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THE
TEMPERANCE SHORTER CATECHISM

AND
CONFESSION OF FAITH.

WITH
UNABRIDGED NOTES.

BY THE AUTHOR OF
"THE SABBATH ON THE ROCK," "THE BIBLE ON THE ROCK,"
"THE CONFESSION ON THE ROCK," &c.

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PREFACE.

THIS Catechism is designed to be an epitome of abiding truth. It has been prepared to meet a want of the times, and to contend with the errors and ignorance which in Church and State prevail on the subject of temperance. Many who are deeply interested in the moral condition of the nation desire to have in public school reading books short articles or lessons to the children on the chemistry of alcohol, and its physiological action on the human body. These men justly believe that it is as much the duty of school-boards to give the children scientific instruction on the most necessary and practical of all themes—*how to preserve health*—as on the nature of trees, metals, and wild beasts. The aim of this Catechism is to communicate to children much fuller information on the scientific aspects of temperance than can be obtained through the brief detached articles in public school reading books; and, in addition, to illustrate what God in Providence and the Bible has said concerning intoxicating drink—points which school-books will probably not take up, though they be as essential as the voice of science. Should any suppose that this Catechism is too lengthy and elaborate, the answer is that the author had no desire to prepare a Catechism *so juvenile* that it would never be glanced at in manhood—but one that after it had been the instructor and guide of childhood could be the companion of mature years—one that would be as much adapted for adults as for children. The long notes have been written with the express view that the children should ask the meaning at their parents, and that thus the Catechism would be introduced to the whole household. The most powerful teachers of parents are their own children—and it is hoped that when the old hear abiding temperance principles warbled from infant lips, and advocated by those

with whom they have no wish to contend in argument, they may see abstinence in a new light and more strongly than ever feel its claims. The education of children on the subject cannot be too complete. One reason why Bands of Hope have hitherto not been so successful as desired, is the defective teaching of sound temperance principles; and this is likewise a chief cause why so many adult members of temperance societies and templar lodges fall away in the hour of temptation. The writer of this Catechism believes it would be of great advantage to temperance societies and templar lodges if they would occasionally take as subjects for discussion at their weekly meetings the new definitions given and positions taken up, as, for instance, "Does God in the Bible *more strongly condemn* the use of intoxicating drink than He condemns polygamy and slavery?" (Question No. 167), "Was the law of abstinence given to the priests in Lev. x. 9, a perpetual law for *all* mankind?" (Question No. 151), or "Is the definition of natural liberty given in Question No. 189 a correct one?" There are a sufficient number of new trains of thought in the Catechism to afford subjects of interesting and instructive debate for many nights, and the time so engaged would be as profitably expended as in listening entirely to songs or recitations. And earnestly does the author entreat superintendents of Bands of Hope and juvenile lodges to get at least the advanced children to commit to memory three or four questions and answers before coming to each meeting; then by apt illustration and story nail the meaning in the reason and conscience, and thus prepare the children for the battle of life—for the errors and fallacies which abound in society, and which they are so soon to encounter. If the children be faithfully led through a temperance curriculum of study we may hope that when in a few years they become the office-bearers and members of our churches there shall be a much-needed revolution in the action of our churches, church courts, and also in the State against intoxicating drink.

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THE TEMPERANCE

SHORTER CATECHISM.

QUESTION 1. *What is "Christian Temperance" in its widest sense?*

Answer. Proper self-control; the regulation of every thought, word, and action, according to the will of God.

(Isaiah lv. 7; Mat. xii. 36; 1 Cor. x. 31.)

The omnipotence of God is pledged to maintain all His laws, and have them respected by His moral creatures. Therefore, if a man will oppose the laws or plan upon which his body and soul were formed to work aright, he must suffer, unless he can overcome God. Prov. xi. 21; Rom. ii. 9. Men construct machinery on the plan that the bearings shall revolve in oil; if sand were used instead of oil, the bearings would be soon destroyed. In like manner man's opposition to the plan of his constitution must end in destruction. Rom. vi. 23.

Q. 2. *How is the will of God to be found out?*

A. By listening to His voice in Nature, Providence, and the Bible, until we find they all agree in their teaching; and by praying for His Holy Spirit to give us light, and make our heart willing to receive the truth.

All men will confess that this would be a happier world if no intoxicating drink was in it. Why then do all not personally abstain, and thus make the world happier? Because they are not willing; and therefore we pray for the Holy Ghost to make ourselves and others willing to know and to do that which is safest and best.

Q. 3. *What is the sum of the temperance laws which God has given to man?*

A. To abhor that which is unfit for his constitution; and to cleave to that which is good and fit (Rom. xii. 9).

Superintendents of Bands of Hope, of juvenile lodges, and parents

should make sure that the children understand every word in the questions and answers. Let abundant illustrations be used in explaining, as "*Good milk is fitted to nourish an infant; a good clock is fitted to keep time; right prayers are fitted to bring blessings.*" To encourage the children to learn well there could be *repeating bees, spelling bees, and especially explaining bees.* In the explaining bees questions could be put on the substance and meaning of the notes.

Q. 4. *Into how many classes may human actions be divided?*

A. Into three kinds—the *necessary*, and therefore *commanded*; the *expediently good*, and therefore *allowable*, and the *injurious*, and therefore *forbidden*.

A common division of actions is into "good, bad, and indifferent." But to a moral creature as man, responsible to God for every hour of his time, no action is indifferent; it *does* tell for or against his future welfare. The *subjects* of a king can never be *neutral*, they must always be for or against their sovereign and his laws.

Q. 5. *What are necessary actions?*

A. Those which the nature and welfare of man positively require; as to eat, to sleep, to take exercise, to pray.

Q. 6. *What are expediently good actions?*

A. Those which, though not indispensable, are yet in their nature and tendencies innocent and useful; as the learning of any fine art or science, as painting, music, botany, or chemistry, or acquiring any useful information.

Q. 7. *What are injurious actions?*

A. Those which are against the nature and welfare of man's body or mind; as sin or folly of any kind, such as being slothful, telling lies, hurting others, or taking what injures our own health.

Q. 8. *How are necessary, expediently good, and injurious actions to be regulated?*

A. The necessary *must* be performed to a natural degree, giving to each a just proportion; the expediently good may be enjoyed according to our station, opportunity, and taste, and the claims of others upon our help; and the injurious *must* be sternly refrained from altogether.

Q. 9. *Is the taking of intoxicating drink as a beverage, in even a small quantity, an action which is necessary, expediently good, or injurious?*

A. It is not necessary, since millions of abstainers enjoy health without alcohol; it is not expediently good, since the action of alcohol on the body and mind is not innocent and useful; it is injurious, and is therefore forbidden.

Q. 10. *What is Christian temperance as applied to meat and drink?*

A. A correct judging of the *quality* of food and drink, and taking of such as are fitted to sustain the body, in a quantity sufficient to the work we have to do.

Too little nourishment enfeebles the body; too much exhausts it, by giving it the labour to expel the *surplus*, which is *not* digested and assimilated.

Q. 11. *Whether has the word "temperance" applied to drink, or the word "abstinence" the widest range of meaning?*

A. Temperance consists of three parts: 1st. Judging of *quality*. 2d. Rejecting the *injurious* altogether. 3d. Regulating the *quantity* of the wholesome and fit. Abstinence is only the second part of temperance; therefore "temperance" has the widest meaning.

There is no snare of Satan more effectual in ruining man than the fallacy held by many learned and many unlearned men that abstinence is something different from temperance, for *abstinence* from the *injurious* is only temperance *rejecting* the *unfit*.

Q. 12. *What is Bible moderation as applied to meat and drink?*

A. Bible moderation, like Bible temperance, consists of three parts: judging of quality, abstaining entirely from the unfit, and regulating the fit.

The moderator in a church synod or assembly has these three parts to perform:—1st. He judges of the *quality* of what is said. 2d. He stops a speaker when he says what is unfit or out of order. 3d. He regulates the time to be allowed to such speaking as is fit and in order. There can be no temperance or moderation without these three parts. St. Peter says, "To knowledge add temperance" (2 Pet. i. 6), that temperance may reject the evil and cleave to the good.

Q. 13. *Are those who take intoxicating drinks in small quantities as a beverage entitled to claim that they are temperate or moderate in the use of such drinks?*

A. They are not entitled, since they neglect the first and second parts of temperance and moderation.

In the New Testament the word which is translated "*temperance*," as in Gal. v. 23, is in the Greek original *enkrateia*; and in the second, third, and fourth centuries those in the Christian Church who abstained from fermented wine were called the *Encratites* or "*Temperates*." Thus Epiphanius, bishop of Salamis, writes, "The *Encratites* did not use wine at all, saying that drinking and using it was sinful." Tatian, who lived in the year 172, and was the disciple of Justin Martyr, was one of the water drinkers or *Encratites*, and so hated fermented wine that he said "it was of the devil"—men in every age being able to see that alcohol did the devil's work. John the Baptist and his followers were water drinkers, so was Timothy before Paul advised him to use a little of medicinal wine, which in Paul's time *was* unfermented, as shall be proved. Paul himself abstained from even unfermented grape juice during the continuance of his Nazarite vow in connection with the shearing of his head in Cenchrea. Acts xviii. 18. The early Christian Church believed that several of the apostles were among the *Encratites*, as James who wrote the epistle in the New Testament (Hegesippus apud Eusebius, H.E. ii. 23), Matthew another one (Clemens Alexandrinus, Paed. ii. 2), Peter another (Epiph. Her. xxx. 2; Clemens, Hom. xii. 6). If these three apostles were among the *Encratites* they would of course give an abstinence tone to the Church in Jerusalem and elsewhere, and if they were not among the *Encratites* how could Peter command Christians to abstain? 1 Pet. v. 8. (See Question No. 155.) St. Paul justified the application of "*Encratites*" or *Temperates* to those who abstained entirely from fermented wine, for in 1 Cor. ix. 25, when referring to the competitors in the Grecian games, he said they were *enkrateutai* or *temperate*, and both Greek and Roman writers testify that the temperance of the competitors with regard to intoxicating wine was total abstinence. Thus Horace, the Roman poet, writes—

Who in the Olympic games the prize would gain,
Has borne from early youth fatigue and pain,
Excess of heat and cold has often tried,
Love's softness banished, and the glass denied.

The words of Horace in the Latin are very distinct, "*abstinuit venere et Baccho*." Clearly then *total abstainers* from fermented wine were known in the early centuries of the Christian Church by the name of *Temperates* or temperate men, and scientifically they alone are entitled to be so called. The only fit name for those who take poisonous liquors as a beverage in either small or large quantity, is "*irregular drinkers*," since they drink not according to the rule of

what is physiologically fit. In order that the Temperance Reformation may advance as it ought and must, the errors and sophistries of past ages must be cast aside. And no longer can that reformation be hindered by allowing "*irregular drinkers*" to assume an unfit name by styling themselves as those who drink temperately and in moderation. In this Catechism, therefore, *minimum* drinkers shall be called small-dose drinkers, not moderate or temperate drinkers.

Q. 14. *Where is the proof to be found that taking intoxicating drinks as a beverage is forbidden by God?*

A. In Nature, Providence, and the Bible.

Q. 15. *Which of God's three voices has most authority and is most binding upon man?*

A. The authority of God cannot be greater than the authority of God, therefore the voice of God in nature is as binding upon man as the voice of God in the Bible. God does not lie unto man in nature and speak truth only in the Bible.

The *facts of experience* or *science* are as true as the facts of the Bible. We know from our experience that "a little leaven leaveneth the whole lump." We know that when the tool, whether knife, saw, chisel, or plane, is blunt, more strength is required to make it cut than when it is sharp. We know that alcohol causes many sudden deaths—as sudden as if the men were bitten by a serpent. These three facts of experience are recorded in the Bible (1 Cor. v. 6; Eccl. x. 10; Prov. xxiii. 32); but the declaring of them in the Bible does not make them more true, for a fact is a fact whether it be recorded in a book or not. God cannot, in written revelation, contradict the facts of experience or science; and if the Bible did so we would be justified in casting it aside. God speaks as truly through the reason of man as He speaks in the Bible. The Bible itself is but an appeal to reason; we are commanded to judge of what it says, 1 Cor. x. 15. Yet there are many college-bred men who say they believe the Bible but not the facts of science or experience—they do not receive the physiological argument. These men do not know the meaning of their own words, for what is a fact in *Nature*, as "all the rivers run into the sea," but a declaration from God that He planned the constitution of things so that they will work aright in one way and not in another. The fact that a man cannot take fire in his bosom without burning his clothes and his breast, that he cannot walk upon red hot coals and his feet not be burned (Prov. vi. 27, 28), is God's declaration that He did not intend men to take fire in their bosom or walk barefooted upon red hot coals, such actions being constitutionally unfit. The fact that alcoholic fire, when taken into the

bosom, injures man, is God's declaration that He never intended man to take intoxicating drink.

Q. 16. To which of God's three voices should we first listen, to learn His will regarding intoxicating drink?

A. To the voice of God in Nature, because reason is the guide, and the clearest, fullest guide God has given to man to direct him in the selection of his food, drink, and medicine.

Q. 17. Prove that reason is the guide to man for the selection of his food, drink, and medicine.

A. It was fully 2500 years after the creation of Adam before even the Book of Genesis was written; and to this day the heathen, who are the majority of men, have no guide but reason.

Q. 18. Prove that reason is the clearest, fullest guide to direct man regarding his food, drink, and medicine.

A. Men in their practice never take the Bible as their guide in drawing up diet tables for army, navy, hospitals, prisons, or emigrant ships; nor physicians as their guide in prescribing fit medicine.

Q. 19. If two revelations from God, as Nature and the Bible, be not equally clear and full on a subject, which is to be taken as the interpreter of the other?

A. The clearest and fullest must be taken as the interpreter of the other, and yet when listened to aright, both, coming from the one God, will be heard to give but one and the same sound.

Q. 20. What special care is needed in searching the three revelations from God that we may find the truth?

A. We must gather all the *appearances* together that we may *reject* them, and all the *facts* together that they may lead us to the truth.

Q. 21. Prove that God desires us to separate the appearances from the facts?

A. He hath commanded us to prove all things, and hold fast that which is good. 1 Thes. v. 21.

All men in this world are on trial, and are tested by *appearances*

whether they desire to follow the right or the wrong. In Eden before the fall Eve was tried by appearances; she saw that the forbidden fruit was pleasant to the eyes and to be desired. The *appearances* and the lies told by the serpent overcame her and she fell. If appearances and lies prevailed over a being perfectly holy, how much more easily do they overcome Eve's fallen posterity! This is indeed a world lost by believing appearances and lies.

Q. 22. What is meant by the phrase "the voice of God in Nature" when applied to intoxicating drink?

A. All those **FACTS** which men by their **REASON** have discovered regarding the *manufacture* of fermented drinks and their *action* upon man's mind and body.

Q. 23. What is the chief ingredient in all fermented liquors, and the one which alone induces men and women to drink them?

A. Alcohol, which is a poison.

Q. 24. What is a poison?

A. Any substance which is not natural food, drink, or air, and which, by injuring the body or opposing its healthy working, tends to disease and death.

Q. 25. Is alcohol a product prepared by Nature itself without any interference by man?

A. Grass, trees, and wild fruits grow without the help of man, but alcohol is made by man. The grape rots on the tree or ground, but never of itself ferments, because the skin preserves the juice from the action of yeast germs floating in the air.

Q. 26. What is fermentation?

A. A process of decay and decomposition, in which grape juice or grain, when placed by man in circumstances favourable to putrefaction, has its albumen putrefied and its sugar broken up into two poisons, the one carbonic acid gas, which is scattered to the winds and lost, the other which is alcohol.

In this world two forces are incessantly at work—life and death—composition and decomposition. If there were no life there would be no work for death, and if death and decomposition did not ceaselessly work life could not exist. For if the myriad germs of life which the farmer

possesses in the seeds he intends to sow were not supplied with manure—with chemical elements in a simple, not in a complex form—what would be the use of life in the seeds? how could they grow? and if they did not grow how could the human race survive? Death is the servant of life, and decomposition is Nature's great commissary who lays the supplies—the broken up combinations of dead forms—at the feet of composition, that it may build up again organized forms of life. In order to provide all vegetable life with the materials of growth decomposition has many forces constantly in operation, whose business it is to attack three classes: 1st, The *unprotected*; 2d, the *weak*; 3d, the *passive*; and resolve their complex combinations into such simple digestible forms as vegetable life can easily feed upon. In the air these forces abound. Yeast germs or spores float all around to assail the *unprotected*, as, for instance, grape juice deprived of its skin, its natural defender, and left open to the air; plague and cholera germs, which assail with success principally the *weak*, whose vital resisting power is low; and oxygen, which makes quick work with all *passive* forms, out of which life has departed. There can be no doubt whatever that the cause of *vinous* fermentation is the legion of yeast germs that work under the orders of decomposition. They are smaller than fine dust in the air, and can be seen by a microscope when they settle down on the outside of the skin of the grape. It is not the gluten of the grape combined with oxygen that causes fermentation, for *cane* sugar, which contains no gluten, if made into a thin solution with water, as 2 lbs. of sugar to 1 gallon of water, and then placed in an open vessel in warm summer weather, will be converted into alcohol through the agency of some yeast germs dropping into the solution. These germs will first change the cane sugar into grape sugar, and then into alcohol. Though decomposition must reign in our world as well as life and composition, the question for man to answer is, "Should he throw himself and his food into the clutches of the breaking up and scattering potentate before the natural time?" Should men weaken their health and vital resisting powers that they may fall an easy prey to epidemic germs? Should the farmer leave the sheaves of grain all winter in the fields—each sheaf standing isolated by itself instead of being built into a stack for protection—that decomposition may seize upon them and convert them into manure for next spring? It is strange that man never throws his food into the hands of decomposition except when he wants to prepare a drink, *alcohol*, which throws the food-thrower himself into the arms of death and decomposition. The legions of yeast germs ceaselessly work, but God is over them and their master, decomposition, therefore they are all *under* LAW; and though the ancients knew nothing whatever about the modern doctrine of yeast germs they knew that fermentation could proceed only according to **FIXED LAWS**, and so knew how to prevent the yeast germs from working. These laws are:—1st. Yeast germs cannot work if they be killed by being boiled. All eastern nations—Greeks,

Romans, Jews—from the earliest times boiled grape juice, and thus preserved it. Virgil represents the industrious wife as “boiling the sweet must” while she urged on her spinning-wheel (*Georgics*, i. 293).

