.4	25.1	25.9	26.6
31	12.8	15.1	17.7	18.8	19.4	20.0	20.6	21.3	21.9	23.9	25.2	25.9	26.7	27.5
32	13.2	15.6	18.3	19.4	20.0	20.7	21.2	22.0	22.6	24.7	26.0	26.8	27.6	28.4
33	13.6	16.1	18.9	20.1	20.6	21.3	21.9	22.7	23.3	25.4	26.8	27.6	28.4	29.3
34	14.0	16.6	19.5	20.7	21.3	22.0	22.6	23.3	24.0	26.2	27.6	28.5	29.3	30.2
35	14.4	17.1	20.1	21.3	21.9	22.6	23.3	24.0	24.7	27.0	28.4	29.3	30.1	31.0
36	14.9	17.6	20.6	21.9	22.5	23.2	23.9	24.7	25.4	27.8	29.3	30.1	31.0	31.9
37	15.3	18.0	21.2	22.5	23.1	23.9	24.6	25.4	26.1	28.5	30.1	31.0	31.8	32.8
38	15.7	18.5	21.8	23.1	23.8	24.5	25.2	26.1	26.9	29.3	30.9	31.8	32.7	33.7
39	16.1	19.0	22.3	23.7	24.4	25.2	25.9	26.8	27.6	30.2	31.7	32.6	33.6	34.6
40	16.5	19.5	22.9	24.3	25.0	25.8	26.6	27.5	28.3	30.9	32.6	33.5	34.4	35.5
41	16.9	20.0	23.5	24.9	25.7	26.5	27.3	28.2	29.0	31.7	33.4	34.3	35.3	36.4
42	17.3	20.5	24.0	25.5	26.3	27.1	27.9	28.8	29.7	32.4	34.2	35.1	36.2	37.2
43	17.8	21.0	24.6	26.1	26.9	27.8	28.6	29.5	30.4	33.2	35.0	36.0	37.1	38.1
44	18.2	21.5	25.2	26.7	27.5	28.4	29.3	30.2	31.1	34.0	35.8	36.8	37.9	39.0
45	18.6	22.0	25.7	27.4	28.2	29.1	29.9	30.9	31.8	34.8	36.6	37.7	38.8	39.9
46	19.0	22.4	26.3	28.0	28.8	29.7	30.6	31.6	32.5	35.5	37.4	38.5	39.6	40.8
47	19.4	22.9	26.9	28.6	29.4	30.4	31.3	32.3	33.2	36.3	38.2	39.3	40.5	41.7
48	19.8	23.4	27.4	29.2	30.0	31.0	31.9	33.0	33.9	37.1	39.1	40.2	41.3	42.6
49	20.2	23.9	28.0	29.8	30.7	31.6	32.6	33.7	34.6	37.9	39.9	41.0	42.2	43.5
50	20.6	24.4	28.6	30.4	31.3	32.3	33.3	34.3	35.3	38.6	40.7	41.8	43.1	44.3
51	21.1	24.9	29.2	31.0	31.9	32.9	33.9	35.0	36.1	39.4	41.5	42.7	44.0	45.2
52	21.5	25.4	29.7	31.6	32.5	33.6	34.6	35.7	36.8	40.1	42.3	43.5	44.8	46.1
53	21.9	25.9	30.3	32.2	33.2	34.2	35.2	36.4	37.5	40.9	43.1	44.3	45.7	47.0
54	22.3	26.3	30.9	32.8	33.8	34.9	35.9	37.1	38.2	41.7	43.9	45.2	46.5	47.9
55	22.7	26.8	31.4	33.4	34.4	35.5	36.6	37.8	38.9	42.5	44.8	46.0	47.4	48.8
56	23.1	27.3	32.0	34.0	35.1	36.2	37.2	38.5	39.6	43.2	45.6	46.9	48.2	49.7
57	23.5	27.8	32.6	34.6	35.7	36.8	37.9	39.2	40.3	44.0	46.4	47.7	49.1	50.5
58	24.0	28.3	33.2	35.2	36.3	37.4	38.6	39.9	41.0	44.8	47.2	48.6	50.0	51.4
59	24.4	28.8	33.7	35.9	36.9	38.1	39.2	40.6	41.7	45.6	48.0	49.4	50.9	52.3
60	24.8	29.3	34.3	36.5	37.6	38.8	39.9	41.2	42.4	46.3	48.8	50.2	51.7	53.2
61	25.2	29.8	34.9	37.1	38.2	39.4	40.6	41.9	43.1	47.1	49.6	51.1	52.6	54.1
62	25.6	30.2	35.5	37.7	38.8	40.0	41.2	42.6	43.8	47.9	50.5	51.9	53.4	55.0
63	26.0	30.7	36.1	38.3	39.4	40.7	41.9	43.3	44.5	48.7	51.3	52.7	54.3	55.9
64	26.4	31.2	36.6	38.9	40.1	41.3	42.6	44.0	45.2	49.4	52.1	53.6	55.1	56.8
65	26.8	31.7	37.2	39.5	40.7	42.0	43.2	44.6	45.9	50.2	52.9	54.4	56.0	57.6
66	27.3	32.2	37.7	40.1	41.3	42.6	43.9	45.3	46.7	51.0	53.7	55.2	56.9	58.5
67	27.7	32.7	38.3	40.7	41.9	43.2	44.6	46.0	47.4	51.7	54.5	56.1	57.7	59.4
68	28.1	33.2	38.9	41.3	42.6	43.9	45.2	46.7	48.1	52.5	55.3	56.9	58.5	60.3
69	28.5	33.7	39.5	41.9	43.2	44.5	45.9	47.4	48.8	53.3	56.2	57.7	59.4	61.2
70	28.9	34.2	40.0	42.5	43.8	45.2	46.5	48.1	49.5	54.0	57.0	58.6	60.3	62.1
80	33.0	39.0	45.7	48.6	50.1	51.7	53.2	55.0	56.6	61.7	65.1	67.0	69.0	71.0
90	37.2	43.9	51.5	54.7	56.3	58.1	59.8	61.8	63.6	69.5	73.3	75.3	77.6	79.8
100	41.3	48.8	57.2	60.8	62.6	64.6	66.5	68.7	70.7	77.2	81.4	83.7	86.2	88.7
300	123.9	146.4	171.6	182.4	187.8	193.8	199.5	206.1	212.1	231.6	244.2	251.1	258.6	266.1
500	206.5	244.0	286.0	304.0	313.0	323.0	332.5	343.5	353.5	386.0	407.0	418.5	431.0	443.5

"Altogether we confidently recommend this Work."—*Ridley's Circular.*

See page v



Water required to reduce from **38 OVERPROOF** to strengths of:—

Galls of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	G. lls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	4	5	55	6	6	65	65	7	7	75	8	8	85	9
2	1.2	1.4	1.7	1.8	1.8	1.9	2.0	2.0	2.1	2.2	2.4	2.5	2.5	2.6
3	1.6	1.9	2.2	2.4	2.5	2.5	2.6	2.7	2.8	3.0	3.2	3.3	3.4	3.5
4	2.0	2.4	2.8	3.0	3.1	3.2	3.3	3.4	3.5	3.8	4.0	4.1	4.2	4.4
5	2.4	2.8	3.4	3.6	3.7	3.8	3.9	4.0	4.2	4.6	4.8	4.9	5.1	5.2
6	2.8	3.3	3.9	4.2	4.3	4.5	4.6	4.7	4.9	5.3	5.6	5.8	5.9	6.1
7	3.2	3.8	4.5	4.8	4.9	5.1	5.2	5.4	5.6	6.1	6.4	6.6	6.8	7.0
8	3.6	4.3	5.0	5.4	5.5	5.7	5.9	6.1	6.3	6.8	7.2	7.4	7.6	7.9
9	4.0	4.7	5.6	6.0	6.1	6.3	6.5	6.7	6.9	7.6	8.0	8.2	8.5	8.7
10	4.4	5.2	6.2	6.6	6.7	7.0	7.2	7.4	7.6	8.3	8.8	9.1	9.3	9.6
11	4.8	5.7	6.7	7.2	7.4	7.6	7.8	8.1	8.3	9.1	9.6	9.9	10.2	10.5
12	5.2	6.2	7.3	7.8	8.0	8.2	8.5	8.8	9.0	9.8	10.4	10.7	11.0	11.4
13	5.6	6.6	7.8	8.4	8.6	8.9	9.1	9.4	9.7	10.6	11.2	11.5	11.9	12.2
14	6.0	7.1	8.4	9.0	9.2	9.5	9.8	10.1	10.4	11.4	12.0	12.3	12.8	13.1
15	6.4	7.6	9.0	9.5	9.8	10.1	10.5	10.8	11.1	12.1	12.8	13.2	13.6	14.0
16	6.8	8.1	9.5	10.1	10.4	10.8	11.1	11.5	11.8	12.9	13.6	14.0	14.4	14.8
17	7.2	8.5	10.1	10.7	11.0	11.4	11.8	12.2	12.5	13.6	14.4	14.8	15.3	15.7
18	7.6	9.0	10.6	11.3	11.7	12.0	12.4	12.8	13.2	14.3	15.2	15.6	16.1	16.6
19	8.0	9.5	11.2	11.9	12.3	12.7	13.1	13.5	13.9	15.1	16.0	16.5	17.0	17.5
20	8.4	10.0	11.8	12.5	12.9	13.3	13.7	14.2	14.6	15.9	16.8	17.3	17.8	18.3
21	8.8	10.4	12.3	13.1	13.5	13.9	14.4	14.8	15.3	16.6	17.6	18.1	18.6	19.2
22	9.2	10.9	12.9	13.7	14.1	14.6	15.0	15.5	16.0	17.3	18.4	18.9	19.5	20.1
23	9.6	11.4	13.4	14.3	14.7	15.2	15.7	16.2	16.7	18.1	19.2	19.7	20.4	20.9
24	10.0	11.9	14.0	14.9	15.3	15.8	16.3	16.9	17.4	18.9	20.0	20.6	21.2	21.8
25	10.5	12.3	14.6	15.5	15.9	16.5	17.0	17.5	18.1	19.7	20.8	21.4	22.1	22.7
26	10.9	12.8	15.1	16.1	16.6	17.1	17.7	18.2	18.8	20.4	21.6	22.2	22.9	23.6
27	11.3	13.3	15.7	16.7	17.2	17.7	18.3	18.9	19.5	21.2	22.4	23.0	23.7	24.4
28	11.7	13.8	16.2	17.3	17.8	18.4	18.9	19.6	20.2	21.9	23.2	23.8	24.6	25.3
29	12.1	14.2	16.8	17.9	18.4	19.0	19.6	20.2	20.8	22.7	24.0	24.7	25.4	26.2
30	12.5	14.7	17.4	18.5	19.0	19.6	20.3	20.9	21.5	23.5	24.8	25.5	26.3	27.1
31	12.9	15.2	17.9	19.1	19.6	20.3	20.9	21.6	22.2	24.2	25.6	26.3	27.1	27.9
32	13.3	15.7	18.5	19.7	20.3	20.9	21.6	22.3	22.9	25.0	26.4	27.2	28.0	28.8
33	13.7	16.1	19.1	20.3	20.9	21.6	22.3	22.9	23.6	25.7	27.2	28.0	28.8	29.7
34	14.1	16.6	19.6	20.9	21.5	22.2	22.9	23.6	24.3	26.5	28.0	28.8	29.7	30.6
35	14.5	17.1	20.2	21.5	22.1	22.9	23.5	24.2	25.0	27.2	28.8	29.6	30.5	31.5
36	14.9	17.6	20.7	22.1	22.7	23.5	24.2	24.9	25.7	28.0	29.6	30.5	31.4	32.4
37	15.3	18.0	21.3	22.7	23.3	24.1	24.8	25.6	26.4	28.8	30.4	31.3	32.2	33.2
38	15.7	18.5	21.9	23.3	23.9	24.7	25.5	26.3	27.1	29.5	31.2	32.1	33.1	34.1
39	16.1	19.0	22.4	23.9	24.6	25.4	26.2	27.0	27.8	30.3	32.0	32.9	33.9	34.9
40	16.5	19.5	23.0	24.5	25.2	26.0	26.8	27.7	28.5	31.0	32.8	33.7	34.8	35.8
41	16.9	19.9	23.5	25.1	25.8	26.7	27.5	28.3	29.2	31.8	33.6	34.6	35.6	36.7
42	17.3	20.4	24.1	25.7	26.4	27.3	28.1	29.0	29.9	32.5	34.4	35.4	36.5	37.5
43	17.7	20.9	24.6	26.3	27.0	27.9	28.8	29.7	30.6	33.3	35.2	36.2	37.3	38.4
44	18.1	21.4	25.2	26.9	27.6	28.6	29.4	30.4	31.3	34.0	36.0	37.0	38.2	39.3
45	18.5	21.8	25.8	27.5	28.2	29.2	30.1	31.0	32.0	34.8	36.8	37.9	39.0	40.2
46	18.9	22.3	26.3	28.1	28.8	29.8	30.7	31.7	32.7	35.6	37.6	38.7	39.9	41.0
47	19.3	22.8	26.9	28.7	29.5	30.4	31.4	32.4	33.4	36.3	38.4	39.5	40.7	41.9
48	19.7	23.3	27.4	29.3	30.1	31.1	32.0	33.1	34.1	37.0	39.2	40.4	41.6	42.8
49	20.1	23.7	28.0	29.8	30.7	31.7	32.7	33.7	34.7	37.8	40.0	41.2	42.4	43.6
50	20.5	24.2	28.6	30.4	31.3	32.3	33.4	34.4	35.4	38.6	40.8	42.0	43.2	44.5
51	20.9	24.7	29.1	31.0	31.9	33.0	34.0	35.1	36.1	39.3	41.6	42.9	44.1	45.4
52	21.3	25.2	29.7	31.6	32.5	33.6	34.7	35.8	36.8	40.1	42.4	43.7	44.9	46.3
53	21.7	25.6	30.2	32.2	33.2	34.3	35.3	36.4	37.5	40.9	43.2	44.5	45.8	47.2
54	22.1	26.1	30.8	32.8	33.8	34.9	36.0	37.1	38.2	41.6	44.0	45.3	46.6	48.0
55	22.5	26.6	31.4	33.4	34.4	35.5	36.6	37.8	38.9	42.4	44.8	46.1	47.5	48.9
56	22.9	27.1	32.0	34.0	35.0	36.1	37.3	38.5	39.6	43.1	45.6	46.9	48.3	49.8
57	23.3	27.5	32.5	34.6	35.6	36.8	37.9	39.1	40.3	43.9	46.4	47.7	49.2	50.6
58	23.7	28.0	33.0	35.2	36.2	37.4	38.6	39.8	41.0	44.7	47.2	48.5	50.1	51.5
59	24.1	28.5	33.6	35.8	36.8	38.0	39.2	40.5	41.7	45.4	48.0	49.4	50.9	52.4
60	24.5	29.0	34.2	36.4	37.5	38.6	39.9	41.2	42.4	46.2	48.8	50.2	51.7	53.2
61	24.9	29.4	34.7	37.0	38.1	39.3	40.5	41.8	43.1	46.9	49.6	51.0	52.6	54.1
62	25.3	29.9	35.3	37.6	38.7	39.9	41.2	42.5	43.8	47.7	50.4	51.8	53.4	55.0
63	25.7	30.4	35.8	38.2	39.3	40.6	41.8	43.2	44.5	48.4	51.2	52.7	54.3	55.9
64	26.1	30.9	36.4	38.8	39.9	41.2	42.5	43.9	45.2	49.2	52.0	53.5	55.1	56.7
65	26.5	31.3	37.0	39.4	40.5	41.8	43.1	44.5	45.9	50.0	52.8	54.3	56.0	57.6
66	26.9	31.8	37.5	40.0	41.1	42.5	43.8	45.2	46.6	50.7	53.6	55.1	56.8	58.5
67	27.3	32.3	38.1	40.6	41.7	43.1	44.5	45.9	47.3	51.5	54.4	56.0	57.6	59.3
68	27.7	32.8	38.7	41.2	42.4	43.8	45.1	46.5	48.0	52.2	55.2	56.8	58.5	60.2
69	28.1	33.2	39.2	41.8	43.0	44.4	45.8	47.2	48.6	53.0	56.0	57.6	59.4	61.1
70	32.2	38.0	44.8	47.8	49.1	50.7	52.3	54.0	55.6	60.6	64.0	65.8	67.8	69.8
80	36.2	42.7	50.4	53.7	55.3	57.1	58.9	60.7	62.5	68.1	72.0	74.1	76.3	78.6
90	40.2	47.5	56.0	59.7	61.4	63.4	65.4	67.5	69.5	75.7	80.0	82.3	84.8	87.3
100	120.6	142.5	168.0	179.1	184.2	190.2	196.2	202.5	208.5	227.1	240.0	246.9	254.4	261.9
500	201.0	237.5	280.0	298.5	307.0	317.0	327.0	337.5	347.5	378.5	400.0	411.5	424.0	436.5



Water required to reduce from **37 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	4	4.5	5.5	6	6	6	6.5	7	7	7.5	8	8	8	8.5
2	8	9	1.1	1.2	1.2	1.2	1.3	1.3	1.4	1.5	1.6	1.6	1.7	1.7
3	1.2	1.4	1.6	1.8	1.8	1.9	1.9	2.0	2.0	2.2	2.4	2.4	2.5	2.6
4	1.6	1.9	2.2	2.3	2.4	2.5	2.6	2.6	2.7	3.0	3.1	3.2	3.3	3.4
5	1.9	2.3	2.7	2.9	3.0	3.1	3.2	3.3	3.4	3.7	3.9	4.0	4.2	4.3
6	2.3	2.8	3.3	3.5	3.6	3.7	3.9	3.9	4.1	4.5	4.7	4.9	5.0	5.2
7	2.7	3.3	3.8	4.1	4.2	4.3	4.5	4.6	4.8	5.2	5.5	5.7	5.8	6.0
8	3.1	3.7	4.4	4.7	4.8	5.0	5.1	5.3	5.5	6.0	6.3	6.5	6.7	6.9
9	3.5	4.2	4.9	5.3	5.4	5.6	5.8	5.9	6.1	6.7	7.1	7.3	7.5	7.7
10	3.9	4.6	5.5	5.8	6.0	6.2	6.4	6.6	6.8	7.4	7.9	8.1	8.3	8.6
11	4.3	5.1	6.0	6.4	6.6	6.8	7.1	7.3	7.5	8.2	8.7	8.9	9.2	9.5
12	4.7	5.6	6.6	7.0	7.2	7.4	7.7	7.9	8.2	8.9	9.4	9.7	10.0	10.3
13	5.1	6.0	7.1	7.6	7.8	8.1	8.4	8.6	8.9	9.7	10.2	10.5	10.9	11.2
14	5.5	6.5	7.7	8.2	8.4	8.7	9.0	9.2	9.5	10.4	11.0	11.3	11.7	12.0
15	5.8	6.9	8.2	8.8	9.0	9.3	9.6	9.9	10.2	11.2	11.8	12.1	12.5	12.9
16	6.2	7.4	8.8	9.4	9.6	9.9	10.3	10.6	10.9	11.9	12.6	13.0	13.4	13.8
17	6.6	7.9	9.3	9.9	10.2	10.6	10.9	11.3	11.6	12.7	13.4	13.8	14.2	14.6
18	7.0	8.3	9.9	10.5	10.9	11.2	11.6	11.9	12.3	13.4	14.2	14.6	15.0	15.5
19	7.4	8.8	10.4	11.1	11.5	11.8	12.2	12.6	13.0	14.1	14.9	15.4	15.9	16.3
20	7.8	9.3	11.0	11.7	12.1	12.4	12.8	13.2	13.6	14.9	15.7	16.2	16.7	17.2
21	8.2	9.8	11.5	12.3	12.7	13.0	13.5	13.9	14.3	15.6	16.5	17.0	17.5	18.1
22	8.6	10.2	12.1	12.9	13.3	13.7	14.1	14.6	15.0	16.4	17.3	17.8	18.4	18.9
23	9.0	10.7	12.6	13.5	13.9	14.3	14.8	15.3	15.7	17.1	18.1	18.6	19.2	19.8
24	9.4	11.2	13.2	14.0	14.5	14.9	15.4	15.9	16.3	17.9	18.9	19.4	20.0	20.6
25	9.7	11.6	13.7	14.6	15.1	15.5	16.0	16.5	17.0	18.6	19.7	20.2	20.9	21.5
26	10.1	12.1	14.3	15.2	15.7	16.1	16.7	17.2	17.7	19.4	20.5	21.1	21.7	22.4
27	10.5	12.5	14.8	15.8	16.3	16.8	17.3	17.9	18.4	20.1	21.2	21.9	22.5	23.2
28	10.9	13.0	15.3	16.4	16.9	17.4	18.0	18.6	19.1	20.8	22.0	22.7	23.4	24.1
29	11.3	13.5	15.9	17.0	17.5	18.0	18.6	19.2	19.8	21.6	22.8	23.5	24.2	24.9
30	11.7	13.9	16.4	17.6	18.1	18.6	19.3	19.9	20.5	22.3	23.6	24.3	25.0	25.8
31	12.1	14.4	17.0	18.1	18.7	19.2	19.9	20.5	21.1	23.1	24.4	25.1	25.9	26.7
32	12.5	14.8	17.5	18.7	19.3	19.8	20.6	21.2	21.8	23.8	25.2	25.9	26.7	27.5
33	12.9	15.3	18.1	19.3	19.9	20.5	21.2	21.8	22.5	24.6	26.0	26.7	27.6	28.4
34	13.3	15.8	18.6	19.9	20.5	21.1	21.8	22.5	23.2	25.3	26.8	27.5	28.4	29.2
35	13.6	16.2	19.2	20.5	21.1	21.7	22.5	23.2	23.9	26.1	27.6	28.3	29.2	30.1
36	14.0	16.7	19.7	21.1	21.7	22.3	23.1	23.8	24.6	26.8	28.3	29.2	30.1	31.0
37	14.4	17.2	20.3	21.6	22.3	23.0	23.8	24.5	25.3	27.5	29.1	30.0	30.9	31.8
38	14.8	17.6	20.8	22.2	22.9	23.6	24.4	25.1	26.0	28.3	29.9	30.8	31.7	32.7
39	15.2	18.1	21.4	22.8	23.5	24.2	25.1	25.8	26.6	29.0	30.7	31.6	32.6	33.5
40	15.6	18.6	21.9	23.4	24.1	24.8	25.7	26.5	27.3	29.8	31.5	32.4	33.4	34.4
41	16.0	19.1	22.5	24.0	24.7	25.5	26.3	27.1	28.0	30.5	32.3	33.2	34.2	35.3
42	16.4	19.5	23.0	24.6	25.3	26.1	27.0	27.8	28.6	31.3	33.0	34.0	35.1	36.2
43	16.8	20.0	23.6	25.1	25.9	26.7	27.6	28.5	29.3	32.0	33.8	34.8	35.9	37.0
44	17.2	20.5	24.1	25.7	26.5	27.3	28.2	29.1	30.0	32.7	34.6	35.6	36.7	37.8
45	17.5	20.9	24.7	26.3	27.1	27.9	28.9	29.8	30.7	33.5	35.4	36.4	37.6	38.7
46	17.9	21.4	25.2	26.9	27.7	28.6	29.5	30.5	31.4	34.2	36.2	37.3	38.4	39.6
47	18.3	21.8	25.8	27.5	28.3	29.2	30.2	31.1	32.1	35.0	37.0	38.1	39.2	40.4
48	18.7	22.3	26.3	28.1	28.9	29.8	30.8	31.8	32.7	35.7	37.8	38.9	40.1	41.3
49	19.1	22.8	26.8	28.7	29.5	30.4	31.5	32.4	33.4	36.5	38.6	39.7	40.9	42.1
50	19.5	23.2	27.4	29.2	30.1	31.0	32.1	33.1	34.1	37.2	39.3	40.5	41.7	43.0
51	19.9	23.7	27.9	29.8	30.8	31.7	32.7	33.8	34.8	37.9	40.1	41.3	42.6	43.9
52	20.3	24.2	28.5	30.4	31.4	32.3	33.4	34.5	35.5	38.7	40.9	42.1	43.4	44.7
53	20.7	24.6	29.0	31.0	32.0	32.9	34.0	35.1	36.1	39.4	41.7	42.9	44.3	45.6
54	21.1	25.1	29.6	31.6	32.6	33.5	34.7	35.8	36.8	40.2	42.5	43.7	45.1	46.4
55	21.4	25.6	30.1	32.2	33.2	34.2	35.3	36.4	37.5	40.9	43.3	44.5	45.9	47.3
56	21.8	26.0	30.7	32.8	33.8	34.8	36.0	37.1	38.2	41.7	44.1	45.4	46.8	48.2
57	22.2	26.5	31.2	33.3	34.4	35.4	36.6	37.7	38.9	42.4	44.9	46.2	47.6	49.0
58	22.6	27.0	31.8	33.9	35.0	36.0	37.3	38.4	39.6	43.2	45.6	47.0	48.4	49.9
59	23.0	27.4	32.3	34.5	35.6	36.6	37.9	39.0	40.2	43.9	46.4	47.8	49.3	50.7
60	23.4	27.9	32.9	35.1	36.2	37.3	38.6	39.7	40.9	44.6	47.2	48.6	50.1	51.6
61	23.8	28.4	33.4	35.7	36.8	37.9	39.2	40.4	41.6	45.4	48.0	49.4	50.9	52.4
62	24.2	28.8	34.0	36.3	37.4	38.5	39.8	41.0	42.3	46.1	48.8	50.2	51.8	53.3
63	24.6	29.3	34.5	36.9	38.0	39.1	40.5	41.7	43.0	46.9	49.6	51.0	52.6	54.2
64	25.0	29.8	35.1	37.4	38.6	39.7	41.1	42.3	43.6	47.6	50.4	51.8	53.4	55.0
65	25.3	30.2	35.6	38.0	39.2	40.4	41.8	43.0	44.3	48.4	51.2	52.6	54.3	55.9
66	25.7	30.7	36.2	38.6	39.8	41.0	42.4	43.7	45.0	49.1	51.9	53.5	55.1	55.8
67	26.1	31.1	36.7	39.2	40.4	41.6	43.0	44.4	45.7	49.9	52.7	54.3	55.9	56.6
68	26.5	31.6	37.3	39.8	41.0	42.2	43.7	45.0	46.4	50.6	53.5	55.1	56.8	58.5
69	26.9	32.1	37.8	40.4	41.6	42.8	44.3	45.7	47.1	51.3	54.3	55.9	57.6	59.3
70	27.3	32.6	38.4	40.9	42.2	43.5	44.9	46.3	47.7	52.1	55.1	56.7	58.4	60.2
80	31.2	37.2	43.8	46.8	48.2	49.7	51.4	53.0	54.6	59.5	63.8	64.8	66.8	68.8
90	35.1	41.8	49.3	52.6	54.3	55.9	57.8	59.6	61.4	67.0	70.8	72.9	75.1	77.4
100	39.0	46.5	54.8	58.5	60.3	62.1	64.2	66.2	68.2	74.2	78.7	81.0	83.5	86.0
300	117.0	139.5	164.4	175.5	180.9	186.3	192.6	198.6	204.6	223.2	236.1	243.0	250.5	258.0
500	195.0	232.5	274.0	292.5	301.5	310.5	321.0	331.0	341.0	372.0	393.5	405.0	417.5	430.0

All Shippers of Wines, Spirits, &amp;c., represented in the U.K. with Agents of each &amp;c. See page v.



Water required to reduce from **36 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls. .4	Galls. .45	Galls. .5	Galls. .6	Galls. .6	Galls. .6	Galls. .65	Galls. .65	Galls. .7	Galls. .7	Galls. .8	Galls. .8	Galls. .8	Galls. .85
1														
2		.75	.9	1.1	1.1	1.2	1.3	1.3	1.3	1.5	1.5	1.6	1.6	1.7
3		1.1	1.4	1.6	1.7	1.8	1.8	1.9	2.0	2.2	2.3	2.4	2.5	2.5
4		1.5	1.8	2.1	2.3	2.4	2.4	2.5	2.6	2.7	2.9	3.1	3.2	3.4
5		1.9	2.3	2.7	2.9	2.9	3.0	3.1	3.2	3.3	3.7	3.9	4.0	4.2
6		2.3	2.7	3.2	3.4	3.5	3.7	3.8	3.9	4.0	4.4	4.6	4.8	5.1
7		2.7	3.2	3.8	4.0	4.1	4.3	4.4	4.5	4.7	5.1	5.4	5.6	5.9
8		3.0	3.6	4.3	4.6	4.7	4.9	5.0	5.2	5.4	5.9	6.2	6.4	6.8
9		3.4	4.1	4.8	5.2	5.3	5.5	5.7	5.8	6.0	6.6	7.0	7.2	7.6
10		3.8	4.5	5.4	5.7	5.9	6.1	6.3	6.5	6.7	7.3	7.7	8.0	8.5
11		4.2	5.0	5.9	6.3	6.5	6.7	6.9	7.1	7.4	8.1	8.5	8.8	9.3
12		4.6	5.4	6.4	6.9	7.1	7.3	7.5	7.8	8.0	8.8	9.3	9.6	10.2
13		4.9	5.9	7.0	7.5	7.7	7.9	8.2	8.4	8.7	9.5	10.1	10.3	10.7
14		5.3	6.3	7.5	8.0	8.3	8.5	8.8	9.1	9.4	10.2	10.9	11.1	11.9
15		5.7	6.8	8.1	8.6	8.8	9.1	9.4	9.7	10.0	11.0	11.6	11.9	12.3
16		6.1	7.3	8.6	9.2	9.4	9.8	10.1	10.4	10.7	11.7	12.4	12.7	13.1
17		6.5	7.7	9.1	9.7	10.0	10.4	10.7	11.0	11.4	12.4	13.2	13.5	14.0
18		6.8	8.2	9.7	10.3	10.6	11.0	11.3	11.7	12.1	13.2	13.9	14.3	14.8
19		7.2	8.6	10.2	10.9	11.2	11.6	12.0	12.3	12.7	13.9	14.7	15.1	15.6
20		7.6	9.1	10.7	11.5	11.8	12.2	12.6	13.0	13.4	14.6	15.5	15.9	16.4
21		8.0	9.5	11.3	12.0	12.4	12.8	13.2	13.6	14.1	15.4	16.3	16.7	17.3
22		8.4	10.0	11.8	12.6	13.0	13.4	13.9	14.3	14.7	16.1	17.0	17.5	18.1
23		8.7	10.4	12.4	13.2	13.6	14.0	14.5	14.9	15.4	16.8	17.8	18.3	18.9
24		9.1	10.9	12.9	13.7	14.2	14.6	15.1	15.6	16.1	17.6	18.6	19.1	19.7
25		9.5	11.3	13.4	14.3	14.7	15.2	15.7	16.2	16.7	18.3	19.4	19.9	20.5
26		9.9	11.8	14.0	14.9	15.3	15.9	16.4	16.9	17.4	19.0	20.1	20.7	21.4
27		10.3	12.3	14.5	15.5	15.9	16.5	17.0	17.5	18.1	19.8	20.9	21.5	22.2
28		10.6	12.7	15.0	16.0	16.5	17.1	17.6	18.2	18.8	20.5	21.7	22.3	23.0
29		11.0	13.2	15.6	16.6	17.1	17.7	18.3	18.8	19.4	21.2	22.4	23.1	23.8
30		11.4	13.6	16.1	17.2	17.7	18.3	18.9	19.5	20.1	22.0	23.2	23.9	24.7
31		11.8	14.1	16.6	17.8	18.3	18.9	19.5	20.1	20.8	22.7	24.0	24.7	25.5
32		12.2	14.5	17.2	18.3	18.9	19.5	20.2	20.8	21.4	23.4	24.8	25.5	26.3
33		12.6	15.0	17.7	18.9	19.5	20.1	20.8	21.4	22.1	24.1	25.5	26.3	27.1
34		12.9	15.4	18.2	19.5	20.1	20.7	21.5	22.1	22.8	24.9	26.3	27.1	27.9
35		13.3	15.9	18.8	20.1	20.6	21.3	22.1	22.7	23.4	25.6	27.1	27.9	28.8
36		13.7	16.3	19.3	20.6	21.2	22.0	22.7	23.4	24.1	26.3	27.9	28.7	29.6
37		14.1	16.8	19.8	21.2	21.8	22.6	23.3	24.0	24.8	27.1	28.6	29.4	30.4
38		14.5	17.2	20.4	21.8	22.4	23.2	23.9	24.7	25.5	27.8	29.4	30.2	31.2
39		14.9	17.7	20.9	22.4	23.0	23.8	24.6	25.3	26.1	28.5	30.2	31.0	32.1
40		15.2	18.2	21.5	23.0	23.6	24.4	25.2	26.0	26.8	29.3	31.0	31.8	32.9
41		15.6	18.6	22.0	23.6	24.2	25.0	25.8	26.6	27.5	30.0	31.7	32.6	33.7
42		16.0	19.1	22.6	24.1	24.8	25.6	26.5	27.3	28.1	30.7	32.5	33.4	34.6
43		16.3	19.5	23.1	24.7	25.4	26.2	27.1	27.9	28.8	31.5	33.3	34.2	35.4
44		16.7	20.0	23.6	25.2	26.0	26.8	27.7	28.6	29.5	32.2	34.0	35.0	36.2
45		17.1	20.4	24.2	25.8	26.5	27.4	28.3	29.2	30.1	32.9	34.8	35.8	37.0
46		17.5	20.9	24.7	26.4	27.1	28.1	29.0	29.9	30.8	33.7	35.6	36.6	37.8
47		17.9	21.3	25.2	26.9	27.7	28.7	29.6	30.5	31.5	34.4	36.4	37.4	38.6
48		18.2	21.8	25.8	27.5	28.3	29.3	30.2	31.2	32.2	35.1	37.1	38.2	39.4
49		18.6	22.2	26.3	28.1	28.9	29.9	30.9	31.8	32.8	35.8	37.9	39.0	40.3
50		19.0	22.7	26.8	28.6	29.5	30.5	31.5	32.5	33.5	36.6	38.7	39.8	41.1
51		19.4	23.1	27.4	29.2	30.1	31.1	32.1	33.1	34.2	37.3	39.5	40.6	41.9
52		19.8	23.6	27.9	29.8	30.7	31.7	32.8	33.8	34.8	38.1	40.2	41.4	42.7
53		20.1	24.0	28.4	30.4	31.3	32.3	33.4	34.4	35.5	38.8	41.0	42.2	43.6
54		20.5	24.5	29.0	30.9	31.9	32.9	34.0	35.1	36.1	39.5	41.8	43.0	44.4
55		20.9	24.9	29.5	31.5	32.4	33.5	34.6	35.7	36.8	40.3	42.6	43.8	45.2
56		21.3	25.4	30.1	32.1	33.0	34.2	35.3	36.4	37.5	41.0	43.3	44.6	46.0
57		21.7	25.8	30.6	32.7	33.6	34.8	35.9	37.0	38.2	41.7	44.1	45.4	46.8
58		22.0	26.3	31.1	33.2	34.2	35.4	36.5	37.7	38.8	42.5	44.8	46.2	47.6
59		22.4	26.7	31.7	33.8	34.8	36.0	37.2	38.3	39.5	43.2	45.6	47.0	48.5
60		22.8	27.2	32.2	34.4	35.4	36.6	37.8	39.0	40.2	43.9	46.4	47.8	49.3
61		23.2	27.6	32.8	34.9	36.0	37.2	38.4	39.6	40.9	44.6	47.2	48.6	50.1
62		23.6	28.1	33.3	35.5	36.6	37.8	39.1	40.3	41.5	45.4	48.0	49.3	51.0
63		23.9	28.6	33.8	36.1	37.2	38.4	39.7	40.9	42.2	46.1	48.8	50.1	51.8
64		24.3	29.1	34.4	36.7	37.8	39.0	40.3	41.6	42.9	46.8	49.5	50.9	52.6
65		24.6	29.5	34.9	37.2	38.3	39.6	40.9	42.2	43.5	47.6	50.3	51.7	53.4
66		25.0	30.0	35.4	37.8	38.9	40.3	41.6	42.9	44.2	48.3	51.1	52.5	54.2
67		25.4	30.4	36.0	38.4	39.5	40.9	42.2	43.5	44.9	49.0	51.9	53.3	55.1
68		25.8	30.9	36.5	39.0	40.1	41.5	42.8	44.2	45.5	49.8	52.6	54.1	55.9
69		26.2	31.3	37.0	39.5	40.7	42.1	43.5	44.8	46.2	50.5	53.4	54.9	56.7
70		26.6	31.8	37.6	40.1	41.3	42.7	44.1	45.5	46.9	51.2	54.2	55.7	57.5
80		30.4	36.3	43.0	45.8	47.2	48.8	50.4	52.0	53.6	58.6	61.9	63.7	65.8
90		34.2	40.9	48.3	51.6	53.1	54.9	56.7	58.5	60.3	65.9	69.7	71.6	74.0
100		38.0	45.4	53.7	57.3	59.0	61.0	63.0	65.0	67.0	73.2	77.4	79.6	82.6
300		114.0	136.2	161.1	171.9	177.0	183.0	189.0	195.0	201.0	219.6	232.2	238.8	254.1
500		190.0	227.0	268.5	286.5	295.0	305.0	315.0	325.0	335.0	366.0	387.0	398.0	411.0



Water required to reduce from **35 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 a.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls. .4	Galls. .45	Galls. .5	Galls. .55	Galls. .6	Galls. .6	Galls. .6	Galls. .65	Galls. .65	Galls. .7	Galls. .75	Galls. .8	Galls. .8	Galls. .8
1	4													
2	7	9	10	11	12	12	12	13	13	14	15	16	16	17
3	1.1	1.3	1.6	1.7	1.7	1.8	1.8	1.9	2.0	2.2	2.3	2.3	2.4	2.5
4	1.5	1.8	2.1	2.2	2.3	2.4	2.5	2.5	2.6	2.9	3.0	3.1	3.2	3.3
5	1.8	2.2	2.6	2.8	2.9	3.0	3.1	3.2	3.3	3.6	3.8	3.9	4.0	4.2
6	2.2	2.7	3.1	3.3	3.5	3.6	3.7	3.8	3.9	4.3	4.5	4.7	4.8	5.0
7	2.6	3.1	3.7	3.9	4.0	4.2	4.3	4.5	4.6	5.0	5.3	5.5	5.7	5.8
8	3.0	3.5	4.2	4.5	4.6	4.8	4.9	5.1	5.3	5.7	6.1	6.3	6.5	6.7
9	3.3	4.0	4.7	5.0	5.2	5.4	5.6	5.7	5.9	6.5	6.8	7.0	7.3	7.5
10	3.7	4.4	5.2	5.6	5.8	6.0	6.2	6.4	6.6	7.2	7.6	7.8	8.1	8.3
11	4.1	4.9	5.8	6.1	6.4	6.6	6.8	7.0	7.3	7.9	8.4	8.6	8.9	9.2
12	4.4	5.3	6.3	6.7	6.9	7.2	7.4	7.6	7.9	8.6	9.1	9.4	9.7	10.0
13	4.8	5.8	6.8	7.2	7.5	7.8	8.0	8.3	8.6	9.3	9.9	10.2	10.5	10.8
14	5.2	6.2	7.3	7.8	8.1	8.4	8.6	8.9	9.2	10.1	10.6	11.0	11.3	11.7
15	5.5	6.6	7.9	8.4	8.7	9.0	9.3	9.6	9.9	10.8	11.4	11.7	12.1	12.5
16	5.9	7.1	8.4	9.0	9.2	9.5	9.9	10.2	10.5	11.5	12.2	12.5	12.9	13.3
17	6.3	7.5	8.9	9.5	9.8	10.1	10.5	10.8	11.2	12.2	12.9	13.3	13.7	14.2
18	6.7	8.0	9.4	10.1	10.4	10.7	11.1	11.5	11.8	12.9	13.7	14.1	14.5	15.0
19	7.0	8.4	10.0	10.6	11.0	11.3	11.7	12.1	12.5	13.6	14.4	14.9	15.3	15.8
20	7.4	8.9	10.5	11.2	11.6	11.9	12.3	12.7	13.1	14.4	15.2	15.7	16.2	16.7
21	7.8	9.3	11.0	11.8	12.1	12.5	13.0	13.4	13.8	15.1	16.0	16.4	17.0	17.5
22	8.1	9.7	11.5	12.3	12.7	13.1	13.6	14.0	14.4	15.8	16.7	17.2	17.8	18.3
23	8.5	10.2	12.1	12.9	13.3	13.7	14.2	14.6	15.1	16.5	17.5	18.0	18.6	19.2
24	8.9	10.6	12.6	13.4	13.9	14.3	14.8	15.3	15.8	17.2	18.2	18.8	19.4	20.0
25	9.2	11.1	13.1	14.0	14.4	14.9	15.4	15.9	16.4	17.9	19.0	19.6	20.2	20.8
26	9.6	11.5	13.6	14.6	15.0	15.5	16.0	16.5	17.1	18.7	19.7	20.4	21.0	21.7
27	10.0	12.0	14.2	15.1	15.6	16.1	16.7	17.2	17.7	19.4	20.5	21.1	21.8	22.5
28	10.4	12.4	14.7	15.7	16.2	16.7	17.3	17.8	18.4	20.1	21.3	21.9	22.6	23.3
29	10.7	12.9	15.2	16.2	16.8	17.3	17.9	18.5	19.0	20.8	22.0	22.7	23.4	24.2
30	11.1	13.3	15.7	16.8	17.3	17.9	18.5	19.1	19.7	21.5	22.8	23.5	24.2	25.0
31	11.5	13.7	16.3	17.4	17.9	18.5	19.1	19.7	20.3	22.3	23.6	24.3	25.0	25.8
32	11.8	14.2	16.8	17.9	18.5	19.1	19.7	20.4	21.0	23.0	24.3	25.1	25.9	26.7
33	12.2	14.6	17.3	18.5	19.1	19.7	20.4	21.0	21.7	23.7	25.1	25.8	26.7	27.5
34	12.6	15.1	17.8	19.0	19.6	20.3	21.0	21.7	22.3	24.4	25.8	26.6	27.5	28.3
35	12.9	15.5	18.4	19.6	20.2	20.9	21.6	22.3	23.0	25.1	26.6	27.4	28.3	29.2
36	13.3	15.9	18.9	20.2	20.8	21.5	22.2	22.9	23.6	25.8	27.4	28.2	29.1	30.0
37	13.7	16.4	19.4	20.7	21.4	22.1	22.8	23.6	24.3	26.6	28.1	29.0	29.9	30.8
38	14.0	16.8	19.9	21.3	22.0	22.7	23.4	24.2	24.9	27.3	28.9	29.8	30.7	31.6
39	14.4	17.3	20.5	21.8	22.5	23.3	24.1	24.8	25.6	28.0	29.6	30.5	31.5	32.5
40	14.8	17.7	21.0	22.4	23.1	23.9	24.7	25.5	26.3	28.7	30.4	31.3	32.3	33.3
41	15.2	18.2	21.5	23.0	23.7	24.5	25.3	26.1	26.9	29.4	31.2	32.1	33.1	34.2
42	15.5	18.6	22.0	23.5	24.3	25.1	25.9	26.7	27.6	30.2	31.9	32.9	33.9	35.0
43	15.9	19.1	22.6	24.1	24.9	25.7	26.5	27.4	28.2	30.9	32.7	33.7	34.7	35.8
44	16.3	19.5	23.1	24.6	25.4	26.3	27.1	28.0	28.9	31.6	33.4	34.5	35.5	36.6
45	16.6	19.9	23.6	25.2	26.0	26.9	27.8	28.7	29.6	32.3	34.2	35.2	36.4	37.5
46	17.0	20.4	24.2	25.8	26.6	27.5	28.4	29.3	30.2	33.0	34.9	36.0	37.2	38.3
47	17.4	20.8	24.7	26.3	27.2	28.1	29.0	29.9	30.9	33.7	35.7	36.8	38.0	39.1
48	17.8	21.3	25.2	26.9	27.7	28.7	29.6	30.6	31.5	34.5	36.5	37.6	38.8	40.0
49	18.1	21.7	25.7	27.4	28.3	29.3	30.2	31.2	32.2	35.2	37.2	38.4	39.6	40.8
50	18.5	22.1	26.2	28.0	28.9	29.8	30.8	31.8	32.8	35.9	38.0	39.1	40.4	41.6
51	18.9	22.6	26.8	28.6	29.5	30.4	31.5	32.5	33.5	36.6	38.8	39.9	41.2	42.5
52	19.2	23.0	27.3	29.1	30.0	31.0	32.1	33.1	34.2	37.3	39.5	40.7	42.0	43.3
53	19.6	23.5	27.8	29.7	30.6	31.6	32.7	33.8	34.8	38.1	40.3	41.5	42.8	44.1
54	20.0	23.9	28.4	30.2	31.2	32.2	33.3	34.4	35.5	38.8	41.0	42.3	43.6	45.0
55	20.3	24.4	28.9	30.8	31.8	32.8	33.9	35.0	36.1	39.5	41.8	43.1	44.4	45.8
56	20.7	24.8	29.4	31.4	32.4	33.4	34.5	35.7	36.8	40.2	42.5	43.9	45.2	46.6
57	21.1	25.3	30.0	31.9	32.9	34.0	35.2	36.3	37.4	40.9	43.3	44.6	46.0	47.5
58	21.5	25.7	30.5	32.5	33.5	34.6	35.8	36.9	38.1	41.6	44.1	45.4	46.8	48.3
59	21.8	26.2	31.0	33.0	34.1	35.2	36.4	37.6	38.7	42.4	44.8	46.2	47.7	49.1
60	22.2	26.6	31.5	33.6	34.7	35.8	37.0	38.2	39.4	43.1	45.6	47.0	48.5	50.0
61	22.6	27.0	32.0	34.2	35.3	36.4	37.6	38.8	40.1	43.8	46.3	47.8	49.3	50.8
62	22.9	27.5	32.5	34.7	35.8	37.0	38.2	39.5	40.7	44.5	47.1	48.6	50.1	51.6
63	23.3	27.9	33.1	35.3	36.4	37.6	38.9	40.1	41.4	45.2	47.9	49.4	50.9	52.5
64	23.7	28.4	33.6	35.8	37.0	38.2	39.5	40.7	42.0	45.9	48.6	50.2	51.7	53.3
65	24.0	28.8	34.1	36.4	37.6	38.8	40.1	41.4	42.7	46.7	49.4	51.0	52.5	54.2
66	24.4	29.3	34.6	37.0	38.1	39.4	40.7	42.0	43.4	47.4	50.2	51.7	53.3	55.0
67	24.8	29.7	35.2	37.5	38.7	40.0	41.3	42.7	44.0	48.1	50.9	52.5	54.1	55.8
68	25.1	30.1	35.7	38.1	39.3	40.6	42.0	43.3	44.7	48.8	51.7	53.3	54.9	56.7
69	25.5	30.6	36.2	38.6	39.9	41.2	42.6	43.9	45.3	49.5	52.4	54.0	55.7	57.5
70	25.9	31.0	36.7	39.2	40.5	41.8	43.2	44.5	46.0	50.3	53.2	54.8	56.6	58.3
80	29.6	35.4	42.0	44.8	46.2	47.8	49.4	51.0	52.6	57.4	60.8	62.6	64.6	66.6
90	33.3	39.9	47.2	50.4	52.0	53.7	55.5	57.3	59.1	64.6	68.4	70.5	72.7	75.0
100	37.0	44.3	52.5	56.0	57.8	59.7	61.7	63.7	65.7	71.8	76.0	78.3	80.8	83.3
300	111.0	132.9	157.5	168.0	173.4	179.1	185.1	191.1	197.1	215.4	228.0	235.5	242.4	249.9
500	185.0	221.5	262.5	280.0	289.0	298.5	308.5	318.5	328.5	359.0	380.0	391.5	404.0	416.5



Water required to reduce from **34 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	4	4	5	5.5	6	6	6	6	6.5	7	7.5	8	8	8
2	7	9	1.0	1.1	1.1	1.2	1.2	1.2	1.3	1.4	1.5	1.5	1.6	1.6
3	1.1	1.3	1.5	1.6	1.7	1.8	1.8	1.9	1.9	2.1	2.2	2.3	2.4	2.4
4	1.4	1.7	2.0	2.2	2.3	2.3	2.4	2.5	2.6	2.8	3.0	3.1	3.2	3.3
5	1.8	2.2	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.5	3.7	3.8	4.0	4.1
6	2.2	2.6	3.1	3.3	3.4	3.5	3.6	3.7	3.9	4.2	4.5	4.6	4.8	4.9
7	2.5	3.0	3.6	3.8	4.0	4.1	4.2	4.4	4.5	4.9	5.2	5.4	5.6	5.7
8	2.9	3.4	4.1	4.4	4.6	4.7	4.8	5.0	5.2	5.6	6.0	6.2	6.4	6.5
9	3.2	3.8	4.6	4.9	5.1	5.3	5.4	5.6	5.8	6.3	6.7	6.9	7.2	7.4
10	3.6	4.3	5.1	5.5	5.7	5.9	6.0	6.2	6.4	7.0	7.5	7.7	7.9	8.2
11	4.0	4.7	5.6	6.0	6.2	6.4	6.6	6.9	7.1	7.8	8.2	8.5	8.7	9.0
12	4.3	5.2	6.2	6.6	6.8	7.0	7.2	7.5	7.7	8.5	9.0	9.2	9.5	9.8
13	4.7	5.6	6.7	7.1	7.4	7.6	7.9	8.1	8.4	9.2	9.7	10.0	10.3	10.6
14	5.0	6.0	7.2	7.7	7.9	8.2	8.5	8.7	9.0	9.9	10.5	10.8	11.1	11.4
15	5.4	6.5	7.7	8.2	8.5	8.8	9.1	9.4	9.7	10.6	11.2	11.6	11.9	12.3
16	5.7	6.9	8.2	8.8	9.1	9.4	9.7	10.0	10.3	11.3	12.0	12.3	12.7	13.1
17	6.1	7.3	8.7	9.3	9.6	10.0	10.3	10.6	11.0	12.0	12.7	13.1	13.5	13.9
18	6.5	7.8	9.2	9.9	10.2	10.5	10.9	11.2	11.6	12.7	13.4	13.9	14.3	14.7
19	6.8	8.2	9.7	10.4	10.8	11.1	11.5	11.9	12.3	13.4	14.2	14.6	15.1	15.5
20	7.2	8.6	10.3	11.0	11.4	11.7	12.1	12.5	12.9	14.1	14.9	15.4	15.9	16.4
21	7.6	9.1	10.8	11.5	11.9	12.3	12.7	13.1	13.5	14.8	15.7	16.2	16.7	17.2
22	7.9	9.5	11.3	12.1	12.5	12.9	13.3	13.7	14.2	15.5	16.4	16.9	17.5	18.0
23	8.3	9.9	11.8	12.6	13.1	13.5	13.9	14.4	14.8	16.2	17.2	17.7	18.3	18.8
24	8.6	10.4	12.3	13.2	13.6	14.1	14.5	15.0	15.5	16.9	17.9	18.5	19.1	19.6
25	9.0	10.8	12.8	13.7	14.2	14.6	15.1	15.6	16.1	17.6	18.7	19.3	19.9	20.4
26	9.4	11.2	13.3	14.3	14.7	15.2	15.7	16.2	16.8	18.3	19.4	20.0	20.6	21.3
27	9.7	11.7	13.8	14.8	15.3	15.8	16.3	16.9	17.4	19.0	20.2	20.8	21.4	22.1
28	10.1	12.1	14.4	15.4	15.9	16.4	16.9	17.5	18.1	19.7	20.9	21.6	22.2	22.9
29	10.4	12.5	14.9	15.9	16.4	17.0	17.5	18.1	18.7	20.4	21.7	22.3	23.0	23.7
30	10.8	13.0	15.4	16.5	17.0	17.6	18.1	18.7	19.3	21.1	22.4	23.1	23.8	24.5
31	11.2	13.4	15.9	17.0	17.6	18.2	18.7	19.4	20.0	21.9	23.2	23.9	24.6	25.4
32	11.5	13.9	16.4	17.6	18.2	18.7	19.3	20.0	20.6	22.6	23.9	24.6	25.4	26.2
33	11.9	14.4	16.9	18.1	18.7	19.3	19.9	20.6	21.3	23.3	24.7	25.4	26.2	27.0
34	12.2	14.8	17.5	18.7	19.3	19.9	20.5	21.2	21.9	24.0	25.4	26.2	27.0	27.8
35	12.6	15.2	18.0	19.2	19.9	20.5	21.1	21.8	22.6	24.7	26.1	26.9	27.8	28.6
36	13.0	15.7	18.5	19.8	20.4	21.1	21.7	22.5	23.2	25.4	26.9	27.7	28.6	29.4
37	13.3	16.1	19.0	20.3	21.0	21.7	22.3	23.1	23.9	26.1	27.6	28.5	29.4	30.3
38	13.7	16.5	19.5	20.9	21.6	22.3	22.9	23.7	24.5	26.8	28.4	29.2	30.2	31.1
39	14.1	16.9	20.0	21.4	22.1	22.9	23.6	24.3	25.2	27.5	29.1	30.0	31.0	31.9
40	14.4	17.3	20.5	22.0	22.7	23.4	24.2	25.0	25.8	28.2	29.9	30.8	31.8	32.7
41	14.8	17.7	21.0	22.5	23.3	24.0	24.8	25.6	26.4	28.9	30.6	31.6	32.6	33.5
42	15.1	18.1	21.5	23.1	23.9	24.6	25.4	26.2	27.1	29.6	31.4	32.3	33.4	34.3
43	15.5	18.6	22.1	23.6	24.4	25.2	26.0	26.9	27.7	30.3	32.1	33.1	34.2	35.1
44	15.8	19.0	22.6	24.2	25.0	25.8	26.6	27.5	28.4	31.0	32.9	33.9	35.0	36.0
45	16.2	19.4	23.1	24.7	25.6	26.4	27.2	28.1	29.0	31.7	33.6	34.6	35.8	36.8
46	16.6	19.9	23.6	25.3	26.1	27.0	27.8	28.7	29.7	32.4	34.4	35.4	36.6	37.6
47	16.9	20.3	24.1	25.8	26.7	27.5	28.4	29.4	30.3	33.1	35.1	36.2	37.4	38.4
48	17.3	20.7	24.6	26.4	27.3	28.1	29.0	30.0	31.0	33.8	35.9	37.0	38.2	39.2
49	17.6	21.2	25.1	26.9	27.8	28.7	29.6	30.6	31.6	34.5	36.6	37.7	38.9	40.0
50	18.0	21.6	25.6	27.4	28.4	29.3	30.2	31.2	32.2	35.2	37.4	38.5	39.7	40.9
51	18.4	22.0	26.2	28.0	29.0	29.9	30.8	31.9	32.9	36.0	38.1	39.3	40.5	41.7
52	18.7	22.5	26.7	28.5	29.5	30.5	31.4	32.5	33.5	36.7	38.9	40.0	41.3	42.5
53	19.1	22.9	27.2	29.1	30.1	31.1	32.0	33.1	34.2	37.4	39.6	40.8	42.1	43.3
54	19.4	23.3	27.7	29.6	30.7	31.6	32.6	33.7	34.8	38.1	40.3	41.6	42.9	44.2
55	19.8	23.8	28.2	30.2	31.2	32.2	33.2	34.4	35.5	38.8	41.1	42.3	43.7	45.0
56	20.2	24.2	28.7	30.7	31.8	32.8	33.8	35.0	36.1	39.5	41.8	43.1	44.5	45.8
57	20.5	24.6	29.2	31.3	32.3	33.4	34.4	35.6	36.8	40.2	42.6	43.9	45.3	46.6
58	20.9	25.1	29.7	31.8	32.9	34.0	35.0	36.2	37.4	40.9	43.3	44.6	46.1	47.4
59	21.2	25.5	30.3	32.4	33.5	34.6	35.6	36.9	38.1	41.6	44.1	45.4	46.9	48.3
60	21.6	25.9	30.8	32.9	34.1	35.2	36.2	37.5	38.7	42.3	44.8	46.2	47.6	49.1
61	22.0	26.3	31.3	33.5	34.6	35.7	36.8	38.1	39.3	43.0	45.6	47.0	48.4	49.9
62	22.3	26.8	31.8	34.0	35.2	36.3	37.4	38.7	40.0	43.7	46.3	47.7	49.2	50.7
63	22.7	27.2	32.3	34.6	35.8	36.9	38.0	39.3	40.6	44.4	47.1	48.5	50.0	51.5
64	23.0	27.6	32.8	35.1	36.3	37.5	38.7	40.0	41.3	45.1	47.8	49.3	50.8	52.3
65	23.4	28.1	33.3	35.7	36.9	38.1	39.3	40.6	41.9	45.8	48.6	50.0	51.6	53.2
66	23.8	28.5	33.9	36.2	37.5	38.7	39.9	41.2	42.6	46.5	49.3	50.8	52.4	54.0
67	24.1	28.9	34.4	36.8	38.0	39.3	40.5	41.8	43.2	47.2	50.1	51.6	53.2	54.8
68	24.5	29.4	34.9	37.3	38.6	39.8	41.1	42.5	43.9	47.9	50.8	52.3	54.0	55.6
69	24.8	29.8	35.4	37.9	39.2	40.4	41.7	43.1	44.5	48.6	51.5	53.1	54.8	56.4
70	25.2	30.2	35.9	38.4	39.8	41.0	42.3	43.7	45.1	49.3	52.3	53.9	55.6	57.3
80	28.8	34.6	41.0	43.9	45.4	46.9	48.3	50.0	51.6	56.4	59.8	61.6	63.5	65.4
90	32.4	38.9	46.2	49.4	51.1	52.7	54.4	56.2	58.0	63.4	67.2	69.3	71.2	73.6
100	36.0	43.2	51.3	54.9	56.8	58.6	60.4	62.5	64.5	70.5	74.7	77.0	79.4	81.8
300	108.0	129.6	153.9	164.7	170.4	175.8	181.2	187.5	193.5	211.5	224.1	231.0	238.2	245.4
500	180.0	216.0	256.5	274.5	284.0	293.0	302.0	312.5	322.5	352.5	373.5	385.0	397.0	409.0