2d. Yeast germs cannot effect fermentation in a thick syrup. The ancients therefore boiled 5 or more gallons of grape juice down to 1 gallon; and such grape juice syrup was made 3600 years ago, for Jacob sent a present of it to the ruler of Egypt (*Gen.* xliii. 11).

3d. Yeast germs cannot work if they be made torpid with cold. The fermenting heat should not be under 45° Fahr. nor above 75°. The Romans filled casks with juice, and then kept them cool under water for several months, which plan prevented fermentation.

4th. Yeast germs effect fermentation most rapidly when gluten is present in the fermenting liquid, for then they feed upon the gluten and multiply their power. The Romans, as if they knew this, filtered the newly-expressed juice through a linen strainer to extract the gluten from the grape; and the juice thus filtered, that it might not ferment, was called the most useful wine by Pliny, who was the best judge in Rome, and the author who wrote most on the subject.

5th. Yeast spores could settle down on the layer of *dried* gluten which lined the inside of such old goat-skins as the easterns called their bottles and be ready to cause fermentation whenever new wine was put in. Even *dried* yeast obtained from ale froth can, as Professor Thomson states, cause fermentation (*Brewing and Distillation*, p. 71). Therefore the ancients, nearly 4000 years ago, began to put new wine into new bottles to *prevent* fermentation. Job (xxxii. 19) speaks of *new* bottles, and the wine was not placed in them to ferment, for, law 6th. Yeast germs must have room to work, since the liquid during fermentation rises in temperature from 10° to 15° Fahr.; increases in bulk, and generates carbonic acid with such force as to burst any bottle. The easterns fermented in open jars as they do now, and never filled the jars to the brim. 7th. Yeast germs cannot cause grape juice to ferment if they are prevented from coming in. The Romans therefore filled casks with the juice newly trodden out, and had these casks painted with pitch to keep them air-tight. Thus it is seen that though decomposition stands looking upon every wine-press in the world, he does not say, “I shall resistlessly change that juice into alcohol whether man be willing or not;” he only says, “If man does not think it for his benefit to preserve it then I shall take charge of it, and use its materials for my supplies.” Then, without giving man more than twenty-four hours’ notice, he begins to convert the sugar into

	Carbon.	Oxygen.	Hydrogen.
Carbonic Acid a poisonous combination of	1 part.	2 parts.	0 part.
Alcohol a poisonous combination of	2 parts.	1 part.	3 parts.
Grape Sugar is a wholesome combination of	3 parts.	3 parts.	3 parts.

In this Catechism the old chemical notation is employed, it being, for the purpose of explaining temperance questions, more easily

understood than the new one. The old notation takes into account the *shrinking* which the elements undergo when chemically combined. Thus the new notation properly states that water or vapour of water is composed of one volume or measure of oxygen gas, and two volumes of hydrogen gas, and so marks OH_2 , which means oxygen one volume, hydrogen two volumes; but as when the oxygen and hydrogen are combined to form water the two volumes of hydrogen shrink into *the size* of one (of one with double weight, however), the old notation marks OH or O_1H_2 . A simple notation for *children*, combining the advantages of both the old and new, would be water = O_1H_2 into 1. Grape sugar = $\text{C}_6\text{O}_6\text{H}_{12}$ into 3, or what is the same thing, all the figures being only multiplied by four, $\text{C}_{24}\text{O}_{24}\text{H}_{48}$ into 12.

Q. 27. *If man were to allow fermented wine or ale to go further on into decomposition what would become of it?*

A. If left in open vessels to the action of the air the first change would be into vinegar, and then by putrefactive fermentation the remaining elements would be scattered and lost as completely as that part of the sugar which was changed into carbonic acid gas.

Decomposition ever seeks to break up organized substances into such simple forms as vegetable life can feed upon, and alcohol and vinegar being too complex for vegetable food they must be broken up.

Q. 28. *What proportion of sugar submitted to fermentation by man is lost by being changed into carbonic acid gas?*

A. Of every 90 lbs. weight of grape sugar or barley-wort sugar which is fermented, 44 lbs., or nearly one-half of the whole, is lost by conversion into carbonic acid gas.

Grape sugar and barley-wort sugar, which is just the starch of the barley changed by malting and mashing into grape sugar, is composed of carbon, oxygen, and hydrogen in equal proportions by *volume* or measure, but not in equal proportions by *weight*. The combining or atomic weight of an atom of carbon is in proportion to other chemical elements as 12, that of an atom of oxygen as 16, while that of an atom of hydrogen, which is the lightest element known, is only 1; so that carbon is 12 times and oxygen 16 times heavier than hydrogen, just as gold is heavier than lead, and lead than cork. Taking a portion of grape sugar we have 3 combining atoms carbon at $12 = 36$, and 3 combining atoms oxygen at $16 = 48$, and 6 combining atoms hydrogen at 1 (being equal to 3 contracted atoms at 2) = 6,

being in all 90 as the proportional weight. When the grape sugar is broken up by fermentation the two products stand thus in *weight*: carbonic acid = 1 carbon at 12 = 12, and 2 oxygen at 16 = 32, being 44 in all; alcohol = 2 carbon at 12 = 24, 1 oxygen at 16 = 16, and 3 contracted hydrogen at 2 = 6, being 46 in all. Professor Thomson, father of Professor Sir William Thomson, in his treatise on *Brewing and Distillation*, comes very near this proportion. At page 87 he says, "100 parts of grape sugar ought by fermentation to be *decomposed* into alcohol 50·76 parts and carbonic acid 49·24 parts, or it ought to form *very nearly equal weights* of each of these constituents." From correct data it can be shown that in the manufacture of fermented wine in Europe and Asia fully three and a half million tons of grape sugar are *annually* thrown into the air as carbonic acid gas, which sugar (the natural *fuel* food for the human body), added to the albumen of the grapes (the flesh-forming food), putrefied in fermentation, would supply ample food and nourishment throughout *the whole year* for the fully thirty millions of Britain's population. It can also be shown that the brewers and distillers of Britain *annually* throw into the air as much sugar in the shape of carbonic acid, and waste as much gluten in malting (every pound weight of barley containing two ounces of gluten or flesh-forming food) as would bring at market price more than ten million pounds sterling a year. This waste is *intentionally* caused by man in a land which has three millions of *paupers*—is intentionally caused in order to produce the poison alcohol, which *in ruin* repays him a million fold for his labour.

Q. 29. *Is fermentation a process of nature intended by God to preserve the fruit of the vine?*

A. Since by fermentation the albumen of the grape is destroyed into a putrefied mass, since one-half of its sugar is scattered into the air as carbonic acid gas and lost, while the other half is converted into the ruin-working poison alcohol, fermentation is not preservation, but an enormous destruction of food, and since alcohol when taken into the body does not nourish it, but is expelled unchanged as alcohol, it is lost as completely as the carbonic acid gas, and thus the fermentation caused by man is nothing but destruction and loss from beginning to end.

The meaning of the word "*preserve*," when applied to articles of diet, as mutton, beef, salmon, butter, or to juice of fruits, as of apples, currants, marmalade oranges, is to keep from decay and decomposition so that the whole of the natural nourishment and qualities may be retained. What would the preservers of colonial beef, mutton, and salmon, or the curers of British fish, think if they were told by wine

manufacturers, brewers, and distillers, that the right mode of *preserving* articles of diet was to send one-half of them into the air as gas, then so change the remaining half that the taste, nourishment, and natural qualities of the original would be entirely lost? Though there can be no greater absurdity than that of applying the word "*preserve*" to fermentation, which means decay, *decomposition*, and *scattering* of elements, there are many men bred in universities who, not knowing the English language, with gravity affirm that fermentation is a process of nature to preserve the fruit of the vine! This question deals with God's intention regarding the use by man of the fruit of the vine. No doubt God designed decomposition to work, but from the beginning He planned that it would work in two ways: 1st. *Benevolently*, if man would be wise and perform his duty. 2d. *Penally*, if man would be foolish and neglect his duty. The whole chemical elements composing the grapes which the vine-trees yield in any year God intends shall be brought back by decomposition to nourish the plants in coming harvests; but He intends that *the whole* of the chemical elements shall first pass through the body of man before returning to form the constituents of another crop or vintage. And by first passing the whole of the elements of the grapes—the albumen, sugar, cooling antiseptic acids, phosphorus, sulphur, and cream of tartar—through man's body it is nourished and fortified against disease, the antiseptic qualities of the grape acting internally against fever and other epidemic germs in the blood as carbolic acid acts against them externally. When man then uses the whole chemical elements of the grapes decomposition works benevolently both for the life of man and for the life of plants, because in that case man's body returns the chemical elements to the appropriating organs of plants in the natural and simple forms designed by God for their growth. A single illustration will make this evident. If the sugar of the grape be first passed through man's body it is used as fuel food, and after it has generated heat and force the whole of it departs out of his mouth as carbonic acid and vapour of water into the air, and then the leaves of plants easily absorb the carbon and water to nourish their fruits. But if man will invite decomposition to work *penally* in the fermenting vat then the sugar does not benefit the body of man as fuel food; and the sugar is not all scattered to the air as carbonic acid and vapour of water, but one half as dry carbonic acid and the other half as alcohol, which the plants cannot use in the form of alcohol, for if it be poured upon the roots of growing flowers or trees or grain they die, it being a poison to the life of plants as well as to the life of man and all animals. When alcohol escapes as vapour in the breath of men into the air the plants cannot use it until it is broken up. Thus it is seen that if man will be so mad as to invite decomposition to work *penally* he loses everything, he tortures himself and Nature too. God then has placed under the command of decomposition two great forces—those which work *benevolently* and reward man for his wise attention to

duty, which is to preserve himself and his food, and those which work *penally*, to punish man for his folly and sin. But when decomposition is invited by man to work penally in the fermenting vat let him not dare to say that God intended human food, as grapes, was not to be used as food; but that, on the contrary, He intended the albumen, sugar, antiseptic qualities, should be thrown into the devouring jaws of decomposition instead of first sustaining the body of man and fortifying it against the diseases common in a sultry climate. A Syrian missionary writes that in Palestine the inhabitants, after eating plentifully of ripe grapes for two or three months, are so improved in health and appearance that their absent friends on returning scarcely know them; if they were to drink plentifully of alcohol for two or three months they would sink in health or die. Did God in creating the grape intend health or disease to man? Let those answer that question who say that fermentation was intended by God to preserve the fruit of the vine.

Q. 30. Since fermentation cannot be carried on without the action of the laws of nature, is it not God that ferments the fruits and grain of earth into alcohol?

A. Whoso useth a law of nature, is responsible for the use. If a man set fire to his house it can burn only by laws of nature, yet he is the author of the destruction, not God. In like manner when men ferment sugar into alcohol they are the destroyers, not God.

If a foreign produce merchant were to open all his stock of air-tight tin cans containing preserved beef, mutton, and salmon from Australia and America, or cut up all his stock of American apples into quarters, the action of the air would soon destroy the whole, but would the public blame the laws of nature for the waste or the madness of the man who willingly submitted his stock to certain destruction? Men know, and for four thousand years have known, how to preserve grapes as fully as they know how to preserve any other article of diet. They know that grapes if hung up in proper lofts will keep sound for months; that if dried in the sun they will as raisins remain in good condition for years; they know that if the juice, as soon as it is pressed out, be brought to the boiling-point to kill the life of any yeast germs, and then be put into air-tight casks or bottles, it will keep sound and sweet for more than a year, and for years if boiled down into one-fourth of its bulk; and they also know if the fresh juice be exposed to the air in open vessels to receive the yeast germs which are floating around, that fermentation will begin in about eighteen hours in a hot country, and knowing that exposure to the air will insure fermentation they willingly tread the grapes and expose the juice to the air. At Hebron in Palestine not one-tenth part of the produce of the rich vineyards is converted into

fermented wine, nearly the whole annual yield being consumed as grapes, raisins, and juice boiled down to the thickness of jelly, which is called *Dibs*, and which cannot ferment, and in this manner the produce of Hebron was consumed in the days of Christ. It is only in highly civilized European lands, where Christianity is professed, that men convert the greater part of the vineyard's produce into fermented wine, that they intentionally destroy the grape and then call God the destroyer!

Q. 31. May not man lawfully for a necessary purpose convert any of earth's fruits into alcohol?

A. For a really necessary purpose he may, but drinking alcohol as a beverage is not necessary for man, but is highly injurious. And when alcohol is required it should be prepared from a substance, as cane sugar, which contains no albumen to be destroyed.

The command given to Adam and his posterity was, "Subdue the earth and have dominion" (Gen. i. 28)—subdue all the forces of the earth that they may minister to your welfare. Nothing has been made in vain, not even the destroying germs in the air. The yeast spores may be beneficially employed in making alcohol out of cane-sugar—not out of grapes or grain containing flesh-forming food—that it may be employed in the manufacture of varnishes, chloroform, and for other necessary purposes in the arts. But for man to throw his food to yeast germs to prepare alcohol for a beverage is no more lawful in the sight of God than to throw himself to the plague or cholera germs in the East or to the deadly pestilential germs which abound in many parts of Africa.

Q. 32. Is fermented wine entitled to be called "the fruit of the vine"?

A. The fruit of any tree is its food-affording elements in the same chemical state as gathered together and fixed by the life of the tree, therefore unfermented wine, being the juice as it existed in the grapes, is the fruit of the vine, while alcohol, being the food-affording qualities as diminished and destroyed by death and *decomposition*, is not the fruit of the vine.

Only the life of a tree can so arrange and fix the constituent elements as to produce its characteristic fruit. If the same elements and in exactly the same proportions be fixed by any other power than the life of the tree the result is not the same. To show the vast difference between an arrangement fixed by life and one fixed by death and decomposition we give two illustrations. The sugar in

the grape as gathered and fixed by the life of the vine-tree consists of 3 parts carbon, 3 parts oxygen, and 3 parts hydrogen. If this natural combination be exposed to fermentation then decomposition (since its nature is to scatter what life has collected) steals away 1 part carbon and 2 parts oxygen to form carbonic acid gas, leaving a *diminished* and *altered* combination of 2 parts carbon, 1 part oxygen, and 3 parts hydrogen, which is alcohol. Let decomposition go on still further by exposing fermented wine to the air in open vessels, and 1 part of the hydrogen will be stolen away by 1 part of oxygen from the air, uniting with it to form an atom of vapour of water, which is removed, and now the combination is still further *reduced* and *altered*, being 2 parts carbon, 1 part oxygen, and 2 parts hydrogen, which is aldehyde, an intoxicating poison. Let decomposition still go on, and the air supplies a second part of oxygen, which joins itself to an atom of hydrogen, and now the combination stands thus: Carbon 2 parts, oxygen 2 parts, hydrogen 2 parts, which is *vinegar*! It will be seen that this combination which is vinegar has the same three elements as sugar in the grape and in the same quantities, that is, an equal proportion of each, only one-third of each element of the sugar having been stolen away. How then is vinegar sour and not a fuel food, while grape sugar is sweet and the best fuel food for the body? No answer can be given but this: the sour and un nourishing combination has been arranged and fixed by death and decomposition, while the sweet and nourishing one has been arranged and fixed by life. The difference between life and decomposition will be seen by another illustration. The greater part of rice, wheat, oats, barley, potatoes, &c., is composed of *starch*, which is a combination of carbon 12 parts, oxygen 10 parts, hydrogen 10 parts, which combination wants 2 parts of oxygen and 2 of hydrogen to have all its constituents in equal proportion. Well, the nature of life being to *gather together* and *increase*, as it is the nature of decomposition to scatter and diminish, the living stomach of a man when it receives the starch adds to it 2 parts oxygen and 2 parts hydrogen (equal to 2 atoms of water), and by doing so converts it into grape sugar. It must be evident then that a combination effected by death, decomposition, and *diminution* is as different from one effected by life and *increase* as darkness is from light, and that, therefore, fermented wine, being a combination arranged and fixed by decomposition and *diminution*, cannot be justly called the fruit of the vine. In the grape the juice is not intoxicating and it is nature's finest nourishment, when fermented it is not nourishing, for alcohol is not a food and it is intoxicating—a difference this which has been the scourge and curse of every age and clime, and is to-day the cause of earth's severest misery. If fermented wine were entitled to be called "the fruit of the vine," because obtained by fermentation from the real fruit of the vine as contained within the grape, then all the products of fermentation, as carbonic acid, vinegar, and last results of decomposition, would

equally deserve being styled fruits of the vine. A chemist can easily, by aid of nature's laws, change grape sugar into oxalic acid, a deadly poison; but who would call oxalic acid "the fruit of the vine?" Coming now to the question, "What was Christ's meaning of the words, '*this fruit of the vine*'" (Mat. xxvi. 29), we find that no writer of the first century states that among the Jews in the time of Christ fermented wine was called "the fruit of the vine." In the Mishna, which was written by Rabbi Yehudah about 150 years after the death of Christ, wine is called "the fruit of the vine," but how long before Yehudah's time the phrase was so applied cannot be known; and the information could not be of the slightest use, for though it could be proved that some or many rabbis in the days of Christ applied the phrase to fermented wine, that would be no evidence whatever that their meaning was Christ's meaning when He said, "*this fruit of the vine*," *this quality now in the cup*. The Rabbis, Scribes, and Pharisees could abuse language to any extent. With them "to defile" was to eat with hands unwashed; with Christ it was to have evil in the heart and to let it out, Mat. xv. 20. With them to heal the sick on the Sabbath was to break the Fourth Commandment; with Christ it was a work of necessity and mercy, consistent with keeping the commandment. They by having the word "Corban" uttered could free a son from obedience to his parents and make of none effect the commandment of God, Mark vii. 11. In the entire want of evidence as to what Christ meant by the phrase "*this fruit of the vine*," we are thrown back upon science and reason to decide. Science shows the chemical difference between the two combinations grape sugar and alcohol, and reason at once perceives that two substances so completely *opposite* in nature as unintoxicating juice in the grape and alcoholic wine in the fermenting vat cannot both have proceeded from the life of the vine-tree. And that as the function of vegetable life is to gather nourishment for the sustenance of animal life, and the juice in the grape contains albumen and sugar to sustain the life of man, while alcohol contains no nourishment whatever and is at deadly war with every function of animal life, it follows of necessity that fermented wine is *not* the fruit of the vine.

Q. 33. *What are the FACTS of science regarding the action of alcohol upon the human body?*

A. That it is neither natural drink nor food, but a poison which opposes the healthy working of every part of the body.

Q. 34. *Prove that alcohol cannot be a natural drink?*

A. The function of a natural drink, as water, is four-fold:—1st. Water tends to soften and dissolve the food; alcohol to harden and coagulate. 2d. Water soothes and

refreshes every part of the body; alcohol irritates and inflames. 3d. Water is the *canal* for conveying nourishment to every part of the body, and therefore keeps the dissolved constituents of the blood in proper condition for forming flesh and bone; alcohol could not be such a canal, for it injures both the constituents, and the arteries and capillaries, which are the sides of the canal. 4th. Water is a *cleanser*, and when it departs from the body it carries out with it impurities; alcohol has no such cleansing action, but is cast out of the body *by itself* as an enemy.

Q. 35. *What is the threefold function of animal life, as in the body of a child?*

A. Building, heating, and cleansing. The principle of life in an infant builds up its body to the stature of manhood, it keeps the body at its natural warmth, and it removes the daily waste and impurities—or more briefly, the principle of life builds its house, warms its house, and cleans its house.

Q. 36. *How many kinds of food does the principle of life require for building and heating?*

A. Two kinds: building or flesh-forming food, and heating or fuel food.

Q. 37. *What is the essential difference between fuel and flesh-forming food?*

A. The purely fuel food is *simple*, being intended only to raise heat, as cane sugar, animal fat, or vegetable oil. The building food is *compound*, it being both for forming flesh and raising heat, as wheat, beef or mutton, milk or grapes.

A purely fuel or simple food contains only *three* chemical elements, thus—

Cane sugar = carbon 12 parts, hydrogen 11 parts, oxygen 11 parts.

Fat or oil = " 10 " " 9 " " 1 part.

while a compound food is a mixture of many elements. Thus, the gluten or flesh-forming part of wheat consists of *more than six* elements, the chief being—nitrogen, sulphur, mineral salts, together with carbon, hydrogen, and oxygen. Wheat also contains starch, which is a purely fuel food made up of carbon 12 parts, hydrogen

10 parts, oxygen 10 parts. Any food which contains albumen or gluten, as the *lean* of flesh, the *white* of an egg, the *casein* of milk, the *albumen* of grapes, and also purely fuel material, as suet, starch, or sugar, is a compound or flesh-forming food. Part of the simple fuel foods are sometimes changed into fat, and fixed as fat in the body, but even then fat is only fuel food.

Q. 38. Prove that alcohol cannot be a compound or building food.

A. Since alcohol contains only carbon, oxygen, and hydrogen, and has no nitrogen, sulphur, phosphorus, lime, or other chemical elements absolutely required to form flesh and bones, it can never be a building food.

Nitrogen is the basis of the animal body, as carbon is the basis of the vegetable body. If, then, every ocean, lake, and river on earth were of pure alcohol, the whole put together would not contain as much flesh-forming material as is to be found in a farthing biscuit.

Q. 39. Prove that alcohol cannot be a simple or fuel food.

A. Every fuel food must observe these two conditions:—
1st. It must naturally have its carbon, oxygen, and hydrogen in equal proportion, or be such that the body can easily bring them into equal proportion. 2d. It must be vitalized by the digestive organs before it enter the blood. Since alcohol hurriedly passes through the stomach into the blood, without being vitalized or equalized in its chemical constituents, and its proportion of hydrogen is unnaturally great, it can never be a fuel food.

Every fuel food enters the body: 1st, in a *solid* state, as starch in bread, rice, or potatoes; 2d, in a state of *mere mechanical suspension*, as sugar dissolved in tea; or 3d, in the form of a *thick fluid*, as oil—so that the stomach and other digestive organs *shall have time* to operate upon it and effect the necessary changes. Thus starch, which is composed of carbon 12 parts, oxygen 10 parts, hydrogen 10 parts, remains in the digestive organs fully an hour, during which time it is vitalized, and the body adds 2 parts oxygen and 2 parts of hydrogen, or, in other words, 2 atoms of water, bringing all the component parts of the starch up to 12; cane sugar, which is carbon 12 parts, oxygen 11 parts, hydrogen 11 parts, remains long enough to be vitalized and have an atom of water, that is an atom of oxygen and one of hydrogen, added; while oil remains still longer to be vitalized and be made into a very fine emulsion. In the blood then, starch, cane sugar, and fat or oil are *never* found in the same state as when

they entered the mouth; while alcohol, a fluid thinner than water, within two or three minutes after it is drank rushes through the coats of the stomach into the blood without being vitalized or changed in the slightest degree. In the glass it was alcohol, in the stomach it is alcohol, in the blood alcohol, and in the brain alcohol, *unchanged* alcohol. It is specially worthy of notice that alcohol has a superabundant and unnatural proportion of hydrogen, such as is to be found in no flesh-forming or fuel food which nature has provided for man or beast. Grape sugar, the model fuel food, has only one atom of hydrogen for every atom of carbon. Starch and cane sugar have less than one atom of hydrogen to one of their carbon, and so the stomach, by addition of water, makes up the deficiency. Fat, as beef or mutton suet, butter, olive-oil, whale-fat, have also less hydrogen, the proportion being 9 parts of hydrogen to 10 of carbon. But alcohol contains $1\frac{1}{2}$ atoms of hydrogen to every atom of its carbon, and as one atom of hydrogen to one of carbon is the highest amount ever required by the body in fuel food, since one atom of vapour of water to one of carbon in the form of carbonic acid is sufficient in the most torrid climes to keep the air-tubes moist, it is seen that alcohol has an unnecessary and unnatural amount of hydrogen. If, then, alcohol were consumed as a fuel, either the breath would have one half more moisture or vapour than the natural and required quantity, or there would be a waste of that portion of hydrogen which is superfluous. In a natural fuel food there is no waste, every atom is used in supplying heat or moisture. In the breath of those who have taken alcohol there is found neither excess of moisture nor uncombined hydrogen coming out with the carbonic acid. If alcohol be used as a fuel food, what then becomes of its excess of hydrogen, and especially, why is the heat of the body greater while consuming sugar as a fuel than after alcohol has been taken? Since the hydrogen of the alcohol, if combined with oxygen, would raise an enormously greater heat than the carbon of the sugar combining with oxygen, and yet the heat of the body falls when alcohol is taken, it is perfectly evident that the hydrogen of the alcohol is *not* consumed as a fuel, as is the case with the hydrogen of fat, butter, or oil. There is no scientific man now who believes alcohol is used as a fuel.

Q. 40. Why must every fuel food naturally have its carbon, oxygen, and hydrogen in equal proportion, or be brought by the body into equal proportion?

A. For two reasons. 1st. To be sufficiently soluble to pass through those hair-like blood-vessels called capillaries. 2d. To have an atom of vapour of water for every atom of its carbon, in order that the carbonic acid coming from the lungs may be moistened, so as not to dry up and destroy the air-tubes of the lungs and throat.

Grape sugar is very soluble, and by having 12 parts carbon to 12 parts of vapour of water (for its 12 parts of oxygen and 12 of hydrogen just form 12 of water) it is the model fuel food God has planned for the body, and all others must be brought up by the body to this model. Starch is not soluble, for a teaspoonful of it in hot water forms a paste. Cane sugar is not so soluble as grape sugar, therefore the body must change both starch and cane sugar into grape sugar. As to the second reason, the funnel of a locomotive engine does not care whether the carbonic acid from the furnace be moist or dry, indeed dry hot carbonic acid gas is the best for it, not corroding the iron, but dry carbonic acid passing from the lungs to the mouth would be death to the delicate air-tubes of man. In winter when the air is cold and moist it may be that the carbon of fat, or butter, or oil gets only 9-10ths of an atom of water to moisten an atom of carbon, which in the circumstances would be quite sufficient. Science as yet has not experimented on this point.

Q. 41. Why must every fuel food be vitalized before it enter the blood?

A. That it may not irritate all the parts of the body it comes into contact with.

It has been found by direct experiments that a solution of egg albumen injected into the veins of a dog proceeds *unchanged* to the kidneys to be expelled from the body; whereas it would not have passed unchanged to the kidneys if it had first been vitalized by being subjected to the action of the digestive organs. No doubt until it was expelled it would be a source of irritation. It is a scientific fact that alcohol, until it is cast out of the body, irritates every part it comes into contact with. Sweet milk is an excellent food; but if it were to get into the blood without being vitalized in the stomach death would be the result.

Q. 42. Since alcohol is neither a building nor a fuel food, what becomes of it when taken into the body?

A. The facts of science are these four:—1st. Alcohol is not consumed in the body like natural fuel by being converted into carbonic acid and water. 2d. That at least a portion of it is expelled *unchanged* in the breath and other excretions. 3d. No proof has been given to show that any part of it is oxidized in the body by being changed into aldehyde or vinegar. 4th. That if any part were so changed the process would be more injurious to the body than expelling the alcohol unchanged.

All scientific men are agreed on the first two facts. All confess that when alcohol is used the generation of carbonic acid is less than

when a natural fuel is being consumed. As to the third, it is extremely improbable that the body makes use of any part of alcohol, since it is positively certain it casts out part of it unchanged, as an enemy, through the lungs, skin, and chiefly through the kidneys—at least the body *never* does this with any other substance taken into the stomach. From analogy we may also conclude that a combination like alcohol, which has been effected and fixed by death and decomposition, is not capable of having its elements broken up and used in the body. There are other two combinations fixed by decomposition which the body cannot break up, carbonic acid and ammonia; while vegetable life can use these three death-made combinations, a fact which suggests that they are not only utterly useless, like mere refuse, but poisons to animal life. It is no argument to say that the whole of the alcohol taken into the body cannot be recovered from the excretions, because alcohol is too subtle a spirit for the whole of its vapour to be seized by experimenters, and they have never found the alcohol changed into vinegar in the body. But even allowing that a part of alcohol was changed into aldehyde, an intoxicating poison, and then into vinegar, the folly of using it at all would thereby be only the more apparent, for why should a man drink alcohol, then rob his blood of oxygen, which it cannot spare, and afflict his whole body to change the alcohol to vinegar, when he can buy and use more vinegar for sixpence than the body could produce from twenty shillings worth of intoxicating drink? Since to expel the alcohol unchanged would inflict less injury upon the body than to convert it into aldehyde, vinegar, and other products of oxidation, we may conclude that the whole of it is cast out as alcohol unchanged.

Q. 43. Whether is grape sugar or fat the best fuel food?

A. God has made everything beautiful in its season and place. Grape sugar is the best fuel in summer and in warm climates; fat is the best in winter and in cold climates.

In summer and in warm climates the body being languid is less able to convert starch into sugar than in winter and in cold countries, therefore God, out of compassion to man, has the model fuel food ready prepared in the grape and other rich sugary fruits which abound in warm climates. And as when the air is warm there is no need for the body to generate much heat, only the carbon of grape sugar combines with the oxygen breathed into the lungs, for the 12 parts of oxygen and 12 parts of hydrogen which exist in the sugar are in *chemical combination* in the grape. But as in winter and in frigid climates the body must generate much heat, the composition of fat or oil is very different from that of grape sugar, thus—

Grape sugar: carbon 12 parts, hydrogen and oxygen combined together, 12 parts each.

Fat or oil: carbon 10 parts, hydrogen 9 parts, oxygen 1 part.

It is seen that the hydrogen in fat or oil is not combined with oxygen when taken as fuel food, for it contains only 1 part of oxygen to 9 parts of hydrogen. The hydrogen must therefore draw its combining oxygen to form vapour of water from the air breathed in, and the air breathed in being denser, because colder, it contains more oxygen than in warm climates. Both the carbon and hydrogen of fat or oil are thus burned or oxidized in the body; and as oxygen, when combining with hydrogen, gives out much more heat than when combining with carbon, one pound weight of fat will generate as much heat as $2\frac{1}{4}$ pounds weight of grape sugar. It is extremely probable that the manna which fell in the wilderness contained abundance of sugar in summer, it then tasting like "wafers made with honey" (Ex. xvi. 31), while in winter oil was substituted for the sugar, the taste of it then being, as Moses writes, like that of "*fresh oil*" (Num. xi. 8). Oil or fat, besides being a *stronger* fuel food than sugar, so operates on the atoms of albumen in the blood that they are better prepared to be deposited as atoms of flesh in the wasted parts of the body, a very great advantage in winter when the waste of tissue is greater than in summer.

Q. 44. Is the flesh-forming part of a compound food of any use in maintaining the heat of the body?

A. God so abhors waste that he gathers up every fragment that may be of use, therefore when the atoms of flesh are worn out and can do no more work, most of the carbon which they contain is combined with oxygen, and assists to warm the body.

Even the flesh-forming part of a compound food contains a large proportion of carbon. The essential element in albumen or gluten, as in wheat, the lean of beef, the white of an egg, &c., is *nitrogen*, and yet the carbon in the combination is nearly four times as much as the nitrogen, the composition of albumen or flesh-forming food being, in every 100 ounces weight: carbon 55 ounces, hydrogen $7\frac{1}{2}$ ounces, nitrogen 16 ounces, oxygen $20\frac{3}{4}$ ounces, sulphur and phosphorus between them 1 ounce. When the albumen, after being deposited as solid flesh, has become worn out and must be removed from the body by the kidneys, the most of its carbon is separated to become fuel food, as is evident from a glance at the composition of urea from the kidneys, which is (old notation): carbon 2, hydrogen 4, nitrogen 2, oxygen 2. Carbon in the urea is only two parts, while carbon in the albumen was 55 parts. It is thus seen how the Guachos of the South American Pampas can live on beef and water, the lean of the beef as well as the fat supplying carbon for combustion. This is, however, an unnatural diet, and on lean beef alone the body could not thrive, since the supply of fuel food should always exceed that of flesh-forming food.

Q. 45. In what manner does alcohol oppose the principle of life in building up the body of a child or repairing the daily waste in the body of a man?

A. In many ways; the four principal are: 1st. By hardening and contracting the food, which hinders it being dissolved. 2d. By spoiling the juices which dissolve the food in the organs of digestion. 3d. By irritating these organs so that they do not secrete healthy and natural juice. 4th. By paralyzing the nerves of nutrition which superintend the building up and repairing of the body.