Water required to reduce from **33 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
		Galls. .35	Galls. .4	Galls. .5	Galls. .55	Galls. .55	Galls. .6	Galls. .6	Galls. .6	Galls. .65	Galls. .7	Galls. .7	Galls. .75	Galls. .8
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
31														
32														
33														
34														
35														
36														
37														
38														
39														
40														
41														
42														
43														
44														
45														
46														
47														
48														
49														
50														
51														
52														
53														
54														
55														
56														
57														
58														
59														
60														
61														
62														
63														
64														
65														
66														
67														
68														
69														
70														
80														
90														
100														
300														
500														



Water required to reduce from **32 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	3	4	5	5	5	5	6	6	6	7	7	7	7	8
2	6.5	8	1.0	1.0	1.1	1.1	1.2	1.2	1.2	1.4	1.4	1.5	1.5	1.6
3	1.0	1.2	1.5	1.6	1.6	1.7	1.7	1.8	1.9	2.0	2.2	2.2	2.3	2.4
4	1.4	1.6	2.0	2.1	2.2	2.2	2.3	2.4	2.5	2.7	2.9	3.0	3.1	3.2
5	1.7	2.0	2.4	2.6	2.7	2.8	2.9	3.0	3.1	3.4	3.6	3.7	3.8	4.0
6	2.0	2.5	2.9	3.1	3.2	3.4	3.5	3.6	3.7	4.1	4.3	4.5	4.6	4.7
7	2.4	2.9	3.4	3.7	3.8	3.9	4.1	4.2	4.3	4.7	5.0	5.2	5.4	5.6
8	2.7	3.3	3.9	4.2	4.3	4.5	4.6	4.8	5.0	5.4	5.8	5.9	6.1	6.3
9	3.0	3.7	4.4	4.7	4.9	5.0	5.2	5.4	5.6	6.1	6.5	6.7	6.9	7.1
10	3.4	4.1	4.9	5.2	5.4	5.6	5.8	6.0	6.2	6.8	7.2	7.4	7.7	7.9
11	3.7	4.5	5.4	5.8	6.0	6.2	6.4	6.6	6.8	7.5	7.9	8.2	8.4	8.7
12	4.1	4.9	5.9	6.3	6.5	6.7	7.0	7.2	7.4	8.1	8.6	8.9	9.2	9.5
13	4.4	5.3	6.4	6.8	7.0	7.3	7.6	7.8	8.1	8.8	9.4	9.7	10.0	10.3
14	4.7	5.7	6.9	7.3	7.6	7.8	8.1	8.4	8.7	9.5	10.1	10.4	10.7	11.1
15	5.1	6.1	7.3	7.9	8.1	8.4	8.7	9.0	9.3	10.2	10.8	11.1	11.5	11.8
16	5.4	6.6	7.8	8.4	8.7	9.0	9.3	9.6	9.9	10.8	11.5	11.9	12.3	12.6
17	5.7	7.0	8.3	8.9	9.2	9.5	9.9	10.2	10.5	11.5	12.2	12.6	13.0	13.4
18	6.1	7.4	8.8	9.4	9.8	10.1	10.5	10.8	11.1	12.2	13.0	13.4	13.8	14.2
19	6.4	7.8	9.3	10.0	10.3	10.6	11.0	11.4	11.8	12.9	13.7	14.1	14.6	15.0
20	6.8	8.2	9.8	10.5	10.8	11.2	11.6	12.0	12.4	13.6	14.4	14.9	15.3	15.8
21	7.1	8.6	10.3	11.0	11.4	11.8	12.2	12.6	13.0	14.2	15.1	15.6	16.1	16.6
22	7.4	9.0	10.8	11.6	11.9	12.3	12.8	13.2	13.6	14.9	15.8	16.3	16.8	17.4
23	7.8	9.4	11.3	12.1	12.5	12.9	13.4	13.8	14.3	15.6	16.6	17.1	17.6	18.2
24	8.1	9.8	11.8	12.6	13.0	13.4	13.9	14.4	14.9	16.3	17.3	17.8	18.4	19.0
25	8.4	10.2	12.2	13.1	13.5	14.0	14.5	15.0	15.5	16.9	18.0	18.6	19.1	19.7
26	8.8	10.7	12.7	13.6	14.1	14.6	15.1	15.6	16.1	17.6	18.7	19.3	19.9	20.5
27	9.1	11.1	13.2	14.2	14.6	15.1	15.7	16.2	16.7	18.3	19.4	20.1	20.7	21.3
28	9.5	11.5	13.7	14.7	15.2	15.7	16.3	16.8	17.4	19.0	20.2	20.8	21.4	22.1
29	9.8	11.9	14.2	15.2	15.7	16.2	16.8	17.4	18.0	19.7	20.9	21.5	22.2	22.9
30	10.1	12.3	14.7	15.7	16.3	16.8	17.4	18.0	18.6	20.3	21.6	22.3	23.0	23.7
31	10.5	12.7	15.2	16.3	16.8	17.4	18.0	18.6	19.2	21.0	22.3	23.0	23.7	24.5
32	10.8	13.1	15.7	16.8	17.3	17.9	18.6	19.2	19.8	21.7	23.0	23.8	24.5	25.3
33	11.2	13.5	16.2	17.3	17.9	18.5	19.2	19.8	20.5	22.4	23.8	24.5	25.3	26.1
34	11.5	13.9	16.7	17.8	18.4	19.0	19.7	20.4	21.1	23.0	24.5	25.3	26.0	26.9
35	11.8	14.3	17.1	18.4	19.0	19.6	20.3	21.0	21.7	23.7	25.2	26.0	26.8	27.7
36	12.2	14.8	17.6	18.9	19.5	20.2	20.9	21.6	22.3	24.4	25.9	26.7	27.6	28.4
37	12.5	15.2	18.1	19.4	20.0	20.7	21.5	22.2	22.9	25.1	26.6	27.5	28.3	29.2
38	12.8	15.6	18.6	19.9	20.6	21.3	22.1	22.8	23.6	25.8	27.4	28.2	29.1	30.0
39	13.2	16.0	19.1	20.5	21.1	21.8	22.6	23.4	24.2	26.4	28.1	29.0	29.9	30.8
40	13.5	16.4	19.6	21.0	21.7	22.4	23.2	24.0	24.8	27.1	28.8	29.7	30.6	31.6
41	13.9	16.8	20.1	21.5	22.2	23.0	23.8	24.6	25.4	27.8	29.5	30.5	31.4	32.4
42	14.2	17.2	20.6	22.0	22.8	23.5	24.4	25.2	26.0	28.5	30.2	31.2	32.2	33.2
43	14.5	17.6	21.1	22.6	23.3	24.1	25.0	25.8	26.7	29.2	31.0	32.0	32.9	34.0
44	14.9	18.0	21.6	23.1	23.8	24.6	25.6	26.4	27.3	29.8	31.7	32.7	33.7	34.8
45	15.2	18.4	22.0	23.6	24.4	25.2	26.1	27.0	27.9	30.5	32.4	33.4	34.5	35.6
46	15.5	18.9	22.5	24.1	24.9	25.8	26.7	27.6	28.5	31.2	33.1	34.2	35.2	36.3
47	15.9	19.3	23.0	24.7	25.5	26.3	27.3	28.2	29.1	31.9	33.8	34.9	36.0	37.1
48	16.2	19.7	23.5	25.2	26.0	26.9	27.9	28.8	29.8	32.5	34.6	35.7	36.8	37.9
49	16.6	20.1	24.0	25.7	26.6	27.4	28.5	29.4	30.4	33.2	35.3	36.4	37.5	38.7
50	16.9	20.5	24.5	26.2	27.1	28.0	29.0	30.0	31.0	33.9	36.0	37.1	38.3	39.5
51	17.2	20.9	25.0	26.8	27.6	28.6	29.6	30.6	31.6	34.6	36.7	37.9	39.1	40.3
52	17.6	21.3	25.5	27.3	28.2	29.1	30.2	31.2	32.2	35.3	37.4	38.6	39.8	41.1
53	17.9	21.7	26.0	27.8	28.7	29.7	30.8	31.8	32.9	35.9	38.2	39.4	40.6	41.9
54	18.3	22.1	26.5	28.3	29.3	30.2	31.4	32.4	33.5	36.6	38.9	40.1	41.4	42.7
55	18.6	22.6	27.0	28.8	29.8	30.8	32.0	33.0	34.1	37.3	39.6	40.9	42.1	43.4
56	18.9	23.0	27.4	29.4	30.4	31.4	32.5	33.6	34.7	38.0	40.3	41.6	42.9	44.2
57	19.3	23.4	27.9	29.9	30.9	31.9	33.1	34.2	35.3	38.6	41.0	42.4	43.7	45.0
58	19.6	23.8	28.4	30.4	31.4	32.5	33.7	34.8	36.0	39.3	41.8	43.1	44.4	45.8
59	19.9	24.2	28.9	31.0	32.0	33.0	34.3	35.4	36.6	40.0	42.5	43.8	45.2	46.6
60	20.3	24.6	29.4	31.5	32.5	33.6	34.9	36.0	37.2	40.7	43.2	44.6	46.0	47.4
61	20.6	25.0	29.9	32.0	33.1	34.2	35.4	36.6	37.8	41.4	43.9	45.3	46.7	48.2
62	21.0	25.4	30.4	32.6	33.6	34.7	36.0	37.2	38.4	42.0	44.6	46.1	47.5	49.0
63	21.3	25.8	30.9	33.1	34.1	35.3	36.6	37.8	39.1	42.7	45.4	46.8	48.3	49.8
64	21.6	26.2	31.4	33.6	34.7	35.8	37.2	38.4	39.7	43.4	46.1	47.6	49.0	50.6
65	22.0	26.7	31.8	34.1	35.2	36.4	37.7	39.0	40.3	44.1	46.8	48.3	49.8	51.4
66	22.3	27.1	32.3	34.6	35.8	37.0	38.3	39.6	40.9	44.7	47.5	49.0	50.6	52.1
67	22.6	27.5	32.8	35.2	36.3	37.5	38.9	40.2	41.5	45.4	48.2	49.8	51.3	52.9
68	23.0	27.9	33.3	35.7	36.9	38.1	39.5	40.8	42.2	46.1	49.0	50.5	52.1	53.7
69	23.3	28.3	33.8	36.2	37.4	38.6	40.1	41.4	42.8	46.8	49.7	51.3	52.9	54.5
70	23.7	28.7	34.3	36.7	37.9	39.2	40.7	42.0	43.4	47.5	50.4	52.0	53.6	55.3
80	27.0	32.8	39.2	42.0	43.4	44.8	46.5	48.0	49.6	54.2	57.6	59.4	61.3	63.2
90	30.4	36.9	44.1	47.2	48.8	50.4	52.3	54.0	55.8	61.0	64.8	66.9	68.9	71.1
100	33.8	41.0	49.0	52.5	54.2	56.0	58.1	60.0	62.0	67.8	72.0	74.3	76.6	79.0
300	101.4	123.0	147.0	157.5	162.6	168.0	174.3	180.0	186.0	203.4	216.0	222.9	229.8	237.0
500	169.0	205.0	245.0	262.5	271.0	280.0	290.5	300.0	310.0	339.0	360.0	371.5	383.0	395.0



Water required to reduce from **31 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	3	4	5	5	5	5	5	6	6	6	7	7	7	8
2	3	4	5	5	5	5	5	6	6	6	7	7	7	8
3	3	4	5	5	5	5	5	6	6	6	7	7	7	8
4	3	4	5	5	5	5	5	6	6	6	7	7	7	8
5	3	4	5	5	5	5	5	6	6	6	7	7	7	8
6	3	4	5	5	5	5	5	6	6	6	7	7	7	8
7	3	4	5	5	5	5	5	6	6	6	7	7	7	8
8	3	4	5	5	5	5	5	6	6	6	7	7	7	8
9	3	4	5	5	5	5	5	6	6	6	7	7	7	8
10	3	4	5	5	5	5	5	6	6	6	7	7	7	8
11	3	4	5	5	5	5	5	6	6	6	7	7	7	8
12	3	4	5	5	5	5	5	6	6	6	7	7	7	8
13	3	4	5	5	5	5	5	6	6	6	7	7	7	8
14	3	4	5	5	5	5	5	6	6	6	7	7	7	8
15	3	4	5	5	5	5	5	6	6	6	7	7	7	8
16	3	4	5	5	5	5	5	6	6	6	7	7	7	8
17	3	4	5	5	5	5	5	6	6	6	7	7	7	8
18	3	4	5	5	5	5	5	6	6	6	7	7	7	8
19	3	4	5	5	5	5	5	6	6	6	7	7	7	8
20	3	4	5	5	5	5	5	6	6	6	7	7	7	8
21	3	4	5	5	5	5	5	6	6	6	7	7	7	8
22	3	4	5	5	5	5	5	6	6	6	7	7	7	8
23	3	4	5	5	5	5	5	6	6	6	7	7	7	8
24	3	4	5	5	5	5	5	6	6	6	7	7	7	8
25	3	4	5	5	5	5	5	6	6	6	7	7	7	8
26	3	4	5	5	5	5	5	6	6	6	7	7	7	8
27	3	4	5	5	5	5	5	6	6	6	7	7	7	8
28	3	4	5	5	5	5	5	6	6	6	7	7	7	8
29	3	4	5	5	5	5	5	6	6	6	7	7	7	8
30	3	4	5	5	5	5	5	6	6	6	7	7	7	8
31	3	4	5	5	5	5	5	6	6	6	7	7	7	8
32	3	4	5	5	5	5	5	6	6	6	7	7	7	8
33	3	4	5	5	5	5	5	6	6	6	7	7	7	8
34	3	4	5	5	5	5	5	6	6	6	7	7	7	8
35	3	4	5	5	5	5	5	6	6	6	7	7	7	8
36	3	4	5	5	5	5	5	6	6	6	7	7	7	8
37	3	4	5	5	5	5	5	6	6	6	7	7	7	8
38	3	4	5	5	5	5	5	6	6	6	7	7	7	8
39	3	4	5	5	5	5	5	6	6	6	7	7	7	8
40	3	4	5	5	5	5	5	6	6	6	7	7	7	8
41	3	4	5	5	5	5	5	6	6	6	7	7	7	8
42	3	4	5	5	5	5	5	6	6	6	7	7	7	8
43	3	4	5	5	5	5	5	6	6	6	7	7	7	8
44	3	4	5	5	5	5	5	6	6	6	7	7	7	8
45	3	4	5	5	5	5	5	6	6	6	7	7	7	8
46	3	4	5	5	5	5	5	6	6	6	7	7	7	8
47	3	4	5	5	5	5	5	6	6	6	7	7	7	8
48	3	4	5	5	5	5	5	6	6	6	7	7	7	8
49	3	4	5	5	5	5	5	6	6	6	7	7	7	8
50	3	4	5	5	5	5	5	6	6	6	7	7	7	8
51	3	4	5	5	5	5	5	6	6	6	7	7	7	8
52	3	4	5	5	5	5	5	6	6	6	7	7	7	8
53	3	4	5	5	5	5	5	6	6	6	7	7	7	8
54	3	4	5	5	5	5	5	6	6	6	7	7	7	8
55	3	4	5	5	5	5	5	6	6	6	7	7	7	8
56	3	4	5	5	5	5	5	6	6	6	7	7	7	8
57	3	4	5	5	5	5	5	6	6	6	7	7	7	8
58	3	4	5	5	5	5	5	6	6	6	7	7	7	8
59	3	4	5	5	5	5	5	6	6	6	7	7	7	8
60	3	4	5	5	5	5	5	6	6	6	7	7	7	8
61	3	4	5	5	5	5	5	6	6	6	7	7	7	8
62	3	4	5	5	5	5	5	6	6	6	7	7	7	8
63	3	4	5	5	5	5	5	6	6	6	7	7	7	8
64	3	4	5	5	5	5	5	6	6	6	7	7	7	8
65	3	4	5	5	5	5	5	6	6	6	7	7	7	8
66	3	4	5	5	5	5	5	6	6	6	7	7	7	8
67	3	4	5	5	5	5	5	6	6	6	7	7	7	8
68	3	4	5	5	5	5	5	6	6	6	7	7	7	8
69	3	4	5	5	5	5	5	6	6	6	7	7	7	8
70	3	4	5	5	5	5	5	6	6	6	7	7	7	8
80	3	4	5	5	5	5	5	6	6	6	7	7	7	8
90	3	4	5	5	5	5	5	6	6	6	7	7	7	8
100	3	4	5	5	5	5	5	6	6	6	7	7	7	8
300	98.1	119.4	143.4	153.6	159.3	164.7	171.0	176.4	182.4	199.5	212.1	219.0	225.9	233.1
500	163.5	199.0	239.0	256.0	265.5	274.5	285.0	294.0	304.0	332.5	353.5	365.0	376.5	388.5

The Agents or Representative Houses of Distillers, showing districts represented. See page 7.



Water required to reduce from **30 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	.3	.4	.45	.5	.5	.5	.55	.6	.6	.65	.7	.7	.7	.75
2	.6	.8	.9	1.0	1.0	1.1	1.1	1.1	1.2	1.3	1.4	1.4	1.5	1.5
3	.9	1.2	1.4	1.5	1.6	1.7	1.7	1.7	1.8	2.0	2.1	2.1	2.3	2.3
4	1.3	1.5	1.9	2.0	2.1	2.1	2.2	2.3	2.4	2.6	2.8	2.9	3.0	3.0
5	1.6	1.9	2.3	2.5	2.6	2.7	2.8	2.9	3.0	3.3	3.5	3.6	3.7	3.8
6	1.9	2.3	2.8	3.0	3.1	3.2	3.3	3.4	3.6	3.9	4.2	4.3	4.4	4.6
7	2.2	2.7	3.3	3.5	3.6	3.8	3.9	4.0	4.2	4.6	4.9	5.0	5.2	5.3
8	2.5	3.1	3.7	4.0	4.2	4.3	4.4	4.6	4.8	5.2	5.5	5.7	5.9	6.1
9	2.8	3.5	4.2	4.5	4.7	4.8	5.0	5.2	5.4	5.9	6.2	6.4	6.6	6.9
10	3.2	3.9	4.6	5.0	5.2	5.4	5.6	5.7	5.9	6.5	6.9	7.2	7.4	7.6
11	3.5	4.3	5.1	5.5	5.7	5.9	6.1	6.3	6.5	7.2	7.6	7.9	8.1	8.4
12	3.8	4.6	5.6	6.0	6.2	6.4	6.7	6.9	7.1	7.8	8.3	8.6	8.9	9.1
13	4.1	5.0	6.0	6.5	6.8	7.0	7.2	7.5	7.7	8.5	9.0	9.3	9.6	9.9
14	4.4	5.4	6.5	7.0	7.3	7.5	7.8	8.0	8.3	9.1	9.7	10.0	10.3	10.7
15	4.7	5.8	7.0	7.5	7.8	8.1	8.3	8.6	8.9	9.8	10.4	10.7	11.1	11.4
16	5.1	6.2	7.4	8.0	8.3	8.6	8.9	9.2	9.5	10.4	11.1	11.5	11.8	12.2
17	5.4	6.6	7.9	8.5	8.8	9.1	9.5	9.8	10.1	11.1	11.8	12.2	12.5	13.0
18	5.7	7.0	8.4	9.0	9.4	9.7	10.0	10.3	10.7	11.7	12.5	12.9	13.3	13.7
19	6.0	7.4	8.8	9.5	9.9	10.2	10.6	10.9	11.3	12.4	13.2	13.6	14.0	14.5
20	6.3	7.7	9.3	10.0	10.4	10.7	11.1	11.5	11.9	13.0	13.9	14.3	14.8	15.2
21	6.6	8.1	9.8	10.5	10.9	11.3	11.7	12.1	12.5	13.7	14.6	15.0	15.5	16.0
22	7.0	8.5	10.2	11.0	11.4	11.8	12.2	12.6	13.1	14.3	15.2	15.8	16.2	16.8
23	7.3	8.9	10.7	11.5	12.0	12.3	12.8	13.2	13.7	15.0	15.9	16.5	17.0	17.5
24	7.6	9.3	11.2	12.0	12.5	12.9	13.3	13.8	14.3	15.6	16.6	17.2	17.7	18.3
25	7.9	9.7	11.6	12.5	13.0	13.4	13.9	14.4	14.9	16.3	17.3	17.9	18.4	19.1
26	8.2	10.1	12.1	13.0	13.5	14.0	14.5	15.0	15.5	17.0	18.0	18.6	19.2	19.8
27	8.5	10.4	12.6	13.5	14.0	14.5	15.0	15.6	16.1	17.6	18.7	19.3	19.9	20.6
28	8.8	10.8	13.0	14.0	14.6	15.0	15.6	16.1	16.7	18.3	19.4	20.1	20.7	21.3
29	9.2	11.2	13.5	14.5	15.1	15.6	16.1	16.7	17.3	18.9	20.1	20.8	21.4	22.1
30	9.5	11.6	14.0	15.0	15.6	16.1	16.7	17.2	17.9	19.6	20.8	21.5	22.1	22.9
31	9.8	12.0	14.4	15.5	16.1	16.6	17.2	17.8	18.4	20.2	21.5	22.2	22.9	23.6
32	10.1	12.4	14.9	16.0	16.6	17.2	17.8	18.4	19.0	20.9	22.2	22.9	23.6	24.4
33	10.4	12.8	15.3	16.5	17.2	17.7	18.3	19.0	19.6	21.5	22.9	23.6	24.4	25.1
34	10.7	13.2	15.8	17.0	17.7	18.3	18.9	19.5	20.2	22.1	23.6	24.3	25.1	25.9
35	11.1	13.5	16.3	17.5	18.2	18.8	19.5	20.1	20.8	22.8	24.3	25.1	25.8	26.7
36	11.4	13.9	16.7	18.0	18.7	19.3	20.0	20.7	21.4	23.5	24.9	25.8	26.6	27.4
37	11.7	14.3	17.2	18.5	19.2	19.9	20.6	21.3	22.0	24.1	25.6	26.5	27.3	28.2
38	12.0	14.7	17.7	19.0	19.8	20.4	21.2	21.9	22.6	24.8	26.3	27.2	28.0	29.0
39	12.3	15.1	18.1	19.5	20.2	20.9	21.7	22.4	23.2	25.4	27.0	27.9	28.8	29.7
40	12.6	15.5	18.6	20.0	20.8	21.5	22.2	23.0	23.8	26.1	27.7	28.6	29.5	30.5
41	13.0	15.9	19.1	20.5	21.3	22.0	22.8	23.6	24.4	26.7	28.4	29.4	30.3	31.2
42	13.3	16.3	19.5	21.0	21.8	22.6	23.4	24.1	25.0	27.4	29.1	30.1	31.0	32.0
43	13.6	16.6	20.0	21.5	22.4	23.1	23.9	24.7	25.6	28.0	29.8	30.8	31.7	32.8
44	13.9	17.0	20.5	22.0	22.9	23.6	24.5	25.3	26.2	28.7	30.5	31.5	32.5	33.5
45	14.2	17.4	20.9	22.5	23.4	24.2	25.0	25.9	26.8	29.3	31.2	32.2	33.2	34.3
46	14.5	17.8	21.4	23.0	23.9	24.7	25.6	26.4	27.4	30.0	31.9	32.9	33.9	35.1
47	14.9	18.2	21.9	23.5	24.4	25.2	26.1	27.0	28.0	30.6	32.6	33.7	34.7	35.8
48	15.2	18.6	22.3	24.0	25.0	25.8	26.7	27.6	28.6	31.3	33.3	34.4	35.4	36.6
49	15.5	19.0	22.8	24.5	25.5	26.3	27.2	28.2	29.2	31.9	34.0	35.1	36.2	37.3
50	15.8	19.3	23.2	25.0	26.0	26.8	27.8	28.8	29.8	32.6	34.6	35.8	36.9	38.1
51	16.1	19.7	23.7	25.5	26.5	27.4	28.4	29.3	30.3	33.3	35.3	36.5	37.6	38.9
52	16.4	20.1	24.2	26.0	27.0	27.9	28.9	29.9	30.9	33.9	36.0	37.2	38.4	39.6
53	16.7	20.5	24.6	26.5	27.6	28.5	29.5	30.5	31.5	34.6	36.7	37.9	39.1	40.4
54	17.1	20.9	25.1	27.0	28.1	29.0	30.0	31.0	32.1	35.2	37.4	38.7	39.9	41.1
55	17.4	21.3	25.6	27.5	28.6	29.5	30.6	31.6	32.7	35.9	38.1	39.4	40.6	41.9
56	17.7	21.7	26.0	28.0	29.1	30.1	31.1	32.2	33.3	36.5	38.8	40.1	41.3	42.7
57	18.0	22.1	26.5	28.5	29.6	30.6	31.7	32.8	33.9	37.2	39.5	40.8	42.1	43.4
58	18.3	22.4	27.0	29.0	30.2	31.1	32.2	33.4	34.5	37.8	40.2	41.5	42.8	44.2
59	18.6	22.8	27.4	29.5	30.8	31.7	32.8	33.9	35.1	38.5	40.9	42.2	43.5	45.0
60	19.0	23.2	27.9	30.0	31.3	32.2	33.4	34.5	35.7	39.1	41.6	43.0	44.3	45.7
61	19.3	23.6	28.4	30.5	31.7	32.8	33.9	35.1	36.3	39.8	42.3	43.7	45.0	46.5
62	19.6	24.0	28.8	31.0	32.2	33.3	34.5	35.6	36.9	40.4	43.0	44.4	45.8	47.2
63	19.9	24.4	29.3	31.5	32.8	33.8	35.0	36.2	37.5	41.1	43.7	45.1	46.5	48.0
64	20.2	24.8	29.7	32.0	33.3	34.4	35.6	36.8	38.1	41.7	44.4	45.8	47.2	48.8
65	20.5	25.2	30.2	32.5	33.8	34.9	36.1	37.4	38.7	42.3	45.0	46.5	48.0	49.5
66	20.9	25.5	30.7	33.0	34.3	35.4	36.7	37.9	39.3	43.0	45.7	47.3	48.7	50.3
67	21.2	25.9	31.2	33.5	34.8	36.0	37.3	38.5	39.9	43.7	46.4	48.0	49.4	51.1
68	21.5	26.3	31.6	34.0	35.4	36.5	37.8	39.1	40.5	44.3	47.1	48.7	50.2	51.8
69	21.8	26.7	32.1	34.5	35.9	37.1	38.4	39.7	41.1	45.0	47.8	49.4	50.9	52.6
70	22.1	27.1	32.5	35.0	36.4	37.6	38.9	40.2	41.6	45.6	48.5	50.1	51.7	53.3
80	25.2	31.0	37.2	40.0	41.6	43.0	44.5	46.0	47.6	52.2	55.4	57.3	59.0	61.0
90	28.4	34.8	41.9	45.0	46.8	48.3	50.0	51.7	53.6	58.7	62.4	64.4	66.4	68.6
100	31.6	38.7	46.5	50.0	52.0	53.7	55.6	57.5	59.5	65.2	69.3	71.6	73.8	76.2
300	94.8	116.1	139.5	150.0	156.0	161.1	166.8	172.5	178.5	195.6	207.9	214.8	221.4	228.6
500	158.9	193.5	232.5	250.0	260.0	268.5	278.0	287.5	297.5	326.0	346.5	358.0	369.0	381.0



Water required to reduce from **29 OVERPROOF** to strengths of:—

Galls of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	2	3	4	5	5	5	5	5	6	6	7	7	7	7.5
2	6	7.5	9	10	10	10	10	11	11	12	13	14	15	15
3	9	11	14	15	15	16	16	17	17	19	20	21	22	22
4	12	15	18	19	20	21	22	22	23	26	27	28	29	30
5	15	19	23	24	25	26	27	28	29	32	34	35	36	37
6	18	23	27	29	30	31	33	34	35	38	41	42	44	45
7	21	26	32	34	35	37	38	39	41	45	48	49	51	52
8	24	30	36	39	40	42	43	45	47	51	54	56	58	60
9	27	34	41	44	46	47	49	50	52	57	61	63	65	67
10	30	38	45	49	51	52	54	56	58	64	68	70	73	75
11	34	41	50	54	56	58	59	61	64	70	75	77	80	82
12	37	45	54	58	61	63	65	67	70	77	81	84	87	90
13	40	49	59	63	66	68	70	73	76	83	88	91	94	97
14	43	53	64	68	71	73	76	79	82	89	95	98	102	105
15	46	56	68	73	76	78	81	84	87	96	102	105	109	112
16	49	60	73	78	81	84	87	90	93	102	109	112	116	120
17	52	64	77	83	86	89	92	95	99	108	115	119	123	127
18	55	68	82	88	91	94	97	101	105	114	122	126	130	135
19	58	71	86	93	96	99	103	107	111	121	129	133	138	142
20	61	75	91	97	101	105	108	112	117	128	136	140	145	150
21	64	79	95	102	106	110	114	118	122	134	143	147	152	157
22	67	83	100	107	111	115	119	123	128	140	149	154	160	165
23	70	86	104	112	116	120	125	129	134	147	156	161	167	172
24	73	90	109	117	121	126	130	135	140	153	163	168	174	180
25	76	94	114	122	127	131	136	140	146	160	170	176	181	187
26	79	98	118	127	132	136	141	146	152	166	177	183	189	194
27	82	102	123	131	137	141	146	151	157	172	183	190	196	201
28	85	105	127	136	142	146	152	157	163	179	190	197	203	209
29	88	109	132	141	147	152	157	163	169	185	197	204	210	217
30	92	113	136	146	152	157	163	168	175	191	204	211	218	224
31	95	117	141	151	157	162	168	174	181	198	210	218	225	232
32	98	120	145	156	162	167	173	180	187	204	217	225	232	239
33	101	124	150	161	167	173	179	185	192	210	224	232	239	247
34	104	128	154	166	172	178	184	191	198	217	231	239	247	254
35	107	132	159	170	177	183	190	196	204	223	238	246	254	262
36	110	135	163	175	182	188	195	202	210	230	244	253	261	269
37	113	139	168	180	187	194	201	208	216	236	251	260	268	277
38	116	143	172	185	192	199	206	213	222	242	258	267	276	284
39	119	147	177	190	197	204	211	219	227	249	265	274	283	292
40	122	150	182	195	202	209	217	224	233	255	272	281	290	299
41	125	154	186	200	207	214	222	230	239	262	278	288	297	307
42	128	158	191	205	213	220	228	236	246	268	285	295	305	314
43	131	162	195	209	218	225	233	241	251	274	292	302	312	322
44	134	165	200	214	223	230	238	247	257	281	299	309	319	329
45	137	169	205	219	228	235	244	252	262	287	306	316	326	337
46	140	173	209	224	233	241	249	258	268	293	312	323	334	344
47	143	177	214	229	238	246	255	264	274	300	319	330	341	352
48	146	180	218	234	243	251	260	269	280	306	326	337	348	359
49	149	184	222	239	248	256	266	275	286	313	333	344	355	367
50	153	188	227	244	253	262	271	281	292	319	340	351	363	374
51	156	192	231	248	258	267	276	286	297	325	346	358	370	381
52	159	196	236	253	263	272	282	292	303	332	353	365	377	389
53	162	199	241	258	268	277	287	297	309	338	360	372	384	396
54	165	203	245	263	273	282	293	303	315	345	367	379	392	404
55	168	207	250	268	278	288	298	309	321	351	373	386	399	411
56	171	211	254	273	283	293	304	314	326	357	380	393	406	419
57	174	214	259	278	288	298	309	320	332	364	387	400	413	426
58	177	218	263	282	293	303	314	325	338	370	394	407	421	434
59	180	222	268	287	299	309	320	331	344	376	401	414	428	441
60	183	226	272	292	304	314	325	337	350	383	407	421	435	449
61	186	229	277	297	309	319	331	342	356	389	414	428	442	456
62	189	233	281	302	314	324	336	348	361	396	421	435	450	464
63	192	237	286	307	319	329	341	353	367	402	428	442	457	471
64	195	241	291	312	324	335	347	359	373	408	435	449	464	479
65	198	244	295	317	329	340	352	364	379	415	441	456	471	486
66	201	248	300	321	334	345	358	370	385	421	448	463	479	494
67	204	252	304	326	339	350	363	376	391	427	455	470	486	501
68	207	256	309	331	344	356	369	381	396	434	462	477	493	509
69	210	259	313	336	349	361	374	387	402	440	469	484	500	516
70	214	263	318	341	354	366	379	393	408	447	475	491	508	524
80	244	301	363	390	405	418	434	449	466	510	543	562	580	598
90	275	338	409	438	455	471	488	505	525	574	611	632	653	673
100	305	376	454	487	506	523	542	561	583	638	679	702	725	748
300	915	1128	1362	1461	1518	1569	1626	1683	1749	1914	2037	2106	2175	2244
500	1525	1880	2270	2435	2530	2615	2710	2805	2915	3190	3395	3510	3625	3740



Water required to reduce from **28 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.		10 u.p.		12 u.p.		13 u.p.		14 u.p.		15 u.p.		16 u.p.		17 u.p.		20 u.p.		22 u.p.		23 u.p.		24 u.p.		25 u.p.		
		Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1																												
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												
13																												
14																												
15																												
16																												
17																												
18																												
19																												
20																												
21																												
22																												
23																												
24																												
25																												
26																												
27																												
28																												
29																												
30																												
31																												
32																												
33																												
34																												
35																												
36																												
37																												
38																												
39																												
40																												
41																												
42																												
43																												
44																												
45																												
46																												
47																												
48																												
49																												
50																												
51																												
52																												
53																												
54																												
55																												
56																												
57																												
58																												
59																												
60																												
61																												
62																												
63																												
64																												
65																												
66																												
67																												
68																												
69																												
70																												
80																												
90																												
100																												
300																												
500																												



Water required to reduce from **27 OVERPROOF** to strengths of:—

Galls of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
		Galls. .35	Galls. .4	Galls. .45	Galls. .5	Galls. .5	Galls. .55	Galls. .55	Galls. .6	Galls. .65	Galls. .7	Galls. .7	Galls. .7	Galls. .7
1	.3	.7	.9	.9	1.0	1.0	1.0	1.1	1.1	1.2	1.3	1.3	1.4	1.4
2	.6	.7	.9	.9	1.0	1.0	1.0	1.1	1.1	1.2	1.3	1.3	1.4	1.4
3	.8	1.1	1.3	1.4	1.4	1.5	1.6	1.6	1.7	1.8	2.0	2.0	2.1	2.2
4	1.1	1.4	1.7	1.8	1.9	2.0	2.1	2.2	2.2	2.4	2.6	2.7	2.8	2.9
5	1.4	1.8	2.2	2.3	2.4	2.5	2.6	2.7	2.8	3.1	3.2	3.4	3.5	3.6
6	1.7	2.1	2.6	2.8	2.9	3.0	3.1	3.2	3.4	3.7	3.9	4.0	4.2	4.3
7	2.0	2.5	3.0	3.2	3.4	3.5	3.6	3.8	3.9	4.3	4.6	4.7	4.9	5.0
8	2.3	2.8	3.4	3.7	3.8	4.0	4.2	4.3	4.5	4.9	5.2	5.4	5.6	5.8
9	2.6	3.2	3.9	4.2	4.3	4.5	4.7	4.8	5.0	5.5	5.9	6.1	6.3	6.5
10	2.8	3.6	4.3	4.6	4.8	5.0	5.2	5.4	5.6	6.1	6.5	6.7	7.0	7.2
11	3.1	3.9	4.7	5.1	5.3	5.5	5.7	6.0	6.1	6.7	7.2	7.4	7.7	7.9
12	3.4	4.3	5.2	5.5	5.8	6.0	6.2	6.5	6.7	7.3	7.8	8.1	8.4	8.6
13	3.7	4.6	5.6	6.0	6.3	6.5	6.8	7.0	7.3	8.0	8.5	8.8	9.1	9.4
14	4.0	5.0	6.0	6.5	6.7	7.0	7.3	7.5	7.8	8.6	9.1	9.4	9.8	10.1
15	4.3	5.3	6.5	6.9	7.2	7.5	7.8	8.1	8.4	9.2	9.8	10.1	10.5	10.8
16	4.5	5.7	6.9	7.4	7.7	8.0	8.3	8.6	8.9	9.8	10.4	10.8	11.2	11.5
17	4.8	6.0	7.3	7.9	8.2	8.5	8.9	9.1	9.5	10.4	11.1	11.5	11.8	12.2
18	5.1	6.4	7.7	8.3	8.7	9.0	9.4	9.7	10.0	11.0	11.7	12.1	12.5	13.0
19	5.4	6.7	8.2	8.8	9.1	9.5	9.9	10.2	10.6	11.6	12.4	12.8	13.2	13.7
20	5.7	7.1	8.6	9.3	9.6	10.0	10.4	10.8	11.2	12.2	13.0	13.4	13.9	14.4
21	6.0	7.5	9.0	9.7	10.1	10.5	10.9	11.3	11.7	12.9	13.7	14.1	14.6	15.1
22	6.2	7.8	9.5	10.2	10.6	11.0	11.4	11.8	12.3	13.5	14.3	14.8	15.3	15.8
23	6.5	8.2	9.9	10.6	11.1	11.5	12.0	12.4	12.8	14.1	15.0	15.5	16.0	16.6
24	6.8	8.5	10.3	11.1	11.5	12.0	12.5	12.9	13.4	14.7	15.6	16.2	16.7	17.3
25	7.1	8.9	10.8	11.6	12.0	12.5	13.0	13.5	14.0	14.5	15.9	17.0	17.5	18.0
26	7.4	9.2	11.2	12.0	12.5	13.0	13.5	14.0	14.5	15.1	16.5	17.6	18.2	18.8
27	7.7	9.6	11.6	12.5	13.0	13.5	14.0	14.5	15.1	15.6	17.1	18.3	18.9	19.5
28	8.0	9.9	12.0	12.9	13.5	14.0	14.6	15.1	15.6	16.2	17.7	18.9	19.6	20.2
29	8.2	10.3	12.5	13.4	13.9	14.5	15.1	15.6	16.2	17.4	18.4	19.6	20.2	20.9
30	8.5	10.7	12.9	13.9	14.4	15.0	15.6	16.1	16.7	17.8	19.0	20.2	20.9	21.6
31	8.8	11.0	13.3	14.3	14.9	15.5	16.1	16.7	17.3	19.0	20.2	20.9	21.6	22.3
32	9.1	11.4	13.8	14.8	15.4	16.0	16.6	17.2	17.9	19.6	20.9	21.6	22.3	23.0
33	9.4	11.7	14.2	15.2	15.9	16.5	17.2	17.8	18.4	20.2	21.5	22.2	23.0	23.8
34	9.7	12.1	14.6	15.7	16.4	17.0	17.7	18.3	19.0	20.8	22.2	22.9	23.7	24.5
35	10.0	12.4	15.0	16.2	16.8	17.5	18.2	18.8	19.5	21.4	22.8	23.6	24.4	25.2
36	10.2	12.8	15.5	16.6	17.3	18.0	18.7	19.4	20.1	22.0	23.5	24.3	25.1	25.9
37	10.5	13.1	15.9	17.1	17.8	18.5	19.2	19.9	20.6	22.6	24.1	24.9	25.8	26.6
38	10.8	13.5	16.3	17.6	18.3	19.0	19.8	20.4	21.2	23.3	24.8	25.6	26.5	27.4
39	11.1	13.8	16.8	18.0	18.8	19.5	20.3	21.0	21.8	23.9	25.4	26.3	27.2	28.1
40	11.4	14.2	17.2	18.5	19.2	20.0	20.8	21.5	22.3	24.5	26.1	27.0	27.9	28.8
41	11.6	14.6	17.6	18.9	19.7	20.5	21.3	22.1	22.9	25.1	26.7	27.6	28.6	29.5
42	11.9	14.9	18.1	19.4	20.2	21.0	21.8	22.6	23.4	25.7	27.4	28.3	29.3	30.2
43	12.2	15.3	18.5	19.9	20.7	21.5	22.4	23.1	24.0	26.3	28.0	29.0	30.0	31.0
44	12.5	15.6	18.9	20.3	21.2	22.0	22.9	23.7	24.6	26.9	28.7	29.6	30.7	31.7
45	12.8	16.0	19.4	20.8	21.6	22.5	23.4	24.2	25.1	27.5	29.3	30.3	31.4	32.4
46	13.1	16.3	19.8	21.3	22.1	23.0	23.9	24.7	25.7	28.1	30.0	31.0	32.1	33.1
47	13.3	16.7	20.2	21.7	22.6	23.5	24.4	25.3	26.2	28.8	30.6	31.7	32.8	33.8
48	13.6	17.0	20.6	22.2	23.0	24.0	25.0	25.8	26.8	29.4	31.3	32.4	33.5	34.6
49	13.9	17.4	21.0	22.6	23.6	24.5	25.5	26.4	27.3	30.0	31.9	33.0	34.2	35.3
50	14.2	17.7	21.5	23.1	24.0	25.0	26.0	26.9	27.9	30.6	32.6	33.7	34.9	36.0
51	14.5	18.1	21.9	23.6	24.5	25.6	26.5	27.4	28.5	31.2	33.2	34.4	35.5	36.7
52	14.8	18.5	22.4	24.0	25.0	26.1	27.0	28.0	29.0	31.8	33.9	35.0	36.2	37.4
53	15.1	18.8	22.8	24.5	25.5	26.6	27.6	28.5	29.6	32.4	34.6	35.7	36.9	38.2
54	15.3	19.2	23.2	24.9	26.0	27.1	28.1	29.1	30.1	33.0	35.2	36.4	37.6	38.9
55	15.6	19.5	23.7	25.4	26.5	27.6	28.6	29.6	30.7	33.7	35.9	37.1	38.3	39.6
56	15.9	19.9	24.1	25.9	26.9	28.1	29.1	30.1	31.2	34.3	36.5	37.7	39.0	40.3
57	16.2	20.2	24.5	26.3	27.4	28.6	29.6	30.7	31.8	34.9	37.2	38.4	39.7	41.0
58	16.5	20.6	24.9	26.8	27.9	29.1	30.2	31.2	32.4	35.5	37.8	39.1	40.4	41.7
59	16.8	20.9	25.4	27.3	28.4	29.6	30.7	31.7	32.9	36.1	38.5	39.8	41.1	42.4
60	17.0	21.3	25.8	27.7	28.9	30.1	31.2	32.3	33.4	36.7	39.1	40.4	41.8	43.2
61	17.3	21.7	26.2	28.2	29.3	30.6	31.7	32.8	34.0	37.3	39.7	41.1	42.5	43.9
62	17.6	22.0	26.7	28.6	29.8	31.1	32.2	33.4	34.6	37.9	40.4	41.8	43.2	44.6
63	17.9	22.4	27.1	29.1	30.3	31.6	32.8	33.9	35.2	38.6	41.1	42.5	43.9	45.3
64	18.2	22.7	27.5	29.6	30.8	32.1	33.3	34.4	35.7	39.2	41.7	43.1	44.6	46.1
65	18.5	23.1	28.0	30.0	31.3	32.6	33.8	35.0	36.3	39.8	42.4	43.8	45.3	46.8
66	18.7	23.4	28.4	30.5	31.7	33.1	34.3	35.5	36.8	40.4	43.0	44.5	46.0	47.5
67	19.0	23.8	28.8	31.0	32.2	33.6	34.8	36.0	37.4	41.0	43.7	45.2	46.7	48.2
68	19.3	24.1	29.2	31.4	32.7	34.1	35.4	36.6	37.9	41.6	44.3	45.8	47.4	48.9
69	19.6	24.5	29.7	31.9	33.2	34.6	35.9	37.1	38.5	42.2	45.0	46.5	48.1	49.7
70	19.9	24.9	30.1	32.3	33.7	35.1	36.4	37.7	39.1	42.8	45.6	47.2	48.8	50.4
80	22.7	28.4	34.4	37.0	38.5	40.1	41.6	43.0	44.6	49.0	52.1	54.0	55.8	57.6
90	25.6	31.9	38.7	41.6	43.3	45.1	46.8	48.4	49.2	55.0	58.7	60.7	62.7	64.8
100	28.4	35.5	43.0	46.2	48.1	50.1	52.0	53.8	55.8	61.2	65.2	67.4	69.7	72.0
300	85.2	106.5	129.0	138.6	144.3	150.3	156.0	161.4	167.4	183.6	195.6	202.2	209.1	216.0
500	142.0	177.5	215.0	231.0	240.5	250.5	260.0	269.0	279.0	306.0	326.0	337.0	348.5	360.0



Water required to reduce from **26 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5
2	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
3	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5
4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11
5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5
6	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12
7	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5
8	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13
9	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5
10	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14
11	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5
12	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15
13	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5
14	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16
15	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5
16	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17
17	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17	17.5
18	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17	17.5	18
19	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17	17.5	18	18.5
20	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17	17.5	18	18.5	19
21	13	13.5	14	14.5	15	15.5	16	16.5	17	17.5	18	18.5	19	19.5
22	13.5	14	14.5	15	15.5	16	16.5	17	17.5	18	18.5	19	19.5	20
23	14	14.5	15	15.5	16	16.5	17	17.5	18	18.5	19	19.5	20	20.5
24	14.5	15	15.5	16	16.5	17	17.5	18	18.5	19	19.5	20	20.5	21
25	15	15.5	16	16.5	17	17.5	18	18.5	19	19.5	20	20.5	21	21.5
26	15.5	16	16.5	17	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22
27	16	16.5	17	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5
28	16.5	17	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23
29	17	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5
30	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24
31	18	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5
32	18.5	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25
33	19	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25	25.5
34	19.5	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25	25.5	26
35	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25	25.5	26	26.5
36	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25	25.5	26	26.5	27
37	21	21.5	22	22.5	23	23.5	24	24.5	25	25.5	26	26.5	27	27.5
38	21.5	22	22.5	23	23.5	24	24.5	25	25.5	26	26.5	27	27.5	28
39	22	22.5	23	23.5	24	24.5	25	25.5	26	26.5	27	27.5	28	28.5
40	22.5	23	23.5	24	24.5	25	25.5	26	26.5	27	27.5	28	28.5	29
41	23	23.5	24	24.5	25	25.5	26	26.5	27	27.5	28	28.5	29	29.5
42	23.5	24	24.5	25	25.5	26	26.5	27	27.5	28	28.5	29	29.5	30
43	24	24.5	25	25.5	26	26.5	27	27.5	28	28.5	29	29.5	30	30.5
44	24.5	25	25.5	26	26.5	27	27.5	28	28.5	29	29.5	30	30.5	31
45	25	25.5	26	26.5	27	27.5	28	28.5	29	29.5	30	30.5	31	31.5
46	25.5	26	26.5	27	27.5	28	28.5	29	29.5	30	30.5	31	31.5	32
47	26	26.5	27	27.5	28	28.5	29	29.5	30	30.5	31	31.5	32	32.5
48	26.5	27	27.5	28	28.5	29	29.5	30	30.5	31	31.5	32	32.5	33
49	27	27.5	28	28.5	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5
50	27.5	28	28.5	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5	34
51	28	28.5	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5	34	34.5
52	28.5	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5	34	34.5	35
53	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5	34	34.5	35	35.5
54	29.5	30	30.5	31	31.5	32	32.5	33	33.5	34	34.5	35	35.5	36
55	30	30.5	31	31.5	32	32.5	33	33.5	34	34.5	35	35.5	36	36.5
56	30.5	31	31.5	32	32.5	33	33.5	34	34.5	35	35.5	36	36.5	37
57	31	31.5	32	32.5	33	33.5	34	34.5	35	35.5	36	36.5	37	37.5
58	31.5	32	32.5	33	33.5	34	34.5	35	35.5	36	36.5	37	37.5	38
59	32	32.5	33	33.5	34	34.5	35	35.5	36	36.5	37	37.5	38	38.5
60	32.5	33	33.5	34	34.5	35	35.5	36	36.5	37	37.5	38	38.5	39
61	33	33.5	34	34.5	35	35.5	36	36.5	37	37.5	38	38.5	39	39.5
62	33.5	34	34.5	35	35.5	36	36.5	37	37.5	38	38.5	39	39.5	40
63	34	34.5	35	35.5	36	36.5	37	37.5	38	38.5	39	39.5	40	40.5
64	34.5	35	35.5	36	36.5	37	37.5	38	38.5	39	39.5	40	40.5	41
65	35	35.5	36	36.5	37	37.5	38	38.5	39	39.5	40	40.5	41	41.5
66	35.5	36	36.5	37	37.5	38	38.5	39	39.5	40	40.5	41	41.5	42
67	36	36.5	37	37.5	38	38.5	39	39.5	40	40.5	41	41.5	42	42.5
68	36.5	37	37.5	38	38.5	39	39.5	40	40.5	41	41.5	42	42.5	43
69	37	37.5	38	38.5	39	39.5	40	40.5	41	41.5	42	42.5	43	43.5
70	37.5	38	38.5	39	39.5	40	40.5	41	41.5	42	42.5	43	43.5	44
71	38	38.5	39	39.5	40	40.5	41	41.5	42	42.5	43	43.5	44	44.5
72	38.5	39	39.5	40	40.5	41	41.5	42	42.5	43	43.5	44	44.5	45
73	39	39.5	40	40.5	41	41.5	42	42.5	43	43.5	44	44.5	45	45.5
74	39.5	40	40.5	41	41.5	42	42.5	43	43.5	44	44.5	45	45.5	46
75	40	40.5	41	41.5	42	42.5	43	43.5	44	44.5	45	45.5	46	46.5
76	40.5	41	41.5	42	42.5	43	43.5	44	44.5	45	45.5	46	46.5	47
77	41	41.5	42	42.5	43	43.5	44	44.5	45	45.5	46	46.5	47	47.5
78	41.5	42	42.5	43	43.5	44	44.5	45	45.5	46	46.5	47	47.5	48
79	42	42.5	43	43.5	44	44.5	45	45.5	46	46.5	47	47.5	48	48.5
80	42.5	43	43.5	44	44.5	45	45.5	46	46.5	47	47.5	48	48.5	49
81	43	43.5	44	44.5	45	45.5	46	46.5	47	47.5	48	48.5	49	49.5
82	43.5	44	44.5	45	45.5	46	46.5	47	47.5	48	48.5	49	49.5	50
83	44	44.5	45	45.5	46	46.5	47	47.5	48	48.5	49	49.5	50	50.5
84	44.5	45	45.5	46	46.5	47	47.5	48	48.5	49	49.5	50	50.5	51
85	45	45.5	46	46.5	47	47.5	48	48.5	49	49.5	50	50.5	51	51.5
86	45.5	46	46.5	47	47.5	48	48.5	49	49.5	50	50.5	51	51.5	52
87	46	46.5	47	47.5	48	48.5	49	49.5	50	50.5	51	51.5	52	52.5
88	46.5	47	47.5	48	48.5	49	49.5	50	50.5	51	51.5	52	52.5	53
89	47	47.5	48	48.5	49	49.5	50	50.5	51	51.5	52	52.5	53	53.5
90	47.5	48	48.5	49	49.5	50	50.5	51	51.5	52	52.5	53	53.5	54
91	48	48.5	49	49.5	50	50.5	51	51.5	52	52.5	53	53.5	54	54.5
92	48.5	49	49.5	50	50.5	51	51.5	52	52.5	53	53.5	54	54.5	55
93	49	49.5	50	50.5	51	51.5	52	52.5	53	53.5	54	54.5	55	55.5
94	49.5	50	50.5	51	51.5	52	52.5	53	53.5	54	54.5	55	55.5	56
95	50	50.5	51	51.5	52	52.5	53	53.5	54	54.5	55	55.5	56	56.5
96	50.5	51	51.5	52	52.5	53	53.5	54	54.5	55	55.5	56	56.5	57
97	51	51.5	52	52.5	53	53.5	54	54.5	55	55.5	56	56.5	57	57.5
98	51.5	52	52.5	53	53.5	54	54.5	55						