The health of the body depends upon the daily repair being as much as the daily waste. A moderate sized man uses daily two pounds weight of solid food, which in a year has amounted to 730 pounds, or fully 50 stones, and yet at the end of the year he is no heavier than at the beginning. A considerable portion of this food was converted into blood albumen, and then into flesh and bone; and since he is no heavier the waste of flesh and bone must have been as great as the repair. The daily waste is so great (and a fair amount of waste is necessary to health) that all the flesh—muscles, sinews, nerves, &c.—on the bones is changed every three or four months. The total weight of dry flesh, excluding fat, in the body of a man weighing 11 stones, does not exceed 33 pounds, and as when he performs an ordinary amount of daily work he consumes and assimilates at least $4\frac{1}{2}$ ounces of dry flesh-forming food, it follows that in about 117 days he assimilates 33 pounds weight of flesh-forming food, which being made into new flesh takes the place of the old flesh, and thus renews his entire body within four months. The bones, not wearing so rapidly as the flesh, last much longer than four months. That the body is renewed within four months may be proved in another way. The chemical elements in the body of a man weighing 11 stones are in the following proportions: oxygen 111 pounds, hydrogen 14 pounds (these two are mostly combined together as water), carbon 21 pounds, nitrogen only $3\frac{1}{2}$ pounds, phosphorus 1 pound, 13 ounces, calcium (lime not oxidized) 2 pounds, sulphur $2\frac{1}{2}$ ounces, fluorine 2 ounces, chlorine 2 ounces, sodium (with chlorine in the form of salt) $2\frac{1}{2}$ ounces, potassium $\frac{2}{3}$ of an ounce, iron $\frac{1}{4}$ of an ounce, and a trace each of magnesium and of silicon. There is only $3\frac{1}{2}$ pounds or 56 ounces of nitrogen, and by very close inspection of the excretions from the body it is found that when at rest it wastes daily $\frac{1}{2}$ ounce of pure nitrogen, and when at ordinary work, as that of a tradesman or labourer, about $\frac{3}{4}$ of an ounce. Even at half an ounce per day the whole nitrogen in the body would therefore last only 112 days. Personal identity is preserved by the new atoms which drop into the vacant spots being exactly the same size as the old ones which left, and these new atoms take their tone from those

around, so that new atoms fixed in the body of an old man do not make him young again or rid him of his diseases. The reason of the great waste in the human body is, that animal life, unlike that of vegetable life, is capable of motion and work. A tree or herb is fixed in the ground and neither moves nor works, therefore its life consists in perpetual growth and increase. It has no lungs, therefore it cannot of itself maintain heat, and so delicate plants must live in a hothouse. It has no daily waste, and consequently no daily casting out of impurities. Its sole function is to keep gathering inorganic elements, and combine them into organic for the benefit of man and of animal life. And since man requires to move and work, and the health and strength of his body depends on its ability to repair its daily waste, it is seen that if alcohol opposes the building operations of animal life, as it certainly does, it is a deadly enemy to man.

Q. 46. Explain the mode in which alcohol hardens and contracts food.

A. Flesh-forming food is composed of albumen, and alcohol hardens and contracts albumen by depriving it of its natural quantity of water.

Steep 16 ounces of lean beef or mutton for a night in spirits of wine, take it out and dry with a cloth, it will then be found to be shrunk into much smaller size and to weigh only 12 ounces—the alcohol having abstracted 4 ounces of the water in the meat. When bought from the flesher it contained as much as 8 ounces of water and only 8 ounces of albumen; the alcohol therefore has removed half the natural proportion of water. The *drier* any food becomes the *harder* it is thereby made. It is the strong affinity which alcohol has for water that enables it to play such dreadful havoc on a soft mass of flesh like the human body, which is just a vast filter and must be kept soft and free from contraction in order to filter aright. No number of distillations will force alcohol to give up its hold upon water, for after repeated distillations it contains 9 per cent. of water, which can be removed only by the strongest chemical agents. When pure alcohol is poured upon several salts containing water it breaks up their chemical combination in order to seize the water. When inside the body it acts precisely as upon lean beef or mutton, for if brandy be retained for five minutes in the mouth the surface of the skin is whitish through the coagulation of its albumen, and the whole mouth feels as if it were contracted.

Q. 47. How many juices operate upon human food in the digestive organs in order to prepare it for being converted into blood and then into flesh and bone?

A. Five: the saliva from the mouth, gastric juice from

the stomach, bile from the liver, pancreatic juice from the gland called pancreas, and intestinal juice from the intestines.

When a piece of bread is eaten it is broken small by the teeth and coated over with saliva to make it glide down to the stomach. In the stomach the starch in the bread is attacked by the saliva, the function of which is to convert starch into grape sugar by adding two atoms of water; and the gluten of the bread is attacked by the gastric juice, the office of which is to dissolve albumen. While in the stomach such part of the starch as is thoroughly converted into grape sugar, and such part of the gluten as is perfectly dissolved, escapes through the thin porous sides or walls of the *veins* in the stomach, and mixing with the venous blood proceeds to the lungs to receive oxygen and get the last touch of the vitalizing process. The remainder of the bread not digested, now called chyme, descends to the continuation of the stomach called the duodenum, which is about 10 inches long and forms the widest part of the small intestines. While in the duodenum the chyme is attacked by the pancreatic juice that the remaining starch may be changed into grape sugar, the pancreatic juice, being more powerful than even saliva, it also co-operates with the gastric juice in completing the dissolving of the albumen, and on account of its alkaline nature it is able also to convert fat or oil into a very fine emulsion. In the duodenum the chyme is also acted upon by the bile, which, being alkaline, works with the pancreatic juice in dividing fat and oil into a very fine emulsion, to prepare it for flowing along with the blood through the smallest capillaries. The bile also assists in animalizing or vitalizing the chyme, and in separating the indigestible portions that they may be cast out. And lastly, the chyme is acted upon by the intestinal juice, which can convert starch into grape sugar, and being of an alkaline nature can co-operate with the bile. It is thus seen that three out of the five juices can act upon starch, and three of them upon fat or oil, because the body daily requires at least four times more fuel than flesh-forming food. After being subjected to the action of the five juices the *chyme* has become *chyle*, and then hundreds of little tubes called lacteals, whose diameter is about one-thousandth part of an inch, suck in the finer portions of the chyle, to carry it to a pipe about the diameter of a common goose-quill. This pipe, called the thoracic duct, discharges the chyle into a vein near the lungs, to be reddened by the oxygen in the lungs, and thus receive the last vitalizing process. As an alkali, such as soda, assists albumen in remaining soluble, the blood is slightly alkaline, and the three last digesting juices being alkaline, the chyle is made alkaline before reaching the blood and lungs.

Q. 48. *In what manner does alcohol act upon the saliva?*

A. It coagulates the active principle of the saliva and thus prevents it converting starch into grape sugar.

The active principle of the saliva is called ptyalin, which is of a nitrogenous, that is, of an albuminous nature. Its importance may be seen from the fact that the greater part of the food consumed by the human race is starch, and that starch is quite useless to the body until changed into grape sugar. Many millions of the human race are fed on rice, three-fourths of which is starch, there being 79 ounces of it in every 100 ounces of rice. More than one-half of wheaten flour is starch, there being 66 ounces of it in every 100 ounces of flour. In barley, oats, sago, potatoes, &c., the predominant element is starch. The absolute necessity for the body changing the starch into grape sugar, a very *soluble* substance, is seen when we consider the exceedingly small diameter of the tubes through which the fuel food must flow. From the trunk of a tree several large branches proceed, and from these large branches still smaller ones, or twigs, proceed. In like manner, from the large artery, about an inch in diameter, which receives the blood from the heart, smaller arteries branch out, which terminate in capillaries varying from one-thousandth to a five-thousandth part of an inch in diameter. On a foot rule the one-sixteenth part of an inch does not appear to be a large space, and yet within it more than 250 capillary tubes could be placed in a line side by side. To meet the exceedingly small diameter of these blood-vessels it is evident that the food must be reduced to a very fine division of atoms. All the relative working parts of God's creation balance each other, and so both fuel and flesh-forming food are divided into atoms so minute as to be beyond belief if the revelations of the microscope had not placed the facts beyond doubt. If one teaspoonful of grape sugar be dissolved in a cupful of hot water, and then the cupful be mixed with a hundred gallons of water, every drop of the hundred gallons will contain a minute portion of sugar. The alkaline action of the bile, pancreatic and intestinal juices upon the fat we consume changes it into almost a soapy solution, and it has been found by experiment that 1 ounce of soap dissolved in 100 ounces weight of water forms a solution fit for producing soap-bubbles when blown through a pipe of small diameter. The thinness of the skin or covering of a soap-bubble is almost beyond conception, and it has been correctly calculated that if the whole 100 ounces of soap solution were converted into soap-bubbles it would be seen that the single ounce of soap was divisible into nearly two thousand trillion parts. The divisibility of albuminous food is equally great. In the blood the red corpuscles or globules are of an albuminous nature, and are minute rings about one 3200th of an inch in diameter and only one 12,000th of an inch in thickness. Ten millions of them could lie on the surface of one square inch. One *cubic* inch of blood contains at least eighty millions of red corpuscles, and within a cubic inch there could be crowded together

one hundred and twenty thousand millions = one hundred times the population of the globe. This need not be wondered at when within a drop of putrid water a horde of animalculæ exist, each with a distinct living active organization. Even a cubic inch of gold, that is, an inch in length, breadth, and depth, can be hammered out to fully one hundred and eighty thousand inches in length, so as to form a tape of gold one inch broad by three miles long; and by the electro-plating process gold can be still farther extended. That alcohol opposes the necessary dividing of starch in human food into minute atoms by preventing the change into grape sugar is easily proved. Place half a tea-spoonful of *potato* starch under the tongue, mix it thoroughly with the saliva, then discharge it into a cup nearly full of water, at between 156° and 165° Fahr. Keep at that heat and stir occasionally, when the saliva will soon convert the starch into sugar, and the liquid be perfectly soluble and thin. Repeat the experiment, only add one tea-spoonful of spirits of wine or whisky to the mixture, and the alcohol will prevent the change into sugar.

Q. 49. In what manner does alcohol act upon the gastric juice?

A. When in sufficient quantity it precipitates the pepsin, which is the active dissolving ingredient; and it *tends to the same result* when not in sufficient quantity.

Pepsin being of an albuminous nature is easily coagulated and precipitated by alcohol. It will be necessary here to make children thoroughly understand the meaning of "*tends to the same result,*" and of the phrase to be used in subsequent questions, "*tendency and goal.*" Every child knows that water "*tends*"—*it is its nature*—to run down a hill, and every well-educated physiologist knows that alcohol "*tends*"—*it is its nature*—to injure the body of man, whether taken in a large or in a small quantity. If we wish, in summer, when water stands at 70° Fahr., to convert a gallon of it into ice, we have only to use a *sufficient* quantity of any freezing mixture. Suppose it was such a mixture and in sufficient quantity to reduce the gallon to 10° Fahr., a diminution in temperature of 60°, the consequence would be that the gallon would be rapidly turned into ice. But since half of the sufficient quantity would make no ice, would it not therefore *tend to that result*, since it would bring the water down from 70° to 40°? And would not one-fourth of the sufficient quantity *tend* to make ice, since it would reduce the heat 15°? In like manner a sufficient quantity of alcohol will make a man drunk, half the quantity will make him half drunk, and quarter the quantity quarter drunk. When quite drunk he cannot walk, when half drunk he staggers, when quarter drunk he is excited, and each of these states is an injury inflicted. The popular delusion that alcohol in a small quantity is beneficial while in a large quantity it is injurious, has no foundation in science. Equally fallacious is the

wide-spread impression that a little wine or bitter beer assists digestion. In the nature of things whatever *tends* (as alcohol does) to precipitate the pepsin *cannot* assist digestion. To prove this, take the stomach of any animal recently killed (as of a pig, or, better, of a dog), steep it in a *little* cold water, or well brush the mucous surface of it with cold water to extract what gastric juice it contains. Put one-half of the gastric juice obtained into a phial with a small piece of boiled meat cut into bits. Keep at 100° Fahr. and agitate frequently. In about three hours the meat will be quite dissolved. Add a little alcohol to the other half of the gastric juice and a similar portion of boiled meat, cork to prevent escape of alcohol, and then the gastric juice will be powerless. Gastric juice taken from the human stomach has exactly the same action, and alcohol affects the gastric juice inside the stomach precisely as it does inside the phial, with this difference, that as it rushes through the thin sides of the veins in the stomach within two or three minutes after it has been drunk it has time to give only one destroying touch, leaving the stomach to secrete another supply of juice, while in the phial it remains confined with its perpetual interdict against digestion. It is no unusual occurrence for those who have been freely drinking all night to vomit the supper or dinner, undigested, which had been taken the day before. This is the result of a sufficient quantity, and without doubt an insufficient quantity *tends* to the same result of preventing digestion. Very numerous experiments have been tried upon dogs, and in every case it has been found that alcohol tends to resist digestion. The assertion of some physicians that alcohol, by forcing the stomach to secrete an unusually large quantity of gastric juice, thus aids digestion, has no physiological force, for such unnatural stimulation would inevitably be followed by a corresponding depression and the secretion of depraved juice. By the phrase "*tendency and goal*" in subsequent questions is meant not "*an end*," but "*the end aimed at*, and which certainly will be reached."

Q. 50. *In what manner does alcohol affect the bile, pancreatic juice, and intestinal juice?*

A. Since alcohol passes through the veins of the stomach into the circulation of the blood a few minutes after it is taken, and very little if any of it descends to the duodenum, it does not *directly* affect these three juices to any considerable extent.

Dr. Beaumont, looking through the opening caused by a gunshot wound in the stomach of St. Martin, always saw that when alcoholic drinks were taken they were rapidly absorbed by the veins of the stomach. If the alcohol descended to the duodenum in any considerable quantity it would certainly precipitate the pancreatic juice, since pancreatin, its active principle, is a nitrogenous substance;

and though *directly* the alcohol does not reach the juices *already* in the duodenum, it injuriously affects the quantity afterwards secreted by operating on the organs of secretion.

Q. 51. In what manner does alcohol prevent the stomach from secreting natural and healthy gastric juice?

A. By irritating and inflaming it.

Dr. Beaumont always found that when St. Martin had been drinking alcoholic liquors for several days the coats of the stomach were inflamed in proportion to the quantity of alcohol taken. When small quantities were used the inflammation was not strong, and St. Martin felt no pain, but when he had been drinking hard there were large patches of inflammation and considerable uneasiness felt. Even when the stomach has only a gentle chronic inflammation, it is impossible for it to secrete perfectly natural juice. If a thousand wet nurses were to receive as part of their food one pint of good sweet milk daily for a month, and then have the milk exchanged for a pint of London porter or ale daily during the next month, chemical analysis would show that under the alcoholic irritation the breast milk for the infants had been deteriorated, the milk of not one in the thousand being so plentiful in *curd*, and so in nourishment, when during the alcoholic, as during the milk treatment. Chemical analysis would also show that the unfortunate unsuspecting infants were getting alcohol in the breast milk, a poison which their tender frame cannot bear.

Q. 52. In what manner does alcohol affect the liver?

A. Alcohol has a peculiar affinity for the brain and also for the liver. By accumulating in large quantity in the liver it inflames it, causes organic disease, and thus affects the secretion of bile.

When alcohol is injected into the stomach of an animal, and it is shortly afterwards killed, the alcohol is found in the following proportions: in the blood as 1 part, in the liver as 1.48 parts, and in the brain as 1.34 parts. But if the alcohol be injected into the veins, it is found in this proportion: in the blood as 1 part, in the brain as 3 parts, and in the liver as 1.75 parts. It is thus seen that alcohol has a special affinity for two most important organs: the brain, which is fed with arterial blood, and is the material instrument of thought; and the liver, which is fed with venous blood, and is valuable as an assistant in digestion, as a utilizer, and as a purifier. In the human body there are two canals running almost parallel with each other—the red arterial blood in the arteries and capillaries, which is the canal of *nutrition*, since from the red blood alone every part of the body is nourished; and the dark venous blood in the veins and their connections, which is the canal of *excretion* or *purification*, for into it

all the waste and impurities of the body are continually poured. The liver as a utilizer lays hold of whatever can be turned to account in the venous blood which comes from the organs in the chest, as the stomach, and converts it into fat or into glycogen, which in the blood is rapidly changed into grape sugar for the body's wants, and as a purifier assists the lungs in carrying out dead carbon compounds, in addition to the other impurities it removes through the secretion of bile. An organ so important and so sensitive to the action of alcohol as the liver should not be opposed in its working by even the slightest quantity of alcoholic drink.

Q. 53. In what manner does alcohol affect the nerves of nutrition?

A. It so paralyzes them that they cease to regulate aright the supply of arterial blood to the capillaries.

Since the introduction of india-rubber thin circles or rings, they have been extensively used as bands around pocket-books, purses, bundles of letters, &c. Their utility depends on their elasticity, which enables them when stretched to contract and thus put a gentle pressure around the articles they envelop. Precisely as an india-rubber band puts a uniform and gentle pressure around a purse to keep it closed, so do the muscular fibres belonging to the smaller arteries which feed the capillaries put a gentle continuous pressure around them to hold them at the natural diameter. And a chief part of the office of the nerves of nutrition is to keep constantly shedding the necessary nervous influence upon the feeding arteries that they may remain at the same diameter; for if they enlarge, then the capillaries become gorged with too great a supply of blood, and red in their appearance, as is seen when the eye is inflamed or blood-shot. When the capillaries are gorged the blood does not flow through them at a natural speed, nor is the process of nutrition natural, for the healthy state of any part of the body depends on the capillaries being kept at the natural contracted size, in which condition the minute atoms of albumen in the blood can best pass through their thin porous sides to the tissues which lie between the capillaries, and which require constant building up with new atoms of flesh to meet the ceaseless waste going on. Alcohol has a magical power in paralyzing the nerves of nutrition, and consequently of gorging the capillaries, and thus it is the ally of every disease, for in every disease the capillaries of the affected parts are enlarged and gorged. And so small a quantity of alcohol as two ounces, which is equal to a gill of whisky or brandy, can effect a perceptible temporary gorging of the capillaries throughout nearly the entire body.

Q. 54. Having seen how alcohol opposes the principle of life in building its house, the body, explain now in what manner it opposes it in warming its house?

A. By diminishing the quantity of oxygen received into the blood, which it accomplishes in two ways: 1st. By affecting the muscles of respiration so that less air is drawn into the lungs. 2d. By contracting the receiving capacity of the red globules in the blood, so that they cannot contain and carry the natural quantity of oxygen.

In a fit of intoxication the breathing is so slow and laboured that very much less than the natural quantity of air is drawn into the lungs. To the same result even a small allowance of alcohol tends, for by close observation it is seen that what is called a moderate-dose quantity of intoxicating drink causes a relaxation of the muscles of respiration, so that the drawing in of air is more jerky and hurried than natural, while the expiration is slower and more feeble. The special function of the red corpuscles or globules is to absorb oxygen from the air drawn into the lungs, carry it to every part of the body, and distribute it to all the tissues. The globules do not themselves pass through the thin porous walls of the capillaries to the tissues—they live and die in the circulation of the blood, and only allow the oxygen they carry to escape through the capillaries to the tissues, where the oxygen unites with the carbon of the waste tissues, and through the same minute pores in the capillaries the albumen and blood liquor escape to nourish and bathe every tissue. Being of an albuminous substance the globules are easily contracted by alcohol when it gets into the blood, and their capacity of receiving oxygen is diminished in proportion to the contraction. The new-made corpuscles are contracted, while those half decayed are killed outright.

Q. 55. *What great evils flow from the action of alcohol in diminishing the quantity of oxygen received into the blood?*

A. The evils are many; the principal three are: 1st. A reduction of the heat of the body. 2d. A reduction of physical and mental power. 3d. A pollution of the blood through the retention in it of impurities.

One of the evils not enumerated in the above answer is the injury which the body sustains when deprived of a full natural supply of oxygen in its *building* operations. After the food has been thoroughly dissolved by the digestive organs, and becomes yellow white chyle, it requires the finishing touch of oxygen to convert it into red arterial nourishing blood. If the blood in the *arteries* was deprived of its oxygen, nutrition of the body could not go on. If such oxygenless blood were to circulate for three minutes through the brain, insensibility and death would be the certain result. During the day when the body is at hard work, and so requiring muscular force, three times as much oxygen unites with carbon as during sleep; and during

the day nearly all the oxygen drawn into the blood by *inspiration* is returned to the atmosphere by *expiration* in the shape of carbonic acid, the oxygen having united with carbon to supply heat and power for the day's work. But the case is very different at night during sleep. Then the body, which during the day imperfectly repaired the waste as it occurred, has to fill in all vacancies caused by the removal of atoms dead, and a remarkable difference is now observed in the demand of the body for oxygen, not to be used in uniting with carbon. The truly scientific experiments carried out in Munich, where the King of Bavaria gave £600 to construct a suitable apparatus or room, show that if a man during the day was kept awake a certain number of hours and at perfect rest, as lying on a bed, his body consumed *nearly all* the oxygen received into the blood in forming carbonic acid, for even though at rest his mind would be thinking and so at work; but in the same number of hours during sleep at night, the body appropriated one-half of the *inspired* oxygen for other purposes than the formation of carbonic acid. What can the body do with this great extra quantity of oxygen retained during sleep, but apply it in its various restorative and building up operations. These Munich experiments finely show the great value of sleeping in the country at night to those who toil in crowded cities all day; and the utter folly of professional men, as clergymen and physicians, when exhausted at night, taking alcohol before retiring to rest, an action sure to diminish the supply of oxygen, which is the very and only thing the body requires during sleep to restore the wearied frame to wonted vigour.

Q. 56. Prove that alcohol reduces the heat of the body by diminishing the supply of oxygen?

A. 1st. The thermometer shows a reduction of heat, which proves that less oxygen is combining with carbon. 2d. Every experiment made to measure the quantity of carbonic acid gas coming from the lungs after alcohol was taken has proved that the alcohol had diminished the production of carbonic acid.

Two pounds weight of coal will give twice the heat and also twice the carbonic acid given by 1 pound, therefore heat is a measurer of carbonic acid evolved, and carbonic acid an indicator of the heat generated, and both heat and carbonic acid show the amount of oxygen consumed. At each inspiration a man of ordinary size draws into his lungs from 20 to 30 cubic inches of air; being less or more according as he is at rest or exercise. A box 3 inches square by $3\frac{1}{2}$ inches deep, would contain 30 cubic inches, and in this quantity there would be $6\frac{1}{2}$ inches of oxygen and $23\frac{3}{4}$ inches of nitrogen. The whole of the $6\frac{1}{2}$ inches of oxygen, though entering the lungs, would not enter the blood—if the man were at rest little more than 1 cubic

inch would be seized by the red corpuscles; if he were at work, as that of a labourer, fully $1\frac{1}{2}$ inches would be seized to meet the demands made by labour, and $1\frac{1}{2}$ inches being only $\frac{1}{20}$ th part of the 30 inches of air drawn into the lungs, it is usual to say that in respiration man uses about 5 per cent. of the air inspired, and returns in the place of the oxygen about 5 per cent. of carbonic acid. The amount of oxygen received and changed into carbonic acid is no fixed quantity, since it varies with climate, season of the year, health, age, exercise, food, &c. &c. An average estimate is, however, that the blood seizes one-fifth of the oxygen contained in each inspiration, which is 4.35 per cent. of the air drawn into the lungs, and gives back to the atmosphere 4.30 per cent. as carbonic acid gas. Dr. Prout of Aberdeen, in the year 1813, was the first to experiment upon the action of alcohol in diminishing the production of carbonic acid. When his stomach was empty, his pulse at 70 beats per minute, and the expulsion of carbonic acid from his lungs was 4 per cent. of the expired air, he took 3 oz., not of pure alcohol, but of *wine* (about two glasses). Five minutes afterwards the generation of carbonic acid had fallen to 3 per cent. of the expired air—a reduction of 25 per cent., while his pulse had risen to 72, and then gradually mounted to 78 beats per minute. It was $5\frac{3}{4}$ hours before the heart and heat-generating power were brought back to 70 beats and 4 per cent. of carbonic acid. Dr. Prout's experiments were conducted in the most simple manner. He measured the carbonic acid by blowing the expired air along a tube into a solution of baryta (where the carbonic acid formed carbonate of baryta), and only during a very limited period, as a minute at a time. And yet, all things considered, the reduction of 25 per cent. is in many cases not far from the truth. When the experiments are scientifically carried out it is found that wine and spirits do not, when in small quantities, cause a diminution of 25 per cent.—it is, indeed, but little, but then the mere putting of something into an empty stomach should not cause a decrease, but an increase. A drink of cold water will produce a decided increase, so will a cup of tea (by its sugar and cream) to a greater extent, so will food of any kind. The true mode of finding the difference is to put into an empty stomach, and when the excretion of pure carbon is at the rate of 9 oz. per day, 2 oz. of alcohol in water, and compare the result with that of taking in similar circumstances 2 oz. of grape sugar, a natural fuel food, in water. It will then be seen that the difference is this—while the alcohol in the shape of whisky, gin, brandy, or wine *lessens* the production of carbonic acid a little, the grape sugar has *increased* it to the extent of at least 2 grains per minute, which would be 120 grains per hour, or at the rate of 2880 grains per day; or since carbonic acid is carbon 1 atom, weight 12, and oxygen 2 atoms, weight $16 \times 2 = 32$, the increase would be at the rate of 785 grains of pure carbon per day, and since the excretion of carbon from the lungs of those in professions and at light labour is only about 10 oz. per day, the increase at the rate of

785 grains, or fully $1\frac{3}{4}$ oz., would be at the rate of fully 15 per cent. of the total quantity daily excreted. Adding now the two factors—the small diminution in the production of carbonic acid caused by the introduction of alcohol into an empty stomach, with the great increase caused by the introduction of a proper fuel food as grape sugar—it is seen that the difference approaches 20 per cent., and that Dr. Prout was not far wrong in his experiment. Taking the average of the class calling themselves moderate drinkers in Britain, the reduction of oxygen received into the blood while the alcohol is in the body is not less than 15 per cent., the generation of carbonic acid and heat being equally deficient, which means a loss nearly one-sixth part of the body's heat-producing power. When 4, 6, or more oz. of alcohol are taken, the generation of heat diminishes in proportion, and thus it is seen how impossible it is for sailors to endure an Arctic winter if they will take alcohol, the heat diminisher and greatest known enemy of the human body.

Q. 57. Prove that alcohol causes a reduction of physical and mental power.

A. Heat evolved within the body is the moving power of the body, and since alcohol diminishes the natural production of *normal* heat, it diminishes physical and mental power.

In the material world there can be no power exerted without an expenditure of the means which evolve the power. In the steam-engine the quantity of heat in the steam is the measure of the engine's power; and the power of the steam boiler is exactly the quantity of carbonic acid its furnace can generate. The steam-boiler furnace of an express locomotive going at 60 miles an hour, or of a goods locomotive with its very heavy train, generates in proportion to its size more carbonic acid, and consequently both more heat and *power*, than any other boiler furnace. The steam acting on the piston is at 120 lbs. pressure per square inch, and its heat is 350° Fahr., while steam at 30 lbs. pressure for a factory engine stands at only 275° Fahr. So well is it known that heat is power that proprietors of steam-engines cover their boilers, steam pipes, and steam cylinders, and thus by preventing an escape of heat effect a great saving of fuel. Equally in the human body heat is power. A railway contractor looks for navvies who can sleep well and *eat well*, just as they buy a horse that can sleep well and eat well. Though both horse and man eat well, they are no heavier at the end than at the beginning of the year; their food, therefore, consisting of 13 or 14 parts of carbon to 1 of nitrogen, has been applied to some purpose, and we know the carbon has combined with oxygen to generate heat and force. All manual work is effected through the contraction of the muscles, and when a muscle is looked at during a state of

rest through a good microscope, the arterial blood passing through it is of the ordinary red colour, and contains about $7\frac{1}{2}$ per cent. of oxygen; but as soon as the muscle is strongly contracted by an act of the will the blood immediately loses oxygen, and becomes darker in proportion to the force of the contractions, which darker colour in the capillaries is entirely owing to the generation of carbonic acid within the muscle by oxygen uniting with the atoms or fibres of the muscle wasted by the contracting effort. Heat (the product of oxygen combining with carbon) is applied by the influence of the nerves to stimulate the muscle to motion, precisely as the heat in the steam forces the piston of the steam-engine to move. If the heat leaves the steam the piston cannot move; if the muscles be thoroughly benumbed with cold, no exercise of the will can force them to work. The measure of a man's work is exactly equal to the carbonic acid produced to perform the work. If he walks the generation of heat is greater than when he sits. If he carry a load the quantity of carbonic acid increases exactly in proportion to the increase of the load. Mental work is likewise the offspring of heat and the waste of nitrogenous atoms. Muscular fibre in a dry state contains about 15 per cent. of nitrogen, and the brain having a large proportion of nitrogen, hard mental workers require fully as much flesh-forming or albuminous food as those who labour with their hands. Though heat be the source of physical force, it operates through albuminous atoms which perish as they work; and therefore a compound food in due proportion is essential to the continuous working of physical force. And thus the physical force expended may be measured by the waste of nitrogenous tissue in performing any work. The quantity of urea excreted may thus measure the amount of work done. As to the loss of physical and mental power in Britain through the use of intoxicating drinks, it is very great. In the note to the previous question it was seen that alcohol caused the heart to beat faster, while at the same time it diminished the generation of carbonic acid—that is, it demanded more work from the body, and supplied less power with which to accomplish it. Well aware of this strength-impairing action of alcohol, the engineers who in 1872 had charge of shifting the rails of the Great Western Railway from the broad to the narrow gauge were convinced that the work could not be done with the necessary expedition if the labourers were allowed to take their usual allowance of beer, and so made a bargain with them that if they would take no intoxicating drink during the job they would, without charge, be supplied daily with a drink for each man composed of 1 lb. of oatmeal and $\frac{1}{2}$ lb. sugar, well boiled to a pleasant gruel. The offer was accepted, and under this scientific drink, which was carried to the men at all hours, and rapidly was converted by the stomach every hour of the day into fuel food (with the necessary nitrogen), and so into heat and vital force, the rails were shifted in one-third less time than would have been occupied had alcoholic drinks been allowed. If working

men take only 2 oz. of alcohol per day, which is a quantity counted by many small and moderate, then there is during working hours an average loss of about 15 per cent. in the generation of carbonic acid, and so of heat and power, while the heart has at least 5 per cent. more work to do, caused by the unnecessary increase in its pulsations, which work involves a useless expenditure of vital force, since no machine can be driven quicker without more power. In the experiments of Dr. Parkes and Count Wollowicz upon a healthy soldier, the number of pulsations caused in twenty-four hours by a dose of 2 oz. of alcohol per day was 8172 more than when only water had been used, which was an increase of $7\frac{1}{2}$ per cent. in the heart's daily work. But taking a low average of 5 per cent., and adding only 12 per cent. as the loss of power through diminished production of carbonic acid, it is no exaggeration to say that one-sixth part of the body's physical and mental power is lost by so-called moderate drinking, excluding the loss through disease gradually produced by the drinking; so that in a workshop employing 1200 men all the work could be done, and better done, and with more ease to themselves, by 1000, if they would abstain, than by the 1200 while they continue to drink. If Britain's army were all abstainers a reduction of 20,000 could be made, with the certainty that the remainder would be a more formidable force in any clime and before any foe than the total number at present on the roll. The preceding calculation has been made to show to so-called moderate drinkers that by using 2 oz. of alcohol daily they lose one-sixth part of their vital power. But this calculation does not represent the national loss, which is much greater. The total population of Great Britain and Ireland at this date (year 1876) is a little over 32,000,000, of whom 16,000,000 are between the ages of twenty and sixty. Deducting the abstainers, and those who taste so seldom that they may be called abstainers, the drinking population of Britain will be about 12,000,000. These consume 30,000,000 gallons of British spirits, 11,500,000 of foreign spirits, 14,000,000 gallons of wine, 908,000,000 gallons of porter and ale, with cider, perry, &c., into the bargain. This lake of liquor, 9 miles long, 100 feet broad, and 30 feet deep, would float all the navies in the world, and its weight is not less than 4,250,000 tons, or five times the weight of all the drinkers themselves, and greater than the weight of the year's solid food which they consume. This quantity of intoxicating drink contains 100,000,000 gallons of pure alcohol, which at the rate of 8 lbs. per gallon (water being 10 lbs. per gallon) will give to each of the 12,000,000 drinkers 3 oz. of alcohol daily throughout the year. This is an amount which every physiologist will confess cannot be taken without weakening appetite and strength, and generating disease and death. From the experiments of Dr. Parkes and Count Wollowicz it was seen that 2 oz. of alcohol per day increased the heart's work $7\frac{1}{2}$ per cent., while 4 oz. raised it 11 per cent., the pulsations with the latter quantity being 12,960 above the natural

number in twenty-four hours when only water was drunk. Three oz. of alcohol (being $1\frac{1}{2}$ gills of whisky or brandy at proof taken daily) will augment the heart's *unnecessary* labour 9 per cent., and cause a diminution of 20 per cent. in the generation of carbonic acid, or in other words it will rob the body of one-fourth of its total power for work. Passing now over all items having relation to the non-producers caused by the liquor traffic, as 186,000 publicans, 200,000 publicans' servants, 52,074 lunatics made insane through drink, 40,000 thieves, 200,000 vagrants and beggars, the able-bodied or the nurses among 3,000,000 of paupers, 18,000 policemen watching thieves and drunkards,—looking at only the physiological aspect of the question, at the facts that the wages of the working classes amount to £450,000,000 a year, and that they, with others above them in station, waste one-fourth of their physical and mental power, which is their productive capacity, we reach the sad conclusion that it costs Britain's drinkers £142,000,000 a year, which is the price of the drink—one hundred and forty-two million pounds sterling to lift the $4\frac{1}{4}$ million tons of liquor to their mouth, and that in the loss of vital energy to the suffering body it costs annually one hundred and ten millions sterling to pump the poison out,—a proceeding this not so wise as that of an Atlantic steamboat proprietor who would bore holes in the side of his vessel below the water line, and then keep throughout the voyage one-fourth part of the engine's power in pumping out the water, while the cargo was all the time being completely spoiled,—not so wise, for he would get the water for nothing, while the nation pays a seventh part of its entire income for the poison. Superintendents of Bands of Hope and juvenile lodges should bring this and other notes down to the comprehension of the children by familiar simple illustrations. The greater part of coal is carbon, and the children know that when the kettle is wanted to boil quickly air is blown by the bellows into the fire, the sole object of which is to get more oxygen to unite with the carbon of the coal, and so generate more carbonic acid and heat. The high stalk of a factory furnace, a rapid walk in cold frosty weather, are also intended to get more oxygen to combine with carbon, and so produce heat. The children should be made to understand that when two substances combine, even if they be both cold, as cold quicklime and cold water, cold sulphuric acid and cold water, great heat is given out, just as when carbon combines with oxygen, whether in the kitchen grate or in the furnace of the human body. The combination is *quick* in the grate, and therefore the heat is intenser than when the combination is very *slow*, as in the human body; and yet, whether the combination be quick or slow, power is developed, and so one pound of carbon in oat-meal or bread, slowly consumed in the muscles of a labourer, will perform as much work as one pound in coal quickly consumed in the furnace of a high-pressure steam engine. An Atlantic full-powered screw steamer consumes daily as much carbon as 50,000 labouring men. It, how-

ever, works twenty-four hours per day, instead of ten, as labourers do.