Water required to reduce from **25 OVERPROOF** to strengths of:—

Galls of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
		Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	25	3	4	4.5	4.5	4.5	5	5	5	6	6	6.5	7	7
2	5	7	8	9	9	9	1.0	1.0	1.1	1.2	1.3	1.3	1.3	1.4
3	8	1.0	1.2	1.3	1.4	1.4	1.5	1.5	1.6	1.8	1.9	1.9	2.0	2.1
4	1.1	1.3	1.6	1.8	1.8	1.9	2.0	2.0	2.1	2.3	2.5	2.6	2.7	2.8
5	1.3	1.7	2.0	2.2	2.3	2.4	2.5	2.6	2.6	2.9	3.1	3.2	3.4	3.5
6	1.6	2.0	2.4	2.6	2.7	2.8	3.0	3.1	3.2	3.5	3.8	3.9	4.0	4.2
7	1.8	2.3	2.8	3.0	3.2	3.3	3.4	3.6	3.7	4.1	4.4	4.5	4.7	4.8
8	2.1	2.6	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.7	5.0	5.2	5.4	5.5
9	2.4	3.0	3.7	4.0	4.1	4.3	4.4	4.6	4.8	5.3	5.6	5.8	6.0	6.2
10	2.6	3.3	4.1	4.4	4.6	4.7	4.9	5.1	5.3	5.9	6.2	6.5	6.7	6.9
11	2.9	3.6	4.5	4.8	5.0	5.2	5.4	5.6	5.8	6.4	6.9	7.1	7.4	7.6
12	3.1	4.0	4.9	5.3	5.5	5.7	5.9	6.1	6.3	7.0	7.5	7.8	8.0	8.3
13	3.4	4.3	5.3	5.7	5.9	6.2	6.4	6.6	6.9	7.6	8.1	8.4	8.7	9.0
14	3.7	4.6	5.7	6.2	6.4	6.6	6.9	7.1	7.4	8.2	8.8	9.1	9.4	9.7
15	3.9	5.0	6.1	6.6	6.8	7.1	7.4	7.7	7.9	8.8	9.4	9.7	10.1	10.4
16	4.2	5.3	6.5	7.0	7.3	7.6	7.9	8.2	8.4	9.4	10.0	10.4	10.7	11.1
17	4.5	5.6	6.9	7.5	7.8	8.1	8.4	8.7	9.0	9.9	10.6	11.0	11.4	11.8
18	4.8	6.0	7.3	8.0	8.2	8.5	8.9	9.2	9.5	10.5	11.3	11.6	12.1	12.5
19	5.0	6.3	7.7	8.4	8.6	9.0	9.4	9.7	10.0	11.1	11.9	12.3	12.7	13.1
20	5.3	6.6	8.1	8.8	9.1	9.5	9.9	10.2	10.6	11.7	12.5	12.9	13.4	13.8
21	5.5	7.0	8.5	9.2	9.6	10.0	10.3	10.7	11.1	12.3	13.1	13.6	14.1	14.5
22	5.8	7.3	9.0	9.7	10.0	10.4	10.8	11.2	11.6	12.9	13.8	14.2	14.7	15.2
23	6.0	7.6	9.4	10.1	10.5	10.9	11.3	11.7	12.1	13.5	14.4	14.9	15.4	15.9
24	6.3	7.9	9.8	10.6	10.9	11.4	11.8	12.2	12.7	14.0	15.0	15.5	16.1	16.6
25	6.6	8.3	10.2	11.0	11.4	11.9	12.3	12.8	13.2	14.6	15.7	16.2	16.8	17.3
26	6.8	8.6	10.6	11.4	11.9	12.3	12.8	13.3	13.7	15.2	16.3	16.8	17.4	18.0
27	7.1	8.9	11.0	11.9	12.3	12.8	13.3	13.8	14.3	15.8	16.9	17.5	18.1	18.7
28	7.4	9.3	11.4	12.3	12.8	13.3	13.8	14.3	14.8	16.4	17.5	18.1	18.8	19.4
29	7.6	9.6	11.8	12.8	13.2	13.7	14.3	14.8	15.3	17.0	18.2	18.8	19.4	20.1
30	7.9	9.9	12.2	13.2	13.7	14.2	14.8	15.3	15.8	17.6	18.8	19.4	20.1	20.8
31	8.2	10.3	12.6	13.6	14.1	14.7	15.3	15.8	16.4	18.1	19.4	20.1	20.8	21.5
32	8.4	10.6	13.0	14.0	14.6	15.2	15.7	16.3	16.9	18.7	20.0	20.7	21.4	22.1
33	8.7	10.9	13.4	14.5	15.0	15.6	16.2	16.8	17.4	19.3	20.7	21.4	22.1	22.8
34	8.9	11.2	13.8	15.0	15.5	16.1	16.7	17.3	18.0	19.9	21.3	22.0	22.8	23.5
35	9.2	11.6	14.2	15.4	16.0	16.6	17.2	17.9	18.5	20.5	21.9	22.6	23.4	24.2
36	9.5	11.9	14.7	15.8	16.4	17.1	17.7	18.4	19.0	21.1	22.5	23.3	24.1	24.9
37	9.8	12.2	15.1	16.3	16.9	17.5	18.2	18.9	19.5	21.6	23.2	23.9	24.8	25.6
38	10.1	12.5	15.5	16.7	17.3	18.0	18.7	19.4	20.1	22.2	23.8	24.6	25.4	26.3
39	10.3	12.9	15.9	17.2	17.8	18.5	19.2	19.9	20.6	22.8	24.4	25.2	26.1	27.0
40	10.5	13.2	16.3	17.6	18.2	19.0	19.7	20.4	21.1	23.4	25.0	25.9	26.8	27.7
41	10.8	13.6	16.7	18.0	18.7	19.4	20.2	20.9	21.6	24.0	25.7	26.5	27.5	28.4
42	11.0	14.0	17.1	18.5	19.2	19.9	20.7	21.4	22.2	24.6	26.3	27.2	28.1	29.1
43	11.3	14.3	17.5	18.9	19.6	20.4	21.2	21.9	22.7	25.2	26.9	27.8	28.8	29.8
44	11.6	14.6	17.9	19.4	20.1	20.9	21.6	22.4	23.2	25.7	27.5	28.5	29.5	30.4
45	11.8	15.0	18.3	19.8	20.5	21.3	22.1	23.0	23.8	26.3	28.2	29.1	30.2	31.1
46	12.1	15.3	18.7	20.2	21.0	21.8	22.6	23.5	24.3	26.9	28.8	29.8	30.8	31.8
47	12.4	15.6	19.1	20.7	21.4	22.3	23.1	24.0	24.8	27.5	29.4	30.4	31.5	32.5
48	12.6	16.0	19.5	21.1	21.9	22.8	23.6	24.5	25.3	28.1	30.0	31.1	32.2	33.2
49	12.9	16.3	19.9	21.6	22.3	23.2	24.1	25.0	25.9	28.7	30.7	31.7	32.8	33.9
50	13.2	16.6	20.4	22.0	22.8	23.7	24.6	25.5	26.4	29.3	31.3	32.4	33.5	34.6
51	13.4	16.9	20.8	22.4	23.3	24.2	25.1	26.0	26.9	29.8	31.9	33.0	34.2	35.3
52	13.7	17.2	21.2	22.9	23.7	24.6	25.6	26.5	27.5	30.4	32.6	33.6	34.8	36.0
53	13.9	17.5	21.6	23.3	24.2	25.1	26.1	27.0	27.0	31.0	33.2	34.3	35.5	36.7
54	14.2	17.9	22.0	23.8	24.6	25.6	26.6	27.5	28.5	31.6	33.8	34.9	36.2	37.4
55	14.5	18.2	22.4	24.2	25.1	26.1	27.1	28.0	29.0	32.1	34.4	35.6	36.9	38.1
56	14.7	18.5	22.8	24.6	25.5	26.5	27.6	28.6	29.6	32.7	35.1	36.2	37.5	38.8
57	15.0	18.9	23.2	25.1	26.0	27.0	28.0	29.1	30.1	33.3	35.7	36.9	38.2	39.4
58	15.3	19.2	23.6	25.5	26.4	27.5	28.5	29.6	30.6	33.9	36.3	37.5	38.9	40.1
59	15.5	19.5	24.0	26.0	26.9	28.0	29.0	30.1	31.2	34.5	36.9	38.2	39.5	40.8
60	15.8	19.9	24.4	26.4	27.3	28.4	29.5	30.6	31.7	35.1	37.5	38.8	40.2	41.5
61	16.0	20.2	24.8	26.9	27.8	28.9	30.0	31.1	32.2	35.7	38.2	39.5	40.9	42.2
62	16.3	20.5	25.2	27.3	28.3	29.4	30.5	31.6	32.7	36.3	38.8	40.1	41.5	42.9
63	16.6	20.9	25.6	27.7	28.7	29.9	31.0	32.1	33.3	36.9	39.4	40.8	42.2	43.6
64	16.8	21.2	26.0	28.1	29.2	30.3	31.5	32.6	33.8	37.4	40.1	41.4	42.9	44.3
65	17.1	21.5	26.5	28.6	29.6	30.8	32.0	33.2	34.3	38.0	40.7	42.1	43.6	45.0
66	17.4	21.8	26.9	29.0	30.1	31.3	32.5	33.7	34.8	38.6	41.3	42.7	44.2	45.7
67	17.6	22.1	27.3	29.5	30.6	31.8	33.0	34.2	35.4	39.2	41.9	43.3	44.9	46.4
68	17.9	22.5	27.7	29.9	31.0	32.3	33.5	34.7	35.9	39.8	42.6	44.0	45.6	47.1
69	18.1	22.8	28.1	30.4	31.5	32.7	34.0	35.2	36.4	40.4	43.2	44.6	46.2	47.7
70	18.4	23.1	28.5	30.8	31.9	33.2	34.4	35.7	37.0	41.0	43.8	45.3	46.9	48.4
80	21.0	26.5	32.6	35.2	36.5	37.9	39.4	40.8	42.2	46.8	50.1	51.8	53.6	55.4
90	23.7	29.8	36.6	39.6	41.0	42.7	44.3	45.9	47.5	52.6	56.3	58.2	60.3	62.3
100	26.3	33.1	40.7	44.0	45.6	47.4	49.2	51.0	52.8	58.5	62.6	64.7	67.0	69.2
300	78.9	99.3	122.1	132.0	136.8	142.2	147.6	153.0	158.4	175.5	187.8	194.1	201.0	207.6
500	131.5	165.5	203.5	220.0	228.0	237.0	246.0	255.0	264.0	292.5	313.0	323.5	335.0	346.0



Water required to reduce from **24 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	25	3	4	4	4.5	5	5	5	5	6	6	6	6.5	7
2	5	.6	.8	.85	.9	.9	1.0	1.0	1.0	1.1	1.2	1.3	1.3	1.4
3	.75	1.0	1.2	1.3	1.3	1.4	1.4	1.5	1.5	1.7	1.8	1.9	2.0	2.0
4	1.0	1.3	1.6	1.7	1.8	1.8	1.9	2.0	2.1	2.3	2.4	2.5	2.6	2.7
5	1.3	1.6	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.9	3.1	3.2	3.3	3.4
6	1.5	1.9	2.4	2.6	2.7	2.8	2.9	3.0	3.1	3.4	3.7	3.8	3.9	4.1
7	1.8	2.2	2.8	3.0	3.1	3.2	3.3	3.5	3.6	4.0	4.3	4.4	4.6	4.7
8	2.0	2.6	3.2	3.4	3.5	3.7	3.8	4.0	4.1	4.6	4.9	5.1	5.2	5.4
9	2.3	2.9	3.6	3.9	4.0	4.1	4.3	4.5	4.6	5.1	5.5	5.7	5.9	6.1
10	2.5	3.2	4.0	4.3	4.4	4.6	4.8	5.0	5.1	5.7	6.1	6.3	6.5	6.8
11	2.8	3.6	4.3	4.7	4.9	5.1	5.3	5.5	5.7	6.3	6.7	7.0	7.2	7.4
12	3.0	3.9	4.7	5.1	5.3	5.5	5.7	6.0	6.2	6.9	7.3	7.6	7.9	8.1
13	3.3	4.2	5.1	5.6	5.8	6.0	6.2	6.4	6.7	7.4	8.0	8.2	8.5	8.8
14	3.5	4.5	5.5	6.0	6.2	6.5	6.7	6.9	7.2	8.0	8.6	8.9	9.2	9.5
15	3.8	4.8	5.9	6.4	6.6	6.9	7.2	7.4	7.7	8.6	9.2	9.5	9.8	10.2
16	4.0	5.1	6.3	6.8	7.0	7.4	7.6	7.9	8.2	9.2	9.8	10.1	10.5	10.8
17	4.3	5.5	6.7	7.3	7.5	7.8	8.1	8.4	8.8	9.7	10.4	10.8	11.1	11.5
18	4.5	5.8	7.1	7.7	8.0	8.3	8.6	8.9	9.3	10.3	11.0	11.4	11.8	12.2
19	4.8	6.1	7.5	8.1	8.4	8.8	9.1	9.4	9.8	10.9	11.6	12.0	12.5	12.9
20	5.0	6.4	7.9	8.6	8.9	9.2	9.6	9.9	10.3	11.4	12.2	12.6	13.1	13.5
21	5.3	6.7	8.3	9.0	9.3	9.7	10.0	10.4	10.8	12.0	12.9	13.3	13.8	14.2
22	5.5	7.1	8.7	9.4	9.7	10.1	10.5	10.9	11.4	12.6	13.5	13.9	14.4	14.9
23	5.8	7.4	9.1	9.8	10.1	10.6	11.0	11.4	11.9	13.2	14.1	14.6	15.1	15.6
24	6.1	7.7	9.5	10.3	10.6	11.1	11.5	11.9	12.4	13.7	14.7	15.2	15.7	16.2
25	6.3	8.0	9.9	10.7	11.0	11.5	12.0	12.4	12.9	14.3	15.2	15.8	16.4	16.9
26	6.6	8.3	10.3	11.1	11.5	12.0	12.4	12.9	13.4	14.9	15.8	16.4	17.0	17.6
27	6.8	8.7	10.7	11.6	12.0	12.4	12.9	13.4	13.9	15.5	16.4	17.1	17.7	18.3
28	7.1	9.0	11.1	12.0	12.4	12.9	13.4	13.9	14.4	16.0	17.0	17.7	18.3	19.0
29	7.3	9.3	11.5	12.4	12.8	13.4	13.9	14.4	15.0	16.6	17.7	18.3	19.0	19.7
30	7.6	9.6	11.9	12.8	13.3	13.9	14.3	14.9	15.5	17.2	18.4	19.0	19.7	20.3
31	7.8	10.0	12.2	13.3	13.7	14.3	14.8	15.4	16.0	17.7	19.0	19.6	20.3	21.0
32	8.1	10.3	12.6	13.7	14.2	14.8	15.3	15.9	16.5	18.3	19.6	20.3	21.0	21.7
33	8.3	10.6	13.0	14.1	14.6	15.2	15.8	16.4	17.0	18.9	20.2	20.9	21.6	22.3
34	8.6	10.9	13.4	14.6	15.0	15.7	16.3	16.9	17.5	19.4	20.8	21.5	22.3	23.0
35	8.8	11.2	13.8	15.0	15.5	16.1	16.7	17.4	18.0	20.2	21.4	22.2	22.9	23.7
36	9.1	11.6	14.2	15.4	16.0	16.6	17.2	17.9	18.6	20.6	22.0	22.8	23.6	24.4
37	9.3	11.9	14.6	15.8	16.4	17.1	17.7	18.4	19.1	21.1	22.6	23.4	24.2	25.0
38	9.6	12.2	15.0	16.3	16.8	17.5	18.1	18.8	19.6	21.7	23.2	24.0	24.9	25.7
39	9.8	12.5	15.4	16.7	17.3	18.0	18.6	19.3	20.1	22.3	23.9	24.7	25.5	26.4
40	10.1	12.8	15.8	17.1	17.7	18.4	19.1	19.8	20.6	22.9	24.5	25.3	26.2	27.1
41	10.3	13.1	16.2	17.5	18.2	18.9	19.6	20.3	21.2	23.4	25.1	26.0	26.9	27.8
42	10.6	13.5	16.6	18.0	18.6	19.4	20.1	20.8	21.7	24.0	25.7	26.6	27.5	28.4
43	10.8	13.8	17.0	18.4	19.0	19.8	20.6	21.3	22.2	24.6	26.3	27.2	28.1	29.1
44	11.1	14.1	17.4	18.8	19.5	20.3	21.0	21.8	22.7	25.2	26.9	27.9	28.8	29.8
45	11.3	14.4	17.8	19.3	19.9	20.7	21.5	22.3	23.2	25.7	27.5	28.5	29.5	30.5
46	11.6	14.8	18.2	19.7	20.4	21.2	22.0	22.8	23.7	26.3	28.2	29.1	30.1	31.1
47	11.8	15.1	18.6	20.1	20.8	21.7	22.5	23.3	24.2	26.9	28.8	29.8	30.8	31.8
48	12.1	15.4	19.0	20.5	21.3	22.1	22.9	23.8	24.8	27.5	29.4	30.4	31.4	32.5
49	12.3	15.7	19.4	21.0	21.7	22.6	23.4	24.3	25.3	28.0	30.0	31.0	32.1	33.2
50	12.6	16.0	19.8	21.4	22.1	23.0	23.9	24.8	25.8	28.6	30.6	31.7	32.7	33.9
51	12.8	16.4	20.1	21.8	22.6	23.5	24.4	25.3	26.3	29.2	31.2	32.3	33.4	34.5
52	13.1	16.7	20.5	22.3	23.0	24.0	24.9	25.8	26.8	29.7	31.8	32.9	34.0	35.2
53	13.4	17.0	20.9	22.7	23.5	24.5	25.3	26.3	27.3	30.3	32.4	33.5	34.7	35.9
54	13.6	17.3	21.3	23.1	23.9	25.0	25.8	26.8	27.9	30.9	33.0	34.1	35.4	36.6
55	13.9	17.7	21.7	23.5	24.3	25.5	26.3	27.3	28.4	31.5	33.7	34.8	36.0	37.2
56	14.1	18.0	22.1	24.0	24.8	25.9	26.8	27.8	28.9	32.0	34.3	35.4	36.7	38.0
57	14.4	18.3	22.5	24.4	25.2	26.3	27.2	28.3	29.4	32.6	34.9	36.1	37.3	38.6
58	14.6	18.6	22.9	24.8	25.7	26.8	27.7	28.8	30.0	33.2	35.5	36.7	38.0	39.2
59	14.9	18.9	23.3	25.3	26.1	27.3	28.2	29.3	30.5	33.7	36.1	37.3	38.6	39.9
60	15.1	19.3	23.7	25.7	26.6	27.7	28.7	29.8	31.0	34.3	36.7	38.0	39.3	40.6
61	15.4	19.6	24.2	26.1	27.0	28.1	29.2	30.3	31.5	34.9	37.3	38.6	40.0	41.3
62	15.6	19.9	24.6	26.5	27.5	28.6	29.6	30.8	32.0	35.5	37.9	39.2	40.6	42.0
63	15.9	20.2	24.9	27.0	27.9	29.0	30.1	31.2	32.5	36.0	38.6	39.9	41.2	42.7
64	16.1	20.5	25.3	27.4	28.4	29.5	30.6	31.7	33.0	36.6	39.2	40.5	41.9	43.3
65	16.3	20.9	25.7	27.8	28.8	30.0	31.1	32.2	33.5	37.2	39.8	41.1	42.6	44.0
66	16.6	21.2	26.1	28.2	29.2	30.4	31.6	32.7	34.0	37.8	40.4	41.8	43.2	44.7
67	16.8	21.5	26.5	28.7	29.7	30.9	32.0	33.2	34.6	38.3	41.0	42.4	43.9	45.4
68	17.1	21.8	26.9	29.1	30.1	31.3	32.5	33.7	35.1	38.9	41.6	43.0	44.5	46.0
69	17.4	22.1	27.3	29.5	30.6	31.8	33.0	34.2	35.6	39.4	42.2	43.7	45.2	46.7
70	17.6	22.5	27.7	30.0	31.0	32.2	33.5	34.7	36.1	40.0	42.8	44.3	45.9	47.4
80	20.2	25.7	31.6	34.2	35.4	36.9	38.2	39.7	41.3	45.8	49.0	50.6	52.4	54.1
90	22.7	28.9	35.5	38.5	39.9	41.5	43.0	44.6	46.4	51.5	55.1	57.0	59.0	60.9
100	25.2	32.1	39.5	42.8	44.3	46.1	47.8	49.6	51.6	57.2	61.2	63.3	65.5	67.7
300	75.6	96.3	118.5	128.4	132.9	138.3	143.4	148.8	154.8	171.6	183.6	189.9	196.5	203.1
500	126.0	160.5	197.5	214.0	221.5	230.5	239.0	248.0	258.0	286.0	306.0	316.5	327.5	338.5



Water required to reduce from **23 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	.25	.3	.4	.4	.4	.45	.5	.5	.5	0.5	.55	.6	.6	.65	.7
2	.5	.6	.75	.8	.9	.9	.9	1.0	1.0	1.0	1.1	1.2	1.2	1.3	1.3
3	.7	.9	1.1	1.2	1.3	1.3	1.4	1.4	1.5	1.6	1.7	1.8	1.9	1.9	2.0
4	1.0	1.2	1.5	1.7	1.7	1.8	1.9	1.9	2.0	2.1	2.2	2.4	2.5	2.6	2.6
5	1.2	1.5	1.9	2.1	2.1	2.2	2.3	2.4	2.5	2.6	2.8	3.0	3.1	3.2	3.3
6	1.4	1.8	2.3	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.4	3.6	3.7	3.9	4.0
7	1.7	2.2	2.7	2.9	3.0	3.1	3.2	3.4	3.5	3.6	3.9	4.2	4.3	4.5	4.6
8	1.9	2.5	3.1	3.3	3.4	3.6	3.7	3.9	4.0	4.2	4.5	4.8	5.0	5.2	5.3
9	2.2	2.8	3.4	3.7	3.9	4.0	4.2	4.3	4.5	4.7	5.0	5.4	5.6	5.8	6.0
10	2.4	3.1	3.8	4.1	4.3	4.5	4.7	4.8	5.0	5.2	5.6	6.0	6.2	6.4	6.6
11	2.7	3.4	4.2	4.6	4.7	4.9	5.1	5.3	5.5	5.7	6.2	6.6	6.8	7.1	7.3
12	2.9	3.7	4.6	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.7	7.2	7.5	7.7	8.0
13	3.1	4.0	5.0	5.4	5.6	5.8	6.1	6.3	6.5	6.8	7.3	7.8	8.1	8.3	8.6
14	3.4	4.3	5.4	5.8	6.0	6.3	6.5	6.8	7.0	7.3	7.8	8.4	8.7	9.0	9.3
15	3.6	4.6	5.7	6.2	6.4	6.7	7.0	7.2	7.5	7.8	8.4	9.0	9.3	9.6	10.0
16	3.9	4.9	6.1	6.6	6.9	7.2	7.5	7.7	8.0	8.3	9.0	9.6	9.9	10.3	10.7
17	4.1	5.2	6.5	7.1	7.3	7.6	7.9	8.2	8.5	8.9	9.5	10.2	10.6	10.9	11.3
18	4.3	5.5	6.9	7.5	7.7	8.1	8.4	8.7	9.0	9.4	10.1	10.8	11.2	11.6	12.0
19	4.6	5.8	7.3	7.9	8.1	8.5	8.9	9.2	9.5	9.9	10.6	11.4	11.8	12.2	12.6
20	4.8	6.2	7.6	8.3	8.6	9.0	9.3	9.7	10.0	10.4	11.2	12.0	12.4	12.8	13.3
21	5.1	6.5	8.0	8.7	9.0	9.4	9.8	10.1	10.5	10.9	11.8	12.6	13.0	13.5	13.9
22	5.3	6.8	8.4	9.1	9.4	9.9	10.3	10.6	11.0	11.5	12.3	13.2	13.7	14.1	14.6
23	5.6	7.1	8.8	9.5	9.9	10.3	10.7	11.1	11.5	12.0	12.9	13.8	14.3	14.8	15.2
24	5.8	7.4	9.2	10.0	10.3	10.7	11.2	11.6	12.0	12.5	13.4	14.4	14.9	15.4	15.9
25	6.0	7.7	9.6	10.4	10.7	11.2	11.7	12.1	12.5	13.1	14.0	15.0	15.5	16.0	16.6
26	6.3	8.0	9.9	10.8	11.2	11.6	12.1	12.6	13.0	13.6	14.6	15.6	16.1	16.7	17.3
27	6.5	8.3	10.3	11.2	11.6	12.1	12.6	13.0	13.6	14.1	15.1	16.2	16.8	17.3	17.9
28	6.8	8.6	10.7	11.6	12.0	12.5	13.0	13.5	14.1	14.6	15.7	16.8	17.4	18.0	18.6
29	7.0	8.9	11.1	12.0	12.5	13.0	13.5	14.0	14.6	15.1	16.3	17.4	18.0	18.6	19.2
30	7.2	9.2	11.5	12.4	12.9	13.4	14.0	14.5	15.1	15.6	16.8	18.0	18.6	19.3	19.9
31	7.5	9.5	11.8	12.9	13.3	13.9	14.5	15.0	15.6	16.1	17.4	18.6	19.2	19.9	20.6
32	7.7	9.9	12.2	13.3	13.8	14.3	14.9	15.5	16.1	16.7	17.9	19.2	19.9	20.5	21.2
33	8.0	10.2	12.6	13.7	14.2	14.8	15.4	15.9	16.6	17.2	18.5	19.8	20.5	21.2	21.9
34	8.2	10.5	13.0	14.1	14.6	15.2	15.8	16.4	17.1	17.7	19.0	20.4	21.1	21.8	22.6
35	8.5	10.8	13.4	14.5	15.0	15.7	16.3	16.9	17.6	18.2	19.6	21.0	21.7	22.5	23.2
36	8.7	11.1	13.7	14.9	15.5	16.1	16.8	17.4	18.1	18.7	20.2	21.6	22.4	23.1	23.9
37	8.9	11.4	14.1	15.3	15.9	16.6	17.2	17.9	18.6	19.3	20.7	22.2	23.0	23.7	24.5
38	9.2	11.7	14.5	15.8	16.4	17.0	17.7	18.3	19.1	19.8	21.3	22.8	23.6	24.4	25.2
39	9.4	12.0	14.9	16.2	16.8	17.5	18.2	18.8	19.6	20.3	21.8	23.4	24.2	25.0	25.9
40	9.7	12.3	15.3	16.6	17.2	17.9	18.6	19.2	20.1	20.8	22.4	24.0	24.8	25.7	26.6
41	9.9	12.6	15.7	17.0	17.6	18.4	19.1	19.8	20.6	21.4	23.0	24.6	25.5	26.3	27.2
42	10.2	12.9	16.0	17.4	18.1	18.8	19.6	20.3	21.1	21.9	23.5	25.2	26.1	27.0	27.9
43	10.4	13.2	16.4	17.8	18.5	19.3	20.0	20.8	21.6	22.4	24.1	25.8	26.7	27.6	28.5
44	10.6	13.5	16.8	18.3	18.9	19.7	20.5	21.3	22.1	22.9	24.6	26.4	27.3	28.2	29.2
45	10.9	13.9	17.2	18.7	19.4	20.2	21.0	21.7	22.6	23.4	25.2	27.0	27.9	28.9	29.8
46	11.1	14.2	17.6	19.1	19.8	20.6	21.4	22.2	23.1	24.0	25.8	27.6	28.6	29.5	30.5
47	11.4	14.5	18.0	19.5	20.2	21.1	21.9	22.7	23.6	24.5	26.3	28.2	29.2	30.2	31.2
48	11.6	14.8	18.3	19.9	20.6	21.5	22.4	23.2	24.1	25.0	26.9	28.8	29.8	30.8	31.9
49	11.8	15.1	18.7	20.3	21.1	22.0	22.8	23.7	24.6	25.5	27.4	29.4	30.4	31.5	32.5
50	12.1	15.4	19.1	20.7	21.5	22.4	23.3	24.1	25.1	26.1	28.0	30.0	31.0	32.1	33.2
51	12.3	15.7	19.5	21.2	21.9	22.9	23.8	24.6	25.6	26.6	28.6	30.6	31.7	32.7	33.9
52	12.5	16.0	19.9	21.6	22.4	23.3	24.2	25.1	26.1	27.1	29.1	31.2	32.3	33.4	34.5
53	12.8	16.3	20.2	22.0	22.8	23.8	24.7	25.6	26.6	27.6	29.7	31.8	32.9	34.0	35.2
54	13.0	16.6	20.6	22.4	23.2	24.2	25.2	26.1	27.1	28.1	30.2	32.4	33.5	34.7	35.9
55	13.3	16.9	21.0	22.8	23.6	24.7	25.6	26.6	27.6	28.7	30.8	33.0	34.2	35.3	36.5
56	13.5	17.2	21.4	23.2	24.1	25.1	26.1	27.1	28.1	29.2	31.4	33.6	34.8	36.0	37.2
57	13.8	17.5	21.8	23.7	24.5	25.6	26.6	27.5	28.6	29.7	31.9	34.2	35.4	36.6	37.8
58	14.0	17.9	22.2	24.1	24.9	26.0	27.0	28.0	29.1	30.2	32.5	34.8	36.0	37.3	38.5
59	14.2	18.2	22.5	24.5	25.4	26.5	27.5	28.5	29.6	30.7	33.0	35.4	36.6	37.9	39.2
60	14.5	18.5	22.9	24.9	25.8	26.9	28.0	29.0	30.1	31.3	33.6	36.0	37.3	38.5	39.8
61	14.7	18.8	23.3	25.3	26.2	27.3	28.5	29.5	30.6	31.8	34.2	36.6	37.9	39.2	40.5
62	15.0	19.1	23.7	25.7	26.7	27.8	28.9	30.0	31.1	32.3	34.7	37.2	38.5	39.8	41.2
63	15.2	19.4	24.1	26.1	27.1	28.2	29.4	30.4	31.6	32.8	35.3	37.8	39.1	40.5	41.8
64	15.5	19.7	24.5	26.6	27.5	28.7	29.8	30.9	32.1	33.3	35.8	38.4	39.7	41.1	42.5
65	15.7	20.0	24.9	27.0	27.9	29.1	30.3	31.4	32.6	33.9	36.4	39.0	40.4	41.7	43.2
66	15.9	20.3	25.2	27.4	28.4	29.6	30.8	31.9	33.1	34.4	37.0	39.6	41.0	42.4	43.8
67	16.2	20.6	25.6	27.8	28.8	30.0	31.2	32.3	33.6	34.9	37.5	40.2	41.6	43.0	44.5
68	16.4	20.9	26.0	28.2	29.2	30.5	31.7	32.8	34.1	35.4	38.1	40.8	42.2	43.7	45.1
69	16.7	21.2	26.4	28.6	29.7	30.9	32.2	33.3	34.6	35.9	38.6	41.4	42.8	44.3	45.8
70	16.9	21.6	26.7	29.0	30.1	31.4	32.6	33.8	35.1	36.5	39.2	42.0	43.5	44.9	46.5
80	19.3	24.6	30.6	33.2	34.4	35.8	37.3	38.6	40.2	41.7	44.8	48.0	49.7	51.4	53.1
90	21.7	27.7	34.4	37.3	38.7	40.3	41.9	43.5	45.2	46.9	50.4	54.0	55.9	57.8	59.8
100	24.1	30.8	38.2	41.5	43.0	44.8	46.6	48.3	50.2	52.1	56.0	60.0	62.1	64.2	66.4
300	72.4	92.4	114.7	124.5	129.0	134.4	139.8	144.9	150.6	156.3	168.0	180.0	186.3	192.6	199.2
500	120.7	154.0	191.2	207.5	215.0	224.0	233.0	241.5	251.0	260.5	280.0	300.0	310.5	321.0	332.0

INDEX OF WHISKY BRANDS.—Before using or seeking to register a brand, consult "THE



Water required to reduce from **22 OVERPROOF** to strengths of:—

Galls of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls. .2	Galls. .3	Galls. .35	Galls. .4	Galls. .4	Galls. .45	Galls. .5	Galls. .5	Galls. .5	Galls. .55	Galls. .6	Galls. .6	Galls. .65	Galls. .65	Galls. .65
1															
2	.45	.6	.75	.8	.85	0.9	0.9	.9	1.0	1.0	1.1	1.2	1.2	1.3	1.3
3	.7	0.9	1.1	1.2	1.3	1.3	1.4	1.4	1.5	1.5	1.6	1.8	1.8	1.9	2.0
4	.9	1.2	1.5	1.6	1.7	1.7	1.8	1.9	2.0	2.0	2.2	2.3	2.4	2.5	2.6
5	1.2	1.5	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.7	2.9	3.0	3.1	3.3
6	1.4	1.8	2.2	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.3	3.5	3.6	3.8	3.9
7	1.6	2.1	2.6	2.8	2.9	3.0	3.2	3.3	3.4	3.6	3.8	4.1	4.3	4.4	4.6
8	1.8	2.4	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.4	4.7	4.9	5.0	5.2
9	2.1	2.7	3.3	3.6	3.8	3.9	4.1	4.2	4.4	4.6	4.9	5.3	5.5	5.7	5.9
10	2.3	3.0	3.7	4.0	4.2	4.4	4.5	4.7	4.9	5.1	5.5	5.9	6.1	6.3	6.5
11	2.5	3.3	4.1	4.4	4.6	4.8	5.0	5.2	5.4	5.6	6.0	6.4	6.7	6.9	7.2
12	2.8	3.6	4.4	4.8	5.0	5.2	5.4	5.7	5.9	6.1	6.6	7.0	7.3	7.5	7.8
13	3.0	3.9	4.8	5.2	5.4	5.7	5.9	6.1	6.4	6.6	7.1	7.6	7.9	8.2	8.5
14	3.2	4.2	5.2	5.6	5.9	6.1	6.4	6.6	6.9	7.1	7.6	8.2	8.5	8.8	9.1
15	3.5	4.5	5.6	6.0	6.3	6.5	6.8	7.1	7.4	7.6	8.2	8.8	9.1	9.4	9.8
16	3.7	4.8	5.9	6.4	6.7	7.0	7.3	7.5	7.8	8.1	8.7	9.4	9.7	10.0	10.4
17	3.9	5.0	6.3	6.9	7.1	7.4	7.7	8.0	8.3	8.6	9.3	10.0	10.3	10.7	11.1
18	4.2	5.3	6.7	7.3	7.5	7.8	8.2	8.5	8.8	9.1	9.8	10.5	10.9	11.3	11.7
19	4.4	5.6	7.0	7.7	7.9	8.3	8.6	8.9	9.3	9.7	10.4	11.1	11.5	11.9	12.4
20	4.6	5.9	7.4	8.1	8.4	8.7	9.1	9.4	9.8	10.2	10.9	11.7	12.2	12.6	13.0
21	4.9	6.2	7.8	8.5	8.8	9.1	9.5	9.9	10.3	10.7	11.5	12.3	12.8	13.2	13.7
22	5.1	6.5	8.1	8.9	9.2	9.6	10.0	10.4	10.8	11.2	12.0	12.9	13.4	13.8	14.3
23	5.3	6.8	8.5	9.3	9.6	10.0	10.4	10.8	11.3	11.7	12.6	13.5	14.0	14.4	15.0
24	5.5	7.1	8.9	9.7	10.0	10.4	10.9	11.3	11.8	12.2	13.1	14.1	14.6	15.1	15.6
25	5.8	7.4	9.3	10.1	10.5	10.9	11.4	11.8	12.2	12.7	13.7	14.7	15.2	15.7	16.3
26	6.0	7.7	9.6	10.5	10.9	11.3	11.8	12.2	12.7	13.2	14.2	15.2	15.8	16.3	16.9
27	6.2	8.0	10.0	10.9	11.3	11.7	12.3	12.7	13.2	13.7	14.7	15.8	16.4	17.0	17.6
28	6.5	8.3	10.4	11.3	11.7	12.2	12.7	13.2	13.7	14.2	15.3	16.4	17.0	17.6	18.2
29	6.7	8.6	10.7	11.7	12.1	12.6	13.2	13.7	14.2	14.7	15.8	17.0	17.6	18.2	18.9
30	6.9	8.9	11.1	12.1	12.5	13.1	13.6	14.1	14.7	15.2	16.4	17.6	18.2	18.8	19.5
31	7.2	9.2	11.5	12.5	13.0	13.5	14.1	14.6	15.2	15.7	16.9	18.2	18.8	19.5	20.2
32	7.4	9.5	11.8	12.9	13.4	13.9	14.5	15.1	15.7	16.2	17.5	18.8	19.5	20.1	20.8
33	7.6	9.8	12.2	13.3	13.8	14.4	15.0	15.5	16.2	16.7	18.0	19.3	20.1	20.7	21.5
34	7.9	10.1	12.6	13.7	14.2	14.8	15.4	16.0	16.7	17.2	18.6	20.0	20.7	21.4	22.1
35	8.1	10.4	13.0	14.1	14.6	15.2	15.9	16.5	17.2	17.7	19.1	20.5	21.3	22.0	22.8
36	8.3	10.7	13.3	14.5	15.0	15.7	16.3	17.0	17.6	18.2	19.7	21.1	21.9	22.6	23.4
37	8.5	11.0	13.7	14.9	15.5	16.1	16.9	17.4	18.1	18.8	20.2	21.7	22.5	23.2	24.1
38	8.8	11.3	14.1	15.3	15.9	16.5	17.3	17.9	18.6	19.3	20.7	22.3	23.1	23.9	24.7
39	9.0	11.6	14.4	15.7	16.3	17.0	17.7	18.4	19.1	19.8	21.3	22.9	23.7	24.5	25.4
40	9.2	11.9	14.8	16.1	16.7	17.4	18.2	18.8	19.6	20.3	21.8	23.4	24.3	25.1	26.0
41	9.5	12.2	15.2	16.5	17.1	17.8	18.6	19.3	20.1	20.8	22.4	24.0	24.9	25.7	26.7
42	9.7	12.5	15.5	16.9	17.6	18.3	19.1	19.8	20.6	21.3	22.9	24.6	25.5	26.4	27.3
43	10.0	12.8	15.9	17.3	18.0	18.7	19.5	20.3	21.1	21.8	23.5	25.2	26.1	27.0	28.0
44	10.2	13.1	16.3	17.7	18.4	19.1	20.0	20.7	21.6	22.4	24.0	25.8	26.8	27.6	28.6
45	10.4	13.4	16.7	18.1	18.8	19.6	20.4	21.2	22.1	22.9	24.6	26.4	27.4	28.3	29.3
46	10.6	13.7	17.0	18.5	19.2	20.0	20.9	21.7	22.5	23.4	25.1	27.0	28.0	28.9	29.9
47	10.9	14.0	17.4	18.9	19.6	20.4	21.3	22.1	23.0	23.9	25.7	27.5	28.6	29.5	30.6
48	11.1	14.3	17.8	19.3	20.1	20.9	21.8	22.6	23.5	24.4	26.2	28.1	29.2	30.1	31.2
49	11.3	14.6	18.1	19.7	20.5	21.3	22.2	23.1	24.0	24.9	26.8	28.7	29.8	30.8	31.9
50	11.6	14.9	18.5	20.2	20.9	21.8	22.7	23.6	24.5	25.4	27.3	29.3	30.4	31.4	32.5
51	11.8	15.1	18.9	20.5	21.3	22.2	23.2	24.1	25.0	25.9	27.8	29.9	31.0	32.0	33.2
52	12.0	15.4	19.2	20.9	21.7	22.6	23.6	24.6	25.5	26.4	28.4	30.5	31.6	32.7	33.8
53	12.2	15.7	19.6	21.3	22.2	23.1	24.1	25.1	26.0	26.9	28.9	31.1	32.2	33.3	34.5
54	12.5	16.0	20.0	21.7	22.6	23.5	24.5	25.5	26.5	27.4	29.5	31.6	32.8	33.9	35.1
55	12.7	16.3	20.4	22.1	23.0	23.9	25.0	26.0	27.0	27.9	30.0	32.2	33.4	34.5	35.8
56	12.9	16.6	20.7	22.5	23.4	24.4	25.4	26.5	27.4	28.4	30.6	32.8	34.0	35.2	36.4
57	13.2	16.9	21.1	22.9	23.8	24.8	25.9	26.9	27.9	29.0	31.1	33.4	34.7	35.8	37.1
58	13.4	17.2	21.5	23.3	24.2	25.2	26.3	27.4	28.4	29.5	31.7	34.0	35.3	36.4	37.7
59	13.6	17.5	21.8	23.7	24.7	25.7	26.8	27.9	28.9	30.0	32.2	34.6	35.9	37.1	38.4
60	13.9	17.8	22.2	24.1	25.1	26.1	27.2	28.3	29.4	30.5	32.8	35.2	36.5	37.7	39.0
61	14.1	18.1	22.6	24.6	25.5	26.5	27.7	28.7	29.9	31.0	33.3	35.7	37.1	38.3	39.7
62	14.3	18.4	22.9	25.0	25.9	27.0	28.1	29.2	30.4	31.5	33.9	36.3	37.7	38.9	40.3
63	14.6	18.7	23.3	25.4	26.3	27.4	28.6	29.7	30.9	32.0	34.4	36.9	38.3	39.6	41.0
64	14.8	19.0	23.7	25.8	26.8	27.8	29.1	30.1	31.4	32.5	34.9	37.5	38.9	40.2	41.6
65	15.0	19.3	24.1	26.2	27.2	28.3	29.5	30.6	31.9	33.0	35.5	38.1	39.5	40.8	42.2
66	15.2	19.6	24.4	26.6	27.6	28.7	30.0	31.1	32.3	33.5	36.0	38.7	40.1	41.4	42.9
67	15.5	19.9	24.8	27.0	28.0	29.1	30.4	31.6	32.8	34.0	36.6	39.3	40.7	42.1	43.6
68	15.7	20.2	25.2	27.4	28.4	29.6	30.9	32.0	33.3	34.5	37.1	39.8	41.3	42.7	44.2
69	15.9	20.5	25.5	27.8	28.8	30.0	31.3	32.5	33.8	35.1	37.7	40.4	42.0	43.3	44.9
70	16.2	20.8	25.9	28.2	29.3	30.5	31.8	33.0	34.3	35.6	38.2	41.0	42.6	44.0	45.5
80	18.5	23.8	29.6	32.2	33.4	34.8	36.3	37.7	39.2	40.6	43.7	46.9	48.6	50.2	52.0
90	20.8	26.7	33.3	36.3	37.6	39.2	40.9	42.4	44.1	45.7	49.1	52.7	54.7	56.5	58.5
100	23.1	29.7	37.0	40.3	41.8	43.5	45.4	47.1	49.0	50.8	54.6	58.6	60.8	62.8	65.0
300	69.3	89.1	111.0	120.9	125.4	130.5	136.2	141.8	147.0	152.4	163.8	175.8	182.4	188.4	195.0
500	115.5	148.5	185.0	201.5	209.0	217.5	227.0	235.5	245.0	254.0	273.0	293.0	304.0	314.0	325.0



Water required to reduce from **21 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	2	3	3.5	4	4	4	4.5	4.5	5	5	5.5	6	6	6	6.5
2	.45	.6	.7	.8	.8	.85	.9	.9	1.0	1.0	1.1	1.1	1.2	1.2	1.3
3	.65	.85	1.1	1.2	1.2	1.3	1.4	1.4	1.5	1.6	1.6	1.7	1.8	1.8	1.9
4	.9	1.1	1.4	1.6	1.6	1.7	1.8	1.8	1.9	2.0	2.1	2.3	2.4	2.5	2.5
5	1.1	1.4	1.8	2.0	2.0	2.1	2.2	2.3	2.4	2.5	2.7	2.9	3.0	3.1	3.2
6	1.3	1.7	2.2	2.3	2.4	2.5	2.6	2.7	2.9	3.0	3.2	3.4	3.6	3.7	3.8
7	1.5	2.0	2.5	2.7	2.8	3.0	3.1	3.2	3.3	3.5	3.7	4.0	4.2	4.3	4.5
8	1.8	2.3	2.9	3.1	3.3	3.4	3.5	3.7	3.8	4.0	4.2	4.6	4.7	4.9	5.1
9	2.0	2.6	3.2	3.5	3.7	3.8	4.0	4.1	4.3	4.5	4.8	5.2	5.3	5.5	5.7
10	2.2	2.9	3.6	3.9	4.1	4.2	4.4	4.6	4.8	5.0	5.3	5.7	5.9	6.1	6.4
11	2.4	3.1	3.9	4.3	4.5	4.7	4.9	5.0	5.2	5.5	5.9	6.3	6.5	6.8	7.0
12	2.6	3.4	4.3	4.7	4.9	5.1	5.3	5.5	5.7	6.0	6.4	6.9	7.1	7.4	7.6
13	2.9	3.7	4.7	5.1	5.3	5.5	5.7	6.0	6.2	6.4	6.9	7.4	7.7	8.0	8.3
14	3.1	4.0	5.0	5.5	5.7	5.9	6.2	6.4	6.7	6.9	7.5	8.0	8.3	8.6	8.9
15	3.3	4.3	5.4	5.9	6.1	6.4	6.6	6.9	7.2	7.4	8.0	8.6	8.9	9.2	9.5
16	3.5	4.6	5.7	6.3	6.5	6.8	7.1	7.3	7.6	7.9	8.5	9.2	9.5	9.8	10.2
17	3.7	4.9	6.1	6.6	6.9	7.2	7.5	7.8	8.1	8.4	9.1	9.7	10.1	10.4	10.8
18	4.0	5.1	6.5	7.0	7.3	7.6	7.9	8.2	8.6	8.9	9.6	10.3	10.7	11.1	11.4
19	4.2	5.4	6.8	7.4	7.7	8.1	8.4	8.7	9.1	9.4	10.1	10.9	11.3	11.7	12.1
20	4.4	5.7	7.2	7.8	8.1	8.5	8.8	9.2	9.5	9.9	10.7	11.5	11.9	12.3	12.7
21	4.6	6.0	7.5	8.2	8.5	8.9	9.3	9.6	10.0	10.4	11.2	12.0	12.5	12.9	13.4
22	4.8	6.3	7.9	8.6	9.0	9.3	9.7	10.1	10.5	10.9	11.7	12.6	13.0	13.5	14.0
23	5.1	6.6	8.3	9.0	9.4	9.8	10.1	10.5	11.0	11.4	12.3	13.2	13.6	14.1	14.6
24	5.3	6.9	8.6	9.4	9.8	10.2	10.6	11.0	11.4	11.9	12.8	13.8	14.2	14.7	15.3
25	5.5	7.2	9.0	9.8	10.2	10.6	11.0	11.5	11.9	12.4	13.3	14.3	14.8	15.4	15.9
26	5.7	7.4	9.3	10.2	10.6	11.0	11.5	11.9	12.4	12.9	13.9	14.9	15.4	16.0	16.5
27	5.9	7.7	9.7	10.6	11.0	11.4	11.9	12.4	12.9	13.4	14.4	15.5	16.0	16.6	17.2
28	6.2	8.0	10.1	10.9	11.4	11.9	12.3	12.8	13.4	13.9	14.9	16.0	16.6	17.2	17.8
29	6.4	8.3	10.4	11.3	11.8	12.3	12.8	13.3	13.8	14.4	15.5	16.6	17.2	17.8	18.4
30	6.6	8.6	10.8	11.7	12.2	12.7	13.2	13.7	14.3	14.9	16.0	17.2	17.8	18.4	19.1
31	6.8	8.9	11.1	12.1	12.6	13.1	13.7	14.2	14.8	15.4	16.5	17.8	18.4	19.0	19.7
32	7.0	9.2	11.5	12.5	13.0	13.6	14.1	14.7	15.3	15.9	17.1	18.3	19.0	19.6	20.4
33	7.3	9.4	11.8	12.9	13.4	14.0	14.6	15.1	15.7	16.4	17.6	18.9	19.6	20.3	21.0
34	7.5	9.7	12.2	13.3	13.8	14.4	15.0	15.6	16.2	16.9	18.1	19.5	20.2	20.9	21.6
35	7.7	10.0	12.6	13.7	14.2	14.8	15.4	16.0	16.7	17.4	18.7	20.1	20.8	21.5	22.3
36	7.9	10.3	12.9	14.1	14.7	15.3	15.9	16.5	17.2	17.9	19.2	20.6	21.3	22.1	22.9
37	8.1	10.6	13.3	14.5	15.1	15.7	16.3	16.9	17.6	18.4	19.7	21.2	21.9	22.7	23.5
38	8.4	10.9	13.6	14.9	15.5	16.1	16.8	17.4	18.1	18.8	20.3	21.8	22.5	23.3	24.2
39	8.6	11.2	14.0	15.2	15.9	16.4	17.2	17.9	18.6	19.3	20.8	22.3	23.1	23.9	24.8
40	8.8	11.4	14.4	15.6	16.3	17.0	17.6	18.3	19.1	19.8	21.3	22.9	23.7	24.6	25.4
41	9.0	11.7	14.7	16.0	16.7	17.4	18.1	18.8	19.6	20.3	21.9	23.5	24.3	25.2	26.1
42	9.2	12.0	15.1	16.4	17.1	17.8	18.5	19.2	20.0	20.8	22.4	24.1	24.9	25.8	26.7
43	9.4	12.3	15.4	16.8	17.5	18.2	19.0	19.7	20.5	21.3	22.9	24.6	25.5	26.4	27.3
44	9.7	12.6	15.8	17.2	17.9	18.7	19.4	20.2	21.0	21.8	23.5	25.2	26.1	27.0	28.0
45	9.9	12.9	16.2	17.6	18.3	19.1	19.8	20.6	21.5	22.3	24.0	25.8	26.7	27.6	28.6
46	10.1	13.2	16.5	18.0	18.7	19.5	20.3	21.1	21.9	22.8	24.5	26.4	27.3	28.2	29.3
47	10.3	13.4	16.9	18.4	19.1	19.9	20.7	21.5	22.4	23.3	25.1	26.9	27.9	28.9	29.9
48	10.6	13.7	17.2	18.8	19.5	20.4	21.2	22.0	22.9	23.8	25.6	27.5	28.5	29.5	30.5
49	10.8	14.0	17.6	19.2	19.9	20.8	21.6	22.4	23.4	24.3	26.1	28.1	29.1	30.1	31.2
50	11.0	14.3	18.0	19.6	20.4	21.2	22.0	22.9	23.9	24.8	26.7	28.7	29.7	30.7	31.8
51	11.2	14.6	18.3	19.9	20.8	21.6	22.5	23.4	24.3	25.3	27.2	29.2	30.2	31.3	32.4
52	11.4	14.9	18.7	20.3	21.2	22.0	22.9	23.8	24.8	25.8	27.7	29.8	30.8	31.9	33.1
53	11.7	15.2	19.0	20.7	21.6	22.5	23.4	24.3	25.3	26.3	28.2	30.4	31.4	32.5	33.7
54	11.9	15.4	19.4	21.1	22.0	22.9	23.8	24.7	25.8	26.8	28.8	30.9	32.0	33.2	34.3
55	12.1	15.7	19.7	21.5	22.4	23.3	24.3	25.2	26.2	27.3	29.3	31.5	32.6	33.8	35.0
56	12.3	16.0	20.1	21.9	22.8	23.7	24.7	25.6	26.7	27.8	29.8	32.1	33.2	34.4	35.6
57	12.5	16.3	20.5	22.3	23.2	24.2	25.1	26.1	27.2	28.3	30.4	32.7	33.8	35.0	36.3
58	12.8	16.6	20.8	22.7	23.6	24.6	25.6	26.6	27.7	28.8	30.9	33.2	34.4	35.6	36.9
59	13.0	16.9	21.2	23.1	24.0	25.0	26.0	27.0	28.1	29.3	31.4	33.8	35.0	36.2	37.5
60	13.2	17.2	21.5	23.5	24.4	25.4	26.5	27.5	28.6	29.8	32.0	34.4	35.6	36.8	38.2
61	13.4	17.4	21.9	23.9	24.8	25.9	26.9	27.9	29.1	30.3	32.5	35.0	36.2	37.5	38.8
62	13.6	17.7	22.3	24.2	25.2	26.3	27.3	28.4	29.6	30.8	33.0	35.5	36.8	38.1	39.4
63	13.9	18.0	22.6	24.6	25.6	26.7	27.8	28.9	30.1	31.2	33.6	36.1	37.4	38.7	40.1
64	14.1	18.3	23.0	25.0	26.0	27.1	28.2	29.3	30.5	31.7	34.1	36.7	38.0	39.3	40.7
65	14.3	18.6	23.3	25.4	26.5	27.6	28.7	29.8	31.0	32.2	34.6	37.2	38.5	39.9	41.3
66	14.5	18.9	23.7	25.8	26.9	28.0	29.1	30.2	31.5	32.7	35.2	37.8	39.1	40.5	42.0
67	14.7	19.2	24.1	26.2	27.3	28.4	29.5	30.7	32.0	33.2	35.7	38.4	39.7	41.1	42.6
68	15.0	19.4	24.4	26.6	27.7	28.8	30.0	31.1	32.4	33.7	36.2	39.0	40.3	41.8	43.2
69	15.2	19.7	24.8	27.0	28.1	29.3	30.4	31.6	32.9	34.2	36.8	39.5	40.9	42.4	43.9
70	15.4	20.0	25.1	27.4	28.5	29.7	30.9	32.0	33.4	34.7	37.3	40.1	41.5	43.0	44.5
80	17.6	22.9	28.7	31.3	32.6	33.9	35.3	36.6	38.2	39.7	42.6	45.8	47.4	49.1	50.9
90	19.8	25.7	32.3	35.2	36.6	38.2	39.7	41.2	42.9	44.6	48.0	51.6	53.4	55.3	57.2
100	22.0	28.6	35.9	39.1	40.7	42.4	44.1	45.8	47.7	49.6	53.3	57.3	59.3	61.4	63.6
300	66.0	85.8	107.7	117.3	122.1	127.2	132.3	137.4	143.1	148.8	159.9	171.9	177.9	184.2	190.8
500	110.0	143.0	179.5	195.5	203.5	212.0	220.5	229.0	238.5	248.0	266.5	286.5	307.0	318.0	

**BREAKING DOWN !!!** Marvellous results obtained by reducing with Distilled Water and American Blending Wine! BRYDON & CO., London, Dublin & Belfast.