Q. 58. Having seen in what manner alcohol opposes the principle of life in building and heating its house, show now how alcohol opposes it in cleaning its house.

A. 1st. Oxygen is the ceaseless sweeper of the house of life, and alcohol, by diminishing the supply of oxygen, diminishes the sweeping. 2d. Alcohol, by diminishing the healthy action of the lungs, kidneys, and skin, which are the three great organs of excretion and purification, pollutes the blood by causing the retention in it of impurities.

Oxygen is the mighty agent of Decomposition. It is for ever at work breaking up dead vegetable and animal compounds into their simple chemical elements, in order that Composition may use them in forming organic compounds again. Thus death is changed into life, and life proceeds to death—one generation goeth to prepare for another which cometh. If a living man had a dead man tied to his back, the life would be hurt with such close contact with death. And in like manner the life of the body is seriously affected if the dead worn out atoms of the tissues wasted in daily work are not removed quickly from the body. All decayed dead matter, by being oxidized in the tissues into carbonic acid gas, urea, &c., finds its way from the tissues through the thin porous sides of the vein capillaries, and also by the absorbents into the veins, and are brought forward to the lungs, kidneys, and skin for expulsion from the body. The chief excretion from the lungs is *used up* carbon in the shape of carbonic acid gas, moistened with vapour of water. The skin or lesser lungs sends out much water, both in the form of sensible perspiration as sweat, and insensible as vapour, also a considerable quantity of carbonic acid (about 1-60th part of the amount sent out by the lungs) and a little ammonia; while the chief excretion of the kidneys is the *used up* nitrogen of the wasted tissues in the form of urea. Nature seeks to expel both the used up carbon and nitrogen as fast as they are brought into the circulation of the blood. The body, with its wonderful accommodating power, will, if not interfered with, remove the carbonic acid as quickly as it is generated, for there is a beautiful proportion preserved between the number of the heart's pulsations and of lung respirations each minute of life. The average number of pulsations in full grown men is seventy-two and of lung inspirations eighteen per minute; that is one inspiration for four beats of the heart. If a healthy man, with his pulse at 72, be sitting at rest, there is little waste of muscle, and so the blood corpuscles will suck in only about 1 cubic inch of oxygen at each breath, being 18 cubic inches per minute. If he will then rise and

walk at a swift rate of $4\frac{1}{2}$ miles per hour, both the pulse and the breathing will be quickened in exact proportion to each other, and now since he breathes faster and the corpuscles suck in about $1\frac{1}{2}$ inches of oxygen at each inspiration, he receives at least 27 inches of oxygen per minute, and thus the extra waste of muscular fibre through the walking has its carbon removed as soon as the fibres are dead. But if the same man, before he rises to walk at the rate of $4\frac{1}{2}$ miles per hour, will take 2 oz. of alcohol in some intoxicating drink, his blood corpuscles being contracted and the muscles of respiration being affected, he will not now while walking be drawing in 27 inches of oxygen per minute, as he should do, but a quantity not exceeding 23 inches, and yet proceeding at the rate of $4\frac{1}{2}$ miles per hour there is the same waste of muscular fibre as when he took no intoxicating drink. The inevitable result is that the dead atoms are not removed as soon as they are wasted; his living tissues are encumbered with dead tissues, his blood becomes dark with carbonic acid; and generating less power than if he drew in the natural quantity of oxygen, he feels it is impossible to walk so far as if he had taken no alcohol at all. In Dr. Prout's experiment upon himself with three glasses of wine when his pulse *without alcohol* was going at 70 beats per minute his blood sucked in 4 per cent. of oxygen from the inspired air, or, in other words, expelled 4 per cent. of carbonic acid in the expired air. The alcohol forced his pulse up to 78, and then instead of the blood receiving more oxygen, as it ought to have got to meet the increased speed of the heart, it received only 3 per cent., being one-fourth less than when the pulse was only 70. Had Dr. Prout looked at his blood through a microscope he would have found it loaded with carbonic acid. For the blood to be dark with carbonic acid means diminished vital power of both body and mind—means a languor that is oppressive. Hence the drowsiness which follows drinking—hence the rushing of those who live in small and ill-ventilated dwellings to the public-house, in the vain hope that alcohol will dissipate the feeling of weariness, depression, and weakness produced by breathing air vitiated by a considerable percentage of carbonic acid. In order to understand how alcohol pollutes the blood and whole system, by causing in it the retention of impurities through injuring the organs of excretion and purification, we have but to remember that these organs, the lungs, kidneys, and skin, are only *filters* delicately adapted to perform their special function. The skin has a receiving side, which is that within the body, to receive impurities; and a discharging side, which is that outside, facing the atmosphere. On the surface of the discharging side are about 7,000,000 of pores (about 2800 in a square inch), which are only the ends of as many little tubes, one quarter of an inch in length, that run along to the surface of the receiving side. The lungs likewise have a receiving side next the blood to receive carbonic acid, and a side next the air tubes into which to discharge the carbonic acid. On the surface of the lungs of a full-sized man are

about 600,000,000 of air cells or pores to receive carbonic acid and discharge it, and to receive oxygen for the necessities of the blood. The kidneys also have a receiving side next the blood to draw in the wasted atoms of nitrogen, to convert them into urea, and a discharging side to expel the urea. Its surface likewise is filled with pores. The action of alcohol upon these pores of excretion and purification will be seen from a simple illustration. If the servants of a manufacturer of substances in fine powder maliciously took his hair sieves with spaces 1-100th part of an inch, and passed through them a thin gummy or glutinous liquid, the consequence would be that the sieves on drying would have a thin film of the gum or glue on every hair, and thus the spaces between would be diminished in size to probably 1-120th part of an inch. Next day the sieves would not perform the same amount of work, the smaller size preventing the powder from passing through as before. In like manner the pores in the skin, lungs, and kidneys, also of the small capillary veins, are exactly the size to allow the impurities of the body to pass through them at the natural speed; and when intoxicating drinks are taken alcohol plays the part of the malicious servants, and by contracting the size of the pores diminishes the quantity of impurities expelled. Every part of the body is filled with pores—indeed, life is just a process of double filterage, vitalized albumen in the blood arteries finding its way through millions of pores in the capillaries to build up every waste part of the body, and dead used up albumen oxidized in the tissues into carbonic acid gas, &c., seeking its way from the fluid of the tissues through millions of pores in veins, lungs, skin, and kidneys, to be discharged from the living body. And since every tissue of the body is of albumen, and the characteristic action of alcohol is to contract albumen, and so diminish the size of the pores, if there be one substance in the universe that more than another should not be allowed to touch the human body that substance is alcohol. But since men will afflict their body by exposing it to the deadly touch of a substance which can be obtained only through the work of death and decomposition, the consequence is that the blood is loaded with carbonic acid, dead corpuscles, unhealthy fat, and decayed albumen, which, flowing constantly in the stream of life, and touching the vitalized albumen at every point, affect its very nature, and render the proper nutrition of the body impossible.

Q. 59. What is the action of alcohol upon the nerves of sensation, as those of the five senses?

A. Alcohol, by irritating and contracting their albumen, inflicts injury in proportion to the quantity applied, which injury may be divided into three degrees:—1st. Weakening of function; 2d. Perversion of function; 3d. Suspension of function.

The *facts* of science regarding alcohol are statements respecting its action on the human body which can be easily verified by men in every country and age. No part of the body affords the means by which all men, educated or uneducated, may so easily settle the question, "Is alcohol in small quantities injurious to the body?" as the five senses. The writer of this Catechism earnestly entreats all men to try the necessary and inexpensive experiments upon the nerves of these senses, and then they will be deceived by alcohol no longer. The sole point to be kept in view is the difference in action upon the nerves between a natural *drink*, as water, sweet milk, or unfermented grape juice, and an unnatural drink, as alcohol. Let no thought of mustard or salt, or any other *solid* enter into the comparison, for neither mustard, salt, nor any solid, is a *drink* or a *natural* drink. Procure, on the side of God and nature, a little water, a little sweet milk, and a little juice from ripe grapes; and on the side of the alcohol manufacturer and death, procure a pennyworth of port wine, holding 25 per cent. of alcohol, and a pennyworth of whisky at proof, which contains 50 per cent. of alcohol. First bathe the right eye, right ear, right nostril, tongue, and any finger of the left hand in cold water, and the result will be that the nerves of every one of the senses will be refreshed by the operation. At another time try the bathing with the milk or grape juice, and again the nerves will be found uninjured, their full power of function preserved. Next take a tea-spoonful of the port wine, hold it to the right eye, pressing the eyeball into it and spreading the wine by moving the eyelid; then put some of the wine into the right ear, that it may reach the nerves of hearing; and lastly, sniff some of the wine up the right nostril. In proportion to the quantity applied will be weakness or perversion of function. On closing the left eye and trying to read a book with the wine-eneebled eye black lines along a white page will be seen, but it will be impossible to make out any of the letters, though the capitals will be seen to be larger than the common type. On closing the left ear and listening with the right one a babel of sounds will be heard, but nothing distinctly. And on closing the left nostril with the finger, and allowing a friend to bring several strongly smelling substances to the right nostril, while the eyes are kept shut so as not to know what the substances are, smells will be faintly felt, but if attempts are made to guess what they are the conjectures will in general be wrong. To reach *suspension* of function the eye, ear, and nostril require to be bathed in whisky, which being double the strength of the port wine more strongly irritates and contracts the albumen of the nerves. Or the point of the tongue may be steeped in whisky for five minutes (which is a much shorter time than the internal organs have to bear the contact when whisky is drunk), and then on drying the tongue and placing sugar on the suspended nerves of the point no taste whatever is felt; while if the sugar be removed to the middle of the tongue, which got no alcohol, the sweetness is felt at once. If one of

the fingers be steeped in the whisky for five minutes its sensibility is very much impaired. The foregoing comparison is a fair one; it is between the drinks made by God for man's body, and therefore perfectly adapted to it, and the drinks made by man and obtained only by the destruction of human food. Properly speaking water is the only drink God made for man's blood; milk and unfermented grape juice being really food, which requires to be digested and vitalized before entering the blood, while water is ready to enter the blood the moment it is drunk.

Q. 60. *What is the action of alcohol upon the brain?*

A. Precisely the same as upon the nerves of the five senses, producing, in proportion to its amount, weakening, perversion, or suspension of function.

In a fit of intoxication, or the state of being "dead drunk," the brain suffers temporary *suspension* of function; when a man who, while sober, is gentle and swears not, breaks out under the influence of alcohol into assaults, oaths, and profanity, the brain labours under *perversion* of function; and when a slight flushing is perceptible on the face, through a small quantity of intoxicating drink, there is *weakening* of brain function; for in this state no man need attempt mental work which requires calm, clear thinking, as the solving of a difficult question in arithmetic, algebra, or mathematics. The action of alcohol upon the brain is precisely the same as upon the nerves of sensation, for there is no fact of science more firmly established than this, that alcohol, when drunk, rapidly passes unchanged through the stomach into the blood, thence to the head, where, in virtue of its affinity for the brain, it accumulates, so that suspension of brain or thought function can be obtained as certainly through the stomach as suspension of optic, auditory, or olfactory function can be obtained by applying alcohol directly to the eye, ear, or nostril. That the perversion and suspension of function is caused by the alcohol contracting the albumen of the nervous matter is proved by the application of cold water to the affected nerves and brain, when the alcohol, on account of its great affinity for water, will let go its contracting vice-like grip upon the albumen and then functional power will be restored. If, while the eye cannot see, the ear hear, and nostril smell, they be bathed with water they will immediately recover, much sooner than if nature were left by itself to remove the injury. In like manner, when the brain is so affected with alcohol that a column of figures dances before the eyes, if a large quantity of water be drunk so as to dilute the alcohol which has fastened on the brain, the figures will stand still on the page. Sir Walter Scott, if he did not know the reason of this fact, at least knew the fact itself, for in his *Ivanhoe* he makes Friar Tuck quickly clear his brain of alcohol by a very copious draught of water from the spring of St. Dunstan. It will be understood that the action of alcohol, here described as a

contracting of the albumen of the brain and nerves, refers only to a single dose, not to the effects produced by continued drinking. If into a solution of albumen some alcohol is poured, the albumen will be coagulated; if now water be added to dilute the alcohol and the mixture be stirred the coagulated albumen will, through the action of the water, become liquid again. But if the liquid albumen be confined in a phial for several days with alcohol then the albumen will not dissolve if water be added, the long contact with the alcohol having effected a change in the nature of the albumen. That the brain of alcohol drinkers undergoes a change is one of the abiding facts of science; the proof is the more than 50,000 insane in asylums through the poison. But in what does the change consist? Science will no doubt prove that there is a depth of meaning in Shakspeare's words not yet generally dreamt of, "Oh that men should put an enemy into their mouth to *steal AWAY* their brain!" If the brain of any animal, as of a dog or monkey, be steeped in water some of the constituents can be dissolved, but water has not this dissolving power upon a living brain, because pure water never gets near a living brain, the water in the blood being modified by the salts, oxygen, &c., which the blood contains. If a dead brain be steeped in alcohol, or whisky, or brandy, some of the essential constituents are dissolved out—constituents which could not be dissolved by pure water; and since the action of alcohol is the same upon a living as upon a dead brain, for it hardens and contracts living tissues as it does dead flesh, the question is, Does alcohol dissolve and cause to be removed some of the constituents in the brain of drunkards? Until science discover the facts we must reason from analogy and from what we know. The two organs in the body for which alcohol has the greatest affinity are the liver and the brain. If a quantity of alcohol be injected into those veins of a dog which go straight to the heart, and it be killed very shortly afterwards, the proportion of 3 parts of alcohol will be found in the brain to $1\frac{3}{4}$ parts in the liver, and 1 part in the blood. But if the alcohol had been injected into the stomach, and from the veins of the stomach gone straight to the liver (since the liver is fed with venous blood from the stomach), then the liver being the first organ reached would absorb the alcohol in the proportion of $2\frac{1}{2}$ parts to $2\frac{1}{4}$ parts in the brain and 1 in the blood. It is thus seen that alcohol has a greater affinity for the brain than for the liver. In every drunkard the liver is diseased—as enlargement accompanied with fatty degeneration, or contraction accompanied with hardness. In every drunkard the brain is likewise diseased, sometimes being preternaturally soft, in other cases being contracted and hard; but in disease of neither liver nor brain is it yet known whether alcohol dissolves out any of the constituents or merely changes the organ by preventing its natural nutrition and causing the depositing of morbid matters. Probably it only hardens and contracts the nerves of the brain, which are cones of albuminous substance, while it may dissolve out some of the constituents in the