Water required to reduce from **20 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	.2	.3	.35	.4	.4	.4	.4	.45	.45	.5	.5	.55	.6	.6	.65
2	.4	.55	.7	.75	.8	.8	.9	.9	.9	1.0	1.0	1.1	1.2	1.2	1.2
3	.6	.85	1.0	1.1	1.2	1.2	1.3	1.3	1.4	1.4	1.6	1.7	1.7	1.8	1.9
4	.85	1.1	1.4	1.5	1.6	1.6	1.7	1.8	1.9	1.9	2.1	2.2	2.3	2.4	2.5
5	1.1	1.4	1.7	1.9	2.0	2.1	2.1	2.2	2.3	2.4	2.6	2.8	2.9	3.0	3.1
6	1.3	1.7	2.1	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.1	3.4	3.5	3.6	3.7
7	1.5	1.9	2.4	2.7	2.8	2.9	3.0	3.1	3.3	3.4	3.6	3.9	4.1	4.2	4.4
8	1.7	2.2	2.8	3.0	3.2	3.3	3.4	3.6	3.7	3.9	4.2	4.5	4.6	4.8	5.0
9	1.9	2.5	3.2	3.4	3.6	3.7	3.9	4.0	4.2	4.3	4.7	5.0	5.2	5.4	5.6
10	2.1	2.8	3.5	3.8	4.0	4.1	4.3	4.5	4.7	4.8	5.2	5.6	5.8	6.0	6.2
11	2.3	3.0	3.8	4.2	4.3	4.5	4.7	4.9	5.1	5.3	5.7	6.2	6.4	6.6	6.9
12	2.5	3.3	4.2	4.5	4.7	4.9	5.1	5.4	5.6	5.8	6.2	6.7	7.0	7.2	7.5
13	2.7	3.6	4.5	4.9	5.1	5.4	5.6	5.8	6.0	6.3	6.8	7.3	7.6	7.8	8.1
14	2.9	3.9	4.9	5.3	5.5	5.8	6.0	6.2	6.5	6.7	7.3	7.8	8.1	8.4	8.7
15	3.2	4.1	5.2	5.7	5.9	6.2	6.4	6.7	7.0	7.2	7.8	8.4	8.7	9.0	9.3
16	3.4	4.4	5.6	6.1	6.3	6.6	6.9	7.1	7.4	7.7	8.3	9.0	9.3	9.6	10.0
17	3.6	4.7	5.9	6.4	6.7	7.0	7.3	7.6	7.9	8.2	8.8	9.5	9.9	10.2	10.6
18	3.8	5.0	6.2	6.8	7.1	7.4	7.7	8.0	8.4	8.7	9.4	10.1	10.5	10.8	11.2
19	4.0	5.2	6.6	7.2	7.5	7.8	8.2	8.5	8.8	9.2	9.9	10.6	11.0	11.4	11.8
20	4.2	5.5	6.9	7.6	7.9	8.2	8.6	8.9	9.3	9.6	10.4	11.2	11.6	12.0	12.5
21	4.4	5.8	7.3	8.0	8.3	8.7	9.0	9.4	9.8	10.1	10.9	11.8	12.2	12.6	13.1
22	4.6	6.1	7.6	8.3	8.7	9.1	9.4	9.8	10.2	10.6	11.4	12.3	12.8	13.2	13.7
23	4.8	6.3	8.0	8.7	9.1	9.5	9.9	10.3	10.7	11.1	12.0	12.9	13.4	13.8	14.3
24	5.0	6.6	8.3	9.1	9.5	9.9	10.3	10.7	11.2	11.6	12.5	13.4	13.9	14.4	15.0
25	5.3	6.9	8.7	9.5	9.9	10.3	10.7	11.2	11.6	12.1	13.0	14.0	14.5	15.1	15.6
26	5.5	7.2	9.0	9.9	10.3	10.7	11.2	11.6	12.1	12.5	13.5	14.6	15.1	15.7	16.2
27	5.7	7.4	9.4	10.2	10.7	11.1	11.6	12.0	12.6	13.0	14.0	15.1	15.7	16.3	16.8
28	5.9	7.7	9.7	10.6	11.1	11.5	12.0	12.5	13.0	13.5	14.6	15.7	16.3	16.9	17.4
29	6.1	8.0	10.1	11.0	11.5	11.9	12.4	12.9	13.5	14.0	15.1	16.2	16.8	17.5	18.1
30	6.3	8.3	10.4	11.4	11.9	12.3	12.9	13.4	14.0	14.5	15.6	16.8	17.4	18.1	18.7
31	6.5	8.5	10.8	11.7	12.2	12.8	13.3	13.8	14.4	14.9	16.1	17.4	18.0	18.7	19.3
32	6.7	8.8	11.1	12.1	12.6	13.2	13.7	14.3	14.9	15.4	16.6	17.9	18.6	19.3	19.9
33	6.9	9.1	11.5	12.5	13.0	13.6	14.2	14.7	15.3	15.9	17.2	18.5	19.2	19.9	20.6
34	7.1	9.4	11.8	12.9	13.4	14.0	14.6	15.2	15.8	16.4	17.7	19.0	19.8	20.5	21.2
35	7.4	9.6	12.1	13.3	13.8	14.4	15.0	15.6	16.3	16.9	18.2	19.6	20.3	21.1	21.8
36	7.6	9.9	12.5	13.6	14.2	14.8	15.4	16.1	16.7	17.4	18.7	20.2	20.9	21.7	22.4
37	7.8	10.2	12.8	14.0	14.6	15.2	15.9	16.5	17.2	17.8	19.2	20.7	21.5	22.3	23.1
38	8.0	10.5	13.2	14.4	15.0	15.7	16.3	16.9	17.7	18.3	19.8	21.3	22.1	22.9	23.7
39	8.2	10.7	13.5	14.8	15.4	16.1	16.7	17.4	18.1	18.8	20.3	21.8	22.7	23.5	24.3
40	8.4	11.0	13.9	15.1	15.8	16.5	17.2	17.8	18.6	19.3	20.8	22.4	23.2	24.1	24.9
41	8.6	11.3	14.2	15.5	16.2	16.9	17.6	18.3	19.1	19.8	21.3	23.0	23.8	24.7	25.5
42	8.8	11.6	14.6	15.9	16.6	17.3	18.0	18.7	19.5	20.2	21.8	23.5	24.4	25.3	26.2
43	9.0	11.8	14.9	16.3	17.0	17.7	18.4	19.2	20.0	20.7	22.4	24.1	25.0	25.9	26.8
44	9.2	12.1	15.3	16.7	17.4	18.1	18.9	19.6	20.5	21.2	22.9	24.6	25.6	26.5	27.4
45	9.5	12.4	15.6	17.1	17.8	18.5	19.3	20.1	20.9	21.7	23.4	25.2	26.1	27.1	28.0
46	9.7	12.7	16.0	17.4	18.2	19.0	19.7	20.5	21.4	22.2	23.9	25.8	26.7	27.7	28.7
47	9.9	12.9	16.3	17.8	18.6	19.4	20.2	21.0	21.9	22.7	24.4	26.3	27.3	28.3	29.3
48	10.1	13.2	16.6	18.2	19.0	19.8	20.6	21.4	22.3	23.1	25.0	26.9	27.9	28.9	29.9
49	10.3	13.5	17.0	18.6	19.4	20.2	21.0	21.9	22.8	23.6	25.5	27.4	28.5	29.5	30.5
50	10.5	13.8	17.4	19.0	19.8	20.6	21.4	22.3	23.3	24.1	26.0	28.0	29.1	30.1	31.2
51	10.7	14.0	17.7	19.3	20.1	21.0	21.9	22.7	23.7	24.6	26.5	28.6	29.6	30.7	31.8
52	10.9	14.3	18.0	19.7	20.5	21.4	22.3	23.2	24.2	25.1	27.0	29.1	30.2	31.3	32.4
53	11.1	14.6	18.4	20.1	20.9	21.8	22.7	23.6	24.6	25.5	27.6	29.7	30.8	31.9	33.0
54	11.3	14.9	18.7	20.5	21.3	22.2	23.2	24.1	25.1	26.0	28.1	30.2	31.4	32.5	33.6
55	11.6	15.1	19.1	20.8	21.7	22.7	23.6	24.5	25.6	26.5	28.6	30.8	32.0	33.1	34.3
56	11.8	15.4	19.4	21.2	22.1	23.1	24.0	25.0	26.0	27.0	29.1	31.4	32.5	33.7	34.9
57	12.0	15.7	19.8	21.6	22.5	23.5	24.5	25.4	26.5	27.5	29.6	31.9	33.1	34.3	35.5
58	12.2	16.0	20.1	21.9	22.9	23.9	24.9	25.9	27.0	28.0	30.2	32.5	33.7	34.9	36.1
59	12.4	16.2	20.5	22.4	23.3	24.3	25.3	26.3	27.4	28.4	30.7	33.0	34.3	35.5	36.8
60	12.6	16.5	20.8	22.7	23.7	24.7	25.7	26.8	27.9	28.9	31.2	33.6	34.9	36.1	37.4
61	12.8	16.8	21.2	23.1	24.1	25.1	26.2	27.2	28.4	29.4	31.7	34.2	35.4	36.7	38.0
62	13.0	17.1	21.5	23.5	24.5	25.5	26.6	27.7	28.8	29.9	32.2	34.7	36.0	37.3	38.6
63	13.2	17.3	21.9	23.9	24.9	26.0	27.0	28.1	29.3	30.4	32.8	35.3	36.6	37.9	39.2
64	13.4	17.6	22.2	24.3	25.3	26.4	27.5	28.5	29.8	30.8	33.3	35.8	37.2	38.5	39.9
65	13.7	17.9	22.6	24.6	25.7	26.8	27.9	29.0	30.2	31.3	33.8	36.4	37.7	39.1	40.5
66	13.9	18.2	22.9	25.0	26.1	27.2	28.3	29.4	30.7	31.8	34.3	37.0	38.3	39.7	41.1
67	14.1	18.4	23.2	25.4	26.5	27.6	28.7	29.9	31.2	32.3	34.8	37.5	38.9	40.3	41.7
68	14.3	18.7	23.6	25.8	26.9	28.0	29.2	30.3	31.6	32.8	35.4	38.1	39.5	40.9	42.4
69	14.5	19.0	23.9	26.2	27.3	28.4	29.6	30.8	32.1	33.3	35.9	38.6	40.1	41.5	43.0
70	14.7	19.3	24.3	26.5	27.7	28.8	30.0	31.2	32.6	33.7	36.4	39.2	40.7	42.1	43.6
80	16.8	22.0	27.8	30.3	31.6	33.0	34.3	35.7	37.2	38.6	41.6	44.8	46.5	48.2	49.8
90	18.9	24.8	31.2	34.1	35.6	37.1	38.6	40.1	41.9	43.4	46.8	50.4	52.3	54.2	56.1
100	21.0	27.5	34.7	37.9	39.5	41.2	42.9	44.6	46.5	48.2	52.0	56.0	58.1	60.2	62.3
300	63.0	82.5	104.1	113.7	118.5	123.6	128.7	133.8	139.5	144.6	156.0	168.0	174.3	180.6	186.9
500	105.0	137.5	173.5	189.5	197.5	206.0	214.5	223.0	232.5	241.0	260.0	280.0	290.5	301.0	311.5

**REDUCING !!!**

Those particular about having soft round Whiskies should reduce with American Blending Wine and Distilled Water. **BRYDON & CO., London, Dublin & Belfast.**



Water required to reduce from **19 OVERPROOF** to strengths of:—

Galls of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
9	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
10	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
11	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
12	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
13	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
14	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
15	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
16	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
17	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
18	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
19	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
21	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
22	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
23	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
24	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
25	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
26	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
27	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
28	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
29	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
30	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
31	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
32	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
33	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
34	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
35	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
36	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
37	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
38	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
39	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
40	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
41	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
42	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
43	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
44	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
45	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
46	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
47	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
48	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
49	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
50	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
51	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
52	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
53	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
54	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
55	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
56	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
57	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
58	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
59	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
60	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
61	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
62	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
63	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
64	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
65	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
66	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
67	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
68	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
69	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
70	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
80	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
90	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
100	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
300	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
500	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2



Water required to reduce from **18 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	2	.25	.3	.35	.4	.4	.4	.4	.45	.5	.55	.55	.55	.6	.6
2	4	.5	.6	.7	.7	.8	.8	.8	.9	.9	1.0	1.1	1.1	1.2	1.2
3	6	.75	.9	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.5	1.6	1.7	1.7	1.8
4	8	1.0	1.3	1.4	1.5	1.6	1.6	1.7	1.8	1.8	2.0	2.1	2.2	2.3	2.4
5	1.0	1.3	1.6	1.8	1.9	1.9	2.0	2.1	2.2	2.3	2.5	2.7	2.8	2.9	3.0
6	1.1	1.5	1.9	2.1	2.2	2.3	2.4	2.5	2.6	2.7	3.0	3.2	3.3	3.5	3.6
7	1.3	1.7	2.3	2.5	2.6	2.7	2.8	3.0	3.1	3.2	3.5	3.7	3.9	4.0	4.2
8	1.5	2.0	2.6	2.8	3.0	3.1	3.2	3.4	3.5	3.7	4.0	4.3	4.4	4.6	4.8
9	1.7	2.3	2.9	3.2	3.3	3.5	3.6	3.8	4.0	4.1	4.4	4.8	5.0	5.2	5.4
10	1.9	2.5	3.2	3.6	3.7	3.9	4.1	4.2	4.4	4.6	4.9	5.3	5.5	5.8	6.0
11	2.1	2.8	3.6	3.9	4.1	4.3	4.5	4.6	4.8	5.0	5.4	5.9	6.1	6.3	6.5
12	2.3	3.0	3.9	4.3	4.5	4.7	4.9	5.1	5.3	5.5	5.9	6.4	6.7	6.9	7.1
13	2.5	3.3	4.2	4.6	4.8	5.0	5.3	5.5	5.7	5.9	6.4	6.9	7.2	7.5	7.7
14	2.7	3.5	4.5	5.0	5.2	5.4	5.7	5.9	6.2	6.4	6.9	7.5	7.8	8.1	8.3
15	2.9	3.8	4.9	5.3	5.6	5.8	6.1	6.3	6.6	6.9	7.4	8.0	8.3	8.6	8.9
16	3.0	4.0	5.2	5.7	5.9	6.2	6.5	6.8	7.0	7.3	7.9	8.5	8.9	9.2	9.5
17	3.2	4.3	5.5	6.0	6.3	6.6	6.9	7.2	7.5	7.8	8.4	9.1	9.4	9.8	10.1
18	3.4	4.6	5.8	6.4	6.7	7.0	7.3	7.6	7.9	8.2	8.9	9.6	10.0	10.4	10.7
19	3.6	4.8	6.2	6.7	7.0	7.4	7.7	8.0	8.4	8.7	9.4	10.1	10.5	10.9	11.3
20	3.8	5.1	6.5	7.1	7.4	7.8	8.1	8.4	8.8	9.1	9.9	10.7	11.1	11.5	11.9
21	4.0	5.3	6.8	7.5	7.8	8.1	8.5	8.9	9.2	9.6	10.4	11.2	11.7	12.1	12.5
22	4.2	5.6	7.1	7.8	8.2	8.5	8.9	9.3	9.7	10.1	10.9	11.7	12.2	12.7	13.1
23	4.4	5.8	7.5	8.2	8.5	8.9	9.3	9.7	10.1	10.5	11.4	12.3	12.8	13.2	13.7
24	4.6	6.1	7.8	8.5	8.9	9.3	9.7	10.1	10.6	11.0	11.9	12.8	13.3	13.8	14.3
25	4.8	6.3	8.1	8.9	9.3	9.7	10.1	10.5	11.0	11.4	12.4	13.4	13.9	14.4	14.9
26	4.9	6.6	8.4	9.2	9.6	10.1	10.5	11.0	11.4	11.9	12.8	13.9	14.4	15.0	15.5
27	5.1	6.8	8.7	9.6	10.0	10.5	10.9	11.4	11.9	12.3	13.3	14.4	15.0	15.5	16.1
28	5.3	7.1	9.1	9.9	10.4	10.9	11.3	11.8	12.3	12.8	13.8	15.0	15.5	16.1	16.7
29	5.5	7.3	9.4	10.3	10.8	11.3	11.7	12.2	12.8	13.3	14.3	15.5	16.1	16.7	17.3
30	5.7	7.6	9.7	10.7	11.1	11.6	12.2	12.7	13.2	13.7	14.8	16.0	16.7	17.3	17.9
31	5.9	7.8	10.0	11.0	11.5	12.0	12.6	13.1	13.6	14.2	15.3	16.6	17.2	17.8	18.4
32	6.1	8.1	10.4	11.4	11.9	12.4	13.0	13.5	14.1	14.6	15.8	17.1	17.8	18.4	19.0
33	6.3	8.3	10.7	11.7	12.2	12.8	13.4	13.9	14.5	15.1	16.3	17.6	18.3	19.0	19.6
34	6.5	8.6	11.0	12.1	12.6	13.2	13.8	14.3	15.0	15.5	16.8	18.2	18.9	19.6	20.2
35	6.7	8.9	11.3	12.4	13.0	13.6	14.2	14.8	15.4	16.0	17.3	18.7	19.4	20.1	20.8
36	6.8	9.1	11.7	12.8	13.4	14.0	14.6	15.2	15.8	16.5	17.8	19.2	20.0	20.7	21.4
37	7.0	9.4	12.0	13.1	13.7	14.4	15.0	15.6	16.3	16.9	18.3	19.8	20.5	21.3	22.0
38	7.2	9.6	12.3	13.5	14.1	14.7	15.4	16.0	16.7	17.4	18.8	20.3	21.1	21.9	22.6
39	7.4	9.9	12.6	13.8	14.5	15.1	15.8	16.5	17.2	17.8	19.3	20.8	21.6	22.4	23.2
40	7.6	10.1	13.0	14.2	14.8	15.5	16.2	16.9	17.6	18.3	19.8	21.4	22.2	23.0	23.8
41	7.8	10.4	13.3	14.6	15.2	15.9	16.6	17.3	18.0	18.7	20.3	21.9	22.8	23.6	24.4
42	8.0	10.6	13.6	14.9	15.6	16.3	17.0	17.7	18.5	19.2	20.7	22.4	23.3	24.2	25.0
43	8.2	10.9	13.9	15.3	16.0	16.7	17.4	18.1	18.9	19.7	21.2	23.0	23.9	24.7	25.6
44	8.4	11.1	14.3	15.6	16.3	17.1	17.8	18.6	19.4	20.1	21.7	23.5	24.4	25.3	26.2
45	8.6	11.4	14.6	16.0	16.7	17.5	18.2	19.0	19.8	20.6	22.2	24.0	25.0	25.9	26.8
46	8.7	11.6	14.9	16.3	17.1	17.8	18.6	19.4	20.2	21.0	22.7	24.6	25.5	26.5	27.4
47	8.9	11.9	15.2	16.7	17.4	18.2	19.0	19.8	20.7	21.5	23.2	25.1	26.1	27.0	28.0
48	9.1	12.1	15.6	17.0	17.8	18.6	19.4	20.3	21.1	21.9	23.7	25.6	26.6	27.6	28.6
49	9.3	12.4	15.9	17.4	18.2	19.0	19.8	20.7	21.6	22.4	24.2	26.2	27.2	28.2	29.2
50	9.5	12.7	16.2	17.8	18.6	19.4	20.2	21.1	22.0	22.9	24.7	26.7	27.8	28.8	29.8
51	9.7	12.9	16.5	18.1	18.9	19.8	20.7	21.5	22.4	23.3	25.2	27.2	28.3	29.3	30.3
52	9.9	13.2	16.8	18.5	19.3	20.2	21.1	21.9	22.9	23.8	25.7	27.8	28.9	29.9	30.9
53	10.1	13.4	17.2	18.8	19.7	20.6	21.5	22.4	23.3	24.2	26.2	28.3	29.4	30.5	31.5
54	10.3	13.7	17.5	19.2	20.0	21.0	21.9	22.8	23.8	24.7	26.7	28.8	30.0	31.1	32.1
55	10.5	13.9	17.8	19.5	20.4	21.3	22.3	23.2	24.2	25.1	27.2	29.4	30.5	31.6	32.7
56	10.6	14.2	18.1	19.9	20.8	21.7	22.7	23.6	24.6	25.6	27.7	29.9	31.1	32.2	33.3
57	10.8	14.4	18.5	20.2	21.1	22.1	23.1	24.1	25.1	26.0	28.2	30.4	31.6	32.8	33.9
58	11.0	14.7	18.8	20.6	21.5	22.5	23.5	24.5	25.5	26.5	28.7	31.0	32.2	33.4	34.5
59	11.2	14.9	19.1	20.9	21.9	22.9	23.9	24.9	26.0	27.0	29.1	31.5	32.7	33.9	35.1
60	11.4	15.2	19.4	21.3	22.3	23.3	24.3	25.3	26.4	27.4	29.6	32.0	33.3	34.5	35.7
61	11.6	15.4	19.8	21.7	22.6	23.7	24.7	25.7	26.8	27.9	30.1	32.6	33.9	35.1	36.3
62	11.8	15.7	20.1	22.0	23.0	24.1	25.1	26.2	27.3	28.3	30.6	33.1	34.4	35.7	36.9
63	12.0	15.9	20.4	22.4	23.4	24.4	25.5	26.6	27.7	28.8	31.1	33.6	35.0	36.2	37.5
64	12.2	16.2	20.7	22.7	23.7	24.8	25.9	27.0	28.2	29.2	31.6	34.2	35.5	36.8	38.1
65	12.4	16.4	21.1	23.1	24.1	25.2	26.3	27.4	28.6	29.7	32.1	34.7	36.1	37.4	38.7
66	12.5	16.7	21.4	23.4	24.5	25.6	26.7	27.9	29.0	30.2	32.6	35.2	36.6	38.0	39.3
67	12.7	16.9	21.7	23.8	24.9	26.0	27.1	28.3	29.5	30.6	33.1	35.8	37.2	38.5	39.9
68	12.9	17.2	22.0	24.1	25.2	26.4	27.5	28.7	29.9	31.1	33.6	36.3	37.7	39.1	40.5
69	13.1	17.5	22.4	24.5	25.6	26.8	27.9	29.1	30.4	31.5	34.1	36.8	38.3	39.7	41.1
70	13.3	17.7	22.7	24.9	26.0	27.2	28.4	29.5	30.8	32.0	34.6	37.4	38.9	40.3	41.7
80	15.2	20.2	25.9	28.4	29.7	31.0	32.4	33.8	36.2	36.6	39.5	42.7	44.4	46.0	47.6
90	17.1	22.8	29.2	32.0	33.4	35.0	36.5	38.0	39.6	41.1	44.5	48.1	50.0	51.8	53.6
100	19.0	25.3	32.4	35.5	37.1	38.8	40.5	42.2	44.0	45.7	49.4	53.4	55.5	57.5	59.5
300	57.0	75.9	97.2	106.5	111.3	116.4	121.5	126.6	132.0	137.1	148.2	160.2	166.5	172.5	178.5
500	95.0	126.5	162.0	177.5	185.5	194.0	202.5	211.0	220.0	228.5	247.0	267.0	277.5	287.5	297.5

to 1000 gallons. On 8-pp. Folding Card, Post free 3½d., from M. &amp; T. M. SHERIDAN. See page v.



Water required to reduce from **17 OVERPROOF** to strengths of:—

Galls of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	2	25	3	35	35	4	4	4	45	45	5	5	55	55	6
2	4	5	6	7	7	7	75	8	8	85	9	10	11	11	12
3	5	0.7	9	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.6	1.6	1.7	1.7
4	7	1.0	1.2	1.4	1.4	1.5	1.6	1.6	1.7	1.8	1.9	2.1	2.2	2.2	2.3
5	9	1.2	1.6	1.7	1.8	1.9	2.0	2.0	2.1	2.2	2.4	2.6	2.7	2.8	2.9
6	1.1	1.5	1.9	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.9	3.1	3.2	3.4	3.5
7	1.3	1.7	2.2	2.4	2.5	2.6	2.7	2.9	3.0	3.1	3.4	3.6	3.8	3.9	4.1
8	1.4	1.9	2.5	2.7	2.9	3.0	3.1	3.3	3.4	3.6	3.8	4.2	4.3	4.5	4.6
9	1.6	2.2	2.8	3.1	3.2	3.4	3.5	3.7	3.8	4.0	4.3	4.7	4.9	5.0	5.2
10	1.8	2.4	3.1	3.4	3.6	3.8	3.9	4.1	4.3	4.4	4.8	5.2	5.4	5.6	5.8
11	2.0	2.7	3.4	3.8	3.9	4.1	4.3	4.5	4.7	4.9	5.3	5.7	5.9	6.1	6.4
12	2.1	2.9	3.7	4.1	4.3	4.5	4.7	4.9	5.1	5.3	5.8	6.2	6.5	6.7	7.0
13	2.3	3.1	4.1	4.5	4.7	4.9	5.1	5.3	5.6	5.8	6.2	6.7	7.0	7.3	7.5
14	2.5	3.4	4.4	4.8	5.0	5.3	5.5	5.7	6.0	6.2	6.7	7.3	7.5	7.8	8.1
15	2.7	3.6	4.7	5.1	5.4	5.6	5.9	6.1	6.4	6.7	7.2	7.8	8.1	8.4	8.7
16	2.9	3.9	5.0	5.5	5.7	6.0	6.3	6.6	6.8	7.1	7.7	8.3	8.6	8.9	9.3
17	3.0	4.1	5.3	5.8	6.1	6.4	6.6	7.0	7.3	7.5	8.2	8.8	9.2	9.5	9.9
18	3.2	4.4	5.6	6.2	6.5	6.8	7.0	7.4	7.7	8.0	8.6	9.3	9.7	10.1	10.4
19	3.4	4.6	5.9	6.5	6.8	7.1	7.4	7.8	8.1	8.4	9.1	9.9	10.2	10.6	11.0
20	3.6	4.8	6.2	6.9	7.2	7.5	7.8	8.2	8.5	8.9	9.6	10.4	10.8	11.2	11.6
21	3.8	5.1	6.6	7.2	7.5	7.9	8.2	8.6	9.0	9.3	10.1	10.9	11.3	11.7	12.2
22	3.9	5.3	6.9	7.5	7.9	8.3	8.6	9.0	9.4	9.8	10.6	11.4	11.9	12.3	12.8
23	4.1	5.6	7.2	7.9	8.3	8.6	9.0	9.4	9.8	10.2	11.0	11.9	12.4	12.9	13.3
24	4.3	5.8	7.5	8.2	8.6	9.0	9.4	9.8	10.2	10.7	11.5	12.5	12.9	13.4	13.9
25	4.5	6.1	7.8	8.6	9.0	9.4	9.8	10.2	10.7	11.1	12.0	13.0	13.5	14.0	14.5
26	4.7	6.3	8.1	8.9	9.3	9.8	10.2	10.7	11.1	11.6	12.5	13.5	14.0	14.5	15.1
27	4.8	6.5	8.4	9.3	9.7	10.2	10.6	11.1	11.5	12.0	13.0	14.0	14.6	15.1	15.7
28	5.0	6.8	8.7	9.6	10.1	10.5	11.0	11.5	12.0	12.4	13.4	14.5	15.1	15.7	16.2
29	5.2	7.0	9.0	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.9	15.1	15.6	16.2	16.8
30	5.3	7.3	9.4	10.3	10.8	11.3	11.8	12.3	12.8	13.3	14.4	15.6	16.2	16.8	17.4
31	5.4	7.5	9.7	10.6	11.1	11.7	12.2	12.7	13.2	13.8	14.9	16.1	16.7	17.3	18.0
32	5.6	7.7	10.0	11.0	11.5	12.0	12.5	13.1	13.7	14.2	15.4	16.6	17.2	17.9	18.6
33	5.8	8.0	10.3	11.3	11.8	12.4	12.9	13.5	14.1	14.7	15.8	17.1	17.8	18.4	19.1
34	6.0	8.2	10.6	11.7	12.2	12.8	13.3	13.9	14.5	15.1	16.3	17.6	18.3	19.0	19.7
35	6.2	8.5	10.9	12.0	12.6	13.2	13.7	14.4	14.9	15.5	16.8	18.2	18.9	19.6	20.3
36	6.4	8.7	11.2	12.3	12.9	13.5	14.1	14.8	15.4	16.0	17.3	18.7	19.4	20.1	20.9
37	6.6	8.9	11.5	12.7	13.3	13.9	14.5	15.2	15.8	16.4	17.8	19.2	19.9	20.7	21.5
38	6.8	9.2	11.9	13.0	13.6	14.3	14.9	15.6	16.2	16.9	18.2	19.7	20.5	21.2	22.0
39	7.0	9.4	12.2	13.4	14.0	14.7	15.3	16.0	16.7	17.3	18.7	20.2	21.0	21.8	22.6
40	7.2	9.7	12.5	13.7	14.4	15.0	15.7	16.4	17.1	17.7	19.2	20.8	21.6	22.4	23.2
41	7.3	9.9	12.8	14.1	14.7	15.4	16.1	16.8	17.5	18.2	19.7	21.3	22.1	22.9	23.8
42	7.5	10.2	13.1	14.4	15.1	15.8	16.5	17.2	17.9	18.6	20.2	21.8	22.6	23.5	24.4
43	7.7	10.4	13.4	14.7	15.4	16.2	16.9	17.6	18.4	19.1	20.6	22.3	23.2	24.0	24.9
44	7.9	10.6	13.7	15.1	15.8	16.5	17.2	18.0	18.8	19.5	21.1	22.8	23.7	24.6	25.5
45	8.1	10.9	14.0	15.4	16.2	16.9	17.6	18.5	19.2	20.0	21.6	23.4	24.3	25.2	26.1
46	8.2	11.1	14.4	15.8	16.5	17.3	18.0	18.9	19.6	20.4	22.1	23.9	24.8	25.7	26.7
47	8.4	11.4	14.7	16.1	16.9	17.7	18.4	19.3	20.1	20.9	22.6	24.4	25.3	26.3	27.3
48	8.6	11.6	15.0	16.5	17.2	18.0	18.8	19.7	20.5	21.3	23.0	24.9	25.9	26.8	27.8
49	8.8	11.9	15.3	16.8	17.6	18.4	19.2	20.1	20.9	21.8	23.5	25.4	26.4	27.4	28.4
50	9.0	12.1	15.6	17.2	18.0	18.8	19.6	20.5	21.4	22.2	24.0	26.0	27.0	28.0	29.0
51	9.1	12.3	15.9	17.5	18.3	19.2	20.0	20.9	21.8	22.6	24.5	26.5	27.5	28.5	29.6
52	9.3	12.6	16.2	17.8	18.7	19.6	20.4	21.3	22.2	23.1	25.0	27.0	28.0	29.1	30.2
53	9.5	12.8	16.5	18.2	19.0	19.9	20.8	21.7	22.6	23.5	25.4	27.5	28.6	29.6	30.7
54	9.7	13.1	16.8	18.5	19.4	20.3	21.2	22.1	23.1	24.0	25.9	28.0	29.1	30.2	31.3
55	9.9	13.3	17.2	18.9	19.7	20.7	21.6	22.6	23.5	24.5	26.4	28.5	29.6	30.7	31.9
56	10.0	13.6	17.5	19.2	20.1	21.1	22.0	23.0	23.9	24.9	26.9	29.1	30.2	31.3	32.5
57	10.2	13.8	17.8	19.6	20.5	21.4	22.3	23.4	24.3	25.3	27.4	29.6	30.7	31.9	33.1
58	10.4	14.0	18.1	19.9	20.8	21.8	22.7	23.8	24.8	25.8	27.8	30.1	31.3	32.4	33.6
59	10.6	14.3	18.4	20.2	21.2	22.2	23.1	24.2	25.2	26.2	28.3	30.6	31.8	33.0	34.2
60	10.7	14.5	18.7	20.6	21.5	22.6	23.5	24.6	25.6	26.6	28.8	31.1	32.3	33.5	34.8
61	10.9	14.8	19.0	20.9	21.9	22.9	23.9	25.0	26.0	27.1	29.3	31.7	32.9	34.1	35.4
62	11.1	15.0	19.3	21.3	22.3	23.3	24.3	25.4	26.5	27.5	29.8	32.2	33.4	34.7	36.0
63	11.3	15.2	19.7	21.6	22.6	23.7	24.7	25.8	26.9	28.0	30.2	32.7	34.0	35.2	36.5
64	11.5	15.5	20.0	22.0	23.0	24.1	25.1	26.2	27.3	28.4	30.7	33.2	34.5	35.8	37.1
65	11.6	15.7	20.3	22.3	23.3	24.4	25.5	26.6	27.7	28.9	31.2	33.7	35.0	36.3	37.7
66	11.8	16.0	20.6	22.6	23.7	24.8	25.9	27.1	28.2	29.3	31.7	34.3	35.6	36.9	38.3
67	12.0	16.2	20.9	23.0	24.1	25.2	26.3	27.5	28.6	29.7	32.2	34.8	36.1	37.5	38.9
68	12.2	16.5	21.2	23.3	24.4	25.6	26.7	27.9	29.0	30.2	32.6	35.3	36.7	38.0	39.4
69	12.4	16.7	21.5	23.7	24.8	25.9	27.0	28.3	29.5	30.6	33.1	35.8	37.2	38.6	40.0
70	12.5	16.9	21.8	24.0	25.1	26.3	27.4	28.7	29.9	31.1	33.6	36.3	37.7	39.1	40.6
80	14.3	19.4	25.0	27.4	28.7	30.1	31.4	32.8	34.2	35.5	38.4	41.5	43.1	44.7	46.4
90	16.1	21.8	28.1	30.9	32.3	33.8	35.3	36.9	38.4	40.0	43.2	46.7	48.5	50.3	52.2
100	17.9	24.2	31.2	34.3	35.9	37.6	39.2	41.0	42.7	44.4	48.0	51.9	53.9	55.9	58.0
300	53.7	72.6	93.6	102.9	107.7	112.8	117.6	123.0	128.1	133.2	144.0	159.7	161.7	167.7	174.0
500	89.5	121.0	156.0	171.5	179.5	188.0	196.0	205.0	213.5	222.0	240.0	259.5	269.5	279.5	290.0

RELATIVE COST OF WINES in bond and per dozen duty paid.

See page v.



Water required to reduce from **16 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	15	2	3	3	35	35	4	4	4	4	45	5	5	55	55
2	3	5	6	7	7	7	75	8	8	9	9	10	11	11	11
3	5	7	9	10	10	11	11	12	12	13	14	15	16	16	17
4	7	9	12	13	14	15	15	16	17	17	19	20	21	22	23
5	8	12	15	17	17	18	19	20	21	22	23	25	26	27	28
6	10	14	18	20	21	22	23	24	25	26	28	30	32	33	34
7	12	16	21	23	24	25	27	28	29	30	33	35	37	38	40
8	13	18	24	26	28	29	30	32	33	34	37	40	42	44	46
9	15	21	27	30	31	33	34	36	37	39	42	46	47	49	51
10	17	23	30	33	35	36	38	40	42	43	47	51	53	55	57
11	18	25	33	36	38	40	42	44	46	47	51	56	58	60	62
12	20	28	36	40	42	44	46	48	50	52	56	61	63	66	68
13	22	30	39	43	45	47	49	52	54	56	61	66	68	71	74
14	24	32	42	46	48	51	53	56	58	60	65	71	74	77	79
15	25	35	45	50	52	54	57	60	62	65	70	76	79	82	85
16	27	37	48	53	55	58	61	64	66	69	75	81	84	88	91
17	29	39	51	56	59	62	65	67	71	73	79	86	89	93	96
18	30	42	54	60	62	65	68	71	75	78	84	91	95	98	102
19	32	44	57	63	66	69	72	75	79	82	89	96	100	104	108
20	34	46	60	66	69	73	76	79	83	86	93	101	105	109	113
21	35	49	63	70	73	76	80	83	87	91	98	106	110	115	119
22	37	51	66	73	76	80	84	87	91	95	103	111	116	120	125
23	39	53	69	76	80	83	87	91	95	99	107	116	121	126	130
24	40	55	72	79	83	87	91	95	100	103	112	121	126	131	136
25	42	58	75	83	87	91	95	99	104	108	117	127	132	137	142
26	44	60	78	86	90	94	99	103	108	112	121	132	137	142	147
27	45	62	81	89	93	98	103	107	112	116	126	137	142	148	153
28	47	65	84	93	97	102	106	111	116	121	131	142	147	153	159
29	49	67	87	96	100	105	110	115	120	125	135	147	153	159	164
30	50	69	90	99	104	109	114	119	125	129	140	152	158	164	170
31	52	72	93	103	107	113	118	123	129	134	145	157	163	170	176
32	54	74	96	106	111	116	122	127	133	138	149	162	169	175	181
33	55	76	99	109	114	120	125	131	137	142	154	167	174	181	187
34	57	79	102	113	118	123	129	135	141	147	159	172	179	186	193
35	59	81	105	116	121	127	133	139	145	151	163	177	184	191	198
36	60	83	108	119	125	131	137	143	149	155	168	182	189	197	204
37	62	85	111	122	128	134	141	147	154	159	173	187	195	202	210
38	64	88	114	126	131	138	144	151	158	164	177	192	200	208	215
39	66	90	117	129	135	142	148	155	162	168	182	197	205	213	221
40	67	92	120	132	138	145	152	159	166	172	187	202	210	219	227
41	69	95	123	136	142	149	156	163	170	177	191	207	216	224	232
42	71	97	126	139	145	152	160	167	174	181	196	213	221	230	238
43	72	99	129	142	149	156	163	171	178	185	201	218	226	235	243
44	74	102	132	146	152	160	167	175	183	190	205	223	231	241	249
45	76	104	135	149	156	163	171	179	187	194	210	228	237	246	255
46	77	106	138	152	159	167	175	183	191	198	215	233	242	252	261
47	79	109	141	156	163	171	179	187	195	203	219	238	247	257	266
48	81	111	144	159	166	174	182	191	199	207	224	243	252	263	272
49	82	113	147	162	170	178	186	195	203	211	229	248	258	268	278
50	84	116	150	166	173	182	190	199	208	216	234	253	263	274	284
51	86	118	153	169	176	185	194	202	212	220	238	258	268	279	289
52	87	120	156	172	180	189	198	206	216	224	243	263	274	284	295
53	89	122	159	175	183	192	201	210	220	228	248	268	279	290	301
54	91	125	162	179	187	196	205	214	224	233	252	273	284	295	306
55	92	127	165	182	190	200	209	218	228	237	257	278	289	301	312
56	94	129	168	185	194	203	213	222	232	241	262	283	295	306	318
57	96	132	171	189	197	207	217	226	237	246	266	288	300	312	323
58	97	134	174	192	201	211	220	230	241	250	271	293	305	317	329
59	99	136	177	195	204	214	224	234	245	254	276	299	310	323	335
60	101	139	180	199	208	218	228	238	249	259	280	304	316	328	340
61	102	141	183	202	211	221	232	242	253	263	285	309	321	334	346
62	104	143	186	205	215	225	236	246	257	267	290	314	326	339	352
63	106	146	189	209	218	229	239	250	261	272	294	319	331	345	357
64	108	148	192	212	221	232	243	254	266	276	299	324	337	350	363
65	109	150	195	215	225	236	247	258	270	280	304	329	342	356	369
66	111	152	198	218	228	240	251	262	274	284	308	334	347	361	374
67	113	155	201	222	232	243	255	266	278	289	313	339	352	366	380
68	114	157	204	225	235	247	258	270	282	293	318	344	358	372	386
69	116	159	207	228	239	250	262	274	286	297	322	349	363	377	391
70	118	162	210	232	242	254	266	278	291	302	327	354	368	383	397
80	134	185	244	265	277	290	304	318	332	345	374	405	421	438	454
90	151	208	270	298	311	327	342	357	374	388	420	455	473	492	510
100	168	231	300	331	346	363	380	397	415	431	467	506	526	547	567
300	504	693	900	993	1038	1089	1140	1191	1245	1293	1401	1518	1578	1641	1701
500	840	1155	1500	1655	1730	1815	1900	1985	2075	2155	2335	2530	2630	2735	2835

**BREAKING DOWN!!!**

Marvellous results obtained by reducing with Distilled Water and American Blending Wine!! BRYDON &amp; CO., London, Dublin &amp; Belfast.







Water required to reduce from **14 OVERPROOF** to strengths of:—

Galls of Splits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	.15	.2	.3	.3	.3	.35	.35	.4	.4	.4	.45	.5	.5	.5	.55
2	.3	.4	.55	.6	.65	.7	.7	.75	.8	.8	.9	1.0	1.0	1.0	1.1
3	.45	.6	.8	.9	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.4	1.5	1.6	1.6
4	.6	.8	1.1	1.2	1.3	1.3	1.4	1.5	1.6	1.6	1.8	1.9	2.0	2.1	2.2
5	.7	1.0	1.4	1.5	1.6	1.7	1.8	1.9	1.9	2.0	2.2	2.4	2.5	2.6	2.7
6	.9	1.3	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.6	2.9	3.0	3.1	3.3
7	1.0	1.5	1.9	2.1	2.3	2.4	2.5	2.6	2.7	2.8	3.1	3.4	3.5	3.6	3.8
8	1.2	1.7	2.2	2.5	2.6	2.7	2.8	3.0	3.1	3.2	3.5	3.8	4.0	4.2	4.3
9	1.3	1.9	2.5	2.8	2.9	3.1	3.2	3.3	3.5	3.6	4.0	4.3	4.5	4.7	4.8
10	1.5	2.1	2.8	3.1	3.2	3.4	3.5	3.7	3.9	4.0	4.4	4.8	5.0	5.2	5.4
11	1.6	2.3	3.0	3.4	3.5	3.7	3.9	4.1	4.3	4.5	4.8	5.3	5.5	5.7	5.9
12	1.7	2.5	3.3	3.7	3.9	4.0	4.3	4.5	4.7	4.9	5.3	5.8	6.0	6.2	6.5
13	1.9	2.7	3.6	4.0	4.2	4.4	4.6	4.8	5.1	5.3	5.7	6.2	6.5	6.7	7.0
14	2.0	2.9	3.9	4.3	4.5	4.7	5.0	5.2	5.4	5.7	6.2	6.7	7.0	7.3	7.5
15	2.2	3.1	4.1	4.6	4.8	5.1	5.3	5.6	5.8	6.1	6.6	7.2	7.5	7.8	8.1
16	2.3	3.3	4.4	4.9	5.1	5.4	5.7	5.9	6.2	6.5	7.0	7.7	8.0	8.3	8.6
17	2.5	3.6	4.7	5.2	5.5	5.7	6.0	6.3	6.6	6.9	7.5	8.2	8.5	8.8	9.2
18	2.6	3.8	5.0	5.5	5.8	6.1	6.4	6.6	7.0	7.3	7.9	8.6	9.0	9.3	9.7
19	2.8	4.0	5.2	5.8	6.1	6.4	6.7	7.0	7.4	7.7	8.4	9.1	9.5	9.9	10.2
20	2.9	4.2	5.5	6.1	6.4	6.7	7.1	7.4	7.8	8.1	8.8	9.6	10.0	10.4	10.8
21	3.1	4.4	5.8	6.4	6.8	7.1	7.4	7.8	8.2	8.5	9.2	10.1	10.5	10.9	11.3
22	3.2	4.6	6.1	6.8	7.1	7.4	7.8	8.2	8.6	8.9	9.7	10.6	11.0	11.4	11.9
23	3.4	4.8	6.3	7.1	7.4	7.7	8.2	8.6	8.9	9.3	10.1	11.0	11.5	11.9	12.4
24	3.5	5.0	6.6	7.4	7.7	8.1	8.5	8.9	9.3	9.7	10.6	11.5	12.0	12.5	12.9
25	3.7	5.2	6.9	7.7	8.0	8.4	8.9	9.3	9.7	10.1	11.0	12.0	12.5	13.0	13.5
26	3.8	5.4	7.2	8.0	8.4	8.7	9.2	9.6	10.1	10.5	11.4	12.5	13.0	13.5	14.0
27	4.0	5.6	7.4	8.3	8.7	9.1	9.6	10.0	10.5	10.9	11.9	13.0	13.5	14.0	14.6
28	4.1	5.8	7.7	8.6	9.0	9.4	9.9	10.4	10.9	11.3	12.3	13.4	14.0	14.5	15.1
29	4.3	6.1	8.0	8.9	9.3	9.8	10.3	10.8	11.3	11.7	12.8	13.9	14.5	15.0	15.6
30	4.4	6.3	8.3	9.2	9.7	10.1	10.6	11.2	11.7	12.1	13.2	14.4	15.0	15.6	16.2
31	4.6	6.5	8.6	9.5	10.0	10.4	11.0	11.5	12.1	12.6	13.6	14.9	15.5	16.1	16.7
32	4.7	6.7	8.9	9.8	10.3	10.8	11.3	11.9	12.4	13.0	14.1	15.4	16.0	16.6	17.2
33	4.9	6.9	9.1	10.1	10.6	11.1	11.7	12.3	12.8	13.4	14.5	15.8	16.5	17.1	17.8
34	5.0	7.1	9.4	10.4	10.9	11.4	12.1	12.6	13.2	13.8	15.0	16.3	17.0	17.6	18.3
35	5.1	7.3	9.7	10.7	11.3	11.8	12.4	13.0	13.6	14.2	15.4	16.8	17.5	18.2	18.9
36	5.3	7.5	9.9	11.0	11.6	12.1	12.8	13.4	14.0	14.6	15.8	17.3	18.0	18.7	19.4
37	5.4	7.7	10.2	11.4	11.9	12.5	13.1	13.8	14.4	15.0	16.3	17.8	18.5	19.2	19.9
38	5.6	7.9	10.5	11.7	12.2	12.8	13.5	14.1	14.8	15.4	16.7	18.3	19.0	19.7	20.5
39	5.7	8.1	10.8	12.0	12.6	13.1	13.8	14.5	15.1	15.8	17.2	18.7	19.5	20.2	21.0
40	5.9	8.4	11.0	12.3	12.9	13.5	14.2	14.9	15.5	16.2	17.6	19.2	20.0	20.8	21.6
41	6.0	8.6	11.3	12.6	13.2	13.8	14.6	15.3	15.9	16.6	18.0	19.7	20.5	21.3	22.1
42	6.2	8.8	11.6	12.9	13.5	14.2	14.9	15.6	16.3	17.0	18.5	20.2	21.0	21.8	22.6
43	6.3	9.0	11.9	13.2	13.8	14.5	15.3	16.0	16.7	17.4	18.9	20.6	21.5	22.3	23.2
44	6.5	9.2	12.1	13.5	14.2	14.8	15.6	16.4	17.1	17.8	19.4	21.1	22.0	22.8	23.7
45	6.6	9.4	12.4	13.8	14.5	15.2	16.0	16.7	17.5	18.2	19.8	21.6	22.5	23.4	24.3
46	6.8	9.6	12.7	14.1	14.8	15.5	16.3	17.1	17.9	18.6	20.3	22.1	23.0	23.9	24.8
47	6.9	9.8	13.0	14.4	15.1	15.8	16.7	17.5	18.3	19.0	20.7	22.6	23.5	24.4	25.3
48	7.1	10.0	13.2	14.7	15.5	16.2	17.0	17.9	18.7	19.4	21.1	23.0	24.0	24.9	25.9
49	7.2	10.2	13.5	15.0	15.8	16.5	17.4	18.2	19.1	19.8	21.6	23.5	24.5	25.4	26.4
50	7.4	10.4	13.8	15.3	16.1	16.8	17.7	18.6	19.4	20.2	22.0	24.0	25.0	25.9	27.0
51	7.5	10.7	14.1	15.7	16.4	17.2	18.1	19.0	19.8	20.7	22.4	24.5	25.5	26.5	27.5
52	7.7	10.9	14.3	16.0	16.7	17.5	18.4	19.3	20.2	21.1	22.9	25.0	26.0	27.0	28.1
53	7.8	11.1	14.6	16.3	17.1	17.9	18.8	19.7	20.6	21.5	23.3	25.4	26.5	27.5	28.6
54	8.0	11.3	14.9	16.6	17.4	18.2	19.2	20.1	21.0	21.9	23.8	25.9	27.0	28.0	29.1
55	8.1	11.5	15.2	16.9	17.7	18.5	19.5	20.5	21.4	22.3	24.2	26.4	27.5	28.5	29.6
56	8.3	11.7	15.5	17.2	18.0	18.9	19.9	20.8	21.8	22.7	24.6	26.9	28.0	29.1	30.2
57	8.4	11.9	15.7	17.5	18.4	19.2	20.2	21.2	22.2	23.1	25.1	27.4	28.5	29.6	30.7
58	8.6	12.1	16.0	17.8	18.7	19.5	20.6	21.5	22.6	23.5	25.5	27.8	29.0	30.1	31.3
59	8.7	12.3	16.3	18.1	19.0	19.9	21.0	21.9	22.9	23.9	25.9	28.3	29.5	30.6	31.8
60	8.8	12.5	16.6	18.4	19.3	20.2	21.3	22.3	23.3	24.3	26.4	28.8	30.0	31.1	32.3
61	9.0	12.8	16.8	18.7	19.6	20.6	21.7	22.7	23.7	24.7	26.8	29.3	30.5	31.6	32.9
62	9.1	13.0	17.1	19.1	20.0	20.9	22.0	23.1	24.1	25.1	27.3	29.8	31.0	32.1	33.4
63	9.3	13.2	17.4	19.4	20.3	21.2	22.4	23.4	24.5	25.5	27.7	30.2	31.5	32.7	34.0
64	9.4	13.4	17.7	19.7	20.6	21.6	22.7	23.8	24.9	25.9	28.2	30.7	32.0	33.2	34.5
65	9.6	13.6	17.9	20.0	20.9	21.9	23.1	24.2	25.3	26.3	28.6	31.2	32.5	33.7	35.1
66	9.7	13.8	18.2	20.3	21.3	22.2	23.4	24.6	25.7	26.7	29.0	31.7	33.0	34.2	35.6
67	9.9	14.0	18.5	20.6	21.6	22.6	23.8	24.9	26.1	27.1	29.5	32.2	33.5	34.8	36.1
68	10.0	14.2	18.8	20.9	21.9	22.9	24.1	25.3	26.5	27.5	29.9	32.6	34.0	35.3	36.7
69	10.1	14.4	19.1	21.2	22.2	23.3	24.5	25.7	26.8	27.9	30.4	33.1	34.5	35.8	37.2
70	10.3	14.6	19.3	21.5	22.5	23.6	24.8	26.0	27.2	28.3	30.8	33.6	35.0	36.3	37.7
80	11.8	16.7	22.1	24.6	25.8	27.0	28.4	29.8	31.1	32.4	35.2	38.4	40.0	41.5	43.1
90	13.2	18.8	24.8	27.6	29.0	30.3	31.9	33.5	35.0	36.4	39.6	43.2	45.0	46.7	48.5
100	14.7	20.9	27.6	30.7	32.2	33.7	35.5	37.2	38.9	40.5	44.0	48.0	50.0	51.9	53.9
300	44.1	62.7	82.8	92.1	96.6	101.1	106.5	111.6	116.7	121.5	132.0	144.0	150.0	155.7	161.7
500	73.5	104.5	138.0	153.5	161.0	168.5	177.5	186.0	194.5	202.5	220.0	240.0	250.0	259.5	269.5



Water required to reduce from **13 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	.1	.2	.25	.3	.3	.3	.35	.35	.4	.4	.4	.45	.5	.5	.5
2	.3	.4	.5	.6	.6	.65	.7	.7	.8	.8	.9	.9	1.0	1.0	1.0
3	.4	.6	.8	.9	.9	1.0	1.0	1.1	1.1	1.2	1.3	1.4	1.5	1.5	1.6
4	.5	.8	1.1	1.2	1.2	1.3	1.4	1.4	1.5	1.6	1.7	1.9	1.9	2.0	2.1
5	.7	1.0	1.3	1.5	1.6	1.6	1.7	1.8	1.9	2.0	2.1	2.3	2.4	2.5	2.6
6	.8	1.2	1.6	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.6	2.8	2.9	3.0	3.2
7	1.0	1.4	1.9	2.1	2.2	2.3	2.4	2.5	2.6	2.8	3.0	3.3	3.4	3.5	3.7
8	1.1	1.6	2.1	2.4	2.5	2.6	2.7	2.9	3.0	3.1	3.4	3.7	3.9	4.0	4.2
9	1.2	1.8	2.4	2.7	2.8	2.9	3.1	3.2	3.4	3.5	3.8	4.2	4.4	4.5	4.7
10	1.4	2.0	2.7	3.0	3.1	3.3	3.4	3.6	3.8	3.9	4.3	4.7	4.9	5.1	5.3
11	1.5	2.2	2.9	3.3	3.4	3.6	3.8	4.0	4.1	4.3	4.7	5.1	5.3	5.6	5.8
12	1.6	2.4	3.2	3.6	3.7	3.9	4.1	4.3	4.5	4.7	5.1	5.6	5.8	6.1	6.3
13	1.8	2.6	3.4	3.8	4.0	4.2	4.5	4.7	4.9	5.1	5.6	6.1	6.3	6.6	6.8
14	1.9	2.8	3.7	4.1	4.4	4.6	4.8	5.0	5.3	5.5	6.0	6.5	6.8	7.1	7.4
15	2.1	3.0	4.0	4.4	4.7	4.9	5.1	5.4	5.6	5.9	6.4	7.0	7.3	7.6	7.9
16	2.2	3.2	4.2	4.7	5.0	5.2	5.5	5.8	6.0	6.3	6.8	7.5	7.8	8.1	8.4
17	2.3	3.3	4.5	5.0	5.3	5.5	5.8	6.1	6.4	6.7	7.3	7.9	8.2	8.6	8.9
18	2.5	3.5	4.8	5.3	5.6	5.9	6.2	6.5	6.8	7.1	7.7	8.4	8.7	9.1	9.5
19	2.6	3.7	5.0	5.6	5.9	6.2	6.5	6.8	7.1	7.5	8.1	8.9	9.2	9.6	10.0
20	2.7	3.9	5.3	5.9	6.2	6.5	6.9	7.2	7.5	7.9	8.5	9.3	9.7	10.1	10.5
21	2.9	4.1	5.6	6.2	6.5	6.8	7.2	7.6	7.9	8.3	9.0	9.8	10.2	10.6	11.0
22	3.0	4.3	5.8	6.5	6.8	7.2	7.5	7.9	8.3	8.6	9.4	10.3	10.7	11.1	11.6
23	3.2	4.5	6.1	6.8	7.2	7.5	7.9	8.3	8.6	9.0	9.8	10.7	11.2	11.6	12.1
24	3.3	4.7	6.4	7.1	7.5	7.8	8.2	8.6	9.0	9.4	10.2	11.2	11.6	12.1	12.6
25	3.4	4.9	6.6	7.4	7.8	8.2	8.6	9.0	9.4	9.8	10.7	11.7	12.1	12.6	13.1
26	3.6	5.1	6.9	7.7	8.1	8.5	8.9	9.4	9.8	10.2	11.1	12.1	12.6	13.1	13.7
27	3.7	5.3	7.2	8.0	8.4	8.8	9.3	9.7	10.2	10.6	11.5	12.6	13.1	13.6	14.2
28	3.8	5.5	7.4	8.3	8.7	9.1	9.6	10.1	10.5	11.0	12.0	13.0	13.6	14.1	14.7
29	4.0	5.7	7.7	8.6	9.0	9.5	9.9	10.4	10.9	11.4	12.4	13.5	14.1	14.6	15.2
30	4.1	5.9	8.0	8.9	9.3	9.8	10.3	10.8	11.3	11.8	12.8	14.0	14.6	15.2	15.8
31	4.2	6.1	8.2	9.2	9.6	10.1	10.6	11.2	11.7	12.2	13.2	14.5	15.0	15.7	16.3
32	4.4	6.3	8.5	9.5	10.0	10.4	11.0	11.5	12.0	12.6	13.7	14.9	15.5	16.2	16.8
33	4.5	6.5	8.7	9.8	10.3	10.8	11.3	11.9	12.4	13.0	14.1	15.4	16.0	16.7	17.3
34	4.7	6.7	9.0	10.1	10.6	11.1	11.7	12.2	12.8	13.4	14.5	15.8	16.5	17.2	17.9
35	4.8	6.9	9.3	10.4	10.9	11.4	12.0	12.6	13.2	13.8	14.9	16.3	16.9	17.7	18.4
36	4.9	7.1	9.5	10.7	11.2	11.7	12.3	13.0	13.5	14.1	15.4	16.8	17.5	18.2	18.9
37	5.1	7.3	9.8	11.0	11.5	12.1	12.7	13.3	13.9	14.5	15.8	17.2	17.9	18.7	19.4
38	5.2	7.5	10.1	11.2	11.8	12.4	13.0	13.7	14.3	14.9	16.2	17.7	18.4	19.2	20.0
39	5.3	7.7	10.3	11.5	12.1	12.7	13.4	14.0	14.7	15.3	16.7	18.2	18.9	19.7	20.5
40	5.5	7.9	10.6	11.8	12.4	13.0	13.7	14.4	15.0	15.7	17.1	18.6	19.4	20.2	21.0
41	5.6	8.1	10.9	12.1	12.8	13.4	14.1	14.8	15.4	16.1	17.5	19.1	19.9	20.7	21.5
42	5.8	8.3	11.1	12.4	13.1	13.7	14.4	15.1	15.8	16.5	17.9	19.6	20.4	21.2	22.1
43	5.9	8.5	11.4	12.7	13.4	14.0	14.7	15.5	16.2	16.9	18.4	20.0	20.9	21.7	22.6
44	6.0	8.7	11.7	13.0	13.7	14.3	15.1	15.8	16.5	17.3	18.8	20.5	21.3	22.2	23.1
45	6.2	8.9	11.9	13.3	14.0	14.7	15.4	16.2	16.9	17.7	19.2	21.0	21.8	22.7	23.6
46	6.3	9.1	12.2	13.6	14.3	15.0	15.8	16.6	17.3	18.1	19.6	21.4	22.3	23.2	24.2
47	6.4	9.3	12.5	13.9	14.6	15.3	16.1	16.9	17.7	18.5	20.1	21.9	22.8	23.7	24.7
48	6.6	9.5	12.7	14.2	14.9	15.6	16.5	17.3	18.0	18.9	20.5	22.4	23.3	24.2	25.2
49	6.7	9.7	13.0	14.5	15.2	16.0	16.8	17.6	18.4	19.3	20.9	22.8	23.8	24.7	25.7
50	6.9	9.9	13.3	14.8	15.6	16.3	17.2	18.0	18.8	19.7	21.4	23.3	24.3	25.3	26.3
51	7.0	10.0	13.5	15.1	15.9	16.6	17.5	18.4	19.2	20.0	21.8	23.8	24.7	25.8	26.8
52	7.1	10.2	13.8	15.4	16.2	17.0	17.8	18.7	19.6	20.4	22.2	24.2	25.2	26.3	27.3
53	7.3	10.4	14.0	15.7	16.5	17.3	18.2	19.1	19.9	20.8	22.6	24.7	25.7	26.8	27.8
54	7.4	10.6	14.3	16.0	16.8	17.6	18.5	19.4	20.3	21.2	23.1	25.2	26.2	27.3	28.4
55	7.5	10.8	14.6	16.3	17.1	17.9	18.9	19.8	20.7	21.6	23.5	25.6	26.7	27.8	28.9
56	7.7	11.0	14.8	16.6	17.4	18.3	19.2	20.2	21.1	22.0	23.9	26.1	27.2	28.3	29.4
57	7.8	11.2	15.0	16.9	17.7	18.6	19.6	20.5	21.4	22.4	24.3	26.6	27.6	28.8	29.9
58	7.9	11.4	15.3	17.2	18.0	18.9	19.9	20.9	21.8	22.8	24.8	27.0	28.1	29.3	30.5
59	8.1	11.6	15.6	17.5	18.3	19.2	20.2	21.2	22.2	23.2	25.2	27.5	28.6	29.8	31.0
60	8.2	11.8	15.9	17.8	18.7	19.6	20.6	21.6	22.6	23.6	25.6	28.0	29.1	30.3	31.5
61	8.4	12.0	16.2	18.1	19.0	19.9	20.9	22.0	22.9	24.0	26.0	28.4	29.6	30.8	32.0
62	8.5	12.2	16.4	18.4	19.3	20.2	21.3	22.3	23.3	24.4	26.5	28.9	30.1	31.3	32.6
63	8.6	12.4	16.7	18.6	19.6	20.5	21.6	22.7	23.7	24.8	26.9	29.4	30.6	31.8	33.1
64	8.8	12.6	17.0	18.9	19.9	20.9	22.0	23.0	24.1	25.2	27.3	29.8	31.0	32.3	33.6
65	8.9	12.8	17.2	19.2	20.2	21.2	22.3	23.4	24.4	25.6	27.8	30.3	31.5	32.8	34.1
66	9.0	13.0	17.5	19.5	20.5	21.5	22.6	23.8	24.8	25.9	28.2	30.8	32.0	33.3	34.7
67	9.2	13.2	17.8	19.8	20.8	21.8	23.0	24.1	25.2	26.3	28.6	31.2	32.5	33.8	35.2
68	9.3	13.4	18.0	20.1	21.1	22.2	23.3	24.5	25.6	26.7	29.0	31.7	33.0	34.3	35.7
69	9.5	13.6	18.3	20.4	21.5	22.5	23.7	24.8	25.9	27.1	29.5	32.2	33.5	34.8	36.2
70	9.6	13.8	18.6	20.7	21.8	22.8	24.0	25.2	26.3	27.5	29.9	32.6	34.0	35.4	36.8
80	11.0	15.8	21.2	23.7	24.9	26.1	27.4	28.8	30.1	31.4	34.2	37.3	38.8	40.4	42.0
90	12.3	17.7	23.9	26.6	28.0	29.3	30.9	32.4	33.8	35.4	38.4	41.9	43.7	45.5	47.3
100	13.7	19.7	26.5	29.6	31.1	32.6	34.3	36.0	37.6	39.3	42.7	46.6	48.5	50.5	52.5
300	41.1	59.1	79.5	88.8	93.3	97.8	102.9	108.0	112.8	117.9	128.1	139.8	145.5	151.5	157.5
500	68.5	98.5	132.5	148.0	155.5	163.0	171.5	180.0	188.0	196.5	213.5	233.0	242.5	252.5	262.5

**STOCK-TAKING !!**

Special arrangements for periodical Stock-takings, Gauging, &c.  
Apply to the Publisher of this work.

See page v.



Water required to reduce from **12 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	1	2	2.5	3	3	3	3.5	3.5	4	4	4	4.5	5	5	5
2	.25	.4	.5	.6	.6	.6	.65	.7	.7	.75	.8	.9	.9	1.0	1.0
3	.4	.6	.75	.85	.9	.9	1.0	1.0	1.1	1.1	1.2	1.4	1.4	1.5	1.5
4	.5	.7	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.5	1.7	1.8	1.9	2.0	2.0
5	.6	.9	1.3	1.4	1.5	1.6	1.6	1.7	1.8	1.9	2.1	2.3	2.4	2.4	2.5
6	.75	1.1	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.5	2.7	2.8	2.9	3.1
7	.9	1.3	1.8	2.0	2.1	2.2	2.3	2.4	2.5	2.7	2.9	3.2	3.3	3.4	3.6
8	1.0	1.5	2.0	2.3	2.4	2.5	2.6	2.8	2.9	3.0	3.3	3.6	3.8	3.9	4.1
9	1.1	1.7	2.3	2.6	2.7	2.8	3.0	3.1	3.3	3.4	3.7	4.1	4.2	4.4	4.6
10	1.3	1.9	2.5	2.8	3.0	3.1	3.3	3.5	3.6	3.8	4.1	4.5	4.7	4.9	5.1
11	1.4	2.1	2.8	3.1	3.3	3.5	3.6	3.8	4.0	4.2	4.6	5.0	5.2	5.4	5.6
12	1.5	2.2	3.0	3.4	3.6	3.8	4.0	4.2	4.4	4.5	5.0	5.4	5.7	5.9	6.1
13	1.6	2.4	3.3	3.7	3.9	4.1	4.3	4.5	4.7	4.9	5.4	5.9	6.1	6.4	6.6
14	1.8	2.6	3.6	4.0	4.2	4.4	4.6	4.9	5.1	5.3	5.8	6.3	6.6	6.9	7.1
15	1.9	2.8	3.8	4.3	4.5	4.7	4.9	5.2	5.4	5.7	6.2	6.8	7.1	7.3	7.6
16	2.0	3.0	4.1	4.5	4.8	5.0	5.3	5.6	5.8	6.1	6.6	7.2	7.5	7.8	8.2
17	2.1	3.2	4.3	4.8	5.1	5.3	5.6	5.9	6.2	6.5	7.0	7.7	8.0	8.3	8.7
18	2.3	3.4	4.6	5.1	5.4	5.7	5.9	6.2	6.5	6.8	7.5	8.1	8.5	8.8	9.2
19	2.4	3.6	4.8	5.4	5.7	6.0	6.3	6.6	6.9	7.2	7.9	8.6	8.9	9.3	9.7
20	2.5	3.7	5.1	5.7	6.0	6.3	6.6	6.9	7.3	7.6	8.3	9.0	9.4	9.8	10.2
21	2.6	3.9	5.3	6.0	6.3	6.6	6.9	7.3	7.6	8.0	8.7	9.5	9.9	10.3	10.7
22	2.8	4.1	5.6	6.2	6.6	6.9	7.3	7.6	8.0	8.4	9.1	9.9	10.4	10.8	11.2
23	2.9	4.3	5.8	6.5	6.9	7.2	7.6	8.0	8.3	8.7	9.5	10.4	10.8	11.3	11.7
24	3.0	4.5	6.1	6.8	7.2	7.5	7.9	8.3	8.7	9.1	9.9	10.8	11.3	11.8	12.2
25	3.1	4.7	6.3	7.1	7.5	7.8	8.3	8.7	9.1	9.5	10.3	11.3	11.8	12.2	12.7
26	3.3	4.9	6.6	7.4	7.8	8.2	8.6	9.0	9.4	9.9	10.8	11.8	12.2	12.7	13.3
27	3.4	5.1	6.9	7.7	8.1	8.5	8.9	9.4	9.8	10.3	11.2	12.2	12.7	13.2	13.8
28	3.5	5.2	7.1	8.0	8.4	8.8	9.3	9.7	10.2	10.6	11.6	12.7	13.2	13.7	14.3
29	3.7	5.4	7.4	8.2	8.7	9.1	9.6	10.1	10.5	11.0	12.0	13.1	13.7	14.2	14.8
30	3.8	5.6	7.6	8.5	9.0	9.4	9.9	10.4	10.9	11.4	12.4	13.6	14.1	14.7	15.3
31	3.9	5.8	7.9	8.8	9.3	9.7	10.2	10.8	11.3	11.8	12.8	14.0	14.6	15.2	15.8
32	4.0	6.0	8.1	9.1	9.6	10.0	10.6	11.1	11.6	12.2	13.2	14.5	15.1	15.7	16.3
33	4.2	6.2	8.4	9.4	9.9	10.4	10.9	11.5	12.0	12.5	13.7	14.9	15.5	16.2	16.8
34	4.3	6.4	8.6	9.7	10.2	10.7	11.2	11.8	12.3	12.9	14.1	15.4	16.0	16.7	17.3
35	4.4	6.5	8.9	9.9	10.5	11.0	11.6	12.1	12.7	13.3	14.5	15.8	16.5	17.1	17.8
36	4.5	6.7	9.1	10.2	10.8	11.3	11.9	12.5	13.1	13.7	14.9	16.3	17.0	17.6	18.4
37	4.7	6.9	9.4	10.5	11.1	11.6	12.2	12.8	13.4	14.1	15.3	16.7	17.4	18.1	18.9
38	4.8	7.1	9.7	10.8	11.4	11.9	12.5	13.2	13.8	14.4	15.7	17.2	17.9	18.6	19.4
39	4.9	7.3	9.9	11.1	11.7	12.2	12.9	13.5	14.2	14.8	16.1	17.6	18.4	19.1	19.9
40	5.0	7.5	10.2	11.4	12.0	12.6	13.2	13.9	14.6	15.2	16.6	18.1	18.8	19.6	20.4
41	5.2	7.7	10.4	11.6	12.3	12.9	13.5	14.2	14.9	15.6	17.0	18.5	19.3	20.1	20.9
42	5.3	7.9	10.7	11.9	12.6	13.2	13.9	14.6	15.3	16.0	17.4	19.0	19.8	20.6	21.4
43	5.4	8.0	10.9	12.2	12.9	13.5	14.2	14.9	15.6	16.3	17.8	19.4	20.3	21.1	21.9
44	5.5	8.2	11.2	12.5	13.2	13.8	14.5	15.3	16.0	16.7	18.2	19.9	20.7	21.6	22.4
45	5.7	8.4	11.4	12.8	13.5	14.1	14.9	15.6	16.3	17.1	18.6	20.3	21.2	22.0	22.9
46	5.8	8.6	11.7	13.1	13.8	14.4	15.2	16.0	16.7	17.5	19.0	20.8	21.7	22.5	23.5
47	5.9	8.8	11.9	13.3	14.1	14.8	15.5	16.3	17.1	17.9	19.5	21.2	22.1	23.0	24.0
48	6.0	9.0	12.2	13.6	14.4	15.1	15.8	16.7	17.4	18.2	19.9	21.7	22.6	23.5	24.5
49	6.2	9.2	12.4	13.9	14.7	15.4	16.2	17.0	17.8	18.6	20.3	22.1	23.1	24.0	25.0
50	6.3	9.3	12.7	14.2	15.0	15.7	16.5	17.3	18.1	19.0	20.7	22.6	23.5	24.5	25.5
51	6.4	9.5	13.0	14.5	15.3	16.0	16.8	17.7	18.5	19.4	21.1	23.1	24.0	25.0	26.0
52	6.5	9.7	13.2	14.8	15.6	16.3	17.2	18.0	18.9	19.8	21.5	23.5	24.5	25.5	26.5
53	6.7	9.9	13.5	15.0	15.8	16.6	17.5	18.4	19.2	20.1	21.9	24.0	25.0	26.0	27.0
54	6.8	10.1	13.7	15.3	16.1	17.0	17.8	18.7	19.6	20.5	22.4	24.4	25.4	26.5	27.5
55	6.9	10.3	14.0	15.6	16.4	17.3	18.1	19.1	20.0	20.9	22.8	24.9	25.9	27.0	28.0
56	7.1	10.5	14.2	15.9	16.7	17.6	18.5	19.4	20.3	21.3	23.2	25.3	26.4	27.4	28.6
57	7.2	10.7	14.5	16.2	17.0	17.9	18.8	19.8	20.7	21.7	23.6	25.8	26.8	27.9	29.1
58	7.3	10.8	14.7	16.5	17.3	18.2	19.1	20.1	21.0	22.0	24.0	26.2	27.3	28.4	29.6
59	7.4	11.0	15.0	16.8	17.6	18.5	19.5	20.5	21.4	22.4	24.4	26.7	27.8	28.9	30.1
60	7.6	11.2	15.2	17.0	17.9	18.8	19.8	20.8	21.8	22.8	24.8	27.1	28.3	29.4	30.6
61	7.7	11.4	15.5	17.3	18.2	19.2	20.1	21.2	22.1	23.2	25.3	27.6	28.7	29.9	31.1
62	7.8	11.6	15.7	17.6	18.5	19.5	20.5	21.5	22.5	23.6	25.7	28.0	29.2	30.4	31.6
63	7.9	11.8	16.0	17.9	18.8	19.8	20.8	21.9	22.9	23.9	26.1	28.5	29.7	30.9	32.1
64	8.1	12.0	16.3	18.2	19.1	20.1	21.1	22.2	23.2	24.3	26.5	28.9	30.1	31.4	32.6
65	8.2	12.2	16.5	18.5	19.4	20.4	21.4	22.6	23.6	24.7	26.9	29.4	30.6	31.8	33.2
66	8.3	12.3	16.8	18.7	19.7	20.7	21.8	22.9	24.0	25.1	27.3	29.8	31.1	32.3	33.7
67	8.4	12.5	17.0	19.0	20.0	21.0	22.1	23.2	24.3	25.5	27.7	30.3	31.6	32.8	34.2
68	8.5	12.7	17.3	19.3	20.3	21.3	22.4	23.6	24.7	25.8	28.2	30.7	32.0	33.3	34.7
69	8.7	12.9	17.5	19.6	20.6	21.7	22.8	23.9	25.0	26.2	28.6	31.2	32.5	33.8	35.2
70	8.8	13.1	17.8	19.9	20.9	22.0	23.1	24.3	25.4	26.6	29.0	31.6	33.0	34.3	35.7
80	10.1	15.0	20.3	22.7	23.9	25.1	26.4	27.8	29.0	30.4	33.1	36.2	37.7	39.2	40.8
90	11.3	16.8	22.9	25.6	26.9	28.3	29.7	31.2	32.7	34.2	37.3	40.7	42.4	44.1	45.9
100	12.6	18.7	25.4	28.4	29.9	31.4	33.0	34.7	36.3	38.0	41.4	45.2	47.1	49.0	51.0
300	37.8	56.1	76.2	85.2	89.7	94.2	99.0	104.1	108.9	114.0	124.2	135.6	141.3	147.0	153.0
500	63.0	93.5	127.0	142.0	149.5	157.0	165.0	173.5	181.5	190.0	207.0	226.0	235.5	245.0	255.0

**THE HANDBOOK** is quite a storehouse of the most valuable information for both the Wholesale and Retail trade. All should have a Copy. See page v.



Water required to reduce from **11 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls. .1	Galls. .2	Galls. .25	Galls. .25	Galls. .3	Galls. .3	Galls. .3	Galls. .35	Galls. .35	Galls. .4	Galls. .4	Galls. .45	Galls. .45	Galls. .5	Galls. .5
1	.1	.2	.25	.25	.3	.3	.3	.35	.35	.4	.4	.45	.45	.5	.5
2	.25	.35	.5	.55	.6	.6	.65	.65	.7	.75	.8	.9	.9	1.0	1.0
3	.35	.5	.7	.8	.85	.9	.95	1.0	1.0	1.1	1.2	1.3	1.4	1.4	1.5
4	.45	.7	1.0	1.1	1.1	1.2	1.3	1.3	1.4	1.5	1.6	1.8	1.8	1.9	2.0
5	.6	.9	1.2	1.4	1.4	1.5	1.6	1.7	1.7	1.8	2.0	2.2	2.3	2.4	2.5
6	.7	1.1	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.4	2.6	2.7	2.9	3.0
7	.8	1.2	1.7	1.9	2.0	2.1	2.2	2.3	2.4	2.6	2.8	3.1	3.2	3.3	3.5
8	.9	1.4	1.9	2.2	2.3	2.4	2.5	2.7	2.8	2.9	3.2	3.5	3.6	3.8	4.0
9	1.0	1.6	2.2	2.4	2.6	2.7	2.9	2.0	3.1	3.3	3.6	3.9	4.1	4.3	4.5
10	1.1	1.8	2.4	2.7	2.9	3.0	3.2	3.3	3.5	3.7	4.0	4.4	4.6	4.8	5.0
11	1.3	1.9	2.7	3.0	3.2	3.3	3.5	3.7	3.8	4.0	4.4	4.8	5.0	5.2	5.5
12	1.4	2.1	2.9	3.3	3.4	3.6	3.8	4.0	4.2	4.4	4.8	5.3	5.5	5.7	6.0
13	1.5	2.3	3.1	3.5	3.7	3.9	4.1	4.3	4.5	4.8	5.2	5.7	5.9	6.2	6.5
14	1.6	2.5	3.4	3.8	4.0	4.2	4.5	4.7	4.9	5.1	5.6	6.1	6.4	6.7	7.0
15	1.7	2.6	3.6	4.1	4.3	4.5	4.8	5.0	5.2	5.5	6.0	6.6	6.8	7.2	7.5
16	1.8	2.8	3.9	4.3	4.6	4.8	5.1	5.3	5.6	5.9	6.4	7.0	7.3	7.6	8.0
17	2.0	3.0	4.1	4.6	4.9	5.1	5.4	5.7	5.9	6.2	6.8	7.4	7.8	8.1	8.5
18	2.1	3.2	4.4	4.9	5.2	5.4	5.9	6.0	6.3	6.6	7.2	7.9	8.2	8.6	8.9
19	2.2	3.4	4.6	5.2	5.4	5.7	6.0	6.3	6.6	7.0	7.6	8.3	8.7	9.1	9.4
20	2.3	3.5	4.8	5.4	5.7	6.0	6.4	6.7	7.0	7.3	8.0	8.8	9.1	9.5	9.9
21	2.4	3.7	5.1	5.7	6.0	6.3	6.7	7.0	7.3	7.7	8.4	9.2	9.6	10.0	10.4
22	2.5	3.9	5.3	6.0	6.3	6.6	7.0	7.3	7.7	8.1	8.8	9.6	10.0	10.5	10.9
23	2.6	4.0	5.6	6.3	6.6	6.9	7.3	7.7	8.0	8.4	9.2	10.1	10.5	11.0	11.4
24	2.8	4.2	5.8	6.5	6.9	7.2	7.6	8.0	8.4	8.8	9.6	10.5	11.0	11.4	11.9
25	2.9	4.4	6.0	6.8	7.2	7.5	7.9	8.3	8.7	9.2	10.0	10.9	11.4	11.9	12.4
26	3.0	4.6	6.3	7.1	7.5	7.9	8.3	8.7	9.1	9.5	10.5	11.4	11.9	12.4	12.9
27	3.1	4.8	6.5	7.3	7.7	8.2	8.6	9.0	9.4	9.9	10.9	11.8	12.3	12.9	13.4
28	3.2	4.9	6.8	7.6	8.0	8.5	8.9	9.4	9.8	10.3	11.3	12.3	12.8	13.4	13.9
29	3.3	5.1	7.0	7.9	8.3	8.8	9.2	9.7	10.1	10.6	11.7	12.7	13.2	13.9	14.4
30	3.4	5.3	7.3	8.2	8.6	9.1	9.5	10.0	10.5	11.0	12.1	13.1	13.7	14.3	14.9
31	3.6	5.5	7.5	8.4	8.9	9.4	9.9	10.4	10.8	11.4	12.5	13.6	14.2	14.8	15.4
32	3.7	5.6	7.8	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.9	14.0	14.6	15.3	15.9
33	3.8	5.8	8.0	9.0	9.5	10.0	10.5	11.0	11.5	12.1	13.3	14.5	15.1	15.7	16.4
34	3.9	6.0	8.2	9.2	9.8	10.3	10.8	11.4	11.9	12.5	13.7	14.9	15.5	16.2	16.9
35	4.0	6.2	8.5	9.5	10.0	10.6	11.1	11.7	12.2	12.8	14.1	15.3	16.0	16.7	17.4
36	4.1	6.3	8.7	9.8	10.3	10.9	11.4	12.0	12.6	13.2	14.5	15.8	16.5	17.2	17.9
37	4.2	6.5	9.0	10.1	10.6	11.2	11.8	12.4	12.9	13.6	14.9	16.2	16.9	17.6	18.4
38	4.3	6.7	9.2	10.3	10.9	11.5	12.1	12.7	13.3	13.9	15.3	16.6	17.4	18.1	18.9
39	4.4	6.9	9.4	10.6	11.2	11.8	12.4	13.0	13.6	14.3	15.7	17.1	17.8	18.6	19.4
40	4.6	7.0	9.7	10.9	11.5	12.1	12.7	13.4	14.0	14.7	16.1	17.5	18.3	19.1	19.9
41	4.7	7.2	9.9	11.2	11.8	12.4	13.0	13.7	14.3	15.0	16.5	17.9	18.7	19.5	20.4
42	4.8	7.4	10.2	11.4	12.1	12.7	13.4	14.0	14.7	15.4	16.9	18.4	19.2	20.0	20.9
43	4.9	7.6	10.4	11.7	12.3	13.0	13.7	14.4	15.0	15.8	17.3	18.8	19.7	20.5	21.4
44	5.1	7.7	10.6	12.0	12.6	13.3	14.0	14.7	15.4	16.1	17.7	19.3	20.1	21.0	21.9
45	5.2	7.9	10.9	12.2	12.9	13.6	14.3	15.0	15.7	16.5	18.1	19.7	20.6	21.5	22.4
46	5.3	8.1	11.1	12.5	13.2	13.9	14.6	15.4	16.1	16.9	18.5	20.1	21.0	21.9	22.9
47	5.4	8.3	11.4	12.8	13.5	14.2	14.9	15.7	16.4	17.2	18.9	20.6	21.5	22.4	23.4
48	5.5	8.4	11.6	13.1	13.8	14.5	15.3	16.0	16.8	17.6	19.3	21.0	21.9	22.9	23.9
49	5.6	8.6	11.9	13.3	14.1	14.8	15.6	16.4	17.1	18.0	19.7	21.5	22.4	23.4	24.4
50	5.7	8.8	12.1	13.6	14.3	15.1	15.9	16.7	17.5	18.3	20.1	21.9	22.8	23.8	24.8
51	5.9	9.0	12.3	13.9	14.6	15.4	16.2	17.0	17.8	18.7	20.5	22.3	23.3	24.3	25.3
52	6.0	9.2	12.6	14.1	14.9	15.7	16.5	17.4	18.2	19.1	20.9	22.8	23.8	24.8	25.8
53	6.1	9.3	12.8	14.4	15.2	16.0	16.9	17.7	18.5	19.4	21.3	23.2	24.2	25.3	26.3
54	6.2	9.5	13.1	14.7	15.5	16.3	17.2	18.0	18.9	19.8	21.7	23.7	24.7	25.8	26.8
55	6.3	9.7	13.3	15.0	15.8	16.6	17.5	18.4	19.2	20.2	22.1	24.1	25.1	26.2	27.3
56	6.4	9.9	13.6	15.2	16.1	16.9	17.8	18.7	19.6	20.6	22.5	24.5	25.6	26.7	27.8
57	6.6	10.0	13.8	15.5	16.4	17.2	18.1	19.0	19.9	20.9	22.9	25.0	26.0	27.2	28.3
58	6.7	10.2	14.0	15.8	16.6	17.5	18.4	19.4	20.3	21.3	23.4	25.4	26.5	27.7	28.8
59	6.8	10.4	14.3	16.0	16.9	17.8	18.8	19.7	20.6	21.7	23.7	25.8	27.0	28.1	29.3
60	6.9	10.6	14.5	16.3	17.2	18.1	19.1	20.0	21.0	22.0	24.1	26.3	27.4	28.6	29.8
61	7.0	10.7	14.8	16.6	17.5	18.4	19.4	20.4	21.3	22.4	24.5	26.7	27.9	29.1	30.3
62	7.1	10.9	15.0	16.9	17.8	18.7	19.7	20.7	21.7	22.8	24.9	27.1	28.3	29.6	30.8
63	7.2	10.1	15.2	17.1	18.1	19.0	20.0	21.0	22.0	23.1	25.3	27.6	28.8	30.0	31.3
64	7.4	11.3	15.5	17.4	18.4	19.3	20.4	21.4	22.4	23.5	25.7	28.0	29.2	30.5	31.8
65	7.5	11.4	15.7	17.7	18.6	19.6	20.7	21.7	22.7	23.9	26.1	28.4	29.7	31.0	32.3
66	7.6	11.6	16.0	18.0	18.9	19.9	21.0	22.0	23.1	24.2	26.5	28.9	30.2	31.5	32.8
67	7.7	11.8	16.2	18.2	19.2	20.2	21.3	22.4	23.4	24.6	26.9	29.3	30.7	32.0	33.3
68	7.8	12.0	16.5	18.5	19.5	20.5	21.6	22.7	23.8	25.0	27.3	29.8	31.1	32.4	33.8
69	7.9	12.1	16.7	18.8	19.8	20.8	21.9	23.0	24.1	25.3	27.7	30.2	31.6	32.9	34.3
70	8.0	12.3	16.9	19.0	20.1	21.1	22.3	23.4	24.5	25.7	28.1	30.7	32.0	33.4	34.8
80	9.2	14.1	19.4	21.7	23.0	24.2	25.4	26.7	28.0	29.4	32.2	35.0	36.6	38.2	39.8
90	10.3	15.8	21.8	24.5	25.8	27.2	28.6	30.1	31.5	33.0	36.2	39.4	41.1	42.9	44.7
100	11.5	17.6	24.2	27.2	28.7	30.2	31.8	33.4	35.0	36.7	40.2	43.8	45.7	47.7	49.7
300	34.5	52.8	72.6	81.6	86.1	90.6	95.4	100.2	105.0	110.1	120.6	131.4	137.1	143.1	149.1
500	57.5	88.0	121.0	136.0	143.5	151.0	159.0	167.0	175.0	183.5	201.0	219.0	228.5	238.5	248.5

**REDUCING !!!**

Those particulars about having soft round Whiskies should reduce with American Blending Wine and Distilled Water. **BRYDON & CO.,** London, Dublin & Belfast.



Water required to reduce from **10 OVERPROOF** to strengths of:—

Galls of Splits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
		Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	.1	.15	.25	.25	.3	.3	.3	.3	.35	.35	.4	.4	.45	.5	.5
2	.2	.35	.45	.5	.55	.6	.6	.65	.7	.7	.8	.85	.9	.95	1.0
3	.3	.5	.7	.8	.8	.9	.9	.95	1.0	1.1	1.2	1.3	1.3	1.4	1.4
4	.4	.65	.9	1.0	1.1	1.2	1.2	1.3	1.3	1.4	1.5	1.7	1.8	1.9	1.9
5	.5	.8	1.2	1.3	1.4	1.4	1.5	1.6	1.7	1.8	1.9	2.1	2.2	2.3	2.4
6	.65	1.0	1.4	1.6	1.6	1.7	1.8	1.9	2.0	2.1	2.3	2.5	2.7	2.8	2.9
7	.75	1.2	1.6	1.8	1.9	2.0	2.1	2.2	2.4	2.5	2.7	3.0	3.1	3.2	3.4
8	.85	1.3	1.8	2.1	2.2	2.3	2.4	2.6	2.7	2.8	3.1	3.4	3.6	3.7	3.9
9	.95	1.5	2.1	2.3	2.5	2.6	2.7	2.9	3.0	3.2	3.5	3.8	4.0	4.2	4.3
10	1.0	1.6	2.3	2.6	2.7	2.9	3.0	3.2	3.4	3.5	3.9	4.2	4.4	4.6	4.8
11	1.1	1.8	2.5	2.9	3.0	3.2	3.4	3.5	3.7	3.9	4.3	4.7	4.9	5.1	5.3
12	1.3	2.0	2.8	3.1	3.3	3.5	3.7	3.9	4.0	4.2	4.7	5.1	5.3	5.6	5.8
13	1.4	2.1	3.0	3.4	3.6	3.8	4.0	4.2	4.4	4.6	5.0	5.5	5.8	6.0	6.3
14	1.5	2.3	3.2	3.6	3.8	4.1	4.3	4.5	4.7	5.0	5.4	5.9	6.2	6.5	6.8
15	1.6	2.5	3.5	3.9	4.1	4.3	4.6	4.8	5.0	5.3	5.8	6.4	6.7	6.9	7.3
16	1.7	2.6	3.7	4.2	4.4	4.6	4.9	5.1	5.4	5.7	6.2	6.8	7.1	7.4	7.7
17	1.8	2.8	3.9	4.4	4.7	4.9	5.2	5.5	5.7	6.0	6.6	7.2	7.5	7.8	8.2
18	1.9	3.0	4.2	4.7	4.9	5.2	5.5	5.8	6.0	6.4	7.0	7.6	8.0	8.3	8.7
19	2.0	3.1	4.4	4.9	5.2	5.5	5.8	6.1	6.4	6.7	7.4	8.1	8.4	8.8	9.2
20	2.1	3.3	4.6	5.2	5.5	5.8	6.1	6.4	6.7	7.1	7.8	8.5	8.9	9.3	9.7
21	2.2	3.5	4.8	5.5	5.8	6.1	6.4	6.7	7.0	7.4	8.1	8.9	9.3	9.7	10.1
22	2.3	3.6	5.1	5.7	6.0	6.4	6.7	7.1	7.4	7.8	8.5	9.3	9.8	10.2	10.6
23	2.4	3.8	5.3	6.0	6.3	6.7	7.0	7.4	7.7	8.1	8.9	9.8	10.2	10.7	11.1
24	2.5	4.0	5.5	6.2	6.6	7.0	7.3	7.7	8.1	8.5	9.3	10.2	10.7	11.1	11.6
25	2.6	4.1	5.8	6.5	6.9	7.2	7.6	8.0	8.4	8.8	9.7	10.6	11.1	11.6	12.1
26	2.7	4.3	6.0	6.8	7.1	7.5	7.9	8.3	8.7	9.2	10.1	11.0	11.5	12.1	12.6
27	2.8	4.5	6.2	7.0	7.4	7.8	8.2	8.7	9.1	9.5	10.5	11.5	12.0	12.5	13.0
28	2.9	4.6	6.5	7.2	7.7	8.1	8.5	9.0	9.4	9.9	10.9	11.9	12.4	13.0	13.5
29	3.0	4.8	6.7	7.5	8.0	8.4	8.8	9.3	9.7	10.3	11.3	12.3	12.9	13.4	14.0
30	3.1	4.9	6.9	7.8	8.2	8.7	9.1	9.6	10.1	10.6	11.6	12.7	13.3	13.9	14.5
31	3.3	5.1	7.2	8.1	8.5	9.0	9.5	10.0	10.4	11.0	12.0	13.2	13.8	14.4	15.0
32	3.4	5.3	7.4	8.3	8.8	9.3	9.8	10.3	10.8	11.3	12.4	13.6	14.2	14.8	15.5
33	3.5	5.4	7.6	8.6	9.1	9.6	10.1	10.6	11.1	11.7	12.8	14.0	14.7	15.3	15.9
34	3.6	5.6	7.9	8.8	9.3	9.9	10.4	10.9	11.5	12.0	13.2	14.4	15.1	15.7	16.4
35	3.7	5.8	8.1	9.1	9.6	10.1	10.7	11.2	11.8	12.4	13.6	14.9	15.5	16.2	16.9
36	3.8	5.9	8.3	9.4	9.9	10.4	11.0	11.6	12.1	12.7	14.0	15.3	16.0	16.7	17.4
37	3.9	6.1	8.5	9.6	10.2	10.7	11.3	11.9	12.5	13.1	14.4	15.7	16.4	17.1	17.9
38	4.0	6.3	8.8	9.8	10.4	11.0	11.6	12.2	12.8	13.4	14.7	16.1	16.9	17.6	18.3
39	4.1	6.4	9.0	10.1	10.7	11.3	11.9	12.5	13.1	13.8	15.1	16.6	17.3	18.1	18.8
40	4.2	6.6	9.2	10.4	11.0	11.6	12.2	12.8	13.5	14.2	15.5	17.0	17.8	18.5	19.3
41	4.3	6.8	9.5	10.7	11.3	11.9	12.5	13.2	13.8	14.5	15.9	17.4	18.2	19.0	19.8
42	4.4	6.9	9.7	10.9	11.5	12.2	12.8	13.5	14.2	14.9	16.3	17.8	18.7	19.4	20.2
43	4.5	7.1	9.9	11.2	11.8	12.5	13.1	13.8	14.5	15.2	16.7	18.3	19.1	19.9	20.7
44	4.6	7.3	10.2	11.4	12.1	12.8	13.4	14.1	14.8	15.6	17.1	18.7	19.5	20.4	21.2
45	4.7	7.4	10.4	11.7	12.4	13.0	13.7	14.4	15.2	15.9	17.5	19.1	20.0	20.8	21.7
46	4.8	7.6	10.6	12.0	12.6	13.3	14.0	14.8	15.5	16.3	17.8	19.5	20.4	21.3	22.2
47	4.9	7.8	10.9	12.2	12.9	13.6	14.3	15.1	15.8	16.6	18.2	20.0	20.9	21.8	22.7
48	5.0	7.9	11.1	12.5	13.2	13.9	14.6	15.4	16.2	17.0	18.6	20.4	21.3	22.2	23.2
49	5.1	8.1	11.3	12.7	13.5	14.2	14.9	15.7	16.5	17.4	19.0	20.8	21.7	22.7	23.7
50	5.2	8.2	11.5	13.0	13.7	14.5	15.2	16.0	16.8	17.7	19.4	21.2	22.2	23.1	24.1
51	5.4	8.4	11.8	13.3	14.0	14.8	15.6	16.4	17.2	18.1	19.8	21.7	22.6	23.6	24.6
52	5.5	8.6	12.0	13.5	14.3	15.1	15.9	16.7	17.5	18.4	20.2	22.1	23.1	24.1	25.1
53	5.6	8.7	12.2	13.8	14.6	15.4	16.2	17.0	17.8	18.8	20.6	22.5	23.5	24.5	25.6
54	5.7	8.9	12.5	14.0	14.8	15.7	16.5	17.3	18.2	19.1	21.0	22.9	24.0	25.0	26.1
55	5.8	9.1	12.7	14.3	15.1	15.9	16.8	17.7	18.5	19.5	21.3	23.4	24.4	25.5	26.6
56	5.9	9.2	12.9	14.6	15.4	16.2	17.1	18.0	18.8	19.8	21.7	23.8	24.9	25.9	27.1
57	6.0	9.4	13.2	14.8	15.7	16.5	17.4	18.3	19.2	20.2	22.1	24.2	25.3	26.4	27.6
58	6.1	9.6	13.4	15.1	15.9	16.8	17.7	18.6	19.5	20.5	22.5	24.6	25.8	26.9	28.1
59	6.2	9.7	13.6	15.3	16.2	17.1	18.0	18.9	19.8	20.9	22.9	25.1	26.2	27.3	28.5
60	6.3	9.9	13.9	15.6	16.5	17.4	18.3	19.3	20.2	21.2	23.3	25.5	26.6	27.8	29.0
61	6.4	10.1	14.1	15.9	16.8	17.7	18.6	19.6	20.5	21.6	23.7	25.9	27.0	28.2	29.5
62	6.5	10.2	14.3	16.1	17.0	18.0	18.9	19.9	20.8	21.9	24.1	26.3	27.5	28.7	30.0
63	6.6	10.4	14.6	16.4	17.3	18.3	19.2	20.2	21.2	22.3	24.4	26.8	27.9	29.1	30.5
64	6.7	10.6	14.8	16.6	17.6	18.6	19.5	20.5	21.5	22.7	24.8	27.2	28.4	29.6	30.9
65	6.8	10.7	15.0	16.9	17.9	18.8	19.8	20.9	21.9	23.0	25.2	27.6	28.9	30.1	31.4
66	6.9	10.9	15.2	17.2	18.1	19.1	20.1	21.2	22.2	23.4	25.6	28.0	29.3	30.6	31.9
67	7.0	11.1	15.5	17.4	18.4	19.4	20.4	21.5	22.6	23.7	26.0	28.5	29.7	31.0	32.4
68	7.1	11.2	15.7	17.7	18.7	19.7	20.7	21.8	22.9	24.1	26.4	28.9	30.2	31.5	32.9
69	7.2	11.4	15.9	17.9	19.0	20.0	21.0	22.1	23.2	24.4	26.8	29.3	30.6	31.9	33.3
70	7.3	11.5	16.1	18.2	19.2	20.3	21.3	22.5	23.6	24.8	27.2	29.7	31.1	32.4	33.8
80	8.4	13.2	18.5	20.8	22.0	23.2	24.4	25.7	27.0	28.3	31.0	34.0	35.5	37.0	38.6
90	9.4	14.8	20.8	23.4	24.7	26.1	27.4	28.9	30.3	31.9	34.9	38.2	40.0	41.7	43.5
100	10.5	16.5	23.1	26.0	27.5	29.0	30.5	32.1	33.7	35.4	38.8	42.5	44.4	46.3	48.3
300	31.5	49.5	69.3	78.0	82.5	87.0	91.5	96.3	101.1	106.2	116.4	127.5	133.2	138.9	144.9
500	52.5	82.5	115.5	130.0	137.5	145.0	152.5	160.5	168.5	177.0	194.0	212.5	222.0	231.5	241.5

**REDUCING !!!**

Those particular about having soft round Whiskies should reduce with American Blending Wine and Distilled Water. BRYDON & CO., London, Dublin & Belfast.



Water required to reduce from **9 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	.1	.15	.2	.25	.25	.3	.3	.3	.3	.35	.4	.4	.45	.45	.5
2	.2	.3	.45	.5	.5	.55	.6	.6	.65	.7	.75	.8	.85	.9	.95
3	.3	.45	.65	.75	.8	.85	.9	.9	1.0	1.0	1.1	1.2	1.3	1.3	1.4
4	.4	.6	.9	1.0	1.1	1.1	1.2	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9
5	.5	.75	1.1	1.2	1.3	1.4	1.5	1.5	1.6	1.7	1.9	2.0	2.1	2.2	2.3
6	.6	.9	1.3	1.5	1.6	1.7	1.8	1.9	2.0	2.2	2.4	2.6	2.9	3.0	3.1
7	.7	1.1	1.5	1.7	1.8	1.9	2.1	2.2	2.3	2.4	2.6	2.9	3.0	3.1	3.3
8	.75	1.2	1.8	2.0	2.1	2.2	2.3	2.5	2.6	2.7	3.0	3.3	3.4	3.6	3.8
9	.85	1.4	2.0	2.2	2.4	2.5	2.6	2.8	2.9	3.1	3.4	3.7	4.1	4.3	4.5
10	.95	1.5	2.2	2.5	2.6	2.8	2.9	3.1	3.2	3.4	3.7	4.1	4.5	4.7	4.9
11	1.0	1.7	2.4	2.7	2.9	3.1	3.2	3.4	3.6	3.7	4.1	4.5	4.9	5.1	5.1
12	1.1	1.8	2.6	3.0	3.2	3.3	3.5	3.7	3.9	4.1	4.5	4.9	5.3	5.4	5.6
13	1.2	2.0	2.9	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.9	5.3	5.6	5.8	6.1
14	1.3	2.2	3.1	3.5	3.7	3.9	4.1	4.3	4.5	4.8	5.2	5.8	6.0	6.3	6.6
15	1.4	2.3	3.3	3.7	3.9	4.2	4.4	4.6	4.9	5.1	5.6	6.2	6.4	6.7	7.0
16	1.5	2.5	3.5	4.0	4.2	4.4	4.7	5.0	5.2	5.5	6.0	6.6	6.9	7.2	7.5
17	1.6	2.6	3.7	4.2	4.5	4.7	5.0	5.3	5.5	5.8	6.4	7.0	7.3	7.6	8.0
18	1.7	2.8	4.0	4.5	4.7	5.0	5.3	5.6	5.8	6.1	6.8	7.4	7.7	8.1	8.4
19	1.8	2.9	4.2	4.7	5.0	5.3	5.6	5.9	6.2	6.5	7.1	7.8	8.2	8.5	8.9
20	1.9	3.1	4.4	5.0	5.3	5.6	5.9	6.2	6.5	6.8	7.5	8.2	8.6	9.0	9.4
21	2.0	3.2	4.6	5.2	5.5	5.8	6.2	6.5	6.8	7.2	7.9	8.6	9.0	9.4	9.8
22	2.1	3.4	4.8	5.5	5.8	6.1	6.4	6.8	7.1	7.5	8.3	9.0	9.5	9.9	10.3
23	2.2	3.5	5.1	5.7	6.1	6.4	6.7	7.1	7.5	7.8	8.6	9.5	9.9	10.3	10.8
24	2.3	3.7	5.3	6.0	6.3	6.7	7.0	7.4	7.8	8.2	9.0	9.9	10.3	10.8	11.3
25	2.3	3.8	5.5	6.2	6.6	6.9	7.3	7.7	8.1	8.5	9.4	10.3	10.7	11.2	11.7
26	2.4	4.0	5.7	6.4	6.8	7.2	7.6	8.1	8.4	8.9	9.7	10.7	11.1	11.7	12.2
27	2.5	4.2	5.9	6.7	7.1	7.5	7.9	8.4	8.8	9.2	10.1	11.1	11.6	12.1	12.7
28	2.6	4.3	6.2	6.9	7.4	7.8	8.2	8.7	9.1	9.5	10.5	11.5	12.0	12.6	13.1
29	2.7	4.5	6.4	7.2	7.6	8.1	8.5	9.0	9.4	9.9	10.9	11.9	12.4	13.0	13.6
30	2.8	4.6	6.6	7.4	7.9	8.3	8.8	9.3	9.7	10.2	11.2	12.3	12.9	13.5	14.1
31	2.9	4.8	6.8	7.7	8.2	8.6	9.1	9.6	10.1	10.6	11.6	12.7	13.3	13.9	14.6
32	3.0	4.9	7.0	7.9	8.4	8.9	9.4	9.9	10.4	10.9	12.0	13.2	13.7	14.4	15.0
33	3.1	5.1	7.3	8.2	8.7	9.2	9.7	10.2	10.7	11.3	12.4	13.6	14.2	14.8	15.5
34	3.2	5.2	7.5	8.4	8.9	9.5	10.0	10.5	11.0	11.6	12.7	14.0	14.6	15.3	15.9
35	3.3	5.4	7.7	8.7	9.2	9.7	10.3	10.8	11.4	11.9	13.1	14.4	15.0	15.7	16.4
36	3.4	5.5	7.9	8.9	9.5	10.0	10.5	11.2	11.7	12.3	13.5	14.8	15.5	16.2	16.9
37	3.5	5.7	8.1	9.2	9.7	10.3	10.8	11.5	12.0	12.6	13.9	15.2	15.9	16.6	17.4
38	3.6	5.8	8.4	9.4	10.0	10.6	11.1	11.8	12.3	13.0	14.2	15.6	16.3	17.1	17.8
39	3.7	6.0	8.6	9.7	10.3	10.8	11.4	12.1	12.7	13.3	14.6	16.0	16.8	17.5	18.3
40	3.8	6.2	8.8	9.9	10.5	11.1	11.7	12.4	13.0	13.6	15.0	16.4	17.2	18.0	18.8
41	3.9	6.3	9.0	10.2	10.8	11.4	12.0	12.7	13.3	14.0	15.4	16.9	17.6	18.4	19.2
42	3.9	6.5	9.2	10.4	11.0	11.7	12.3	13.0	13.6	14.3	15.7	17.3	18.1	18.9	19.7
43	4.0	6.6	9.5	10.7	11.3	12.0	12.6	13.3	14.0	14.7	16.1	17.7	18.5	19.3	20.2
44	4.1	6.8	9.7	10.9	11.6	12.2	12.9	13.6	14.3	15.0	16.5	18.1	18.9	19.8	20.6
45	4.2	6.9	9.9	11.2	11.8	12.5	13.2	13.9	14.6	15.3	16.9	18.5	19.3	20.2	21.1
46	4.3	7.1	10.1	11.4	12.1	12.8	13.5	14.3	14.9	15.7	17.2	18.9	19.8	20.7	21.6
47	4.4	7.3	10.3	11.7	12.3	13.1	13.8	14.6	15.3	16.0	17.6	19.3	20.2	21.1	22.0
48	4.4	7.4	10.6	11.9	12.6	13.3	14.1	14.9	15.6	16.4	18.0	19.7	20.6	21.6	22.5
49	4.5	7.4	10.6	11.9	12.6	13.3	14.1	14.9	15.6	16.4	18.0	19.7	20.6	21.6	22.5
50	4.6	7.6	10.8	12.1	12.9	13.6	14.4	15.2	15.9	16.7	18.4	20.1	21.1	22.0	23.0
51	4.7	7.7	11.0	12.4	13.1	13.9	14.6	15.5	16.2	17.0	18.7	20.6	21.5	22.5	23.4
52	4.8	7.9	11.2	12.6	13.4	14.2	14.9	15.8	16.6	17.4	19.1	21.0	21.9	22.9	23.9
53	4.9	8.0	11.4	12.9	13.7	14.5	15.2	16.1	16.9	17.7	19.5	21.4	22.4	23.4	24.4
54	5.0	8.2	11.7	13.1	13.9	14.7	15.5	16.4	17.2	18.1	19.9	21.8	22.8	23.8	24.9
55	5.1	8.3	11.9	13.4	14.2	15.0	15.8	16.7	17.5	18.4	20.2	22.2	23.2	24.3	25.3
56	5.2	8.5	12.1	13.6	14.5	15.3	16.1	17.0	17.9	18.8	20.6	22.6	23.6	24.7	25.8
57	5.3	8.6	12.3	13.9	14.7	15.6	16.4	17.4	18.2	19.1	21.0	23.0	24.1	25.2	26.3
58	5.4	8.8	12.5	14.1	15.0	15.8	16.7	17.7	18.5	19.4	21.4	23.4	24.5	25.6	26.7
59	5.5	8.9	12.8	14.4	15.3	16.1	17.0	18.0	18.8	19.8	21.7	23.8	24.9	26.1	27.2
60	5.5	9.1	13.0	14.6	15.5	16.4	17.3	18.3	19.2	20.1	22.1	24.2	25.4	26.5	27.7
61	5.6	9.2	13.2	14.9	15.8	16.7	17.6	18.6	19.5	20.5	22.5	24.7	25.8	26.9	28.1
62	5.7	9.4	13.4	15.1	16.0	17.0	17.9	18.9	19.8	20.8	22.9	25.1	26.2	27.4	28.6
63	5.8	9.5	13.6	15.4	16.3	17.2	18.2	19.2	20.1	21.1	23.2	25.5	26.7	27.8	29.1
64	5.9	9.7	13.9	15.6	16.6	17.5	18.5	19.5	20.5	21.5	23.6	25.9	27.1	28.3	29.5
65	6.0	9.8	14.1	15.9	16.8	17.8	18.8	19.8	20.8	21.8	24.0	26.3	27.5	28.7	30.0
66	6.1	10.0	14.3	16.1	17.1	18.1	19.0	20.1	21.1	22.2	24.4	26.7	27.9	29.2	30.5
67	6.2	10.1	14.5	16.4	17.4	18.3	19.3	20.5	21.4	22.5	24.7	27.1	28.4	29.6	31.0
68	6.3	10.3	14.7	16.6	17.6	18.6	19.6	20.8	21.8	22.8	25.1	27.5	28.8	30.1	31.4
69	6.4	10.5	15.0	16.9	17.9	18.9	19.9	21.1	22.1	23.2	25.5	27.9	29.2	30.5	31.9
70	6.5	10.6	15.2	17.1	18.1	19.2	20.2	21.4	22.4	23.5	25.9	28.4	29.7	31.0	32.4
80	6.6	10.8	15.4	17.4	18.4	19.5	20.5	21.7	22.7	23.9	26.2	28.8	30.1	31.4	32.8
90	7.5	12.3	17.6	19.8	21.0	22.2	23.4	24.8	26.0	27.3	30.0	32.9	34.4	35.9	37.5
100	8.5	13.9	19.8	22.3	23.7	25.0	26.4	27.9	29.2	30.7	33.7	37.0	38.7	40.4	42.2
300	9.4	15.4	22.0	24.8	26.3	27.8	29.3	31.0	32.5	34.1	37.5	41.1	43.0	44.9	46.9
500	28.2	46.2	66.0	74.4	28.9	83.4	87.9	93.0	97.5	102.3	112.5	123.3	129.0	134.7	140.7
	47.0	77.0	110.0	124.0	131.5	139.0	146.5	155.0	162.5	170.5	187.5	205.5	215.0	224.5	234.5

**BREAKING DOWN!!!** Marvellous results obtained by reducing with Distilled Water and American Blending Wine!! BRYDON & CO., London, Dublin & Belfast.