pulpy matter which forms the cells. The determination of this point will not add to our practical knowledge, for we already know that in neither the liver nor the brain are the natural constituents there in natural proportion, and that, therefore, the performance of natural function, and to a natural degree, with either organ is absolutely impossible. The brain being the instrumental organ of thought, when it is permanently diseased the power of the mind in its *moral* as well as in its intellectual function is forever in this life impaired. All men know that when a man takes a dose of alcohol which intoxicates or causes perversion of function, the alcohol for the time being affects the *moral* conduct of the man, producing an outburst of ill temper, or profanity, and leading to quarrels and assaults. If alcohol can act thus on the brain when one dose is taken, what is there to prevent it, when it is used for years, effecting not a temporary, but such a permanent change in the structure of the brain that the man, as regards being a moral agent, will never be himself again. On the inferior animals alcohol acts with the same degrading devilish power. Dr. Huss of Stockholm experimented upon three dogs, giving to each of them daily 3 ounces of alcohol in the form of Swedish brandy. As disease was developed, their natural ferocity was called out and increased. When so weakened that they trembled and could not stand, "the sight of other dogs roused them at all times from their apathetic condition, and they endeavoured, even in their weakness, to attack and bite them." The wretched dogs died in the eighth month, but to the last their ferocity towards other dogs was unabated. The broken temper of these dogs arose probably from the change in the brain alone—the broken temper of the drunkard arises from a change of brain and also from a change of soul, produced by the upbraidings of conscience and the hardening effect of sin upon a moral being. As respects this last injury, it may be removed by the grace of the Holy Ghost; but grace will have no more effect upon a permanently weakened brain than upon a permanently weakened liver. Even those whom God in compassion pulls out of the fire (Jude 23) must bear in this life the physical consequences of their folly. And as regards those to whom there cometh not the soothing, cleansing waters of sweet, holy grace, then in the affecting words of Charles Lamb, "Behold the *ruins* of a man, a state of death almost as real as that from which Lazarus rose not but by a miracle." The faded countenance tells of the wreck within of both brain and soul—its besotted lineaments, on which sit sadness, selfishness, stupidity, and brutishness, tell that from within pure joy, tenderness, delicacy, benevolence, religious feeling, and delight in the beautiful and true, have for ever vanished, leaving but the "canker, wormwood and the gall." The writings of Charles Lamb show that naturally he had a keen perception of the beautiful in literature and art. In his melancholy "Confessions" he speaks of the soul-degrading power of alcohol. "My favourite occupations in times past now cease to entertain. The noble passages which formerly delighted

me in history or poetic fiction, now only draw a few weak tears allied to dotage. My broken and dispirited nature seems to sink before anything great and admirable." "So much are the springs of moral action deadened within me I dare not promise that a friend's honour or his cause would be safe in my keeping if I were put to the expense of any manly resolution in defending it." Physiologists may look only at the brain diseased, moralists must look at both brain and soul. The saddest thought in connection with the subject is that alcohol in its operation on the brain involves the immaterial mind. If a flat bar of iron be placed in a blacksmith's fire, the part which is covered with the burning coal conducts heat to that portion outside the fire, and if on that outside part a piece of gold, as a sovereign, be placed, it will rise in temperature as the iron rises. When the bar is removed from the fire the gold will cool as the iron cools. In a relation as intimate does the soul stand to the temporary changing atoms of the brain; if they be excited and perverted by alcohol—the only brain perverter in the world—then a Noah is as helpless as a child, a Lot arrays himself in infamy, a wise man babbles like a fool, and he that fears God utters oaths. While a man is swearing it is not the atoms of the brain, whose brief existence within the body is often less than two months from the time they enter as food and depart as refuse; it is the soul itself that supplies to the tongue the memory of words; it is the immaterial, priceless, undecaying breather of thought and heir of immortality, over whose degradation the demon spirit of alcohol is at the moment triumphing. That material demon is more powerful over man for evil than all the spiritual legions of darkness, with Satan at their head, combined. Their united force could not compel men to blaspheme the God of their life as alcohol does every day. Scripture declares if we resist them they will flee; but when a man has taken a perversion dose of alcohol could all the angels of heaven, with Michael at their head, could even the Holy Ghost, enable that man to resist? Resistance to the material demon when he enters a man is impossible, and therefore it is that He who sitteth on the circle of the universe ceaselessly, from year to year, listens to a chorus of malediction from the earth, for when Britain's swearers are asleep the drunken revellers of other lands send up their imprecations far beyond the stars. Through alcohol earth, as it moveth round, blasphemeth God.

Q. 61. Having now considered the FACTS of science which prove that the tendency and goal of alcohol, even in small quantities, is to injure the body, it is our duty to gather together the appearances that seem to show it is not injurious. Against every appearance God has supplied a fact or facts to overturn it. Some men who take intoxicating drinks every day live to old age and seem

to enjoy good health, and therefore it is said that alcohol in small quantities is not injurious. What are the facts which overturn this appearance?

A. 1st. That only a large number of cases can be the basis of a general inference; and that when a thousand or more of abstainers are compared with an equal number of small-dose drinkers, the death-rate among the abstainers is always found to be the lowest. 2d. That when a small dose of alcohol is within any man, scientific tests can prove it is hurting him by causing less excretion of carbonic acid and urea, quicker beating of the heart, retention of decayed matter in the blood, and consequent diminished healthy action of the body. 3d. That when small-dose drinkers are dissected after death the various organs are found in a condition more or less diseased through alcohol.

Nothing is so convincing with most men as a money test. In the United Kingdom Temperance and General Provident Institution, London, the receipts and expenditure in the temperance and general sections have for twenty-five years been kept quite distinct; and the result has proved in a remarkable manner how profitable to health and purse is abstinence—for all the members of the temperance section are abstainers, while those in the general section are so-called moderate drinkers. The Provident Institution has adopted the Carlisle Tables of annual mortality to be expected among the assured, and it expects as many deaths among every 1000 of abstainers as among every 1000 of small-dose drinkers. The profits of each section are divided among the members of that section only. We present the table of expectations and realizations during the five years ending 31st December, 1875:—

MORTALITY, 1871-75.

	TEMPERANCE SECTION.				GENERAL SECTION.			
	EXPECTED.		ACTUAL.		EXPECTED.		ACTUAL.	
	No.	Amounts.	No.	Amounts.	No.	Amounts.	No.	Amounts.
1871	127	£24,051	72	£13,065	233	£46,105	217	£40,158
1872	137	26,058	90	13,005	244	48,883	282	50,575
1873	144	28,052	118	22,860	253	51,463	246	49,840
1874	153	29,648	110	24,683	263	54,092	288	57,006
1875	162	32,010	121	24,160	275	56,907	297	57,483
5 years	723	£139,819	511	£97,773	1268	£257,450	1330	£255,062

From this table it is seen that among the small-dose drinkers 1330 died, when, according to the well-constructed Carlisle Tables, only 1268 should have died—an excess of realization above expectation of 62, or 5 per cent. According to the same rate of expectation, 723 abstainers should have died, but only 511 really died, leaving a difference of 212 who did not die, or a deficiency in the realization of 29 per cent. As to money, the small-dose drinkers swallowed nearly all the expectations, leaving only a balance of £2388, which provided only a miserable bonus; while the abstainers, a smaller body of members, were really the only moderate swallowers of expectations, and left a balance of £42,046, or about twenty times larger a sum for bonuses than in the general section. No wonder the small-dose drinkers desire to share the abstainers' profit, and that the actuary of the institution should tell them, as he did this year, "The bonus divides itself. It is a question of fact. I cannot help people dying. Those who don't drink don't die so fast." The temperance section during the last five years has been unusually prosperous, probably from many *young* healthy lives rushing in to share the profits; and, on the other hand, the small-dose drinking section, from causes which could be explained, has appeared to disadvantage. To show the necessity of a wide basis of induction in all matters statistical, and the accuracy of the Carlisle Tables of expected mortality on the average of many years, we give the expectations and realizations of the Provident Institution for ten years.

	TEMPERANCE SECTION.		GENERAL SECTION.	
	Expected claims.	Actual.	Expected.	Actual.
1866—1870, 5 years,.....	549	411	1008	944
1871—1875, 5 years,.....	723	511	1268	1330
Totals, 10 years,	1272	922	2276	2274

This table shows that when 2276 small-dose drinkers were expected to die, only 2 of them escaped; whereas out of 1272 abstainers expected to die, according to the same rate of mortality as that for the general section, 350 of them escaped—a deficiency in the realization of 27½ per cent. It therefore appears that for every 100 small-dose drinkers who die, only 73 abstainers will die. Truly then this is a commandment with promise, "Look not thou upon the wine when it is red," that thy days may be long and peaceful in the land where the Lord thy God hath placed thee. All known statistics lead to the same conclusion. A friendly society in England, the Foresters' Lodge of Streatham Common, has small-dose drinkers and abstainers for its members. The expectation of sickness, and so of requiring aliment, is equal for both sections; but such has been the good health of the abstainers during the seven years ending 1875, that instead of requiring £180, 11s. of sick money, as expected, and as they would have received according to the ratio paid to the drinking section,

they received only £56, 11s., being less than a third of the expected sum, and thus by their abstinence they preserved their health and saved £124 to the lodge. It is plain that abstainers are the salt of friendly societies and general life assurance offices, and that if they were wise they would form societies for themselves. In India two small-dose drinkers die for every total abstainer. In a division of British soldiers in India 450 were abstainers, of whom 5 died in a year, which was at the rate of 11 per 1000 men; 4318 were classed in the government returns as temperate, of whom 100 died in the year, being 23 per 1000, or more than *double* the mortality of the abstainers; while 942 hard drinkers took the quick march into the grave, the death rate among them being 44 per 1000, or four times that of the abstainers. Since our government has these returns *why* does it allow grog to army and navy?

Q. 62. Some men appear to have been cured of their diseases by the use of alcohol; therefore it has been said that though alcohol be not a natural food or drink, it is still a useful medicine. What are the facts to overturn this appearance?

A. 1st. That whenever a number of cases of disease sufficiently large to form the basis of a general inference are taken, it is found that the death rate under alcohol treatment is greater than under treatment with any proper medicine. 2d. That many diseases, as indigestion, gout, &c., are incurable except through abstinence from intoxicating drinks. 3d. That no disease can be cured except by the principle of life, which is the sole agent of cure; that no substance is a medicine which does not tend to place the principle of life in favourable circumstances to exert its power; and that since alcohol opposes the principle of life in repairing, heating, and cleansing the body, it is impossible that it can be a medicine.

Alcohol can deaden pain, as, for instance, pain in the bowels, but to deaden pain is not to cure disease. Alcohol applied to cholera cases is almost certain murder, though it will deaden the pain. The alleviation of toothache by alcohol is transient, not being a cure. It is singular that while every real medicine, as Peruvian bark, sarsaparilla, and a host of well-known herbs, are the product of *life*, all the combined elements gathered together by the life of the plants being retained in quality and quantity, men should cling to one and only one substance, alcohol, which is the product of death and decomposition, with the native elements of the true fruit partially scattered to the winds, and the remainder perfectly changed in

quality. Without doubt the London Temperance Hospital will confirm already known statistics, and prove that without the slightest use of alcohol, even in medicinal tinctures, it can cure diseases of every kind with greater speed and less than half the mortality of any hospital in Britain in which alcoholic drinks are freely given to the patients. Medicines prepared by harmless solvents, as acetic acid, glycerine, &c., are safer and more powerful than alcoholic tinctures. The physical breath of life to man is oxygen, as the pent-up dwellers in towns know when they are a month in the country or at the sea-side. There can be no recovery from disease unless the stomach digest aright, and the blood be red with oxygen. The distinctive action of alcohol is to injure digestion and deprive the blood of oxygen, and thus prevent a curc. Not until alcohol is discarded as a medicine can drunkenness be completely suppressed. This rests on fact. Distilled liquors when first introduced were used solely as medicine (the water of life), but speedily they became beverages, and were proved to be the water of death. And this in all time coming shall be the case so long as the nature of alcohol and of man remain the same—it generating a craving and he craving for excitement, stimulus, and a refuge, however transient, from uneasy sensations produced by toil or care.

Q. 63. Some men who drink intoxicating liquors grow fat, therefore it is said that alcohol is fattening. What facts overturn this appearance?

A. 1st. The drinkers of ardent spirits, a mixture of alcohol and water, do not grow fat. 2d. Though some drinkers of malt liquors grow fat, the fat which is produced by such drinks, being to a great extent caused by the retention of dead atoms in the body which should have been expelled, is unhealthy in its nature, an encumbrance to carry about, and a source of disease, the blood having its building power impaired.

Every stoker knows that a thin fire on the furnace bars and a sharp draught of air are necessary to the rapid generation of steam and power. A layer of coals on the bars only four inches deep will produce double the steam of a layer eight inches thick, for the extra thickness obstructs the draught. A human body, heavy and fat through the use of malt liquors, is a layer of eight inches thick, the combustion of fuel is slow, the generation of physical force for work is small, and the furnace is filled with used-up ashes that only prevent the engine from giving out its full power. And should such a body meet with accident or disease, recovery is almost impossible, the plastic power of the blood being very much deteriorated. The blood of some heavy drinkers contains forty times as many fatty and

dead atoms as the blood of a healthy abstainer. Rigid chemical analysis was employed to determine the comparative flesh-forming value of various kinds of wine and lean beef—one pound weight of meat, costing a shilling, was found to contain more nourishment than fifteen pounds sterling worth of wine. Let men no longer be deceived by alcohol; but evaporate it and the water from the wine and malt liquors they use, the solid residue will be such that no man in Britain would take it if supplied free of charge, and yet for that unpalatable, indigestible, solid refuse men willingly pay at the rate of five shillings an ounce in their wine.

Q. 64. Some patients under incurable diseases take nothing but wine or spirits and water during the last few weeks of their life, and it is therefore said that alcohol must be a fuel food. What are the facts that overturn this appearance?

A. 1st. That when men are kept entirely from food, the excretion of carbonic acid and urea is very much less than when food can be taken. 2d. That when such patients are weighed before and after being fed on alcohol alone they are found to be lighter, so that in fact they have been living on their own flesh instead of on alcohol.

The Munich experiments show that after a dog had been kept ten days without food it expelled only one-third the quantity of carbonic acid it gave out after a full meal, and twenty-two times less urea during starvation than when well fed. A man kept several days without food gives out only about one-third of the carbonic acid he generates when digesting food. The waste of tissue in the body of a dying patient is therefore comparatively small, and yet, according to a common phrase, he is reduced to skin and bone, the body itself supplying the fuel while life endures.

Q. 65. Since then every appearance in favour of alcohol is overturned by facts, how is it that rational men take alcoholic drinks?

A. God has declared alcoholic wine to be a mocker (Prov. xx. 1), a substance that by its peculiar action gives sensations quite opposed to scientific truth; thus it deceives its dupes and leads them on from one stage of drinking to another.

Q. 66. It is a scientific fact that alcohol diminishes the

heat and heat-generating power of the body; what deceitful sensation does it give in opposition to this truth?

A. It shocks the *organic* nerves, which immediately send a rush of blood from the internal organs to the skin, where the nerves of sensation abound; these feel the hot, temporary flushing of the fresh flow of blood to the surface, and the victim, not feeling the ebb of blood from within and consequent cold inside the body, believes that he has become warmer.

By deadening the sensibility of the nerves alcohol prevents external heat or cold from being so strongly felt as before. Nevertheless the heat or cold remains in the atmosphere to the same extent as before, and affects the body to a greater extent than before, simply because the body has been disabled by the deceiving alcohol.

Q. 67. It is a scientific fact that alcohol, even in small doses, weakens muscular power and the ability to work. When a man is wearied what deceitful sensations does alcohol give in opposition to this truth?

A. By deadening the sensibility of the nerves it removes, for a few minutes, the feeling of weariness and uneasiness; and by quickening the heart and setting all the internal organs into commotion to expel it, the alcohol produces a feeling of roused energy and makes the victim believe he is fit for work to any amount, at the very moment when his strength is being rapidly expended in expelling the deceiver.

Scientific writers have hitherto underrated the weakening influence of alcohol. They have said it is not a natural stimulant like food to produce fresh strength, but merely a whip to call out whatever force the frame contains. But a whip on retiring from the skin of a horse does not carry any of the animal's strength with it; whereas the labour of casting out the alcohol from the body is a serious and needless expenditure of power. The proof of this is at hand for every man. When two regiments of soldiers have been fatigued by a march of fifteen miles, give to the one the usual amount of grog as a drink, and to the other a drink costing half the price of the grog, and composed of oatmeal and sugar, with lemon or lime juice as a seasoning, the whole well boiled into a pleasant gruel—on starting the march afresh it will soon be seen how much the whip alcohol has exhausted the men and how much the natural drink has refreshed the other regiment. Alcohol only for a brief space *masks* languor and exhaustion. When the mask is removed by the expul-

sion of the alcohol the pain and fatigue are double what they were before. Experience in every climate has established this fact.

Q. 68. It is a scientific fact that alcohol, by its action on the digestive juices and organs, opposes the proper digestion of food. When the appetite is languid what deceitful sensation does alcohol give to make it appear that it is favourable to digestion?

A. By deadening the sensibility of the nerves of the stomach the previous disinclination to food is unfelt; and by irritating and rousing the stomach into an unnatural state the victim can cram it with food, and then believe that, because he can swallow more, he has regained a healthy appetite.

By this deceitful action upon the stomach thousands of the upper classes come to lean upon alcohol as a necessary stimulus, until incurable indigestion is established, or they become irreclaimable drunkards.

Q. 69. In view of all the facts of science, what is the only fit name which the voice of God in nature pronounces upon alcohol?

A. Alcohol the deceiver and destroyer—the enemy of God and man.

The only substance in the world which forces men to curse, swear, and blaspheme the God of their life—the only substance cherished by men which is the product of decomposition—a substance never produced unless men with their own hands invoke death and putrefaction to diminish and transform the qualities of human food—a substance that has desolated earth, and ruined the bodies and minds of men to an extent Omniscience alone can estimate.

VOICE OF GOD IN PROVIDENCE.

Q. 70. What is meant by the phrase, "the voice of God in Providence," when applied to the use of intoxicating drinks?

A. The facts which, in Providence, follow the use of alcoholic drinks as beverages, and are the indications of God's will regarding their use.