Water required to reduce from **S OVERPROOF** to strengths of:—

Galls of Spirits	Proof	Strengths													
		5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
1	1	1.5	2	2.5	2.5	3	3	3	3	3.5	3.5	4	4	4.5	5
2	2	3	4	4.5	5	5.5	6	6	6	6.5	6.5	7	7	7.5	8
3	2.5	4.5	6	7	7.5	8	8.5	9	9.5	10	10	11	11	11.5	12
4	3.5	5.5	8.5	9.5	10	11	11	12	13	13	14	14	15	15	16
5	4	7	10	12	12	13	14	15	16	16	17	18	18	19	20
6	5	8.5	12	14	15	16	17	18	19	20	20	22	22	23	24
7	6	10	15	17	17	19	20	21	22	23	24	25	25	26	27
8	7	11	17	19	20	21	22	24	25	26	27	28	28	29	30
9	7.5	13	19	21	22	24	25	27	28	30	30	32	32	33	34
10	8.5	14	21	24	25	27	28	30	31	33	34	36	36	37	38
11	9.5	16	23	26	27	29	31	33	34	36	40	40	42	43	45
12	10	17	25	28	30	32	34	36	38	40	44	44	46	48	50
13	11	19	27	31	32	35	36	39	41	43	47	47	50	52	55
14	12	20	29	33	35	37	39	42	44	46	51	51	54	57	59
15	13	21	31	35	37	40	42	45	47	49	55	55	60	63	66
16	13	23	33	38	40	43	45	48	50	53	58	60	64	67	70
17	14	24	35	40	42	45	48	50	53	56	62	64	68	71	74
18	15	26	37	42	45	48	51	53	56	59	65	72	75	78	82
19	16	27	40	45	47	51	53	56	59	62	69	76	79	83	86
20	17	29	42	47	50	53	56	59	63	66	73	80	83	87	91
21	18	30	44	50	52	56	59	62	66	69	76	84	88	91	96
22	19	32	46	52	55	59	62	65	69	73	80	88	92	96	100
23	20	33	48	54	57	61	65	68	72	76	84	92	96	100	105
24	21	35	50	57	60	64	67	71	75	79	87	96	100	104	109
25	21	36	52	59	62	66	70	74	78	82	91	100	104	109	114
26	22	37	54	61	65	69	73	77	81	86	95	104	108	113	118
27	23	39	56	64	67	72	76	80	84	89	98	108	113	117	123
28	24	40	58	66	70	74	79	83	88	92	102	112	117	122	127
29	24	41	60	69	72	77	81	86	91	96	106	116	121	126	132
30	25	43	62	71	75	80	84	89	94	99	109	120	125	130	136
31	26	44	64	73	77	83	87	92	97	102	113	124	129	135	141
32	27	46	67	76	80	85	90	95	100	106	116	128	133	139	146
33	28	47	69	78	82	88	93	98	103	109	120	132	138	144	150
34	28	49	71	80	85	91	96	101	106	112	124	136	142	148	155
35	29	50	73	83	87	93	98	104	109	115	127	140	146	152	159
36	30	51	75	85	90	96	101	107	113	119	131	144	150	157	164
37	31	53	77	87	92	98	104	110	116	122	135	148	154	161	168
38	32	54	79	90	95	101	107	113	119	125	138	152	158	165	173
39	33	56	81	92	97	104	110	116	122	129	142	156	163	170	177
40	34	57	83	94	100	106	112	119	125	132	146	160	167	174	182
41	34	59	85	97	102	109	115	122	128	135	149	164	171	178	187
42	35	60	87	99	105	112	118	125	131	139	153	168	175	183	191
43	36	61	89	101	107	114	121	128	135	142	157	172	179	187	196
44	37	63	92	104	110	117	124	131	138	145	160	176	183	191	200
45	38	64	94	106	112	120	126	134	141	148	164	180	188	196	205
46	39	66	96	109	115	123	129	137	144	152	167	184	192	200	209
47	39	67	98	111	117	125	132	140	147	155	171	188	196	204	214
48	40	69	100	113	120	128	135	143	150	158	175	192	200	209	218
49	41	70	102	116	122	130	138	146	153	162	178	196	204	213	223
50	42	71	104	118	125	133	140	148	156	165	182	200	208	217	227
51	43	73	106	120	127	136	143	151	159	168	186	205	212	222	232
52	44	74	108	123	130	138	146	154	163	172	189	209	216	226	237
53	45	76	110	125	132	141	149	157	166	175	193	213	220	231	241
54	45	77	112	127	135	144	152	160	169	178	197	217	224	235	246
55	46	79	114	130	137	146	155	163	172	182	200	221	229	239	250
56	47	80	116	132	140	149	157	166	175	185	204	225	234	244	255
57	48	82	119	135	142	152	160	169	178	188	207	229	238	248	259
58	49	83	121	137	145	154	163	172	182	191	211	233	242	253	264
59	50	84	123	139	147	157	166	175	185	195	215	237	246	257	268
60	50	86	125	142	150	160	169	178	188	198	218	241	250	261	273
61	51	87	127	144	152	163	171	181	191	201	222	245	254	265	278
62	52	89	129	146	155	165	174	184	194	205	226	249	259	270	282
63	53	90	131	149	157	168	177	187	197	208	229	253	263	274	287
64	54	92	133	151	160	170	180	190	200	211	233	257	267	278	291
65	54	93	135	153	162	173	183	193	203	214	237	261	271	283	296
66	55	94	137	156	165	176	185	196	207	218	240	265	275	287	300
67	56	96	139	158	167	178	188	199	210	221	244	269	279	291	305
68	57	97	141	160	170	181	191	202	213	224	248	273	284	296	309
69	58	99	143	163	172	184	194	205	216	228	251	277	288	300	314
70	59	100	146	165	175	186	197	208	219	231	255	281	292	304	318
80	67	114	166	189	200	213	225	238	250	264	291	321	334	348	364
90	75	129	187	212	225	239	253	267	282	297	328	361	375	391	409
100	84	143	208	236	250	266	281	297	313	330	364	401	417	435	455
300	25.2	42.9	62.4	70.8	75.0	79.8	84.3	89.1	93.9	99.0	109.2	120.3	125.1	130.5	136.5
500	42.0	71.5	104.0	118.0	125.0	133.0	140.5	148.5	156.5	165.0	182.0	200.5	208.5	217.5	227.5

**FORTIFYING AND BREAKING DOWN!!** Consult **BRYDON & CO.**, London, Dublin & Belfast.



Water required to reduce from **7 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
1															
2	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
3	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
4	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
5	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
6	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
7	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
8	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
9	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
10	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
11	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
12	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
13	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
14	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
15	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
16	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
17	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
18	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
19	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
20	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
21	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
22	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
23	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
24	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
25	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
26	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
27	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
28	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
29	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
30	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
31	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
32	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
33	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
34	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
35	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
36	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
37	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
38	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
39	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
40	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
41	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
42	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
43	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
44	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
45	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
46	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
47	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
48	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
49	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
50	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
51	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
52	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
53	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
54	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
55	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
56	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
57	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
58	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
59	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
60	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
61	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
62	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
63	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
64	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
65	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
66	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
67	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
68	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
69	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
70	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
80	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
90	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
100	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
300	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4
500	1	15	2	2	2	2	2	3	3	3	3	4	4	4	4

**WARRANACQUER!! A PURE VEGETABLE TONIC SPIRIT.** Sole Agent, R. R. MOSS, 16, Water Lane, London, E.C.



Water required to reduce from **6 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	.5	.2	.2	.2	.2	.25	.25	.3	.3	.3	.35	.35	.4	.4	.4
2	.15	.1	.4	.4	.45	.5	.5	.55	.6	.6	.7	.75	.8	.8	.85
3	.2	.35	.6	.65	.7	.7	.75	.8	.9	.9	1.0	1.1	1.2	1.2	1.3
4	.25	.5	.7	.85	.9	1.0	1.0	1.1	1.2	1.2	1.3	1.5	1.6	1.6	1.7
5	.3	.6	.9	1.1	1.1	1.2	1.3	1.4	1.4	1.5	1.7	1.9	2.0	2.0	2.1
6	.4	.7	1.1	1.3	1.4	1.4	1.5	1.6	1.7	1.8	2.0	2.2	2.3	2.4	2.6
7	.45	.85	1.3	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.4	2.6	2.7	2.9	3.0
8	.5	1.0	1.5	1.7	1.8	1.9	2.0	2.2	2.3	2.4	2.7	3.0	3.1	3.3	3.4
9	.55	1.1	1.7	1.9	2.0	2.2	2.3	2.4	2.6	2.7	3.0	3.3	3.5	3.7	3.8
10	.65	1.2	1.8	2.1	2.3	2.4	2.6	2.7	2.9	3.0	3.4	3.7	3.9	4.1	4.3
11	.7	1.3	2.0	2.3	2.5	2.6	2.8	3.0	3.2	3.3	3.7	4.1	4.3	4.5	4.7
12	.75	1.4	2.2	2.5	2.7	2.9	3.1	3.3	3.5	3.6	4.0	4.5	4.7	4.9	5.1
13	.8	1.6	2.4	2.8	2.9	3.1	3.3	3.5	3.7	4.0	4.4	4.8	5.1	5.3	5.6
14	.9	1.7	2.6	3.0	3.2	3.4	3.6	3.8	4.0	4.3	4.7	5.2	5.5	5.7	6.0
15	.95	1.8	2.8	3.2	3.4	3.6	3.8	4.1	4.3	4.6	5.0	5.6	5.8	6.1	6.4
16	1.0	1.9	3.0	3.4	3.6	3.9	4.1	4.4	4.6	4.9	5.4	6.0	6.2	6.5	6.8
17	1.1	2.0	3.1	3.6	3.9	4.1	4.3	4.6	4.9	5.2	5.7	6.3	6.6	6.9	7.3
18	1.1	2.2	3.3	3.8	4.1	4.3	4.6	4.9	5.2	5.5	6.0	6.7	7.0	7.3	7.7
19	1.2	2.3	3.5	4.0	4.3	4.6	4.9	5.2	5.5	5.8	6.4	7.1	7.4	7.7	8.1
20	1.3	2.4	3.7	4.2	4.5	4.8	5.1	5.4	5.8	6.1	6.7	7.4	7.8	8.2	8.5
21	1.3	2.5	3.9	4.5	4.8	5.1	5.4	5.7	6.0	6.4	7.0	7.8	8.2	8.6	9.0
22	1.4	2.6	4.1	4.7	5.0	5.3	5.6	6.0	6.3	6.7	7.4	8.2	8.6	9.0	9.4
23	1.5	2.8	4.3	4.9	5.2	5.5	5.9	6.3	6.6	7.0	7.7	8.6	9.0	9.4	9.8
24	1.5	2.9	4.4	5.1	5.4	5.8	6.1	6.5	6.9	7.3	8.0	8.9	9.4	9.8	10.2
25	1.6	3.0	4.6	5.3	5.7	6.0	6.4	6.8	7.2	7.6	8.4	9.3	9.7	10.2	10.7
26	1.6	3.1	4.8	5.5	5.9	6.3	6.7	7.1	7.5	7.9	8.7	9.7	10.1	10.6	11.1
27	1.7	3.2	5.0	5.7	6.1	6.5	6.9	7.3	7.8	8.2	9.1	10.1	10.5	11.0	11.5
28	1.8	3.4	5.2	5.9	6.4	6.7	7.2	7.6	8.1	8.5	9.4	10.4	10.9	11.4	12.0
29	1.8	3.5	5.4	6.1	6.6	7.0	7.4	7.9	8.4	8.8	9.7	10.8	11.3	11.8	12.4
30	1.9	3.6	5.5	6.4	6.8	7.2	7.7	8.2	8.6	9.1	10.1	11.2	11.7	12.2	12.8
31	1.9	3.7	5.7	6.6	7.0	7.5	7.9	8.4	8.9	9.4	10.4	11.5	12.1	12.7	13.2
32	2.0	3.8	5.9	6.8	7.3	7.7	8.2	8.7	9.2	9.7	10.8	11.9	12.5	13.1	13.7
33	2.1	4.0	6.1	7.0	7.5	8.0	8.4	9.0	9.5	10.0	11.1	12.3	12.9	13.5	14.1
34	2.1	4.1	6.3	7.2	7.7	8.2	8.7	9.2	9.8	10.3	11.4	12.6	13.3	13.9	14.5
35	2.2	4.2	6.5	7.4	7.9	8.4	9.0	9.5	10.1	10.6	11.8	13.0	13.6	14.3	14.9
36	2.3	4.3	6.7	7.6	8.2	8.7	9.2	9.8	10.4	10.9	12.1	13.4	14.0	14.7	15.4
37	2.3	4.4	6.8	7.8	8.4	8.9	9.5	10.1	10.7	11.2	12.4	13.8	14.4	15.1	15.8
38	2.4	4.6	7.0	8.0	8.6	9.2	9.7	10.3	10.9	11.6	12.8	14.1	14.8	15.5	16.2
39	2.5	4.7	7.2	8.3	8.9	9.4	10.0	10.6	11.2	11.9	13.1	14.5	15.2	15.9	16.7
40	2.5	4.8	7.4	8.5	9.1	9.6	10.2	10.9	11.5	12.2	13.4	14.9	15.6	16.3	17.1
41	2.6	4.9	7.6	8.7	9.3	9.9	10.5	11.2	11.8	12.5	13.8	15.3	16.0	16.7	17.5
42	2.6	5.0	7.8	8.9	9.5	10.1	10.8	11.4	12.1	12.8	14.1	15.6	16.4	17.1	18.0
43	2.7	5.2	8.0	9.1	9.8	10.4	11.0	11.7	12.4	13.1	14.4	16.0	16.8	17.5	18.4
44	2.8	5.3	8.1	9.3	10.0	10.6	11.3	12.0	12.7	13.4	14.8	16.4	17.2	18.0	18.8
45	2.8	5.4	8.3	9.5	10.2	10.8	11.5	12.2	13.0	13.7	15.1	16.7	17.5	18.4	19.2
46	2.9	5.5	8.5	9.8	10.4	11.1	11.8	12.5	13.2	14.0	15.4	17.1	17.9	18.8	19.6
47	3.0	5.6	8.7	10.0	10.7	11.3	12.1	12.8	13.5	14.3	15.8	17.5	18.3	19.2	20.1
48	3.0	5.8	8.9	10.2	10.9	11.6	12.3	13.1	13.8	14.6	16.1	17.9	18.7	19.6	20.5
49	3.1	5.9	9.1	10.4	11.1	11.8	12.6	13.3	14.1	14.9	16.4	18.2	19.1	20.0	20.9
50	3.2	6.0	9.2	10.6	11.3	12.0	12.8	13.6	14.4	15.2	16.8	18.6	19.5	20.4	21.3
51	3.2	6.1	9.4	10.8	11.6	12.3	13.1	13.9	14.7	15.5	17.1	19.0	19.9	20.8	21.8
52	3.3	6.2	9.6	11.0	11.8	12.5	13.3	14.1	15.0	15.8	17.5	19.3	20.3	21.2	22.2
53	3.4	6.4	9.8	11.2	12.0	12.8	13.6	14.4	15.3	16.1	17.8	19.7	20.7	21.6	22.6
54	3.4	6.5	10.0	11.4	12.3	13.0	13.8	14.7	15.5	16.4	18.1	20.1	21.1	22.0	23.1
55	3.5	6.6	10.2	11.7	12.5	13.3	14.1	15.0	15.8	16.7	18.5	20.4	21.4	22.4	23.5
56	3.6	6.7	10.4	11.9	12.7	13.5	14.3	15.2	16.1	17.0	18.8	20.8	21.8	22.8	23.9
57	3.6	6.8	10.5	12.1	12.9	13.7	14.6	15.5	16.4	17.3	19.1	21.2	22.2	23.3	24.3
58	3.7	7.0	10.7	12.3	13.2	14.0	14.8	15.8	16.7	17.6	19.5	21.6	22.6	23.7	24.8
59	3.7	7.1	10.9	12.5	13.4	14.2	15.1	16.0	17.0	17.9	19.8	21.9	23.0	24.1	25.2
60	3.8	7.2	11.1	12.7	13.6	14.5	15.4	16.3	17.3	18.2	20.2	22.3	23.4	24.5	25.6
61	3.8	7.3	11.3	12.9	13.8	14.7	15.6	16.6	17.6	18.5	20.5	22.7	23.8	24.9	26.0
62	3.9	7.4	11.5	13.1	14.1	14.9	15.9	16.9	17.9	18.8	20.8	23.0	24.2	25.3	26.5
63	4.0	7.6	11.6	13.4	14.3	15.2	16.1	17.1	18.1	19.2	21.2	23.4	24.6	25.7	26.9
64	4.0	7.7	11.8	13.6	14.5	15.4	16.4	17.4	18.4	19.5	21.5	23.8	25.0	26.1	27.3
65	4.1	7.8	12.0	13.8	14.8	15.7	16.6	17.7	18.7	19.8	21.8	24.2	25.3	26.5	27.8
66	4.2	7.9	12.2	14.0	15.0	15.9	16.9	18.0	19.0	20.1	22.2	24.6	25.7	26.9	28.2
67	4.2	8.0	12.4	14.2	15.2	16.1	17.1	18.2	19.3	20.4	22.5	24.9	26.1	27.3	28.6
68	4.3	8.2	12.6	14.4	15.4	16.4	17.4	18.5	19.6	20.7	22.8	25.3	26.5	27.7	29.0
69	4.3	8.3	12.7	14.6	15.7	16.6	17.7	18.8	19.9	21.0	23.2	25.7	26.9	28.1	29.5
70	4.4	8.4	12.9	14.8	16.0	16.9	17.9	19.0	20.2	21.3	23.5	26.0	27.3	28.6	29.9
80	5.0	9.6	14.8	17.0	18.2	19.3	20.5	21.8	23.0	24.3	26.9	29.8	31.2	32.6	34.2
90	5.7	10.8	16.6	19.1	20.4	21.7	23.0	24.5	25.9	27.4	30.2	33.5	35.1	36.7	38.4
100	6.3	12.0	18.5	21.2	22.7	24.1	25.6	27.2	28.8	30.4	33.6	37.2	39.0	40.8	42.7
300	18.9	36.0	55.5	63.6	68.1	72.3	76.8	81.6	86.4	91.2	100.8	111.6	117.0	122.4	128.1
500	31.5	60.0	92.5	106.0	113.5	120.5	128.0	136.0	144.0	152.0	168.0	186.0	195.0	204.0	213.5

ALL THE LEADING BRANDS OF SCOTCH AND IRISH WHISKIES. BRYDON &amp; CO., London, Dublin &amp; Belfast.



Water required to reduce from **5 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	.05	.1	.2	.2	.2	.25	.25	.25	.3	.3	.3	.35	.4	.4	.4
2	.1	.2	.35	.4	.45	.5	.5	.5	.55	.6	.65	.7	.75	.8	.8
3	.15	.3	.5	.6	.65	.7	.75	.8	.8	.9	1.0	1.1	1.1	1.2	1.2
4	.2	.4	.7	.8	.85	.9	1.0	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
5	.25	.5	.85	1.0	1.1	1.1	1.2	1.3	1.4	1.5	1.6	1.8	1.9	2.0	2.1
6	.3	.7	1.0	1.2	1.3	1.4	1.5	1.6	1.6	1.7	1.9	2.2	2.3	2.4	2.5
7	.35	.8	1.2	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.3	2.5	2.6	2.8	2.9
8	.4	.9	1.4	1.6	1.7	1.8	2.0	2.1	2.2	2.3	2.6	2.9	3.0	3.2	3.3
9	.45	1.0	1.6	1.8	1.9	2.1	2.2	2.3	2.5	2.6	2.9	3.2	3.4	3.6	3.7
10	.5	1.1	1.7	2.0	2.1	2.3	2.4	2.6	2.7	2.9	3.2	3.6	3.8	3.9	4.1
11	.55	1.2	1.9	2.2	2.4	2.5	2.7	2.9	3.0	3.2	3.6	3.9	4.1	4.3	4.6
12	.6	1.3	2.1	2.4	2.6	2.7	2.9	3.1	3.3	3.5	3.9	4.3	4.5	4.7	5.0
13	.7	1.4	2.2	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.2	4.7	4.9	5.1	5.4
14	.75	1.5	2.4	2.8	3.0	3.2	3.4	3.6	3.9	4.1	4.5	5.0	5.3	5.5	5.8
15	.8	1.6	2.6	3.0	3.2	3.4	3.7	3.9	4.2	4.4	4.8	5.4	5.7	5.9	6.2
16	.85	1.7	2.8	3.2	3.4	3.7	3.9	4.2	4.4	4.6	5.2	5.7	6.1	6.3	6.6
17	.9	1.9	2.9	3.4	3.7	3.9	4.2	4.5	4.7	4.9	5.5	6.1	6.4	6.7	7.0
18	.95	2.0	3.1	3.6	3.9	4.1	4.4	4.7	4.9	5.2	5.8	6.4	6.8	7.1	7.4
19	1.0	2.1	3.3	3.8	4.1	4.3	4.6	5.0	5.2	5.5	6.1	6.8	7.2	7.5	7.8
20	1.05	2.2	3.5	4.0	4.3	4.6	4.9	5.2	5.5	5.8	6.5	7.2	7.5	7.9	8.3
21	1.1	2.3	3.6	4.2	4.5	4.8	5.1	5.5	5.8	6.1	6.8	7.5	7.9	8.3	8.7
22	1.15	2.4	3.8	4.4	4.7	5.0	5.3	5.7	6.0	6.4	7.1	7.9	8.3	8.7	9.1
23	1.2	2.5	4.0	4.6	4.9	5.3	5.6	6.0	6.3	6.7	7.4	8.2	8.7	9.1	9.5
24	1.25	2.6	4.2	4.8	5.2	5.5	5.9	6.2	6.6	7.0	7.8	8.6	9.0	9.5	9.9
25	1.3	2.7	4.3	5.0	5.4	5.7	6.1	6.5	6.9	7.3	8.1	9.0	9.4	9.9	10.3
26	1.35	2.8	4.5	5.2	5.6	5.9	6.3	6.8	7.1	7.6	8.4	9.3	9.8	10.3	10.7
27	1.4	2.9	4.7	5.4	5.8	6.2	6.6	7.0	7.4	7.9	8.7	9.7	10.2	10.7	11.1
28	1.45	3.1	4.8	5.6	6.0	6.4	6.8	7.3	7.7	8.1	9.0	10.0	10.6	11.1	11.6
29	1.5	3.2	5.0	5.8	6.2	6.6	7.1	7.5	8.0	8.4	9.4	10.4	10.9	11.5	12.0
30	1.55	3.3	5.2	6.0	6.4	6.9	7.3	7.8	8.2	8.7	9.7	10.8	11.3	11.8	12.4
31	1.6	3.4	5.4	6.2	6.7	7.1	7.6	8.1	8.5	9.0	10.0	11.1	11.7	12.2	12.8
32	1.65	3.5	5.5	6.4	6.9	7.3	7.8	8.3	8.8	9.3	10.3	11.5	12.1	12.6	13.2
33	1.7	3.6	5.7	6.6	7.1	7.6	8.1	8.6	9.1	9.6	10.7	11.8	12.4	13.0	13.6
34	1.75	3.7	5.9	6.8	7.3	7.8	8.3	8.8	9.3	9.9	11.0	12.2	12.8	13.4	14.0
35	1.8	3.8	6.1	7.0	7.5	8.0	8.5	9.1	9.6	10.2	11.3	12.6	13.2	13.8	14.5
36	1.85	3.9	6.2	7.2	7.7	8.2	8.8	9.3	9.9	10.5	11.6	12.9	13.6	14.2	14.9
37	1.9	4.0	6.4	7.4	8.0	8.5	9.0	9.6	10.2	10.8	11.9	13.3	14.0	14.6	15.3
38	2.0	4.1	6.6	7.6	8.2	8.7	9.3	9.9	10.5	11.1	12.3	13.6	14.3	15.0	15.7
39	2.05	4.2	6.8	7.8	8.4	8.9	9.5	10.1	10.7	11.3	12.6	14.0	14.7	15.4	16.1
40	2.1	4.4	6.9	8.0	8.6	9.2	9.8	10.4	11.0	11.6	12.9	14.4	15.1	15.8	16.5
41	2.15	4.5	7.1	8.2	8.8	9.4	10.0	10.7	11.3	11.9	13.2	14.7	15.5	16.2	16.9
42	2.2	4.6	7.3	8.4	9.0	9.6	10.2	10.9	11.5	12.2	13.6	15.1	15.8	16.6	17.3
43	2.25	4.7	7.4	8.6	9.2	9.8	10.5	11.2	11.8	12.5	13.9	15.4	16.2	17.0	17.8
44	2.3	4.8	7.6	8.8	9.5	10.1	10.7	11.4	12.1	12.8	14.2	15.8	16.6	17.4	18.2
45	2.35	4.9	7.8	9.0	9.7	10.3	11.0	11.7	12.4	13.1	14.5	16.2	17.0	17.8	18.6
46	2.4	5.0	8.0	9.2	9.9	10.5	11.2	12.0	12.6	13.4	14.9	16.5	17.4	18.2	19.0
47	2.45	5.1	8.1	9.4	10.1	10.8	11.5	12.2	12.9	13.7	15.2	16.9	17.7	18.6	19.4
48	2.5	5.2	8.3	9.6	10.3	11.0	11.7	12.5	13.2	14.0	15.5	17.2	18.1	19.0	19.8
49	2.55	5.3	8.5	9.8	10.5	11.2	12.0	12.7	13.5	14.3	15.8	17.6	18.5	19.3	20.2
50	2.6	5.4	8.7	10.0	10.7	11.4	12.2	13.0	13.7	14.5	16.1	17.9	18.8	19.7	20.6
51	2.65	5.6	8.8	10.2	10.9	11.7	12.4	13.3	14.0	14.8	16.5	18.3	19.2	20.1	21.1
52	2.7	5.7	9.0	10.4	11.2	11.9	12.7	13.5	14.3	15.1	16.8	18.7	19.6	20.5	21.5
53	2.75	5.8	9.2	10.6	11.4	12.1	12.9	13.8	14.6	15.4	17.1	19.0	20.0	20.9	21.9
54	2.8	5.9	9.3	10.8	11.6	12.4	13.2	14.0	14.8	15.7	17.4	19.4	20.4	21.3	22.3
55	2.85	6.0	9.5	11.0	11.8	12.6	13.4	14.3	15.1	16.0	17.8	19.7	20.7	21.7	22.7
56	2.9	6.1	9.7	11.2	12.0	12.8	13.7	14.5	15.4	16.3	18.1	20.1	21.1	22.1	23.1
57	2.95	6.2	9.9	11.4	12.3	13.1	13.9	14.8	15.7	16.6	18.4	20.4	21.5	22.5	23.5
58	3.0	6.3	10.0	11.6	12.5	13.3	14.2	15.1	15.9	16.9	18.7	20.8	21.9	22.9	24.0
59	3.05	6.4	10.2	11.8	12.7	13.5	14.4	15.3	16.2	17.2	19.1	21.2	22.2	23.3	24.4
60	3.1	6.5	10.4	12.0	12.9	13.7	14.6	15.6	16.5	17.5	19.4	21.5	22.6	23.7	24.8
61	3.15	6.6	10.6	12.2	13.1	14.0	14.9	15.8	16.8	17.7	19.7	21.9	23.0	24.1	25.2
62	3.2	6.8	10.7	12.4	13.3	14.2	15.1	16.1	17.0	18.0	20.0	22.3	23.4	24.5	25.6
63	3.25	6.9	10.9	12.6	13.6	14.4	15.4	16.3	17.3	18.3	20.3	22.6	23.8	24.9	26.0
64	3.3	7.0	11.1	12.8	13.8	14.7	15.6	16.6	17.6	18.6	20.7	23.0	24.1	25.3	26.4
65	3.35	7.1	11.2	13.0	14.0	14.9	15.9	16.9	17.9	18.9	21.0	23.3	24.5	25.7	26.8
66	3.4	7.2	11.4	13.2	14.2	15.1	16.1	17.2	18.1	19.2	21.3	23.7	24.9	26.1	27.3
67	3.45	7.3	11.6	13.4	14.4	15.3	16.4	17.4	18.4	19.5	21.6	24.1	25.3	26.5	27.7
68	3.5	7.4	11.8	13.6	14.6	15.6	16.6	17.7	18.7	19.8	21.9	24.4	25.6	26.9	28.1
69	3.55	7.5	11.9	13.8	14.8	15.8	16.8	17.9	19.0	20.1	22.3	24.8	26.0	27.3	28.5
70	3.6	7.6	12.1	14.0	15.0	16.0	17.1	18.2	19.2	20.4	22.6	25.1	26.4	27.6	28.9
80	4.2	8.7	13.8	16.0	17.2	18.3	19.5	20.8	22.0	23.3	25.8	28.7	30.2	31.6	33.0
90	4.7	9.8	15.6	18.0	19.3	20.6	22.0	23.4	24.7	26.2	29.1	32.3	33.9	35.5	37.2
100	5.2	10.9	17.3	20.0	21.5	22.9	24.4	26.0	27.5	29.1	32.3	35.9	37.7	39.5	41.3
300	15.6	32.7	51.9	60.0	64.5	68.7	73.2	78.0	82.5	87.3	96.9	107.7	113.1	118.5	123.9
500	26.0	54.5	86.5	100.0	107.5	114.5	122.0	130.0	137.5	145.5	161.5	179.5	188.5	197.5	206.5

**BREAKING DOWN !!**

Best results obtained by using Distilled Water and American Blending Wine.  
**BYROND & CO., London, Dublin & Belfast.**



Water required to reduce from **4 OVERPROOF** to strengths of:—

Galls. of Spirits	Proof	5 u.p.	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	.05	.1	.15	.2	.2	.2	.25	.25	.25	.3	.3	.35	.35	.4	.4
2	.1	.2	.3	.4	.4	.45	.45	.5	.5	.55	.6	.7	.7	.75	.8
3	.15	.3	.5	.55	.6	.65	.7	.75	.8	.85	.9	1.0	1.1	1.1	1.2
4	.15	.4	.65	.75	.8	.85	.9	1.0	1.0	1.1	1.2	1.4	1.4	1.5	1.6
5	.2	.5	.8	.95	1.0	1.1	1.2	1.2	1.3	1.4	1.5	1.7	1.8	1.9	2.0
6	.25	.6	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.9	2.2	2.2	2.3	2.4
7	.3	.7	1.1	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.2	2.4	2.5	2.7	2.8
8	.35	.8	1.3	1.5	1.6	1.7	1.9	2.0	2.1	2.2	2.5	2.8	2.9	3.0	3.2
9	.4	.9	1.4	1.7	1.8	2.0	2.1	2.2	2.4	2.5	2.8	3.1	3.3	3.4	3.6
10	.4	1.0	1.6	1.9	2.0	2.2	2.3	2.5	2.6	2.8	3.1	3.4	3.6	3.8	4.0
11	.45	1.1	1.8	2.1	2.2	2.4	2.6	2.7	2.9	3.1	3.4	3.8	4.0	4.2	4.4
12	.5	1.2	1.9	2.3	2.4	2.6	2.8	3.0	3.1	3.3	3.7	4.1	4.3	4.6	4.8
13	.55	1.3	2.1	2.4	2.6	2.8	3.0	3.2	3.4	3.6	4.0	4.5	4.7	4.9	5.2
14	.6	1.4	2.2	2.6	2.8	3.0	3.2	3.5	3.7	3.9	4.3	4.8	5.1	5.3	5.6
15	.65	1.5	2.4	2.8	3.0	3.3	3.5	3.7	3.9	4.2	4.6	5.2	5.4	5.7	6.0
16	.7	1.6	2.6	3.0	3.2	3.5	3.7	4.0	4.2	4.4	5.0	5.5	5.8	6.1	6.4
17	.7	1.7	2.7	3.2	3.5	3.7	3.9	4.2	4.5	4.7	5.3	5.8	6.2	6.5	6.8
18	.75	1.8	2.9	3.4	3.7	3.9	4.2	4.4	4.7	5.0	5.6	6.2	6.5	6.8	7.2
19	.8	1.9	3.0	3.6	3.9	4.1	4.4	4.7	5.0	5.3	5.9	6.5	6.8	7.2	7.6
20	.85	2.0	3.2	3.8	4.1	4.3	4.6	4.9	5.2	5.6	6.2	6.9	7.2	7.6	8.0
21	.9	2.1	3.4	3.9	4.3	4.6	4.9	5.2	5.5	5.8	6.5	7.2	7.6	8.0	8.4
22	.95	2.2	3.5	4.1	4.5	4.8	5.1	5.4	5.8	6.1	6.8	7.6	8.0	8.4	8.8
23	1.0	2.3	3.7	4.3	4.7	5.0	5.3	5.7	6.0	6.4	7.1	7.9	8.3	8.7	9.2
24	1.0	2.4	3.8	4.5	4.9	5.2	5.6	5.9	6.3	6.7	7.4	8.3	8.7	9.1	9.6
25	1.05	2.5	4.0	4.7	5.1	5.4	5.8	6.2	6.5	7.0	7.7	8.6	9.0	9.5	10.0
26	1.1	2.6	4.2	4.9	5.3	5.6	6.0	6.4	6.8	7.2	8.1	8.9	9.4	9.9	10.4
27	1.15	2.7	4.3	5.1	5.5	5.9	6.3	6.7	7.1	7.5	8.4	9.3	9.8	10.3	10.8
28	1.2	2.8	4.5	5.3	5.7	6.1	6.5	6.9	7.3	7.8	8.7	9.6	10.1	10.6	11.2
29	1.2	2.9	4.6	5.5	5.9	6.3	6.7	7.2	7.6	8.1	9.0	10.0	10.5	11.0	11.6
30	1.25	3.0	4.8	5.6	6.1	6.5	7.0	7.4	7.9	8.3	9.3	10.3	10.9	11.4	12.0
31	1.3	3.1	5.0	5.8	6.3	6.7	7.2	7.7	8.1	8.6	9.6	10.7	11.2	11.8	12.4
32	1.35	3.2	5.1	6.0	6.5	6.9	7.5	7.9	8.4	8.9	9.9	11.0	11.6	12.2	12.8
33	1.4	3.3	5.3	6.2	6.7	7.2	7.7	8.1	8.6	9.2	10.2	11.4	11.9	12.5	13.2
34	1.45	3.4	5.4	6.4	6.9	7.4	7.9	8.4	8.9	9.5	10.5	11.7	12.3	12.9	13.6
35	1.5	3.5	5.6	6.6	7.1	7.6	8.1	8.6	9.2	9.7	10.8	12.0	12.7	13.3	14.0
36	1.5	3.6	5.8	6.8	7.3	7.8	8.4	8.9	9.4	10.0	11.2	12.4	13.0	13.7	14.4
37	1.55	3.7	5.9	7.0	7.5	8.0	8.6	9.1	9.7	10.3	11.5	12.7	13.4	14.1	14.8
38	1.6	3.8	6.1	7.1	7.7	8.2	8.8	9.4	9.9	10.6	11.8	13.1	13.8	14.4	15.2
39	1.65	3.9	6.2	7.3	7.9	8.5	9.1	9.6	10.2	10.8	12.1	13.4	14.1	14.8	15.6
40	1.7	4.0	6.4	7.5	8.1	8.7	9.3	9.9	10.5	11.1	12.4	13.8	14.5	15.2	16.0
41	1.7	4.1	6.6	7.7	8.3	8.9	9.5	10.1	10.7	11.4	12.7	14.1	14.8	15.6	16.4
42	1.75	4.2	6.7	7.9	8.5	9.1	9.7	10.4	11.0	11.7	13.0	14.4	15.2	16.0	16.8
43	1.8	4.3	6.9	8.1	8.7	9.3	10.0	10.6	11.3	12.0	13.3	14.8	15.6	16.3	17.2
44	1.85	4.4	7.0	8.3	8.9	9.5	10.2	10.9	11.5	12.2	13.6	15.1	15.9	16.7	17.6
45	1.9	4.5	7.2	8.4	9.1	9.8	10.4	11.1	11.8	12.5	13.9	15.5	16.3	17.1	18.0
46	1.95	4.6	7.3	8.6	9.3	10.0	10.7	11.4	12.1	12.8	14.3	15.8	16.7	17.5	18.4
47	2.0	4.7	7.5	8.8	9.5	10.2	10.9	11.6	12.3	13.1	14.6	16.2	17.0	17.9	18.8
48	2.0	4.8	7.7	9.0	9.7	10.4	11.1	11.9	12.6	13.3	14.9	16.5	17.4	18.2	19.2
49	2.05	4.9	7.8	9.2	9.9	10.6	11.4	12.1	12.8	13.6	15.2	16.9	17.7	18.6	19.6
50	2.1	5.0	8.0	9.4	10.1	10.8	11.6	12.3	13.1	13.9	15.5	17.2	18.1	19.0	20.0
51	2.15	5.1	8.1	9.6	10.4	11.1	11.8	12.6	13.4	14.2	15.8	17.5	18.5	19.4	20.4
52	2.2	5.2	8.3	9.8	10.6	11.3	12.1	12.8	13.6	14.5	16.1	17.9	18.8	19.8	20.8
53	2.2	5.2	8.4	10.0	10.8	11.5	12.3	13.1	13.9	14.7	16.4	18.2	19.2	20.1	21.2
54	2.25	5.3	8.6	10.1	11.0	11.7	12.5	13.3	14.1	15.0	16.7	18.6	19.5	20.5	21.6
55	2.3	5.4	8.8	10.3	11.2	11.9	12.8	13.6	14.4	15.3	17.0	18.9	19.9	20.9	22.0
56	2.35	5.5	8.9	10.5	11.4	12.2	13.0	13.8	14.7	15.6	17.4	19.3	20.3	21.3	22.4
57	2.4	5.6	9.1	10.7	11.6	12.4	13.2	14.1	14.9	15.8	17.7	19.6	20.6	21.7	22.8
58	2.4	5.7	9.2	10.9	11.8	12.6	13.5	14.3	15.2	16.1	18.0	20.0	21.0	22.0	23.2
59	2.5	5.8	9.4	11.1	12.0	12.8	13.7	14.6	15.5	16.4	18.3	20.3	21.4	22.4	23.6
60	2.5	5.9	9.6	11.3	12.2	13.0	13.9	14.8	15.7	16.7	18.6	20.6	21.7	22.8	24.0
61	2.55	6.0	9.7	11.5	12.4	13.2	14.2	15.1	16.0	16.9	18.9	21.0	22.1	23.2	24.4
62	2.6	6.1	9.9	11.7	12.6	13.5	14.4	15.3	16.2	17.2	19.2	21.3	22.4	23.6	24.8
63	2.65	6.2	10.0	11.8	12.8	13.7	14.6	15.6	16.5	17.5	19.5	21.7	22.8	23.9	25.2
64	2.7	6.3	10.2	12.0	13.0	13.9	14.8	15.8	16.8	17.8	19.8	22.0	23.2	24.3	25.6
65	2.7	6.4	10.4	12.2	13.2	14.1	15.1	16.1	17.0	18.1	20.2	22.4	23.5	24.7	26.0
66	2.75	6.5	10.6	12.4	13.4	14.3	15.3	16.3	17.3	18.3	20.5	22.7	23.9	25.1	26.4
67	2.8	6.6	10.7	12.6	13.6	14.5	15.5	16.6	17.6	18.6	20.8	23.0	24.3	25.5	26.8
68	2.9	6.7	10.9	12.8	13.8	14.7	15.8	16.8	17.8	18.9	21.1	23.4	24.6	25.8	27.2
69	2.9	6.8	11.0	13.0	14.0	15.0	16.0	17.1	18.1	19.2	21.4	23.7	25.0	26.2	27.6
70	2.95	6.9	11.2	13.2	14.2	15.2	16.2	17.3	18.3	19.5	21.7	24.1	25.3	26.6	28.0
80	3.4	7.9	12.8	15.0	16.2	17.4	18.6	19.8	21.0	22.2	24.8	27.5	28.9	30.4	32.0
90	3.8	8.9	14.4	16.9	18.3	19.5	20.9	22.2	23.6	25.0	27.9	31.0	32.6	34.2	36.0
100	4.2	9.9	16.0	18.8	20.3	21.7	23.2	24.7	26.2	27.8	31.0	34.4	36.2	38.0	40.0
300	12.6	29.7	48.0	56.4	60.9	65.1	69.6	74.1	78.6	83.4	93.0	103.2	108.6	114.0	120.0
500	21.0	49.5	80.0	94.0	101.5	108.5	116.0	123.5	131.0	139.0	155.0	172.0	181.0	190.0	200.0

**WARRANACQUER!**

Pure Vegetable Tonic Spirit—The finest Pick-me-up. Extracted from a rare Tropical Plant root. Sole Agent—R. R. MOSS, 16, Water Lane, London, E.C.



Water required to reduce from **3 OVERPROOF** to strengths of:—

Galls of Spirits	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls. .15	Galls. .2	Galls. .2	Galls. .2	Galls. .2	Galls. .25	Galls. .25	Galls. .25	Galls. .3	Galls. .35	Galls. .35	Galls. .4	Galls. .4
1	.15	.2	.2	.2	.2	.25	.25	.25	.3	.35	.35	.4	.4
2	.3	.35	.4	.4	.45	.5	.5	.55	.6	.65	.7	.7	.8
3	.45	.55	.6	.6	.65	.7	.75	.8	.9	1.0	1.0	1.1	1.1
4	.6	.7	.8	.8	.9	.95	1.0	1.1	1.2	1.3	1.4	1.5	1.5
5	.75	.9	1.0	1.0	1.1	1.2	1.2	1.3	1.5	1.7	1.7	1.8	1.9
6	.9	1.1	1.2	1.2	1.3	1.4	1.5	1.6	1.8	2.0	2.1	2.2	2.3
7	1.0	1.2	1.3	1.4	1.5	1.6	1.7	1.9	2.1	2.3	2.4	2.6	2.7
8	1.2	1.4	1.5	1.6	1.8	1.9	2.0	2.1	2.4	2.7	2.8	2.9	3.1
9	1.3	1.6	1.7	1.9	2.0	2.1	2.2	2.4	2.7	3.0	3.1	3.3	3.5
10	1.5	1.8	1.9	2.1	2.2	2.3	2.5	2.6	3.0	3.3	3.5	3.7	3.8
11	1.6	1.9	2.1	2.3	2.4	2.6	2.7	2.9	3.3	3.7	3.8	4.0	4.2
12	1.8	2.1	2.3	2.5	2.6	2.8	3.0	3.2	3.6	4.0	4.2	4.4	4.6
13	1.9	2.3	2.5	2.7	2.9	3.1	3.2	3.4	3.9	4.3	4.5	4.8	5.0
14	2.1	2.5	2.7	2.9	3.1	3.3	3.5	3.7	4.2	4.6	4.9	5.1	5.4
15	2.2	2.7	2.9	3.1	3.3	3.5	3.7	4.0	4.5	5.0	5.2	5.5	5.8
16	2.4	2.8	3.1	3.3	3.5	3.8	4.0	4.2	4.8	5.3	5.6	5.9	6.2
17	2.5	3.0	3.3	3.5	3.7	4.0	4.2	4.5	5.0	5.6	5.9	6.2	6.5
18	2.7	3.2	3.5	3.7	4.0	4.2	4.5	4.8	5.3	6.0	6.3	6.6	6.9
19	2.8	3.4	3.6	3.9	4.2	4.5	4.7	5.0	5.6	6.3	6.6	7.0	7.3
20	3.0	3.5	3.8	4.1	4.4	4.7	5.0	5.3	5.9	6.6	7.0	7.3	7.7
21	3.1	3.7	4.0	4.3	4.6	4.9	5.2	5.6	6.2	7.0	7.3	7.7	8.1
22	3.3	3.9	4.2	4.5	4.8	5.2	5.5	5.8	6.5	7.3	7.7	8.1	8.5
23	3.4	4.1	4.4	4.7	5.1	5.4	5.7	6.1	6.8	7.6	8.0	8.4	8.9
24	3.6	4.2	4.6	4.9	5.3	5.6	6.0	6.4	7.1	8.0	8.4	8.8	9.2
25	3.7	4.4	4.8	5.1	5.5	5.9	6.2	6.6	7.4	8.3	8.7	9.2	9.6
26	3.9	4.6	5.0	5.4	5.7	6.1	6.5	6.9	7.7	8.6	9.1	9.5	10.0
27	4.0	4.8	5.2	5.6	5.9	6.3	6.7	7.2	8.0	9.0	9.4	9.9	10.4
28	4.2	5.0	5.4	5.8	6.2	6.6	7.0	7.4	8.3	9.3	9.8	10.3	10.8
29	4.3	5.1	5.6	6.0	6.4	6.8	7.2	7.7	8.6	9.6	10.1	10.6	11.2
30	4.5	5.3	5.8	6.2	6.6	7.0	7.5	7.9	8.9	10.0	10.5	11.0	11.5
31	4.6	5.5	6.0	6.4	6.8	7.3	7.7	8.2	9.2	10.3	10.8	11.4	11.9
32	4.8	5.7	6.1	6.6	7.0	7.5	8.0	8.5	9.5	10.6	11.2	11.7	12.3
33	5.0	5.9	6.3	6.8	7.3	7.8	8.2	8.7	9.8	11.0	11.5	12.1	12.7
34	5.1	6.0	6.5	7.0	7.5	8.0	8.5	9.0	10.1	11.3	11.9	12.5	13.1
35	5.2	6.2	6.7	7.2	7.7	8.2	8.7	9.3	10.4	11.6	12.2	12.8	13.5
36	5.4	6.4	6.9	7.4	7.9	8.5	9.0	9.5	10.7	12.0	12.6	13.2	13.9
37	5.5	6.5	7.1	7.6	8.1	8.7	9.2	9.8	11.0	12.3	12.9	13.6	14.2
38	5.7	6.7	7.3	7.8	8.4	8.9	9.5	10.1	11.3	12.6	13.3	13.9	14.6
39	5.8	6.9	7.5	8.0	8.6	9.2	9.7	10.3	11.6	12.9	13.6	14.3	15.0
40	6.0	7.1	7.7	8.2	8.8	9.4	10.0	10.6	11.9	13.3	14.0	14.7	15.4
41	6.1	7.3	7.9	8.4	9.0	9.6	10.2	10.9	12.2	13.6	14.3	15.0	15.8
42	6.3	7.4	8.1	8.6	9.2	9.9	10.5	11.1	12.5	13.9	14.7	15.4	16.2
43	6.4	7.6	8.3	8.9	9.5	10.1	10.7	11.4	12.8	14.3	15.0	15.8	16.5
44	6.6	7.8	8.4	9.1	9.7	10.3	11.0	11.7	13.1	14.6	15.4	16.1	16.9
45	6.7	8.0	8.6	9.3	9.9	10.6	11.2	11.9	13.4	14.9	15.7	16.5	17.3
46	6.9	8.1	8.8	9.5	10.1	10.8	11.5	12.2	13.7	15.3	16.1	16.9	17.7
47	7.0	8.3	9.0	9.7	10.3	11.0	11.7	12.5	14.0	15.6	16.4	17.2	18.1
48	7.2	8.5	9.2	9.9	10.6	11.3	12.0	12.7	14.3	15.9	16.8	17.6	18.5
49	7.3	8.7	9.4	10.1	10.8	11.5	12.2	13.0	14.6	16.3	17.1	18.0	18.9
50	7.5	8.8	9.6	10.3	11.0	11.7	12.5	13.2	14.8	16.6	17.4	18.3	19.2
51	7.6	9.0	9.8	10.5	11.2	12.0	12.7	13.5	15.1	16.9	17.8	18.7	19.6
52	7.8	9.2	10.0	10.7	11.4	12.2	13.0	13.8	15.4	17.3	18.1	19.1	20.0
53	7.9	9.4	10.2	10.9	11.7	12.5	13.2	14.0	15.7	17.6	18.5	19.4	20.4
54	8.1	9.6	10.4	11.1	11.9	12.7	13.5	14.3	16.0	17.9	18.8	19.8	20.8
55	8.2	9.7	10.6	11.3	12.1	12.9	13.7	14.6	16.3	18.3	19.2	20.2	21.2
56	8.4	9.9	10.7	11.5	12.3	13.2	14.0	14.8	16.6	18.6	19.5	20.6	21.6
57	8.5	10.1	10.9	11.7	12.5	13.4	14.2	15.1	16.9	18.9	19.9	20.9	21.9
58	8.7	10.3	11.1	11.9	12.8	13.6	14.5	15.4	17.2	19.2	20.2	21.3	22.3
59	8.8	10.4	11.3	12.1	13.0	13.9	14.7	15.6	17.5	19.6	20.6	21.7	22.7
60	9.0	10.6	11.5	12.4	13.2	14.1	15.0	15.9	17.8	19.9	20.9	22.0	23.1
61	9.1	10.8	11.7	12.6	13.4	14.3	15.2	16.2	18.1	20.3	21.3	22.4	23.5
62	9.3	11.0	11.9	12.8	13.6	14.6	15.5	16.4	18.4	20.6	21.6	22.7	23.9
63	9.4	11.2	12.1	13.0	13.9	14.8	15.7	16.7	18.7	20.9	22.0	23.1	24.2
64	9.6	11.3	12.3	13.2	14.1	15.0	16.0	17.0	19.0	21.2	22.3	23.5	24.6
65	9.7	11.5	12.5	13.4	14.3	15.3	16.2	17.2	19.3	21.6	22.7	23.9	25.0
66	9.9	11.7	12.7	13.6	14.5	15.5	16.5	17.5	19.6	21.9	23.0	24.2	25.4
67	10.0	11.9	12.9	13.8	14.7	15.7	16.7	17.7	19.9	22.2	23.4	24.6	25.8
68	10.2	12.0	13.1	14.0	15.0	16.0	17.0	18.0	20.2	22.6	23.7	25.0	26.2
69	10.3	12.2	13.2	14.2	15.2	16.2	17.2	18.3	20.5	22.9	24.1	25.3	26.6
70	10.5	12.4	13.4	14.4	15.4	16.4	17.5	18.5	20.8	23.2	24.4	25.7	26.9
71	12.0	14.2	15.4	16.5	17.6	18.8	20.0	21.2	23.8	26.6	27.9	29.4	30.8
72	13.5	15.9	17.3	18.5	19.8	21.1	22.5	23.8	26.7	29.9	31.4	33.0	34.6
73	15.0	17.7	19.2	20.6	22.0	23.5	25.0	26.5	29.7	33.2	34.9	36.7	38.5
74	45.0	53.1	57.6	61.8	66.0	70.5	75.0	79.5	89.1	99.6	104.7	110.1	115.5
75	75.0	88.5	96.0	103.0	110.0	117.5	125.0	132.5	148.5	166.0	174.5	183.5	192.5



Water required to reduce from **2 OVERPROOF** to strengths of:—

Galls. of Spirits	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls. .15	Galls. .15	Galls. .2	Galls. .2	Galls. .2	Galls. .25	Galls. .25	Galls. .25	Galls. .3	Galls. .3	Galls. .3	Galls. .35	Galls. .4
1	.15	.15	.2	.2	.2	.25	.25	.25	.3	.3	.3	.35	.4
2	.3	.3	.4	.4	.4	.45	.5	.5	.55	.6	.65	.7	.75
3	.4	.5	.55	.6	.6	.65	.7	.75	.85	.95	1.0	1.1	1.1
4	.55	.7	.8	.8	.8	.9	.9	1.0	1.1	1.3	1.3	1.4	1.5
5	.65	.8	.9	1.0	1.0	1.1	1.2	1.3	1.4	1.6	1.7	1.8	1.8
6	.8	1.0	1.1	1.2	1.2	1.3	1.4	1.5	1.7	1.9	2.0	2.1	2.2
7	1.0	1.2	1.3	1.3	1.4	1.5	1.7	1.8	2.0	2.3	2.5	2.7	3.0
8	1.1	1.3	1.4	1.5	1.7	1.8	1.9	2.0	2.3	2.6	2.9	3.0	3.2
9	1.2	1.5	1.6	1.7	1.9	2.0	2.1	2.3	2.6	2.9	3.0	3.2	3.3
10	1.4	1.6	1.8	1.9	2.1	2.2	2.4	2.5	2.8	3.2	3.4	3.5	3.7
11	1.5	1.8	2.0	2.1	2.3	2.4	2.6	2.8	3.1	3.5	3.7	3.9	4.1
12	1.6	2.0	2.2	2.3	2.5	2.7	2.8	3.0	3.4	3.8	4.0	4.2	4.5
13	1.8	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.7	4.2	4.4	4.6	4.8
14	1.9	2.3	2.5	2.7	2.9	3.1	3.3	3.5	4.0	4.5	4.7	4.9	5.2
15	2.1	2.5	2.7	2.9	3.1	3.3	3.5	3.8	4.3	4.8	5.0	5.3	5.6
16	2.2	2.6	2.9	3.1	3.3	3.5	3.8	4.0	4.5	5.1	5.4	5.7	5.9
17	2.3	2.8	3.0	3.3	3.5	3.8	4.0	4.3	4.8	5.4	5.7	6.0	6.3
18	2.5	3.0	3.2	3.5	3.7	4.0	4.2	4.5	5.1	5.7	6.0	6.4	6.7
19	2.6	3.1	3.4	3.7	3.9	4.2	4.5	4.8	5.4	6.1	6.4	6.7	7.1
20	2.8	3.3	3.6	3.9	4.1	4.4	4.7	5.0	5.7	6.4	6.7	7.1	7.4
21	2.9	3.5	3.8	4.0	4.3	4.6	5.0	5.3	6.0	6.7	7.0	7.4	7.8
22	3.1	3.6	3.9	4.2	4.5	4.9	5.2	5.5	6.2	7.0	7.4	7.8	8.2
23	3.2	3.8	4.1	4.4	4.7	5.1	5.4	5.8	6.5	7.3	7.7	8.1	8.5
24	3.3	4.0	4.3	4.6	5.0	5.3	5.7	6.0	6.8	7.6	8.1	8.4	8.9
25	3.4	4.1	4.5	4.8	5.2	5.5	5.9	6.3	7.1	8.0	8.4	8.8	9.2
26	3.6	4.3	4.7	5.0	5.4	5.8	6.1	6.5	7.4	8.3	8.7	9.2	9.6
27	3.7	4.4	4.8	5.2	5.6	6.0	6.4	6.8	7.7	8.6	9.1	9.5	10.0
28	3.9	4.6	5.0	5.4	5.8	6.2	6.6	7.0	7.9	8.9	9.4	9.9	10.4
29	4.0	4.8	5.2	5.6	6.0	6.5	6.8	7.3	8.2	9.3	9.7	10.2	10.7
30	4.1	4.9	5.4	5.8	6.2	6.7	7.1	7.6	8.5	9.6	10.1	10.6	11.1
31	4.3	5.1	5.6	6.0	6.4	6.9	7.3	7.8	8.8	9.9	10.4	10.9	11.5
32	4.4	5.3	5.8	6.2	6.6	7.1	7.6	8.1	9.1	10.2	10.7	11.3	11.8
33	4.5	5.4	5.9	6.4	6.8	7.3	7.8	8.3	9.4	10.6	11.1	11.6	12.2
34	4.7	5.6	6.1	6.6	7.0	7.5	8.0	8.6	9.7	10.9	11.4	12.0	12.6
35	4.8	5.7	6.3	6.8	7.2	7.8	8.3	8.8	9.9	11.2	11.8	12.3	13.0
36	5.0	5.9	6.5	6.9	7.4	8.0	8.5	9.1	10.2	11.5	12.1	12.7	13.3
37	5.1	6.1	6.6	7.1	7.7	8.2	8.7	9.3	10.5	11.8	12.4	13.0	13.7
38	5.2	6.2	6.8	7.3	7.9	8.4	9.0	9.6	10.8	12.1	12.8	13.4	14.1
39	5.4	6.4	7.0	7.5	8.1	8.7	9.2	9.8	11.1	12.4	13.1	13.8	14.4
40	5.5	6.6	7.2	7.7	8.3	8.9	9.5	10.1	11.4	12.8	13.4	14.1	14.8
41	5.6	6.7	7.4	7.9	8.5	9.1	9.7	10.3	11.6	13.1	13.8	14.5	15.2
42	5.8	6.9	7.5	8.1	8.7	9.3	10.0	10.6	11.9	13.4	14.1	14.8	15.6
43	5.9	7.1	7.7	8.3	8.9	9.5	10.2	10.8	12.2	13.7	14.4	15.2	15.9
44	6.0	7.2	7.9	8.5	9.1	9.8	10.4	11.1	12.5	14.0	14.8	15.5	16.3
45	6.1	7.4	8.1	8.7	9.3	10.0	10.7	11.3	12.8	14.4	15.1	15.9	16.7
46	6.3	7.6	8.3	8.9	9.5	10.2	10.9	11.6	13.1	14.7	15.4	16.2	17.1
47	6.5	7.7	8.4	9.1	9.7	10.5	11.1	11.8	13.3	15.0	15.8	16.6	17.4
48	6.6	7.9	8.6	9.3	9.9	10.7	11.4	12.1	13.6	15.3	16.1	16.9	17.8
49	6.8	8.1	8.8	9.5	10.1	10.9	11.6	12.3	13.9	15.7	16.4	17.3	18.2
50	6.9	8.2	9.0	9.6	10.3	11.1	11.8	12.6	14.2	16.0	16.7	17.6	18.5
51	7.0	8.4	9.1	9.8	10.5	11.3	12.1	12.8	14.5	16.3	17.0	18.0	18.9
52	7.2	8.6	9.3	10.0	10.8	11.5	12.3	13.1	14.8	16.6	17.4	18.4	19.3
53	7.3	8.7	9.5	10.2	11.0	11.8	12.5	13.3	15.0	16.9	17.7	18.7	19.7
54	7.5	8.9	9.7	10.4	11.2	12.0	12.8	13.6	15.3	17.2	18.1	19.1	20.0
55	7.6	9.1	9.9	10.6	11.4	12.2	13.0	13.9	15.6	17.6	18.5	19.4	20.4
56	7.7	9.2	10.0	10.8	11.6	12.4	13.2	14.1	15.9	17.9	18.8	19.8	20.8
57	7.9	9.4	10.2	11.0	11.8	12.6	13.5	14.4	16.2	18.2	19.1	20.1	21.1
58	8.0	9.5	10.4	11.2	12.0	12.9	13.7	14.6	16.5	18.5	19.5	20.5	21.5
59	8.1	9.7	10.6	11.4	12.2	13.1	14.0	14.9	16.7	18.8	19.8	20.8	21.9
60	8.3	9.9	10.8	11.6	12.4	13.3	14.2	15.1	17.0	19.1	20.2	21.2	22.3
61	8.4	10.0	10.9	11.8	12.6	13.5	14.5	15.4	17.3	19.5	20.5	21.6	22.6
62	8.6	10.2	11.1	12.0	12.8	13.8	14.7	15.6	17.6	19.8	20.8	21.9	23.0
63	8.7	10.4	11.3	12.2	13.0	14.0	14.9	15.9	17.9	20.1	21.2	22.3	23.4
64	8.8	10.5	11.5	12.3	13.2	14.2	15.2	16.1	18.2	20.4	21.5	22.6	23.7
65	9.0	10.7	11.7	12.5	13.4	14.5	15.4	16.4	18.5	20.8	21.9	22.9	24.1
66	9.1	10.9	11.8	12.7	13.7	14.7	15.6	16.6	18.7	21.1	22.2	23.3	24.5
67	9.3	11.0	12.0	12.9	13.9	14.9	15.9	16.9	19.0	21.4	22.6	23.6	24.8
68	9.4	11.2	12.2	13.1	14.1	15.1	16.1	17.1	19.3	21.7	22.9	24.0	25.2
69	9.5	11.4	12.4	13.3	14.3	15.3	16.3	17.4	19.6	22.0	23.2	24.3	25.6
70	9.7	11.5	12.6	13.5	14.5	15.6	16.6	17.6	19.9	22.3	23.5	24.7	26.0
80	11.0	13.2	14.4	15.4	16.6	17.8	19.0	20.2	22.7	25.5	26.9	28.2	29.7
90	12.4	14.8	16.1	17.4	18.6	20.0	21.3	22.7	25.5	28.7	30.2	31.8	33.4
100	13.8	16.5	17.9	19.3	20.7	22.2	23.7	25.2	28.4	31.9	33.6	35.3	37.1
300	41.4	49.5	53.8	57.8	62.1	66.6	71.1	75.6	85.2	95.7	100.8	105.9	111.3
500	69.0	82.5	89.6	96.3	103.5	111.0	118.5	126.0	142.0	159.5	168.0	176.5	185.5

**WARRANACQUER!**

A Pure Vegetable Tonic Spirit—The finest Pick-me-up.  
Sole Agent—R. R. MOSS, 16, Water Lane, London, E.C.



Water required to reduce from **1 OVERPROOF** to strengths of:—

Galls of Spi. its	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	.15	.15	.15	.2	.2	.2	.2	.25	.25	.3	.3	.35	.35
2	.25	.3	.35	.35	.4	.4	.45	.5	.55	.6	.65	.75	.7
3	.4	.45	.5	.55	.6	.6	.7	.7	.8	.9	.95	1.0	1.1
4	.5	.6	.7	.7	.8	.8	.9	1.0	1.1	1.2	1.3	1.3	1.4
5	.65	.75	.85	.9	1.0	1.0	1.1	1.2	1.4	1.5	1.6	1.7	1.8
6	.75	.9	1.0	1.1	1.2	1.3	1.3	1.4	1.6	1.8	1.9	2.0	2.1
7	.9	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.9	2.1	2.2	2.4	2.5
8	1.0	1.2	1.3	1.4	1.6	1.7	1.8	1.9	2.2	2.4	2.6	2.7	2.9
9	1.1	1.4	1.5	1.6	1.8	1.9	2.0	2.2	2.4	2.7	2.9	3.0	3.2
10	1.3	1.5	1.7	1.8	1.9	2.1	2.2	2.4	2.7	3.0	3.2	3.4	3.6
11	1.4	1.7	1.8	2.0	2.1	2.3	2.5	2.6	3.0	3.3	3.5	3.7	3.9
12	1.5	1.8	2.0	2.2	2.3	2.5	2.7	2.9	3.3	3.6	3.9	4.1	4.3
13	1.7	2.0	2.2	2.4	2.5	2.7	2.9	3.1	3.5	3.9	4.2	4.4	4.6
14	1.8	2.1	2.3	2.5	2.7	2.9	3.2	3.3	3.8	4.3	4.5	4.7	5.0
15	1.9	2.3	2.5	2.7	2.9	3.1	3.4	3.6	4.0	4.6	4.8	5.1	5.3
16	2.0	2.4	2.7	2.9	3.1	3.3	3.6	3.8	4.3	4.9	5.1	5.4	5.7
17	2.2	2.6	2.8	3.1	3.3	3.5	3.8	4.1	4.6	5.2	5.5	5.7	6.1
18	2.3	2.8	3.0	3.3	3.5	3.8	4.0	4.3	4.8	5.5	5.8	6.1	6.4
19	2.4	2.9	3.2	3.4	3.7	4.0	4.3	4.6	5.1	5.8	6.1	6.4	6.7
20	2.6	3.1	3.3	3.6	3.9	4.2	4.5	4.8	5.4	6.1	6.4	6.8	7.1
21	2.7	3.2	3.5	3.8	4.1	4.4	4.7	5.0	5.6	6.4	6.7	7.1	7.5
22	2.8	3.4	3.7	4.0	4.3	4.6	4.9	5.3	5.9	6.7	7.0	7.4	7.8
23	2.9	3.5	3.8	4.2	4.5	4.8	5.2	5.5	6.2	7.0	7.4	7.7	8.2
24	3.0	3.7	4.0	4.3	4.7	5.0	5.4	5.8	6.5	7.3	7.7	8.1	8.6
25	3.1	3.8	4.1	4.5	4.9	5.2	5.6	6.0	6.8	7.6	8.0	8.4	8.9
26	3.2	4.0	4.3	4.7	5.1	5.4	5.8	6.2	7.0	7.9	8.3	8.8	9.3
27	3.3	4.1	4.5	4.9	5.3	5.6	6.0	6.5	7.3	8.2	8.7	9.1	9.6
28	3.5	4.3	4.7	5.1	5.5	5.8	6.3	6.7	7.6	8.5	9.0	9.5	10.0
29	3.6	4.4	4.9	5.2	5.7	6.1	6.5	6.9	7.9	8.8	9.3	9.8	10.3
30	3.8	4.6	5.0	5.4	5.8	6.3	6.7	7.2	8.1	9.1	9.6	10.1	10.7
31	3.9	4.7	5.2	5.6	6.0	6.5	6.9	7.4	8.4	9.4	9.9	10.5	11.1
32	4.1	4.9	5.3	5.8	6.2	6.7	7.2	7.7	8.6	9.7	10.3	10.8	11.4
33	4.2	5.0	5.5	6.0	6.4	6.9	7.4	7.9	8.9	10.0	10.6	11.2	11.8
34	4.3	5.2	5.7	6.1	6.6	7.1	7.6	8.2	9.2	10.3	10.9	11.5	12.1
35	4.4	5.4	5.8	6.3	6.8	7.3	7.8	8.4	9.5	10.6	11.2	11.8	12.5
36	4.6	5.5	6.0	6.5	7.0	7.5	8.1	8.6	9.8	10.9	11.6	12.2	12.8
37	4.7	5.7	6.1	6.7	7.2	7.7	8.3	8.9	10.0	11.2	11.9	12.5	13.2
38	4.8	5.8	6.3	6.9	7.4	7.9	8.5	9.1	10.3	11.6	12.2	12.8	13.6
39	4.9	6.0	6.5	7.1	7.6	8.1	8.7	9.4	10.6	11.9	12.5	13.2	13.9
40	5.1	6.1	6.7	7.2	7.8	8.4	9.0	9.6	10.8	12.2	12.8	13.5	14.3
41	5.2	6.3	6.8	7.4	8.0	8.6	9.2	9.8	11.1	12.5	13.2	13.9	14.6
42	5.3	6.4	7.0	7.6	8.2	8.8	9.4	10.1	11.4	12.8	13.5	14.2	15.0
43	5.5	6.6	7.2	7.8	8.4	9.0	9.6	10.3	11.7	13.1	13.8	14.5	15.3
44	5.6	6.7	7.3	8.0	8.6	9.2	9.9	10.6	11.9	13.4	14.1	14.9	15.7
45	5.7	6.9	7.5	8.1	8.8	9.4	10.1	10.8	12.2	13.7	14.5	15.2	16.1
46	5.8	7.0	7.7	8.3	9.0	9.6	10.3	11.0	12.5	14.0	14.8	15.5	16.4
47	6.0	7.2	7.8	8.5	9.2	9.8	10.5	11.3	12.7	14.3	15.1	15.9	16.7
48	6.1	7.3	8.0	8.7	9.4	10.0	10.8	11.5	13.0	14.6	15.4	16.2	17.1
49	6.2	7.5	8.2	8.9	9.6	10.2	11.0	11.7	13.3	14.9	15.7	16.6	17.5
50	6.3	7.6	8.4	9.0	9.7	10.4	11.2	12.0	13.5	15.2	16.0	16.9	17.8
51	6.5	7.8	8.5	9.2	9.9	10.7	11.4	12.2	13.8	15.5	16.4	17.2	18.2
52	6.6	7.9	8.7	9.4	10.1	10.9	11.7	12.5	14.1	15.8	16.7	17.6	18.6
53	6.7	8.1	8.9	9.6	10.3	11.1	11.9	12.7	14.4	16.1	17.0	17.9	18.9
54	6.8	8.3	9.0	9.8	10.5	11.3	12.1	13.0	14.6	16.4	17.3	18.3	19.3
55	7.0	8.4	9.2	9.9	10.7	11.5	12.3	13.2	14.9	16.7	17.7	18.6	19.6
56	7.1	8.6	9.3	10.1	10.9	11.7	12.6	13.5	15.2	17.0	18.0	18.9	20.0
57	7.2	8.7	9.5	10.3	11.1	11.9	12.8	13.7	15.4	17.3	18.3	19.3	20.4
58	7.3	8.9	9.7	10.5	11.3	12.1	13.0	14.0	15.7	17.6	18.6	19.6	20.7
59	7.5	9.0	9.9	10.7	11.5	12.3	13.2	14.2	16.0	17.9	19.0	19.9	21.1
60	7.6	9.2	10.0	10.9	11.7	12.5	13.5	14.4	16.3	18.2	19.3	20.3	21.4
61	7.7	9.3	10.2	11.0	11.9	12.7	13.7	14.6	16.5	18.5	19.6	20.6	21.8
62	7.9	9.5	10.3	11.2	12.1	13.0	13.9	14.9	16.8	18.8	19.9	21.0	22.1
63	8.0	9.6	10.5	11.4	12.3	13.2	14.1	15.1	17.1	19.2	20.2	21.3	22.5
64	8.1	9.8	10.7	11.6	12.5	13.4	14.4	15.4	17.3	19.5	20.5	21.6	22.8
65	8.3	9.9	10.9	11.8	12.7	13.6	14.6	15.6	17.6	19.8	20.9	22.0	23.2
66	8.4	10.1	11.0	11.9	12.9	13.8	14.8	15.8	17.9	20.1	21.2	22.3	23.6
67	8.5	10.2	11.2	12.1	13.1	14.0	15.0	16.1	18.2	20.4	21.5	22.6	23.9
68	8.6	10.4	11.4	12.3	13.2	14.2	15.3	16.3	18.4	20.7	21.8	23.0	24.3
69	8.8	10.5	11.5	12.5	13.4	14.4	15.5	16.6	18.7	21.0	22.1	23.3	24.6
70	8.9	10.7	11.7	12.7	13.6	14.6	15.7	16.8	19.0	21.3	22.5	23.7	25.0
80	10.2	12.2	13.3	14.5	15.6	16.7	18.0	19.2	21.7	24.3	25.7	27.0	28.6
90	11.4	13.8	15.0	16.3	17.6	18.8	20.2	21.6	24.4	27.4	28.9	30.4	32.1
100	12.7	15.3	16.7	18.1	19.5	20.9	22.5	24.0	27.1	30.4	32.1	33.8	35.7
300	38.1	45.9	50.1	54.3	58.5	62.7	67.5	72.0	81.3	91.2	96.3	101.4	107.1
500	63.5	76.5	83.5	90.5	97.5	104.5	112.5	120.0	135.5	152.0	160.5	169.0	178.5

All the LEADING BRANDS of SCOTCH & IRISH WHISKIES. BRYDON & CO., London, Dublin & Belfast.



Water required to reduce from **PROOF** to:— (Proof to 33, 34, 35 & 40 u.p. at page 55.)

Galls. of Spirits	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.	27 u.p.	30 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	.1	.15	.15	.15	.2	.2	.2	.25	.25	.3	.3	.35	.35	.4	.45
2	.25	.3	.3	.35	.35	.4	.45	.45	.5	.6	.6	.65	.7	.75	.9
3	.35	.45	.45	.5	.55	.6	.65	.7	.75	.85	.9	1.0	1.0	1.1	1.3
4	.45	.55	.6	.65	.75	.8	.85	.9	1.0	1.2	1.2	1.3	1.4	1.5	1.8
5	.55	.7	.75	.85	.9	1.0	1.1	1.1	1.3	1.4	1.5	1.6	1.7	1.9	2.2
6	.7	.85	.9	1.0	1.1	1.2	1.3	1.4	1.5	1.7	1.8	1.9	2.1	2.3	2.6
7	.8	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.8	2.0	2.2	2.3	2.4	2.7	3.1
8	.9	1.1	1.2	1.3	1.5	1.6	1.7	1.8	2.1	2.3	2.5	2.6	2.7	3.0	3.5
9	1.0	1.3	1.4	1.5	1.6	1.8	1.9	2.1	2.3	2.6	2.8	2.9	3.1	3.4	4.0
10	1.1	1.4	1.5	1.7	1.8	2.0	2.1	2.3	2.6	2.9	3.1	3.2	3.4	3.8	4.4
11	1.3	1.5	1.7	1.8	2.0	2.2	2.3	2.5	2.8	3.2	3.4	3.6	3.8	4.2	4.8
12	1.4	1.7	1.8	2.0	2.2	2.4	2.5	2.7	3.1	3.5	3.7	3.9	4.1	4.6	5.3
13	1.5	1.8	2.0	2.2	2.4	2.5	2.8	3.0	3.4	3.8	4.0	4.2	4.5	4.9	5.7
14	1.6	2.0	2.2	2.4	2.5	2.7	3.0	3.2	3.6	4.1	4.3	4.5	4.8	5.3	6.2
15	1.7	2.1	2.3	2.5	2.7	2.9	3.2	3.4	3.9	4.3	4.6	4.9	5.1	5.7	6.6
16	1.8	2.3	2.5	2.7	2.9	3.1	3.4	3.6	4.1	4.6	4.9	5.2	5.5	6.1	7.0
17	2.0	2.4	2.6	2.9	3.1	3.3	3.6	3.9	4.4	4.9	5.2	5.5	5.8	6.5	7.5
18	2.1	2.5	2.8	3.0	3.3	3.5	3.8	4.1	4.6	5.2	5.5	5.8	6.2	6.8	7.9
19	2.2	2.7	2.9	3.2	3.5	3.7	4.0	4.3	4.9	5.5	5.8	6.2	6.5	7.2	8.4
20	2.3	2.8	3.1	3.4	3.6	3.9	4.2	4.6	5.2	5.8	6.2	6.5	6.9	7.6	8.8
21	2.4	3.0	3.2	3.5	3.8	4.1	4.5	4.8	5.4	6.1	6.5	6.8	7.2	8.0	9.2
22	2.5	3.1	3.4	3.7	4.0	4.3	4.7	5.0	5.7	6.4	6.8	7.1	7.5	8.4	9.7
23	2.6	3.2	3.5	3.9	4.2	4.5	4.9	5.2	5.9	6.7	7.1	7.5	7.9	8.7	10.1
24	2.8	3.4	3.7	4.0	4.4	4.7	5.1	5.5	6.2	7.0	7.4	7.8	8.3	9.1	10.6
25	2.9	3.5	3.8	4.2	4.5	4.9	5.3	5.7	6.5	7.2	7.7	8.1	8.6	9.5	11.0
26	3.0	3.7	4.0	4.4	4.7	5.1	5.5	5.9	6.7	7.5	8.0	8.4	8.9	9.9	11.4
27	3.1	3.8	4.2	4.5	4.9	5.3	5.7	6.2	7.0	7.8	8.3	8.8	9.3	10.3	11.9
28	3.2	3.9	4.3	4.7	5.1	5.5	5.9	6.4	7.2	8.1	8.6	9.1	9.6	10.6	12.3
29	3.3	4.1	4.5	4.9	5.3	5.7	6.1	6.6	7.5	8.4	8.9	9.4	9.9	11.0	12.8
30	3.4	4.2	4.6	5.0	5.5	5.9	6.4	6.8	7.7	8.7	9.2	9.7	10.3	11.4	13.2
31	3.6	4.4	4.8	5.2	5.6	6.1	6.6	7.1	8.0	9.0	9.5	10.1	10.6	11.8	13.6
32	3.7	4.5	4.9	5.4	5.8	6.3	6.8	7.3	8.2	9.3	9.9	10.4	11.0	12.2	14.1
33	3.8	4.7	5.1	5.5	6.0	6.5	7.0	7.5	8.5	9.6	10.2	10.7	11.3	12.5	14.5
34	3.9	4.8	5.2	5.7	6.2	6.7	7.2	7.8	8.8	9.9	10.5	11.0	11.7	12.9	15.0
35	4.0	4.9	5.4	5.9	6.4	6.9	7.4	8.0	9.0	10.1	10.8	11.4	12.0	13.3	15.4
36	4.1	5.1	5.5	6.0	6.6	7.1	7.6	8.2	9.3	10.4	11.1	11.7	12.3	13.7	15.8
37	4.3	5.2	5.7	6.2	6.7	7.3	7.8	8.4	9.5	10.7	11.4	12.0	12.7	14.1	16.3
38	4.4	5.4	5.9	6.4	6.9	7.4	8.1	8.7	9.8	11.0	11.7	12.3	13.0	14.4	16.7
39	4.5	5.5	6.0	6.6	7.1	7.6	8.3	8.9	10.1	11.3	12.0	12.7	13.4	14.8	17.2
40	4.6	5.6	6.2	6.7	7.3	7.8	8.5	9.1	10.3	11.6	12.3	13.0	13.7	15.2	17.6
41	4.7	5.8	6.3	6.9	7.5	8.0	8.7	9.3	10.6	11.9	12.6	13.3	14.1	15.6	18.0
42	4.8	5.9	6.5	7.1	7.6	8.2	8.9	9.6	10.8	12.2	12.9	13.6	14.4	16.0	18.5
43	4.9	6.1	6.6	7.2	7.8	8.4	9.1	9.8	11.1	12.5	13.2	14.0	14.8	16.3	18.9
44	5.1	6.2	6.8	7.4	8.0	8.6	9.3	10.0	11.4	12.8	13.6	14.3	15.1	16.7	19.4
45	5.2	6.3	6.9	7.6	8.2	8.8	9.5	10.3	11.6	13.0	13.9	14.6	15.4	17.1	19.8
46	5.3	6.5	7.1	7.7	8.4	9.0	9.8	10.5	11.9	13.3	14.2	14.9	15.8	17.5	20.3
47	5.4	6.6	7.2	7.9	8.6	9.2	10.0	10.7	12.1	13.6	14.5	15.3	16.1	17.9	20.7
48	5.5	6.8	7.4	8.1	8.7	9.4	10.2	10.9	12.4	13.9	14.8	15.6	16.5	18.2	21.1
49	5.6	6.9	7.5	8.2	8.9	9.6	10.4	11.2	12.7	14.2	15.1	15.9	16.8	18.6	21.6
50	5.7	7.0	7.7	8.4	9.1	9.8	10.6	11.4	12.9	14.5	15.4	16.2	17.2	19.0	22.0
51	5.9	7.2	7.9	8.6	9.3	10.0	10.8	11.6	13.2	14.8	15.7	16.6	17.5	19.4	22.4
52	6.0	7.3	8.0	8.7	9.5	10.2	11.0	11.9	13.4	15.1	16.0	16.9	17.8	19.8	22.9
53	6.1	7.5	8.2	8.9	9.6	10.4	11.2	12.1	13.7	15.4	16.3	17.2	18.2	20.1	23.3
54	6.2	7.6	8.3	9.1	9.8	10.6	11.4	12.3	13.9	15.7	16.6	17.5	18.5	20.5	23.8
55	6.3	7.8	8.5	9.2	10.0	10.8	11.7	12.5	14.2	15.9	16.9	17.9	18.9	20.9	24.2
56	6.4	7.9	8.6	9.4	10.2	11.0	11.9	12.8	14.4	16.2	17.2	18.2	19.2	21.3	24.6
57	6.5	8.0	8.8	9.6	10.4	11.2	12.1	13.0	14.7	16.5	17.6	18.5	19.6	21.7	25.1
58	6.7	8.2	8.9	9.7	10.6	11.4	12.3	13.2	14.9	16.8	17.9	18.8	19.9	22.0	25.5
59	6.8	8.3	9.1	9.9	10.7	11.6	12.5	13.4	15.2	17.1	18.2	19.2	20.2	22.4	26.0
60	6.9	8.5	9.2	10.1	10.9	11.8	12.7	13.7	15.5	17.4	18.5	19.5	20.6	22.8	26.4
61	7.0	8.6	9.4	10.2	11.1	12.0	12.9	13.9	15.7	17.7	18.8	19.8	20.9	23.2	26.8
62	7.1	8.7	9.5	10.4	11.3	12.2	13.1	14.1	16.0	18.0	19.1	20.1	21.3	23.6	27.3
63	7.2	8.9	9.7	10.6	11.5	12.3	13.4	14.4	16.3	18.3	19.4	20.5	21.6	23.9	27.7
64	7.4	9.0	9.9	10.8	11.6	12.5	13.6	14.6	16.5	18.6	19.7	20.8	22.0	24.3	28.2
65	7.5	9.2	10.0	10.9	11.8	12.7	13.8	14.8	16.8	18.8	20.0	21.1	22.3	24.7	28.6
66	7.6	9.3	10.2	11.1	12.0	12.9	14.0	15.0	17.0	19.1	20.3	21.4	22.6	25.1	29.0
67	7.7	9.4	10.3	11.3	12.2	13.1	14.2	15.3	17.3	19.4	20.6	21.8	23.0	25.5	29.5
68	7.8	9.6	10.5	11.4	12.4	13.3	14.4	15.5	17.5	19.7	20.9	22.1	23.3	25.8	29.9
69	7.9	9.7	10.6	11.6	12.6	13.5	14.6	15.7	17.8	20.0	21.2	22.4	23.7	26.2	30.4
70	8.0	9.9	10.8	11.8	12.7	13.7	14.8	16.0	18.1	20.3	21.6	22.7	24.0	26.6	30.8
80	9.2	11.3	12.3	13.4	14.6	15.7	17.0	18.2	20.6	23.2	24.6	26.0	27.4	30.4	35.2
90	10.3	12.7	13.9	15.1	16.4	17.6	19.1	20.5	23.2	26.1	27.7	29.2	30.9	34.2	39.6
100	11.5	14.1	15.4	16.8	18.2	19.6	21.2	22.8	25.8	29.0	30.8	32.5	34.3	38.0	44.0
300	34.5	42.3	46.2	50.4	54.6	58.8	63.6	68.4	77.4	87.0	92.4	97.5	102.9	114.0	132.0
500	57.5	70.5	77.0	84.0	91.0	98.0	106.0	114.0	129.0	145.0	154.0	162.5	171.5	190.0	220.0

**FORTIFYING AND BREAKING DOWN!!** Consult **BRYDON & CO., London, Dublin & Belfast.**



Water required to reduce from **3 UNDERPROOF** to strengths of:—

Galls. of Spirits	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
1	1	1	1	1	1	1	1	2	2	2	2	3	3
2	15	2	25	25	3	3	35	4	45	5	55	55	6
3	25	3	35	4	45	5	55	55	65	75	8	85	9
4	3	4	45	55	6	65	7	75	9	10	11	11	12
5	4	5	6	65	75	8	9	95	11	13	13	14	15
6	5	6	7	8	85	10	11	11	13	15	16	17	18
7	55	7	85	95	10	11	12	13	15	18	19	20	21
8	65	8	95	11	12	13	14	15	18	20	21	23	24
9	7	10	11	12	13	14	16	17	20	23	24	26	27
10	8	11	12	13	14	16	18	19	22	25	27	28	30
11	9	12	13	15	16	18	19	21	24	28	29	31	33
12	95	13	14	16	17	19	21	23	26	30	32	34	36
13	105	14	15	17	19	21	23	25	28	33	35	37	39
14	11	15	17	18	20	22	25	27	31	35	37	40	42
15	12	16	18	20	22	24	26	28	33	38	40	43	45
16	13	17	19	21	23	26	28	30	35	40	43	45	48
17	14	18	20	22	25	27	30	32	37	43	45	48	51
18	14	19	21	24	26	29	32	34	39	45	48	51	54
19	15	20	23	25	28	30	33	36	42	48	51	54	57
20	16	21	24	26	29	32	35	38	44	50	53	57	60
21	17	22	25	28	30	34	37	40	46	53	56	60	63
22	18	23	26	29	32	35	39	42	48	55	59	62	66
23	18	24	27	30	33	37	40	44	50	58	61	65	69
24	19	25	29	32	35	38	42	46	53	60	64	68	72
25	20	26	30	33	36	40	44	47	55	63	67	71	75
26	21	28	31	34	38	42	45	49	57	65	69	74	78
27	22	29	32	36	39	43	47	51	59	68	72	77	81
28	23	30	33	37	41	45	49	53	61	70	75	80	84
29	23	31	34	39	42	46	51	55	64	73	77	82	87
30	24	32	36	40	44	48	52	57	66	75	80	85	90
31	25	33	37	41	45	50	54	59	68	78	83	88	93
32	26	34	38	42	46	51	56	61	70	80	85	91	96
33	27	35	39	44	48	53	58	63	72	83	88	94	99
34	27	36	40	45	49	54	59	65	74	85	91	97	102
35	28	37	42	46	51	56	61	66	77	88	93	99	105
36	29	38	43	48	52	58	63	68	79	90	96	102	108
37	30	39	44	49	54	59	65	70	81	93	99	105	111
38	31	40	45	50	55	61	66	72	83	95	101	108	114
39	31	41	46	51	57	62	68	74	85	98	104	111	117
40	32	42	48	53	58	64	70	76	88	100	107	114	120
41	33	43	49	54	59	66	72	78	90	103	109	116	123
42	34	45	50	55	61	67	73	80	92	105	112	119	126
43	34	46	51	57	62	69	75	82	94	108	115	122	129
44	35	47	52	58	64	70	77	84	96	110	117	125	132
45	36	48	54	59	65	72	79	85	99	113	120	128	135
46	37	49	55	61	67	74	80	87	101	115	123	131	138
47	38	50	56	62	68	75	82	89	103	118	125	133	141
48	38	51	57	63	70	77	84	91	105	120	128	136	144
49	39	52	58	65	71	78	86	93	107	123	131	139	147
50	40	53	59	66	73	80	87	95	109	125	133	142	150
51	41	54	61	67	74	82	89	97	112	128	136	145	154
52	42	55	62	69	75	83	91	99	114	130	139	148	157
53	43	56	63	70	77	85	93	101	116	133	141	151	160
54	43	57	64	71	78	87	94	103	118	135	144	153	163
55	44	58	65	73	80	88	96	104	120	138	147	156	166
56	45	59	67	74	81	90	98	106	123	140	150	159	169
57	46	60	68	75	83	91	100	108	125	143	152	162	172
58	46	61	69	77	84	93	101	110	127	145	155	165	175
59	47	63	70	78	86	94	103	112	129	148	158	168	178
60	48	64	71	79	87	96	105	114	131	150	160	170	181
61	49	65	72	81	88	98	107	116	134	153	163	173	184
62	50	66	74	82	90	99	108	118	136	155	165	176	187
63	50	67	75	83	91	101	110	120	138	158	168	179	190
64	51	68	76	85	93	103	112	122	140	160	171	182	193
65	52	69	77	86	94	104	114	123	142	163	173	185	196
66	53	70	79	87	96	106	115	125	145	165	176	187	199
67	54	71	80	88	97	107	117	127	147	168	179	190	202
68	54	72	81	90	99	109	119	129	149	170	181	193	205
69	55	73	82	91	100	110	121	131	151	173	184	196	208
70	56	74	83	92	102	112	122	133	153	175	187	199	211
80	64	85	95	106	116	128	140	152	175	200	214	227	241
90	72	95	107	119	131	144	157	171	197	225	240	256	271
100	80	106	119	132	145	160	175	190	219	250	267	284	301
300	240	318	357	396	435	480	525	570	657	750	801	852	903
500	400	530	595	660	725	800	875	950	1095	1250	1335	1420	1505

**WARRANACQUER!**

Pure Vegetable Tonic Spirit and Pick-me-up. Extracted from a rare Tropical Plant root. Sole Agent—R. R. MOSS, 16, Water Lane, E.C.



Water required to reduce from **5 UNDERPROOF** to strengths of:—

Galls. of Spirits	10 u.p.	12 u.p.	13 u.p.	14 u.p.	15 u.p.	16 u.p.	17 u.p.	18 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	.05	.1	.1	.1	.1	.15	.15	.15	.2	.25	.25	.3	.3
2	.1	.15	.2	.2	.25	.25	.3	.35	.4	.45	.5	.5	.55
3	.15	.25	.3	.3	.35	.4	.45	.5	.6	.65	.7	.75	.8
4	.25	.35	.4	.4	.5	.55	.6	.65	.8	.9	.95	1.0	1.1
5	.3	.4	.5	.5	.6	.7	.75	.8	1.0	1.1	1.2	1.3	1.4
6	.35	.5	.55	.6	.75	.8	.9	1.0	1.2	1.3	1.4	1.5	1.6
7	.4	.6	.65	.8	.85	.95	1.0	1.1	1.4	1.6	1.7	1.8	1.9
8	.45	.65	.75	.9	.95	1.1	1.2	1.3	1.5	1.8	1.9	2.1	2.2
9	.5	.75	.85	1.0	1.1	1.2	1.3	1.5	1.7	2.0	2.2	2.3	2.5
10	.55	.8	.95	1.1	1.2	1.4	1.5	1.6	1.9	2.2	2.4	2.6	2.7
11	.6	.9	1.0	1.2	1.3	1.5	1.6	1.8	2.1	2.5	2.6	2.8	3.0
12	.7	1.0	1.1	1.3	1.5	1.6	1.8	2.0	2.3	2.7	2.9	3.1	3.3
13	.75	1.1	1.2	1.4	1.6	1.8	1.9	2.1	2.5	2.9	3.1	3.3	3.6
14	.8	1.15	1.3	1.5	1.7	1.9	2.1	2.3	2.7	3.1	3.4	3.6	3.8
15	.85	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.9	3.4	3.6	3.9	4.1
16	.9	1.3	1.5	1.7	1.9	2.2	2.4	2.6	3.1	3.6	3.8	4.1	4.4
17	.95	1.4	1.6	1.8	2.1	2.3	2.5	2.8	3.3	3.8	4.1	4.4	4.7
18	1.0	1.5	1.7	1.9	2.2	2.4	2.7	2.9	3.5	4.0	4.3	4.6	4.9
19	1.1	1.5	1.8	2.0	2.3	2.6	2.8	3.1	3.7	4.3	4.5	4.9	5.2
20	1.15	1.6	1.9	2.2	2.4	2.7	3.0	3.3	3.9	4.5	4.8	5.1	5.5
21	1.2	1.7	2.0	2.3	2.5	2.8	3.1	3.4	4.1	4.7	5.0	5.4	5.8
22	1.25	1.8	2.1	2.4	2.7	3.0	3.3	3.6	4.2	4.9	5.3	5.7	6.0
23	1.3	1.9	2.2	2.5	2.8	3.1	3.4	3.7	4.4	5.2	5.5	5.9	6.3
24	1.35	2.0	2.3	2.6	2.9	3.2	3.6	3.9	4.6	5.4	5.8	6.2	6.6
25	1.4	2.1	2.4	2.7	3.0	3.4	3.7	4.1	4.8	5.6	6.0	6.4	6.9
26	1.5	2.1	2.5	2.8	3.1	3.5	3.9	4.2	5.0	5.8	6.2	6.7	7.1
27	1.55	2.2	2.6	2.9	3.3	3.6	4.0	4.4	5.2	6.0	6.5	6.9	7.4
28	1.6	2.3	2.7	3.0	3.4	3.8	4.2	4.6	5.4	6.3	6.7	7.2	7.7
29	1.65	2.4	2.8	3.1	3.5	3.9	4.3	4.7	5.6	6.5	7.0	7.4	7.9
30	1.7	2.5	2.9	3.2	3.6	4.1	4.5	4.9	5.8	6.7	7.2	7.7	8.2
31	1.75	2.6	2.9	3.3	3.8	4.2	4.6	5.1	6.0	6.9	7.4	8.0	8.5
32	1.8	2.6	3.0	3.5	3.9	4.3	4.8	5.2	6.2	7.2	7.7	8.2	8.8
33	1.9	2.7	3.1	3.6	4.0	4.5	4.9	5.4	6.4	7.4	7.9	8.5	9.0
34	1.95	2.8	3.2	3.7	4.1	4.6	5.1	5.5	6.6	7.6	8.2	8.7	9.3
35	2.0	2.9	3.3	3.8	4.2	4.7	5.2	5.7	6.8	7.8	8.4	9.0	9.6
36	2.05	3.0	3.4	3.9	4.4	4.9	5.4	5.9	7.0	8.1	8.6	9.2	9.8
37	2.1	3.0	3.5	4.0	4.5	5.0	5.5	6.0	7.1	8.3	8.9	9.5	10.1
38	2.15	3.1	3.6	4.1	4.6	5.1	5.7	6.2	7.3	8.5	9.1	9.8	10.4
39	2.2	3.2	3.7	4.2	4.7	5.3	5.8	6.4	7.5	8.7	9.4	10.0	10.7
40	2.3	3.3	3.8	4.3	4.8	5.4	5.9	6.5	7.7	9.0	9.6	10.3	11.0
41	2.35	3.4	3.9	4.4	5.0	5.5	6.1	6.7	7.9	9.2	9.8	10.5	11.2
42	2.4	3.4	4.0	4.5	5.1	5.7	6.2	6.8	8.1	9.4	10.1	10.8	11.5
43	2.45	3.5	4.1	4.6	5.2	5.8	6.4	7.0	8.3	9.7	10.3	11.0	11.8
44	2.5	3.6	4.2	4.8	5.3	5.9	6.5	7.2	8.5	9.9	10.6	11.3	12.1
45	2.55	3.7	4.3	4.9	5.4	6.1	6.7	7.3	8.7	10.1	10.8	11.6	12.3
46	2.6	3.8	4.4	5.0	5.6	6.2	6.8	7.5	8.9	10.3	11.0	11.8	12.6
47	2.7	3.9	4.5	5.1	5.7	6.3	7.0	7.7	9.1	10.5	11.3	12.1	12.9
48	2.75	3.9	4.6	5.2	5.8	6.5	7.1	7.8	9.3	10.8	11.5	12.3	13.2
49	2.8	4.0	4.7	5.3	5.9	6.6	7.3	8.0	9.5	11.0	11.8	12.6	13.4
50	2.85	4.1	4.8	5.4	6.1	6.8	7.4	8.2	9.7	11.2	12.0	12.8	13.7
51	2.9	4.2	4.8	5.5	6.2	6.9	7.6	8.3	9.8	11.4	12.2	13.1	14.0
52	2.95	4.3	4.9	5.6	6.3	7.0	7.7	8.5	10.0	11.6	12.5	13.4	14.2
53	3.0	4.4	5.0	5.7	6.4	7.1	7.9	8.6	10.2	11.9	12.7	13.6	14.5
54	3.1	4.4	5.1	5.8	6.5	7.3	8.0	8.8	10.4	12.1	13.0	13.9	14.8
55	3.15	4.5	5.2	5.9	6.7	7.4	8.2	9.0	10.6	12.3	13.2	14.1	15.1
56	3.2	4.6	5.3	6.0	6.8	7.6	8.3	9.1	10.8	12.5	13.4	14.4	15.3
57	3.25	4.7	5.4	6.2	6.9	7.7	8.5	9.3	11.0	12.8	13.7	14.6	15.6
58	3.3	4.8	5.5	6.3	7.0	7.8	8.6	9.5	11.2	13.0	13.9	14.9	15.9
59	3.35	4.8	5.6	6.4	7.1	8.0	8.8	9.6	11.4	13.2	14.2	15.2	16.2
60	3.4	4.9	5.7	6.5	7.3	8.1	8.9	9.8	11.6	13.4	14.4	15.4	16.4
61	3.5	5.0	5.8	6.6	7.4	8.2	9.1	9.9	11.8	13.7	14.6	15.7	16.7
62	3.55	5.1	5.9	6.7	7.5	8.4	9.2	10.1	12.0	13.9	14.9	15.9	17.0
63	3.6	5.2	6.0	6.8	7.6	8.5	9.4	10.3	12.2	14.1	15.1	16.2	17.3
64	3.65	5.3	6.1	6.9	7.7	8.6	9.5	10.4	12.4	14.3	15.4	16.4	17.5
65	3.7	5.3	6.2	7.0	7.9	8.8	9.7	10.6	12.5	14.6	15.6	16.7	17.8
66	3.75	5.4	6.3	7.1	8.0	8.9	9.8	10.8	12.7	14.8	15.8	17.0	18.1
67	3.8	5.5	6.4	7.2	8.1	9.0	10.0	10.9	12.9	15.0	16.1	17.2	18.4
68	3.9	5.6	6.5	7.3	8.2	9.2	10.1	11.1	13.1	15.2	16.3	17.5	18.6
69	3.95	5.7	6.6	7.4	8.3	9.3	10.3	11.2	13.3	15.5	16.6	17.7	18.9
70	4.0	5.8	6.7	7.6	8.5	9.5	10.4	11.4	13.5	15.7	16.8	18.0	19.2
80	4.6	6.6	7.6	8.6	9.7	10.8	11.9	13.0	15.4	17.9	19.2	20.6	21.9
90	5.1	7.4	8.5	9.7	10.9	12.2	13.4	14.7	17.4	20.2	21.6	23.1	24.7
100	5.7	8.2	9.5	10.8	12.1	13.5	14.9	16.3	19.3	22.4	24.0	25.7	27.4
300	17.1	24.6	28.5	32.4	36.3	40.5	44.7	48.9	57.9	67.2	72.0	77.1	82.2
500	28.5	41.0	47.5	54.0	60.5	67.5	74.5	81.5	96.5	112.0	120.0	128.5	137.0

**WARRANACQUER!**

A Pure Vegetable Tonic Spirit—The finest Pick-me-up.  
Sole Agent—R. R. MOSS, 15, Water Lane, London, E.C.



From **8 UNDERPROOF** to strengths of:—From **10 UNDERPROOF** to:—

Galls of Spirits	13 u.p.	15 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.	15 u.p.	17 u.p.	20 u.p.	22 u.p.	23 u.p.	24 u.p.	25 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	.05	.1	.1	.15	.2	.2	.2	.25	.05	.1	.15	.15	.2	.2	.2
2	.1	.15	.2	.3	.35	.4	.45	.45	.15	.15	.25	.3	.35	.4	.4
3	.15	.25	.35	.45	.55	.6	.65	.7	.2	.25	.4	.45	.5	.55	.6
4	.25	.35	.45	.6	.75	.8	.85	.95	.25	.35	.5	.65	.7	.75	.8
5	.3	.45	.55	.75	.95	1.0	1.1	1.2	.3	.45	.65	.8	.85	.95	1.0
6	.35	.5	.65	.9	1.1	1.2	1.3	1.4	.35	.5	.75	.95	1.0	1.1	1.2
7	.4	.6	.8	1.1	1.3	1.4	1.5	1.6	.45	.6	.9	1.1	1.2	1.3	1.4
8	.45	.7	.9	1.2	1.5	1.6	1.7	1.9	.5	.7	1.0	1.3	1.4	1.5	1.6
9	.55	.8	1.0	1.4	1.7	1.8	1.9	2.1	.55	.8	1.2	1.4	1.5	1.7	1.8
10	.6	.85	1.1	1.5	1.9	2.0	2.2	2.3	.6	.85	1.3	1.6	1.7	1.9	2.0
11	.65	.95	1.2	1.7	2.0	2.2	2.4	2.6	.65	.95	1.4	1.7	1.9	2.1	2.3
12	.7	1.0	1.3	1.8	2.2	2.4	2.6	2.8	.7	1.0	1.5	1.9	2.1	2.3	2.5
13	.75	1.1	1.5	2.0	2.4	2.6	2.8	3.0	.8	1.1	1.7	2.0	2.2	2.5	2.7
14	.85	1.2	1.6	2.2	2.6	2.8	3.0	3.3	.85	1.2	1.8	2.2	2.4	2.6	2.9
15	.9	1.3	1.7	2.3	2.8	3.0	3.2	3.5	.9	1.3	1.9	2.4	2.6	2.8	3.1
16	.95	1.4	1.8	2.5	3.0	3.2	3.5	3.7	1.0	1.4	2.0	2.5	2.8	3.0	3.3
17	1.0	1.4	1.9	2.6	3.1	3.4	3.7	4.0	1.05	1.5	2.2	2.7	2.9	3.2	3.5
18	1.05	1.5	2.0	2.8	3.3	3.6	3.9	4.2	1.1	1.5	2.3	2.8	3.1	3.4	3.7
19	1.1	1.6	2.1	2.9	3.5	3.8	4.1	4.4	1.15	1.6	2.4	3.0	3.3	3.6	3.9
20	1.2	1.7	2.2	3.1	3.7	4.0	4.3	4.7	1.2	1.7	2.6	3.2	3.5	3.8	4.1
21	1.25	1.8	2.4	3.2	3.9	4.2	4.5	4.9	1.3	1.8	2.7	3.3	3.6	4.0	4.3
22	1.3	1.9	2.5	3.4	4.1	4.4	4.8	5.1	1.35	1.9	2.8	3.5	3.8	4.2	4.5
23	1.35	1.9	2.6	3.5	4.3	4.6	5.0	5.4	1.4	2.0	2.9	3.6	4.0	4.3	4.7
24	1.4	2.0	2.7	3.7	4.4	4.8	5.2	5.6	1.45	2.1	3.1	3.8	4.2	4.5	4.9
25	1.5	2.1	2.8	3.8	4.6	5.0	5.4	5.8	1.5	2.1	3.2	4.0	4.3	4.7	5.1
26	1.55	2.2	2.9	4.0	4.8	5.2	5.6	6.1	1.6	2.2	3.3	4.1	4.5	4.9	5.3
27	1.6	2.3	3.0	4.2	5.0	5.4	5.8	6.3	1.65	2.3	3.5	4.3	4.7	5.1	5.5
28	1.65	2.4	3.1	4.3	5.2	5.6	6.0	6.5	1.7	2.4	3.6	4.4	4.8	5.3	5.7
29	1.7	2.5	3.2	4.5	5.4	5.8	6.3	6.8	1.8	2.5	3.7	4.6	5.0	5.5	5.9
30	1.75	2.6	3.4	4.6	5.6	6.0	6.5	7.0	1.85	2.6	3.8	4.7	5.2	5.7	6.1
31	1.8	2.6	3.5	4.8	5.7	6.2	6.7	7.2	1.9	2.7	4.0	4.9	5.4	5.9	6.4
32	1.9	2.7	3.6	4.9	5.9	6.4	6.9	7.5	1.95	2.7	4.1	5.1	5.5	6.0	6.6
33	1.95	2.8	3.7	5.1	6.1	6.6	7.1	7.7	2.0	2.8	4.2	5.2	5.7	6.2	6.8
34	2.0	2.9	3.8	5.2	6.3	6.8	7.3	7.9	2.1	2.9	4.3	5.4	5.9	6.4	7.0
35	2.1	3.0	3.9	5.4	6.5	7.0	7.6	8.2	2.15	3.0	4.5	5.5	6.1	6.6	7.2
36	2.15	3.1	4.0	5.5	6.7	7.2	7.8	8.4	2.2	3.1	4.6	5.7	6.2	6.8	7.4
37	2.2	3.1	4.1	5.7	6.8	7.4	8.0	8.6	2.25	3.2	4.7	5.8	6.4	7.0	7.6
38	2.25	3.2	4.3	5.9	7.0	7.6	8.2	8.9	2.3	3.3	4.9	6.0	6.6	7.2	7.8
39	2.3	3.3	4.4	6.0	7.2	7.8	8.4	9.1	2.4	3.4	5.0	6.2	6.7	7.4	8.0
40	2.4	3.4	4.5	6.2	7.4	8.0	8.6	9.3	2.45	3.4	5.1	6.3	6.9	7.6	8.2
41	2.45	3.5	4.6	6.3	7.6	8.2	8.9	9.6	2.5	3.5	5.2	6.5	7.1	7.7	8.4
42	2.5	3.6	4.7	6.5	7.8	8.4	9.1	9.8	2.55	3.6	5.4	6.6	7.3	7.9	8.6
43	2.55	3.6	4.8	6.6	8.0	8.6	9.3	10.0	2.6	3.7	5.5	6.8	7.5	8.1	8.8
44	2.6	3.7	4.9	6.8	8.1	8.8	9.5	10.3	2.7	3.8	5.6	7.0	7.6	8.3	9.0
45	2.65	3.8	5.0	6.9	8.3	9.0	9.7	10.5	2.75	3.9	5.8	7.1	7.8	8.5	9.2
46	2.7	3.9	5.1	7.1	8.5	9.2	9.9	10.7	2.8	4.0	5.9	7.3	8.0	8.7	9.4
47	2.75	4.0	5.3	7.2	8.7	9.4	10.2	11.0	2.85	4.0	6.0	7.4	8.1	8.9	9.6
48	2.8	4.1	5.4	7.4	8.9	9.6	10.4	11.2	2.95	4.1	6.1	7.6	8.3	9.1	9.8
49	2.9	4.2	5.5	7.5	9.1	9.8	10.6	11.4	3.0	4.2	6.3	7.7	8.5	9.3	10.0
50	2.95	4.3	5.6	7.7	9.3	10.0	10.8	11.7	3.05	4.3	6.4	7.9	8.7	9.5	10.2
51	3.0	4.3	5.7	7.9	9.4	10.2	11.0	11.9	3.1	4.4	6.5	8.1	8.8	9.6	10.5
52	3.05	4.4	5.8	8.0	9.6	10.4	11.2	12.1	3.15	4.5	6.7	8.2	9.0	9.8	10.7
53	3.1	4.5	5.9	8.2	9.8	10.6	11.4	12.3	3.25	4.6	6.8	8.4	9.2	10.0	10.9
54	3.2	4.6	6.0	8.3	10.0	10.8	11.7	12.6	3.3	4.6	6.9	8.5	9.3	10.2	11.1
55	3.25	4.7	6.1	8.5	10.2	11.0	11.9	12.8	3.35	4.7	7.0	8.7	9.5	10.4	11.3
56	3.3	4.8	6.3	8.6	10.4	11.2	12.1	13.0	3.4	4.8	7.2	8.8	9.7	10.6	11.5
57	3.4	4.8	6.4	8.8	10.5	11.4	12.3	13.3	3.45	4.9	7.3	9.0	9.9	10.8	11.7
58	3.45	4.9	6.5	8.9	10.7	11.6	12.5	13.5	3.5	5.0	7.4	9.2	10.0	11.0	11.9
59	3.5	5.0	6.6	9.1	10.9	11.8	12.7	13.7	3.6	5.1	7.5	9.3	10.2	11.2	12.1
60	3.55	5.1	6.7	9.2	11.1	12.0	13.0	14.0	3.65	5.2	7.7	9.5	10.4	11.3	12.3
61	3.6	5.2	6.8	9.4	11.3	12.2	13.2	14.2	3.7	5.2	7.8	9.6	10.6	11.5	12.5
62	3.65	5.3	6.9	9.5	11.5	12.4	13.4	14.4	3.75	5.3	7.9	9.8	10.7	11.7	12.7
63	3.7	5.3	7.1	9.7	11.7	12.6	13.6	14.7	3.8	5.4	8.0	9.9	10.9	11.9	12.9
64	3.8	5.4	7.2	9.9	11.8	12.8	13.8	14.9	3.9	5.5	8.2	10.1	11.1	12.1	13.1
65	3.85	5.5	7.3	10.0	12.0	13.0	14.0	15.1	3.95	5.6	8.3	10.3	11.2	12.3	13.3
66	3.9	5.6	7.4	10.2	12.2	13.2	14.3	15.4	4.0	5.7	8.4	10.4	11.4	12.5	13.5
67	3.95	5.7	7.5	10.3	12.4	13.4	14.5	15.6	4.1	5.8	8.6	10.6	11.6	12.7	13.7
68	4.0	5.8	7.6	10.5	12.6	13.6	14.7	15.8	4.15	5.8	8.7	10.7	11.8	12.9	13.9
69	4.05	5.9	7.7	10.6	12.8	13.8	14.9	16.1	4.2	5.9	8.8	10.9	11.9	13.0	14.1
70	4.1	6.0	7.8	10.8	13.0	14.0	15.1	16.3	4.3	6.0	9.0	11.1	12.1	13.2	14.4
80	4.7	6.8	9.0	12.3	14.8	16.0	17.3	18.6	4.9	6.9	10.2	12.6	13.8	15.1	16.4
90	5.3	7.6	10.1	13.9	16.7	18.0	19.4	21.0	5.5	7.7	11.5	14.2	15.6	17.0	18.4
100	5.9	8.5	11.2	15.4	18.5	20.0	21.6	23.3	6.1	8.6	12.8	15.8	17.3	18.9	20.5
300	17.7	25.5	33.6	46.2	55.5	60.0	64.8	69.9	18.3	25.8	38.4	47.4	51.9	56.7	61.5
500	29.5	42.5	56.0	77.0	92.5	100.0	108.0	116.5	30.5	43.0	64.0	79.0	86.5	94.5	102.5

**WARRANACQUER!**

Pure Vegetable Tonic Spirit—The finest Pick-me-up. Extracted from a rare Tropical Plant root. Sole Agent—R. R. MOSS, 16, Water Lane, London, E.C.



## TABLE FOR STRONG SPIRITS.

Water required to reduce to **PROOF** from the following strengths:—

Galls. of Spirits	70 o.p.	68 o.p.	67 o.p.	66 o.p.	65 o.p.	64 o.p.	62 o.p.	60 o.p.	58 o.p.	56 o.p.	55 o.p.	50 o.p.	45 o.p.	43 o.p.	42 o.p.
1	75	75	7	7	7	7	65	65	6	6	6	55	5	45	45
2	1.5	1.5	1.4	1.4	1.4	1.4	1.3	1.3	1.2	1.2	1.2	1.1	1.0	.9	.9
3	2.3	2.2	2.2	2.1	2.1	2.1	2.0	1.9	1.9	1.8	1.8	1.6	1.4	1.4	1.3
4	3.0	2.9	2.9	2.8	2.8	2.7	2.7	2.6	2.5	2.4	2.3	2.1	1.9	1.8	1.8
5	3.8	3.7	3.6	3.5	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.7	2.4	2.3	2.2
6	4.5	4.4	4.3	4.2	4.2	4.1	4.0	3.9	3.7	3.6	3.5	3.2	2.9	2.7	2.7
7	5.3	5.1	5.0	5.0	4.9	4.8	4.6	4.5	4.3	4.2	4.1	3.7	3.3	3.2	3.1
8	6.0	5.9	5.8	5.7	5.6	5.5	5.3	5.1	5.0	4.8	4.7	4.3	3.8	3.7	3.6
9	6.8	6.6	6.5	6.4	6.3	6.2	6.0	5.8	5.6	5.4	5.3	4.8	4.3	4.1	4.0
10	7.55	7.3	7.2	7.1	7.0	6.85	6.65	6.4	6.2	6.0	5.9	5.3	4.8	4.55	4.45
20	15.1	14.6	14.4	14.2	13.9	13.7	13.3	12.8	12.4	12.0	11.7	10.6	9.6	9.1	8.9
30	22.7	22.0	21.6	21.2	20.9	20.6	19.9	19.3	18.6	17.9	17.6	16.0	14.3	13.7	13.4
40	30.2	29.3	28.8	28.3	27.9	27.4	26.6	25.7	24.8	23.9	23.5	21.3	19.1	18.3	17.8
50	37.8	36.6	36.0	35.4	34.9	34.3	33.2	32.1	31.0	29.9	29.4	26.6	23.9	22.8	22.3
60	45.3	43.9	43.2	42.5	41.8	41.2	39.8	38.5	37.2	35.9	35.2	31.9	28.7	27.4	26.8
70	52.9	51.2	50.4	49.6	48.8	48.0	46.5	44.9	43.4	41.9	41.1	37.2	33.5	32.0	31.2
80	60.4	58.6	57.6	56.6	55.8	54.9	53.1	51.4	49.6	47.8	47.0	42.6	38.2	36.6	35.7
90	68.0	65.9	64.8	63.7	62.7	61.7	59.8	57.8	55.8	53.8	52.8	47.9	43.0	41.1	40.1
100	75.6	73.2	72.0	70.8	69.7	68.6	66.4	64.2	62.0	59.8	58.7	53.2	47.8	45.7	44.6

The contracted bulk after reducing from Proof is equal to the Gallons of Spirit, plus the number of degrees reduced from. Thus the bulk after reducing 100 Gallons of Spirits at 70 o.p. = 100 + 70 = 170 Gallons.

## TABLE FOR STRENGTHS BELOW 25 UNDERPROOF.

Water required to reduce from **25 UNDERPROOF** to the following strengths:—

Galls. of Spirits	33 u.p.	34 u.p.	35 u.p.	40 u.p.	Galls. of Spirits	33 u.p.	34 u.p.	35 u.p.	40 u.p.	Galls. of Spirits	33 u.p.	34 u.p.	35 u.p.	40 u.p.
1	.1	.15	.15	.25	20	2.5	2.8	3.1	5.1	39	4.8	5.4	6.1	9.9
2	.25	.3	.3	.5	21	2.6	2.9	3.3	5.3	40	4.9	5.5	6.2	10.1
3	.35	.4	.45	.75	22	2.7	3.0	3.4	5.6	41	5.0	5.7	6.4	10.4
4	.5	.55	.6	1.0	23	2.8	3.2	3.6	5.8	42	5.2	5.8	6.5	10.6
5	.6	.7	.8	1.3	24	3.0	3.3	3.7	6.1	43	5.3	5.9	6.7	10.9
6	.75	.85	.95	1.5	25	3.1	3.5	3.9	6.3	44	5.4	6.1	6.9	11.1
7	.9	.95	1.1	1.8	26	3.2	3.6	4.1	6.6	45	5.5	6.2	7.0	11.4
8	1.0	1.1	1.2	2.0	27	3.3	3.7	4.2	6.8	46	5.7	6.3	7.2	11.6
9	1.1	1.2	1.4	2.3	28	3.4	3.9	4.4	7.1	47	5.8	6.5	7.4	11.9
10	1.2	1.4	1.5	2.5	29	3.6	4.0	4.5	7.3	48	5.9	6.6	7.5	12.1
11	1.4	1.5	1.7	2.8	30	3.7	4.1	4.7	7.6	49	6.0	6.8	7.6	12.4
12	1.5	1.7	1.9	3.0	31	3.8	4.3	4.8	7.8	50	6.2	6.9	7.8	12.7
13	1.6	1.8	2.0	3.3	32	3.9	4.4	5.0	8.1	51	6.3	7.0	8.0	12.9
14	1.7	1.9	2.2	3.5	33	4.1	4.6	5.1	8.3	52	6.4	7.2	8.1	13.2
15	1.8	2.1	2.3	3.8	34	4.2	4.7	5.3	8.6	60	7.4	8.3	9.4	15.2
16	2.0	2.2	2.5	4.0	35	4.3	4.8	5.5	8.9	70	8.6	9.7	10.9	17.7
17	2.1	2.3	2.6	4.3	36	4.4	5.0	5.6	9.1	80	9.8	11.0	12.5	20.2
18	2.2	2.5	2.8	4.6	37	4.5	5.1	5.8	9.4	90	11.1	12.4	14.0	22.8
19	2.3	2.6	3.0	4.8	38	4.7	5.2	5.9	9.6	100	12.3	13.8	15.6	25.3

LIQUEUR FABRIQUÉE À LA G<sup>DE</sup> CHARTREUSE.

**NOTICE.**—I, the Reverend GABRIEL ALFRED GREZIER, Procurator of the Monastery of "La Grande Chartreuse," in France. GIVE NOTICE that I am Sole Proprietor, by assignment from the Reverend JOHN FRANCIS GARNIER, now deceased (whose name in religion was LOUIS GARNIER) of the Liqueurs green yellow, and white, manufactured at La Grande Chartreuse, which are known to the public as "GRANDE CHARTREUSE," or "CHARTREUSE," and that any person forging, or counterfeiting, or colorably imitating my Labels, or Brands, or Seals, or Bottles; or filling, or refilling my Bottles with Liqueur not manufactured by me or the said LOUIS GARNIER at La Grande Chartreuse, or selling, or offering for sale, Liqueur not so manufactured under the name of "GRANDE CHARTREUSE" or "CHARTREUSE," will be proceeded against under the Merchandise Marks Act, 1887, or otherwise as the Law directs.

A design of the bottles containing the Liqueur manufactured at La Grande Chartreuse appears in the margin.

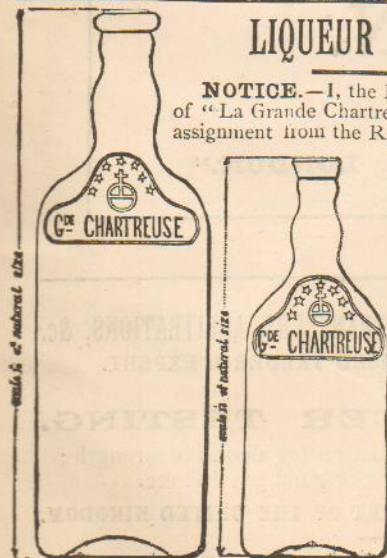
**NOTICE IS ALSO GIVEN** that **SEVERAL INJUNCTIONS** have been granted in my favour by the Chancery Division of the High Court of Justice.

Sole Consignee for the United Kingdom: WILLIAM DOYLE, 35, Crutched Friars, London, E.C., from whom all information respecting Price Lists, Shipping, &c., can be obtained.

(Signed)

G. A. GREZIER.

FOOKS, CHADWICK, ARNOLD & CHADWICK, 60, Carey Street, Lincoln's Inn, London, W.C.,  
Solicitors for the said GABRIEL ALFRED GREZIER.





*Finest* ✨ *Unsweetened*

→ AND ←



**OLD TOM GIN**



**HILLS & UNDERWOOD,**

-- 11 --

*GREAT TOWER STREET,*

**LONDON.**

**Telegraphic Address: "HILLS, LONDON."**

**GAUGING & VALUATION** for PERIODICAL STOCK-TAKING, TRANSFERS, ARBITRATIONS, &c.  
By AN EXPERIENCED PRACTICAL GAUGER, LICENSED VALUER & EXPERT.

ALSO

**WINE, SPIRITS AND BEER TESTING.**

Wines, Liqueurs, Cordials, Bitters, &c, tested by distillation for alcoholic strength ;  
Spirits tested for "obscuration;" Beer tested for original gravity, &c.

**PROMPT RESULTS FROM SAMPLES SENT FROM ANY PART OF THE UNITED KINGDOM.**

*Application to M. & T. M. SHERIDAN, 71, Eastcheap, London, E.C.*



# GIN.

Galls of Spl its	From PROOF to:—					(See also p. 49)					From 17 UNDERPROOF to:—					22 U.P. to:—		
	28 u.p.	33 u.p.	34 u.p.	35 u.p.	40 u.p.	25 u.p.	27 u.p.	28 u.p.	30 u.p.	33 u.p.	35 u.p.	40 u.p.	33 u.p.	35 u.p.	40 u.p.	33 u.p.	35 u.p.	40 u.p.
	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.	Galls.
1	·4	·5	·55	·55	·7	·1	·15	·15	·2	·25	·3	·4	·15	·2	·3	·15	·2	·3
2	·8	1·0	1·1	1·1	1·4	·2	·3	·3	·4	·5	·55	·8	·35	·4	·6	·35	·4	·6
3	1·2	1·5	1·6	1·7	2·0	·35	·4	·45	·55	·75	·85	1·2	·5	·6	·6	·6	·6	·9
4	1·6	2·0	2·1	2·2	2·7	·45	·55	·6	·75	·95	1·1	1·6	·65	·8	1·2	·8	1·2	·9
5	2·0	2·5	2·6	2·8	3·4	·55	·7	·8	·95	1·2	1·4	1·9	·85	1·0	1·5	1·5	1·5	1·5
6	2·4	3·0	3·2	3·3	4·1	·65	·85	·95	1·1	1·5	1·7	2·3	1·0	1·2	1·8	2·7	2·7	2·7
7	2·8	3·5	3·7	3·9	4·8	·75	1·0	1·1	1·3	1·7	2·0	2·7	1·2	1·4	2·1	2·1	2·1	2·1
8	3·2	4·0	4·2	4·4	5·4	·85	1·1	1·2	1·5	1·9	2·3	3·1	1·3	1·6	2·4	2·4	2·4	2·4
9	3·6	4·5	4·7	5·0	6·1	1·0	1·3	1·4	1·7	2·2	2·5	3·5	1·5	1·8	2·7	2·7	2·7	2·7
10	4·0	5·0	5·3	5·5	6·8	1·1	1·4	1·6	1·9	2·4	2·8	3·9	1·7	2·0	3·0	3·0	3·0	3·0
11	4·4	5·5	5·8	6·1	7·5	1·2	1·5	1·7	2·1	2·7	3·1	4·3	1·8	2·2	3·3	3·3	3·3	3·3
12	4·8	6·0	6·3	6·6	8·1	1·3	1·7	1·9	2·3	2·9	3·4	4·7	2·0	2·4	3·6	3·6	3·6	3·6
13	5·2	6·5	6·8	7·2	8·8	1·4	1·8	2·0	2·5	3·1	3·7	5·0	2·2	2·6	3·9	3·9	3·9	3·9
14	5·6	7·0	7·4	7·7	9·5	1·5	2·0	2·2	2·6	3·4	3·9	5·4	2·3	2·8	4·3	4·3	4·3	4·3
15	6·0	7·5	7·9	8·3	10·2	1·6	2·1	2·3	2·8	3·6	4·2	5·8	2·5	3·0	4·6	4·6	4·6	4·6
16	6·4	8·0	8·4	8·8	10·9	1·7	2·2	2·5	3·0	3·9	4·5	6·2	2·7	3·2	4·9	4·9	4·9	4·9
17	6·8	8·6	8·9	9·4	11·6	1·9	2·4	2·7	3·2	4·1	4·8	6·6	2·8	3·5	5·2	5·2	5·2	5·2
18	7·2	9·1	9·5	9·9	12·2	2·0	2·5	2·8	3·4	4·4	5·1	7·0	3·0	3·7	5·5	5·5	5·5	5·5
19	7·6	9·6	10·0	10·5	12·9	2·1	2·7	3·0	3·6	4·6	5·4	7·4	3·2	3·9	5·8	5·8	5·8	5·8
20	8·0	10·1	10·5	11·0	13·6	2·2	2·8	3·1	3·8	4·9	5·6	7·8	3·3	4·1	6·1	6·1	6·1	6·1
21	8·4	10·6	11·0	11·6	14·3	2·3	2·9	3·3	4·0	5·1	5·9	8·1	3·5	4·3	6·4	6·4	6·4	6·4
22	8·8	11·1	11·6	12·1	15·0	2·4	3·1	3·4	4·2	5·3	6·2	8·5	3·7	4·5	6·7	6·7	6·7	6·7
23	9·2	11·6	12·1	12·7	15·6	2·5	3·2	3·6	4·3	5·6	6·5	8·9	3·8	4·7	7·0	7·0	7·0	7·0
24	9·6	12·1	12·6	13·2	16·3	2·6	3·4	3·7	4·5	5·8	6·8	9·3	4·0	4·9	7·3	7·3	7·3	7·3
25	10·0	12·6	13·2	13·8	17·0	2·7	3·5	3·9	4·7	6·1	7·0	9·7	4·2	5·1	7·6	7·6	7·6	7·6
26	10·4	13·1	13·7	14·3	17·7	2·8	3·6	4·1	4·9	6·3	7·3	10·1	4·3	5·3	7·9	7·9	7·9	7·9
27	10·8	13·6	14·2	14·9	18·4	2·9	3·8	4·2	5·1	6·6	7·6	10·5	4·5	5·5	8·2	8·2	8·2	8·2
28	11·2	14·1	14·7	15·4	19·0	3·1	3·9	4·4	5·3	6·8	7·9	10·9	4·7	5·7	8·5	8·5	8·5	8·5
29	11·6	14·6	15·3	16·0	19·7	3·2	4·1	4·5	5·5	7·0	8·2	11·3	4·8	5·9	8·8	8·8	8·8	8·8
30	12·0	15·1	15·8	16·5	20·4	3·3	4·2	4·7	5·7	7·3	8·5	11·6	5·0	6·1	9·1	9·1	9·1	9·1
31	12·4	15·6	16·3	17·1	21·1	3·4	4·4	4·8	5·9	7·5	8·7	12·0	5·2	6·3	9·4	9·4	9·4	9·4
32	12·8	16·1	16·8	17·6	21·8	3·5	4·5	5·0	6·0	7·8	9·0	12·4	5·3	6·5	9·7	9·7	9·7	9·7
33	13·2	16·6	17·4	18·2	22·4	3·6	4·6	5·1	6·2	8·0	9·3	12·8	5·5	6·7	10·0	10·0	10·0	10·0
34	13·6	17·1	17·9	18·7	23·1	3·7	4·8	5·3	6·4	8·3	9·6	13·2	5·7	6·9	10·3	10·3	10·3	10·3
35	14·0	17·6	18·4	19·3	23·8	3·8	4·9	5·5	6·6	8·5	9·9	13·6	5·8	7·1	10·6	10·6	10·6	10·6
36	14·4	18·1	18·9	19·8	24·5	3·9	5·0	5·6	6·8	8·7	10·2	14·0	6·0	7·3	10·9	10·9	10·9	10·9
37	14·8	18·6	19·5	20·4	25·2	4·0	5·2	5·8	7·0	9·0	10·4	14·4	6·2	7·5	11·2	11·2	11·2	11·2
38	15·2	19·1	20·0	20·9	25·8	4·1	5·3	5·9	7·2	9·2	10·7	14·7	6·3	7·7	11·5	11·5	11·5	11·5
39	15·6	19·6	20·5	21·5	26·5	4·3	5·5	6·1	7·4	9·5	11·0	15·1	6·5	7·9	11·8	11·8	11·8	11·8
40	16·0	20·1	21·0	22·0	27·2	4·4	5·6	6·2	7·6	9·7	11·3	15·5	6·7	8·1	12·2	12·2	12·2	12·2
41	16·4	20·6	21·6	22·6	27·9	4·5	5·7	6·4	7·7	10·0	11·6	15·9	6·8	8·3	12·5	12·5	12·5	12·5
42	16·8	21·1	22·1	23·1	28·6	4·6	5·9	6·5	7·9	10·2	11·8	16·3	7·0	8·5	12·8	12·8	12·8	12·8
43	17·2	21·6	22·6	23·7	29·2	4·7	6·0	6·7	8·1	10·5	12·1	16·7	7·2	8·7	13·1	13·1	13·1	13·1
44	17·6	22·1	23·1	24·2	29·9	4·8	6·2	6·9	8·3	10·7	12·4	17·1	7·3	8·9	13·4	13·4	13·4	13·4
45	18·0	22·6	23·7	24·8	30·6	5·0	6·3	7·0	8·5	10·9	12·7	17·5	7·5	9·1	13·7	13·7	13·7	13·7
46	18·4	23·1	24·2	25·3	31·3	5·1	6·4	7·2	8·7	11·2	13·0	17·8	7·7	9·3	14·0	14·0	14·0	14·0
47	18·8	23·6	24·7	25·9	32·0	5·2	6·6	7·3	8·9	11·4	13·3	18·2	7·9	9·5	14·3	14·3	14·3	14·3
48	19·2	24·1	25·2	26·4	32·6	5·3	6·7	7·5	9·1	11·7	13·5	18·6	8·0	9·7	14·6	14·6	14·6	14·6
49	19·6	24·6	25·8	27·0	33·3	5·4	6·9	7·6	9·3	11·9	13·8	19·0	8·2	9·9	14·9	14·9	14·9	14·9
50	20·0	25·1	26·3	27·5	34·0	5·6	7·0	7·8	9·5	12·2	14·1	19·4	8·3	10·1	15·2	15·2	15·2	15·2
51	20·3	25·7	26·8	28·1	34·7	5·7	7·1	8·0	9·6	12·4	14·4	19·8	8·5	10·4	15·5	15·5	15·5	15·5
52	20·7	26·2	27·3	28·6	35·4	5·8	7·3	8·1	9·8	12·7	14·7	20·2	8·6	10·6	15·8	15·8	15·8	15·8
53	21·1	26·7	27·9	29·2	36·0	5·9	7·4	8·3	10·0	12·9	14·9	20·6	8·8	10·8	16·1	16·1	16·1	16·1
54	21·5	27·2	28·4	29·7	36·7	6·0	7·6	8·4	10·2	13·2	15·2	20·9	9·0	11·0	16·4	16·4	16·4	16·4
55	21·9	27·7	28·9	30·3	37·4	6·1	7·7	8·6	10·4	13·4	15·5	21·3	9·2	11·2	16·7	16·7	16·7	16·7
56	22·3	28·2	29·5	30·8	38·1	6·2	7·8	8·7	10·6	13·6	15·8	21·7	9·3	11·4	17·0	17·0	17·0	17·0
57	22·7	28·7	30·0	31·4	38·8	6·3	8·0	8·9	10·8	13·9	16·1	22·1	9·5	11·6	17·3	17·3	17·3	17·3
58	23·1	29·2	30·5	31·9	39·4	6·4	8·1	9·0	11·0	14·1	16·4	22·5	9·7	11·8	17·6	17·6	17·6	17·6
59	23·5	29·7	31·0	32·5	40·1	6·5	8·3	9·2	11·2	14·3	16·6	22·9	9·8	12·0	17·9	17·9	17·9	17·9
60	23·9	30·2	31·6	33·0	40·8	6·6	8·4	9·4	11·3	14·6	16·9	23·3	10·0	12·2	18·2	18·2	18·2	18·2
61	24·3	30·7	32·1	33·6	41·5	6·8	8·5	9·5	11·5	14·8	17·2	23·7	10·2	12·4	18·5	18·5	18·5	18·5
62	24·7	31·2	32·6	34·1	42·2	6·9	8·7	9·7	11·7	15·1	17·5	24·1	10·3	12·6	18·8	18·8	18·8	18·8
63	25·1	31·7	33·1	34·7	42·8	7·0	8·8	9·8	11·9	15·3	17·8	24·4	10·5	12·8	19·2	19·2	19·2	19·2
64	25·5	32·2	33·7	35·2	43·5	7·1	9·0	10·0	12·1	15·6	18·0	24·8	10·7	13·0	19·5	19·5	19·5	19·5
65	25·9	32·7	34·2	35·8	44·2	7·2	9·1	10·1	12·3	15·8	18·3	25·2	10·8	13·2	19·8	19·8	19·8	19·8
66	26·3	33·2	34·7	36·3	44·9	7·3	9·2	10·3	12·5	16·0	18·6	25·6	11·0	13·4	20·1	20·1	20·1	20·1
67	26·7	33·7	35·2	36·9	45·6	7·4	9·4	10·4	12·7	16·3	18·9	26·0	11·2	13·6	20·4	20·4	20·4	20·4
68	27·1	34·2	35·8	37·4	46·2	7·5	9·5	10·6	12·9	16·5	19·2	26·4	11·3	13·8	20·7	20·7	20·7	20·7
69	27·5	34·7	36·3	38·0	46·9	7·6	9·7	10·8	13·0	16·8	19·5	26·8	11·5	14·0	21·0	21·0	21·0	21·0
70	27·9	35·2	36·8	38·5	47·6	7·7	9·8	10·9	13·2	17·0	19·7	27·2	11·7	14·2	21·3	21·3	21·3	21·3
80	31·9	40·2	42·1	44·0	54·4	8·7	11·2	12·5	15·1	19·4	22·6	31·0	13·4	16·2	24·3	24·3	24·3	24·3
90	35·9	45·3	47·3	49·5	61·2	9·8	12·6	14·0	17·0	21·9	25·4	34·9	15·0	18·3	27·4	27·4	27·4	27·4
100	39·9	50·3	52·6	55·0	68·0													



"liquor, or in other words the difference between the true or actual strength and that indicated by the "hydrometer." It is therefore simply a term to express the per centage of the proof strength of spirits hidden or obscured by sweetening, coloring, or other solid matter in solution. As Syke's hydrometer gives correct indication of strength only in absolutely pure unsweetened spirit, or admixtures of pure spirit and pure water, it follows that any matter held in solution in such admixtures affects the correct action of the hydrometer, and the extent to which its action is so affected corresponds with the obscuration as expressed in per centage of proof strength.

It must not be assumed, however, that in a sweetened or obscured spirit obscuration has any reference to bulk or weight. For example—if a spirit contains 3 per cent. of obscuration it does not follow that 3 per cent. of sweetening matter, *i.e.* 3 parts of sugar in 100 parts of spirit is present. A spirit may have 3% of obscuration and yet not contain 1 or 2 parts of sugar, by weight or measure, in 100 parts of spirit.

The spirits ordinarily containing obscuration are Brandy (usually between 1.0 and 3.5%); Rum (usually between 0.5 and 3.0%), and Geneva (usually nil to 0.5%). Whisky is of course free from obscuration, the Revenue regulations prohibiting the addition of any sweetening or coloring ingredient, except fluid coloring to the extent only of a pint to every 80 gallons, such addition not being deemed sufficient to affect the duty charge, or the action of the hydrometer.

**The effect of Reducing on Obscuration.**—Obscuration being a per centage of the proof strength and not of the weight or bulk of the spirit, is in no way affected by the breaking down with water. Thus if 50 gallons of Rum with 2% of obscuration were reduced with 50 gallons of water, obscuration would still remain as 2%. It is therefore an error to assume that in reducing strength obscuration is correspondingly reduced. Bearing this in mind, traders should be quite safe in reducing Brandy or Rum to an extent below the hydrometer strength equal to the per centage of obscuration. For example, if it be required to reduce a Brandy containing 3% of obscuration to 24 u.p., water may be added as required to reduce to 27 u.p. by the hydrometer. An example to illustrate this may be useful:—

60 gallons of Brandy = 5 o.p. by hydrometer with 3% obscuration, to be reduced for sale at 24 u.p. The actual starting strength is 8 o.p. (5 o.p. + 3%).

A reference to page 41 will show that 26.1 gallons are required to reduce to 24 u.p. actual strength.

If the hydrometer is used to try the reduced strengths it should indicate 27 u.p., or 3% below correct strength, being cheated to that extent by the obscuration.

As action under the sale of Foods and Drugs Act is, in the case of obscured spirits, taken only on actual strength ascertained after distillation, the method shown in this example may safely be followed.

**Obscuration as affecting Sale.**—Considerable misunderstanding sometimes arises between the retail trader and the wholesale dealer as to the invoiced strength of such obscured spirits as Brandy and Rum. A retail trader orders his spirit at a certain strength; the dealer supplies it at the ordered strength, but when tried by hydrometer on receipt, the retailer is aggrieved if he finds his hydrometer registers a lower strength than ordered, altogether unmindful of the strength expressed as obscuration. It must in such cases be borne in mind that the dealer has to pay duty on the strength expressed as obscuration, just as on the strength shown by the hydrometer, and therefore before the retailer complains he should add the obscuration shown on his permit to the ascertained hydrometer strength, when he will probably find that the dealer's invoice is quite correct. If a trader who is unequal to an intelligent appreciation of obscuration as a factor in strength, wants a certain hydrometer strength, he should specifically order his spirits at that strength.

### HYDROMETERS, THEIR USE AND CARE.

In view of the very important functions of the hydrometer in all branches of the spirit trade, a few words on the use and care of this—the only scientific instrument the ordinary trader is called upon to use—may not be out of place. In purchasing a hydrometer we cannot too strongly recommend the selection of a thoroughly good English-made instrument, and the avoidance of the cheap class of article which has only its low price to recommend it. Such cheap hydrometers soon become defective, the inferior gilding being unable to withstand for long the highly solvent and corrosive ethers of spirit. These ethers in time penetrate the bulb and cause a leakage which is fatal to correct indications. But apart from this worst possibility, the corrosion or removal by wear of the gilt itself disturbs the weight and displacing volume of the instrument, and if there is any defect in the hydrometer itself, that error runs through all the weights used in connection with it.

Having in view the very delicate structure of the hydrometer, and its liability to fall out of repair, traders should use it with great care. After use it should always be gently wiped dry before putting it into its case, and its bed in the case should never be allowed to become sodden or even damp with spirit. Should by accident a hydrometer fall and get dinged, it must no longer be used, but should at once be sent to the maker for re-adjustment. Retail traders would do well to send their instruments now and again either to the maker or to their wholesale suppliers, for a check against a well-kept or standard instrument.

In trying a sample of spirit care should be taken that all air bubbles have become dispelled, and the hydrometer should be immersed until the surface of the liquid reaches Division O on the stem. When allowed to rise and settle the indication should be read with an allowance for the convexity of the spirit round the stem, *i.e.*, the division on the stem *below* the surface of the liquid should be read. In reading the thermometer for temperature, on the other hand, the degree *above* the mercury should be taken.

### PERMITS AND CHECKS ON RECEIPT.

On receipt of spirit from bond or from the wholesale dealer, the permit should be detached from the cask and the strength of the spirit should be taken and checked with "permitted" strength. A slight discrepancy, if sometimes observed in the two strengths, may be due to the difference in temperature at time and place of removal and at time and place of receipt. This difference should not however exceed from 0.2 to 0.5 of a degree, and as a rule it will be observed that where strength is slightly below liquid measure will be correspondingly above the permit records. As affording a check on the liquid in casks on receipt from bond, the permits do not unfortunately, in all instances, give the dry or wet dip, and it is only by actual measurement such a check can be made. Some of the larger houses however, who clear spirits from bond, do supply the dry dip for the convenience of their customers' check, and it would be an advantage if all did likewise.

**WARRANACQUER!**

Pure Vegetable Tonic Spirit—The finest Pick-me-up. Extracted from a rare Tropical Plant root. Sole Agent—R. R. MOSS, 16, Water Lane, London, E.C.



## STOCK OR STORE CASKS.

The majority of traders employ store casks for their spirits when broken down—sherry butts or double-butts being frequently utilised for the purpose. As a rule such casks are fixed on the scantlings in a lying position, the back head being slightly tilted. Sometimes, however, store casks are erected in a standing position, and in such cases each cask should be fitted with a perpendicular measure gauge tube,—excellent patterns of which are shown by Messrs. L. Lumley & Co., America Square, London, E.C.—so that the ullage quantity in the cask can at any time be ascertained, and a check kept on the quantities drawn off. The opening of top head of standing casks should always be tightly covered to keep out dust and prevent loss through evaporation. Casks should not be left long on ullage at points, about the middle of the bouge—offering the largest surface for evaporation and loss of strength. Store casks should be allowed to run empty frequently to admit of removal of accumulated sediment and for cleansing purposes. If store casks, as well as all vessels used in racking, be kept thoroughly clean, there will be little necessity for the fining and filtering with Spanish Earth, paper-pulp, alum, &c., which are so frequently and not always wisely resorted to.

## CONDITION OF THE CELLAR.

How common it is to find the cellars of small traders and Licensed Victuallers in a condition absolutely hurtful to their stock of Wines, Spirits and Beer! The essentials for a well-kept cellar are:—Proper ventilation, equable temperature and cleanliness. Spirits are not so susceptible to deterioration in defective cellars as Wine and Beer, nevertheless extremes of temperature and foul atmosphere do injuriously affect spirits. No cellar should be without one or more thermometers, so that temperature can be watched and regulated. Sweepings, damp straw packing, or other rubbish, should never be allowed to accumulate, and dregs or rinsings of wine or beer should not be thrown on the floor of the cellar. Casks should always be stored on well raised scantlings of oak or masonry—the space underneath being kept clear, and spiles in Wine Casks should after use be driven in tightly to prevent a weep or drip. The best cellar temperatures are:—for beer from 47° to 52°, and for wines generally from 54° to 60°F. Sudden changes of temperature very injuriously affect wine; the consequent rapid expansion or contraction of liquid stirs up the lees and causes cloudiness. Temperatures above 75°F. are absolutely hurtful.

## LAWS ON THE REDUCING AND SALE OF SPIRITS.

The Revenue Laws permit of no reducing by water of either Foreign or British Spirits *in cask in bond for home use*. Therefore if spirits in cask are received direct from bond with blue-colored revenue permit, there is a guarantee that the strength has not been reduced by water. (This law does not apply to spirits intended for export from bond). If spirits are to be bottled in Customs or Excise bonds for home use, they may be previously reduced to any desired strength and delivered *in bottle* so reduced, the bottles being packed in cases of not less than one dozen each.

## THE SALE OF FOOD AND DRUGS ACT 1875 (38 & 39 Vic. c. 63.)

This Act and the Amendment Act of 1879 (42 & 43 Vic. c. 30) regulate the sale of Spirits, as to strength and quality. They have such an important bearing on the trade that extracts from the principal sections affecting Spirits are given.

Sec. 6.—No person shall sell to the prejudice of the purchaser any article of food or any drug which is not of the nature, substance or quality of the article demanded by such purchaser, under a penalty not exceeding £20; provided that an offence shall not be deemed to be committed under this section in the following cases:—

- (1) Where any ingredient not injurious to health has been added to the food or drug, because the same is required for the production or preparation thereof as an article of commerce, in a state fit for carriage or consumption, and not fraudulently to increase the bulk weight or measure of the food or drug, or conceal the inferior quality thereof.
- (2) When the food or drug is a proprietary medicine or is the subject of a patent in force, and is supplied in the state required in the patent specification.
- (3) Where the food or drug is unavoidably mixed with some extraneous matter in the process of collection or preparation.

Sec. 7.—No person shall sell any compound article of food which is not composed of ingredients in accordance with the demand of the purchaser, under a penalty not exceeding £20.

Sec. 8.—Provided that no person shall be guilty of any such aforesaid offence in respect of the sale of an article or food or a drug mixed with any ingredients not injurious to health, and not intended fraudulently to increase its bulk, weight, or measure, or conceal its inferior quality, if at the time of delivering such article he shall supply to the person receiving the same a notice by label distinctly and legibly written or printed on, or with the article, to the effect that the same is mixed.

Secs. 12 & 13.—Any purchaser of an article of food, or any officer duly appointed, shall be entitled to have the same analyzed by a public analyst, and to receive from him a certificate of the result of his analysis.

Sec. 14.—The person purchasing any article with the intention of submitting it to analysis shall, after the purchase shall have been completed, forthwith notify to the seller or his agent selling the article, his intention to have the same analysed, and shall offer to divide the article into three parts, to be then and there separated, and each part marked and sealed or fastened up in such manner as its nature will permit, and shall, if required to do so, proceed accordingly and deliver one of the parts to the seller or his agent. He shall afterwards retain one of the parts for future comparison, and submit the third part, if he deems it right to have the article analysed, to the analyst.

**WARRANACQUER!** A Pure Vegetable Tonic Spirit—The finest Pick-me-up. Extracted from a rare Tropical Plant root. Sole Agent—R. R. MOSS, 16, Water Lane, London, E.C.



Sec. 15.—If the seller or his agent do not accept the purchaser's offer to divide the article, the analyst receiving the same for analysis shall divide the same into two parts, and shall cause one of the parts to be delivered to the purchaser, who shall retain the same for production in case of subsequent proceedings.

Sec. 17.—If any duly appointed officer shall apply to purchase any article of food or drugs exposed to sale, or on sale by retail, and the person exposing the same for sale refuse to sell such person, such person shall be liable to a penalty not exceeding £10.

Sec. 18.—The justices before whom any complaint under the Act may be made may, upon the request of either party, in their discretion cause any article to be sent to Somerset House for analysis, and the expense of such analysis shall be paid by which parties the justices may direct.

Sec. 27.—Every person who shall wilfully give a label with any article sold by him, which shall falsely describe the article sold, shall be guilty of an offence under the Act, and be liable to a penalty not exceeding £10.

Amendment Act 1879 (42 & 43 Vic. c. 30).—"In determining whether an offence has been committed under Sec. 6 of the principal Act by selling to the prejudice of the purchaser Spirits not adulterated otherwise than by the admixture with water, it shall be a good defence to prove that such admixture has not reduced the spirits more than 25 *under proof* for Brandy, Whisky or Rum, and 35 *under proof* for Gin.

It will therefore be seen that although 25 u.p. and 35 u.p. are the limits fixed by the latter Act, a trader is enabled to sell at a still lower strength if he fulfils the condition laid down in Sec. 8 of the Act of 1875, viz., by supplying a notice or label with the spirits stating the strength, or by exposing the equivalent notice in a conspicuous place where the goods are retailed for consumption. As retailers are sometimes not clear what notice on a label would fulfil the law without stating the strength as so many degrees underproof, we may here point out that no objection can be taken to the following statement of strength, viz., "Contains — per cent. proof spirit." This method of expressing the strength is perfectly legal and obviously preferable. Thus bottled spirits sold at 25 u.p. would be labelled—"Contains 75 per cent. proof spirit."

To meet any necessity for reducing below 25 u.p., a Table is supplied on page 53 showing the quantity of water required to reduce the contracted bulk at 25 u.p. to lower strengths. On the same page is given a Table for reducing strong spirits to proof.

**WARRANACQUER!** Pure Vegetable Tonic Spirit—The finest Pick-me-up. Extracted from a rare Tropical Plant root. Sole Agent—R. R. MOSS, 16, Water Lane, London, E.C.

## RULES FOR RAISING, REDUCING & AVERAGING STRENGTHS OF SPIRITS, AND FOR FORTIFYING WINES.

1. To find the quantity of a weaker spirit that must be added to a given quantity of stronger spirit to reduce it to an intermediate strength.

RULE:—Multiply the difference between the stronger spirit and the strength required by the liquid gallons of the spirits to be reduced, and divide the product by the difference between the weaker spirit and the strength required.

EXAMPLE:—How many gallons of spirit of a strength of 15 u.p. is required to reduce 50 gallons of spirit at 10 o.p. to proof?

The difference between the stronger spirit and strength required is 10 degrees.  
The difference between the weaker spirit and strength required is 15 degrees.

$$\frac{50 \times 10}{15} = 33\frac{1}{3} \text{ gallons of the weaker spirit required.}$$

2. To raise the strength of a weaker spirit by adding a stronger spirit.

RULE:—Multiply the difference between the weaker strength and the required strength by the gallons of the weaker spirit, and divide the product by the difference between the stronger spirit and the required strength. (This is the reverse of the preceding).

EXAMPLE:—To raise 33 $\frac{1}{3}$  gallons of whisky at 15 u.p. to proof by adding whisky at 10 o.p.

The difference between the weaker strength (15 u.p.) and required strength = 15 degrees.

" " " " stronger " (10 o.p.) " " = 10 "

$$\frac{33\frac{1}{3} \times 15}{10} = 50 \text{ gallons at 10 o.p. required.}$$

3. To make up a certain quantity of spirits at a certain strength from spirits of two different strengths.

RULE:—Multiply the difference between the strength of the weaker spirit and the strength required by the certain quantity of spirits required, and divide the product by the difference between the strengths of the two spirits used and the quotient will give the quantity of the stronger spirit.

EXAMPLE:—To make up 30 gallons of spirits at 6 o.p. from mixtures of spirits at 12 o.p. and 2 o.p.

The difference between 2 o.p. and 6 o.p. = 4 degrees.

" " " " 12 " " 2 " = 10 "

$$\frac{30 \times 4}{10} = 12 \text{ gallons at 12 o.p. required, Therefore the quantity at 2 o.p. would be 18 gallons.}$$

4. FORTIFYING WINES:—To find the quantity of spirit of a certain strength required to fortify a given quantity of wine up to a certain strength.

RULE:—Multiply the difference between the present strength of the wine and the strength to which you require to raise it by the number of gallons of wine, and divide by the difference between the strength of the spirit and the required strength of the fortified wine.

EXAMPLE:—To fortify a butt of sherry, 108 gallons, from 29° to a strength of 34° with spirit of 68 o.p.

The difference between 29° and 34° is 5 degrees.

The difference between 68 o.p. and 34° (66 u.p.) is 134 degrees.

$$\frac{108 \times 5}{134} = 4 \text{ gallons of spirit required of the strength of 68 o.p.}$$

**GERMAN, RUSSIAN & AMERICAN DEODORISED ALCOHOL.**  
BRYDON & CO., London, Dublin & Belfast.



# LIQUEURS.

**E. CUSENIER FILS, AINÉ & C<sup>IE</sup>**

The Largest Manufacturers of Liqueurs in the World.

**DISTILLERIES AT**

PARIS ... ..	MULHOUSE.
CHARENTON ... ..	BRUXELLES.
ORNANS ... ..	CAMPANA.
MARSEILLE ... ..	COGNAC.

Over 40 PRIZE MEDALS obtained at various International Exhibitions in England and Abroad.

**SPECIALITIES.**

CRÈME DE MENTHE GLACIALE. KÜMMEL CRYSTALISÉE, EXTRA SEC.  
CURAÇAO, TRIPLE SEC & EXTRA SEC. VERMOUTH, CHERRY BRANDY,  
&c., &c.

**THE BRANDIES OF**

**E. CUSENIER FILS, AINÉ & C<sup>IE</sup> (Château de Solençon)**

*Are distilled from the finest Wines of the Charente.*

A large Stock of "Fines" & "Grandes Champagnes" is held,  
AND THE QUALITY AND AUTHENTICITY ARE GUARANTEED.

*Sole Agents in the United Kingdom,*

**GEO. IDLE, CHAPMAN & CO., LTD.,**  
6 & 7, ST. MARY-AT-HILL, LONDON, E.C.

**GEO. IDLE, CHAPMAN & CO., LTD.,**

IMPORTERS AND DEALERS IN ALL KINDS OF FOREIGN & OTHER LIQUEURS, &c.

**SPECIALITIES.**

PEACH BRANDY.	DAMSON GIN.
APRICOT BRANDY.	SLOE GIN.
ORANGE BRANDY.	ORANGE GIN.
GINGER BRANDY.	PEACH BITTERS.
MILK PUNCH.	ORANGE BITTERS.

*Prepared from Fresh Fruits and finest materials only.*

NO ESSENCES USED.

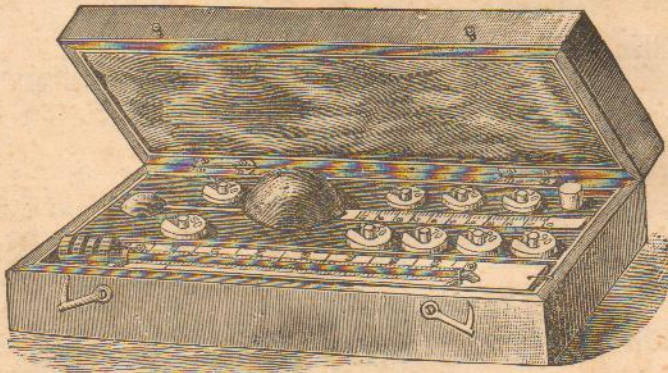
**GEO. IDLE, CHAPMAN & CO., LIMITED,**  
6 & 7, ST. MARY-AT-HILL, LONDON, E.C.



**L. LUMLEY & CO.,**  
 Cork Merchants,  
 WINE & SPIRIT MERCHANTS' ENGINEERS,  
 1, America Square, Minories, LONDON, E.C.

**HYDROMETERS.**

For Testing the Strength of Spirits.



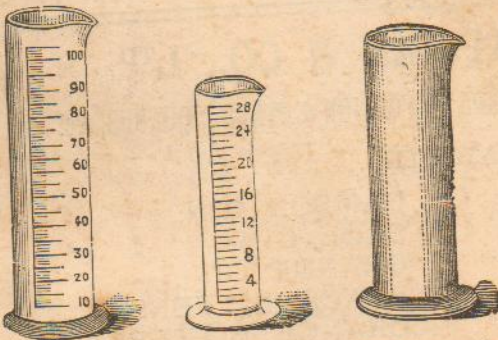
And SACCHAROMETERS from £1 1 0 to £4 5 0

GLASS HYDROMETER & SACCHAROMETERS.

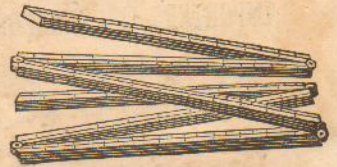


4/6 to 7/6.

HYDROMETER AND BLENDING GLASSES.



STRAIGHT AND JOINTED  
 DIPPING RODS  
 of every description.



GAUGING RULES. — ULLAGE & VALUATION RULES.  
 THERMOMETERS of every description.

**ILLUSTRATED CATALOGUES FREE on application.**

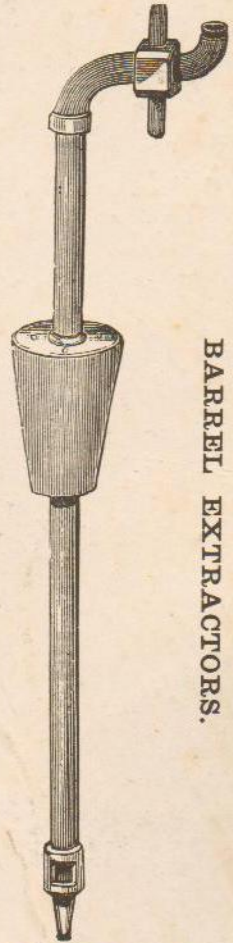
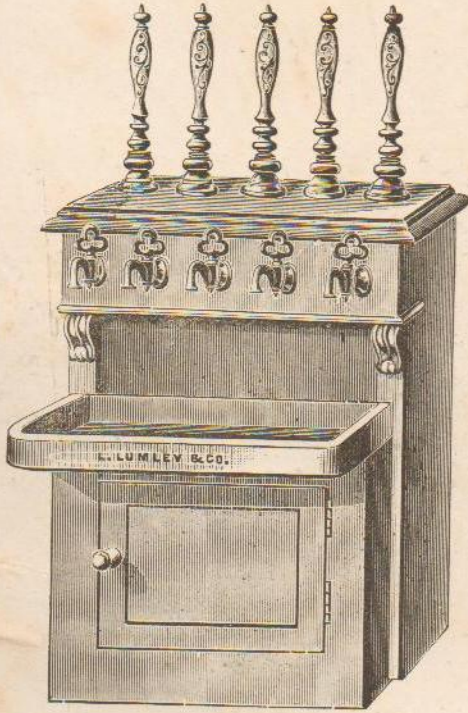


**L. LUMLEY & CO.,**  
 Cork Merchants,  
**HOTEL AND BAR FITTERS,**  
 1, America Square, Minories, LONDON, E.C.

BEER ENGINES of every description.



PATENT PIPING.



BARREL EXTRACTORS.

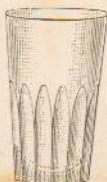
ELECTRO-PLATED & PEWTER TANKARDS.

BEER MEASURES.



ALE & SODA WATER TUMBLERS.

CLARET & GROG GLASSES.



ESTIMATES FOR ALTERATIONS & REPAIRS FREE.

TELEPHONE No. 4330.

Cables & Telegrams—"GOOD CORKS, LONDON."



THE FINEST WHISKIES DISTILLED IN SCOTLAND  
ARE

GREENLEES  
BROTHERS  
RARE  
OLD  
SPECIAL



USED BY YACHTSMEN OF ALL NATIONALITIES ALL OVER THE WORLD.

Ask your Wine Merchants for

"LORNE" "CLAYMORE" "GOLFERS" "G.B." "LIQUEUR"  
SPECIAL SPECIAL OF P.M.V.V.O.

GREENLEES BROTHERS,

29 & 31, Commercial Street,

Distilleries  
CAMPELTOWN, ARGYLESHIRE.

LONDON.

Bonded Warehouses  
GLASGOW.

THE WHISKIES OF THE AGE

Used by all Nationalities all over the World.