Under the moral Governor of the world there is a Mount Gerizim

and a Mount Ebal in every land (Deut. xxvii. 12, 13), blessing for obedience to moral law and judgment for disobedience.

Q. 71. While each of God's three voices should be listened to by itself, it is allowable and proper to permit the fullest and clearest one on food, drink, and medicine (which is that of Nature) to throw an interpreting light upon the other two. Does the voice of God in Nature lead us to expect that the use of alcoholic drinks as beverages would, in Providence, be followed with punishment?

A. The voice of God in nature clearly proves that the use of alcohol is physiologically wrong; and since what is constitutionally wrong for man cannot be morally right, it is evident that judgments in Providence *must* flow from the use of alcohol as beverages.

Q. 72. Has God ever interposed on behalf of any church or nation to prevent alcohol, when used, from working out its natural effects?

A. Ever since Noah, the favourite of Heaven, was overcome with wine, God has allowed alcohol to work out injury to man with the certainty and power of a law of nature.

Q. 73. Why has God refused to prevent alcohol from triumphing over good men, as Noah, Lot, and Solomon, and making priest and prophet to stumble and sin (Is. xxviii. 7)?

A. Because God could not encourage man to violate moral law by protecting him from the consequences of his own wrong actions.

The grace of the Holy Ghost is not more precious than the soul of man, and if God allows the soul to be trodden under by alcohol when the brain has received a perversion dose of it, He certainly will not interpose to prevent grace being also trodden under with the soul. He will not protect even grace from the natural action of counteracting agents.

Q. 74. What effect had, first, abstinence from intoxicating liquors, and then the use of them, upon the great nations of antiquity?

A. At their origin Nineveh, Babylon, Persia, Greece,

and Rome were poor, and so practised *self-denial*, abstinence from alcohol, frugality, industry, and hardy virtues, which developed physical strength and moral power; but when they became rich they practised *self-indulgence*, and then were speedily ruined by fermented wine, luxury, and vice.

When God resolved to chastise or destroy a nation he had only to give it up to the consequences of its own drunkenness. When the Jews had become fearfully degenerate God said, "I will fill all the inhabitants of Jerusalem with drunkenness and destroy them" (Jer. xiii. 13, 14). When Nineveh, through drinking, had backslidden from the reformation under Jonah, and was ripe for destruction, Nahum prophesied, "When they are drunken as drunkards they shall be devoured as stubble fully dry" (Nah. i. 10). And when the cup of Babylon was full God declared, "I will make drunk her princes, wise men, captains, rulers, and mighty men, and they shall sleep the perpetual sleep of death, saith the king whose name is the Lord of hosts" (Jer. li. 57).

Q. 75. What has been the effect upon all past churches and nations of beginning to use alcohol, socially and as a beverage, in what is called moderation?

A. That though no church or nation ever desired to become drunken, yet the use of alcohol in all churches and nations, in all ages and climes, has led to drunkenness, so that historically the use has been the abuse, and so-called moderation the certain parent of excess.

Q. 76. What have been the steps between tempting man by offering him alcohol for use, and death, the natural terminus of drunkenness?

A. Since the nature of man and of alcohol has been the same in all generations, the steps, slightly affected by climate and other circumstances, have been: alcohol offered for use—drinking—drink-crave—drunkenness—demoralization—want—crime—suffering and death.

Q. 77. But since man has no natural appetite for alcohol, how has the offer of it for use invariably in every church and nation led to drinking?

A. Man is never content with his existing condition, and having a strong natural desire to get rid of all uneasy

sensations, pains, troubles, and cares, and yearning for a change, he is quite willing, especially in company, to follow alcohol to its palace of delirium and narcotic oblivion.

Q. 78. But is the palace of delirium and narcotic oblivion a true deliverance from pain and care?

A. The name of man is folly, his flesh ruleth over his spirit, he careth for the present more than for the future, he bows to fashion more than to conscience, and therefore he is quite willing to have a brief change of sensations—to forget himself and his condition by deadening the sensibility of his brain and nerves, even though he knows that his pains and cares will return with tenfold more force when the deceitful alcohol has left his body.

Q. 79. In what manner does frequent drinking produce a drink-crave?

A. Alcohol, by deadening the sensibility of the brain and nerves, makes sure that an ever-increasing quantity of it must be taken to reproduce the desired change of sensations. This increasing quantity of alcohol effects at last such an alteration in the nature of the brain and nerves that they strongly cry for more of the deceiver that has destroyed their original sensibility and function.

Q. 80. In what manner does drinking lead to drunkenness?

A. Water soothes and satisfies all the tissues of the body, alcohol irritates and dries them up by extracting from them their natural quantity of water; therefore the more a man drinks of alcohol the drier and thirstier he becomes; then, in the language of the Bible, he adds drunkenness to his alcoholic thirst (Deut. xxix. 19). And the painful depression of body and mind which remains when alcohol has escaped from his body makes the victim seek it yet again (Prov. xxiii. 35).

When a man has taken salted fish no exertion of his will can save him from becoming thirsty; a much stronger thirst is the natural and inevitable result of drinking alcohol. The criminal, then, that should be brought before the bar of condemnation in the church is not the drink-crave, but small-dose drinking, which produces the

drink-crave. In a justiciary court an *effect* is never placed at the bar—but the *cause*, in the person of the criminal that produced the effect.

Q. 81. *In what manner does drunkenness lead to demoralization?*

A. Every act of drunkenness is a sin, and sin cannot be committed without hardening the moral nature of man. Alcohol effects the degradation of man chiefly by destroying the power of his WILL.

The soul of man is not, as some ancient heretics of the school of the Nicolaitanes supposed, like a gold coin, which if it fall into mud contracts no contamination. Every fall into sin of any kind stains and hardens the soul. The destruction of a drunkard's power of will is produced by two causes:—1st, the change which alcohol effects on the brain. The truth cannot be too strongly enforced that the soul is helpless if its organ be disabled. How can a man hear, if the nerves of the ear be deranged—how see, if those of the eye are diseased—how think or will aright, if the brain be affected? 2d. Through the action of the law of habit. A drunkard by having acquired the habit of yielding to alcohol, the habit of refusing to listen to his conscience, becomes the slave of such habit—conscience, and will come to be mere nominal faculties of his mind. He that committeth sin, saith Christ, is the *slave* of sin—a creature *bound*—whose will to do the right may never attain the strength it once possessed.

Q. 82. *What power has God given to man to rule over his brain, the organ of thought and action?*

A. His MIND, and nothing but the soul of man in its power of *will* should ever be allowed to operate upon his brain.

Q. 83. *Does alcohol, when it is taken into the body, operate on the brain of man independently of the will of his soul?*

A. It does, and in this consists the unspeakable folly of taking intoxicating drinks, for the will of alcohol is always more foolish, cruel, and immoral than the will of the mind, the will of alcohol being guided by neither reason, conscience, nor heart.

Every day in police courts wives who have been barbarously assaulted by drunken husbands declare that when these husbands are sober they are gentle and kind. Every fit of semi-intoxication is one of temporary madness. In dreaming, insanity, and semi-intoxi-

cation reason is dethroned, for the trains of thought are not then under the control of reason, either in their origin or progress, and things which are unreal are taken to be real. Thus in dreaming men run from the horns of a pursuing mad bull, or from other fancied danger, when no danger is near; and equally does the man who has taken a dose of alcohol sufficient to cause perversion of brain function imagine opposition, quarrels, and offence, and then strikes out his arms with murderous force, or runs into the commission of sins he would be ashamed to think of when sober.

Q. 84. Explain more fully how alcohol leads to intellectual and moral degradation.

A. Intellectual eminence is the offspring of calm and patient attention; moral strength, of serious contemplation and resolve. And since alcohol is the spirit of frivolous gaiety—mere bodily pleasure and forgetfulness of consequences and duty—it is the enemy of all intellectual and moral progress.

Q. 85. In what manner does alcohol lead to want and harden the heart?

A. The intense drink-crave must be gratified, whatever else be sacrificed; thus business and work are neglected for drinking, until want and rags clothe the victim, then alcohol, with its foot upon his will, makes him deaf to the voice of duty, and careless of the tears of wife, children, and friends.

The drunkard is the most selfish of men, because the most miserable. On coming out of a fit of intoxication he is the most melancholy being in the world—feeling he is a slave and lying bound at the bottom of a pit.

Q. 86. In what manner does alcohol produce crime?

A. Drunkards will steal rather than want drink, and the will of alcohol being irrational, brutal, and immoral, it brings forth sin as soon as it has dethroned reason and conscience.

Metaphysically speaking, alcohol has not a will, but it has the power to lay low the will and mind of man. By perverting brain-function it perverts reason and conscience and will function; then the lower and animal qualities of the man reign and rage. This perversion, being caused by alcohol, may be said to be effected by the will of alcohol. On the question of the power of alcohol to dis-

solve and remove some of the constituents in the brain, and thus effect a change in intellectual and moral power, see note to Question No. 60.

Q. 87. *Have civil penalties against drunkenness ever been sufficient to prevent national drunkenness, want, and crime, if drinking has been allowed and encouraged socially as a beverage?*

A. The penalty of fine or imprisonment upon those found "*drunk and incapable*" in Britain has not prevented national drunkenness, and even a death penalty did not prevent the nations of antiquity from becoming drunken when they began to drink.

The phrase, "You cannot make men sober by act of Parliament" is true in the sense that, in spite of legal penalties, you cannot keep men from drinking and being drunken after they have been accustomed to the free use of intoxicating liquors, and have a large supply offered to them for sale, simply because alcohol, *if supplied*, is stronger than law. The drink-crave neither remembers nor cares for penalties, and a glass of alcohol in the brain of a company of drinkers has no memory for *consequences*. All the laws of the early nations availed not to prevent national intemperance after alcoholic liquors were freely supplied to the people, for the supply so completely changed the moral sense of the people, rulers and subjects alike, that the laws became a dead letter. Severe indeed were the laws of the ancient nations against drinking. In Rome no man dare taste wine till thirty years of age, and it was death for a woman to take fermented wine. In the early times of the Republic some Roman ladies were scourged to death, others starved to death, for drinking the forbidden wine. Yet so degenerate had the Romans become in the days of Paul that Pliny speaks of the men as having been made only to swallow wine, and of the women Seneca thus writes—"Women now value themselves upon carrying excess of wine to as great an extent as the most robust men; like them they pass whole nights at table, and with a full glass of unmixed wine in their hands they glory in vying with them, and, if they can, in overcoming them."

Q. 88. *Did any religion ever succeed in preventing drunkenness, if the people were permitted to take intoxicating drinks in moderation so-called?*

A. No church has ever succeeded in preventing drunkenness if its members believed that their religion sanctioned the use of fermented drinks, and began to use them frequently in small quantities, for the small quan-

tity has ever been the seed of the coming harvest of drunkenness.

Small-dose drinkers may be divided into two classes—the *occasional*, who taste very seldom, and the *regular*, who take alcohol frequently. The brain and nerves of occasional drinkers have always time to recover their natural tone before being subjected to another dose, and therefore they run little risk of becoming drunkards. Very different is the case with frequent drinkers, for such is the function-deranging power of alcohol that though antediluvians had come under the most solemn obligations never in their life of 900 years or more to exceed a single glass of wine per day, the certainty of alcohol effecting a change in the brain and nerves, and so a change of resolution, was only a question of time. Some may have stood firm for 100 years, others for a still longer period, but the inevitable change of nerve-structure would come at last, and with perverted function of brain would come perverted thought, feeling, and will. The melancholy fact, however, is unquestioned, that no branch of God's church in ancient or modern times has kept its members from drunkenness, if it believed that God sanctioned the use of fermented liquors in small doses, and so partook frequently of them. Priest, prophet, and people in the Jewish church were, in the words of Isaiah, "swallowed up of wine" (Is. xxviii. 7), and were sent into Babylonish captivity to learn abstinence. And ever since Paul styled drunkenness a lust of the flesh the Christian church has been disgraced with intemperance. The first centuries beheld Christians lying dead drunk on the graves of the martyrs whose memory they had that day been celebrating—lying dead drunk within their churches on the Sabbath-day after the celebration of the supper and copious drinking at the love-feast which followed. The middle centuries beheld Christians dead drunk within their sacred places on the feast-days of the church, as Christmas, &c.—beheld the excesses and immoralities of "glutton masses," "feast of the ass," "wakes," &c.; while the nineteenth century beholds many thousands of *baptized* Christians, in even enlightened Britain, lying "drunk and incapable" in police cells on Sabbath as well as on other days of the week, so true is it that alcohol laughs any religion to scorn that sanctions its "moderate" use among the people.

Q. 89. *Has no religion of any kind ever succeeded in restraining drunkenness?*

A. Any heathen religion, as that of Fo or Mahomet, which taught sound doctrine regarding alcohol, and forbade its use, has always succeeded better in restraining drunkenness than the Christian religion when wrongly interpreted; and thus the Chinese, Hindoos, and Maho-

medans are a more sober people than even the British, with their missionaries, churches, and Bibles.

Q. 90. How should a false religion be more powerful in keeping its members sober than a true religion?

A. Because the false religion taught the truth regarding alcohol, and bound the people to abstinence by their conscience; whereas the true religion, wrongly interpreted, taught the people error, and encouraged them to drink.

It is better for the devil's purposes to have the true religion neutralized by the drunkenness of its professors—than to have a false religion preserving by means of abstinence its adherents from the crime and demoralization caused by drunkenness. The devil will never seek to disturb the abstinence commanded by the Koran, for he has its followers already caught in the net of *error*; while his whole strength has ever been put forth to entrap into the net of drinking those who were in possession of the Bible. His policy is, Let drunkenness overcome professing Christians, and then they are mine as surely as if they were heathens of any class or clime. No doubt Satan gloried when he saw how well the doctrinal creed in the religion of the Turk was adding to his kingdom. It is possible that he glories still more over how drinking and drunkenness among professing Christians adds to his kingdom—adds those who through their possessing the Bible imagine they are free. It may be that the prince of darkness and his hosts glory more over having hindered through drinking and drunkenness the progress of Christianity during the last eighteen centuries than over any other of their plans for ensnaring men. Is it thus they sing?

Hail Bacchus, Britain's chosen God,
While thou dost reign and hold the Rod
"ABADDON"* shall command.
If fleshly Christians scorch their dust,
And gratify the grov'ling lust,
Christ's throne rests but on sand.

Q. 91. Has their religion been sufficient to preserve Mohammedans and other Eastern nations from drunkenness?

A. It has generally been sufficient, but since man, when tempted, is weak, many have fallen before tempters and destroyers, as British alcohol traders, who have freely offered them intoxicating drinks for purchase and use. The tribe of the Rechabites, not having been tempted,

* See Rev. ix. 11.

have been faithful to abstinence for 2700 years (Jer. xxxv. 19).

It is often said, "It is not the supply of intoxicating drinks that causes the demand, but the demand that causes the supply." This is not a truth, but the complement of a truth—the truth being that men would never ask for intoxicating drinks if they knew nothing about them, or if the drinks were kept beyond their reach; the complement being that when a supply has produced a drink-crave it can, to a certain amount, maintain a demand, while the example and influence of drinkers can extend the circle of drinking and drink-crave, and thus enlarge and perpetuate a demand. The Red Indians did not ask British or American traders for brandy until *after* a supply, unsolicited, had been introduced; nor the aborigines of any heathen land ignorant of alcohol inquire for intoxicating drinks until *after* the British had thrust them in for gain. Human nature has a capability of learning to use anything whatever that ministers to fleshly gratification. Four hundred years ago not a man in Britain asked for tobacco, and to-day none would seek to purchase it if it had never been brought into the land; but the supply, not asked for at first by the nation, has generated such a demand that now men and boys can injure themselves and annoy others by throwing about fifteen million pounds sterling a year into the air as smoke. The principle of modern trade is—if a commodity be such as human nature can use it, its consumption will be great in proportion as the sale is pushed, and that whether the article be newspapers, sewing-machines, or absinthe. If there was only one railway train between Edinburgh and Glasgow in a day, the passenger traffic would be reduced by probably one-half, since the pleasure-seeking portion, that at present can get a train at every hour, would not incur the inconvenience of making their arrangements bend to a single fixed hour. And in like manner, if public-houses in cities were a mile apart, acquaintances casually meeting each other in the street on a wet day would not walk half a mile to treat one another. In proportion as the purchase of alcohol is convenient, and the sale is pushed by those who have a money interest in the consumption, will be the drinking of any land.

Q. 92. What human means then are required to secure abstinence in any nation?

A. The three voices of God rightly understood must bind men to personal abstinence by their reason, conscience, and heart; and bind rulers to prevent the entrance of temptation by prohibiting the manufacture and sale of intoxicating drinks.

Q. 93. Having now seen the facts in Providence that show God's displeasure against the use of alcoholic drinks,

it is our duty to consider the appearances that seem to prove God is not against their use in moderation, so called. What answer can be given to the objection that all the drinkers in a nation do not become drunkards?

A. Many sufficient answers can be given; as, 1st. It is not to be expected that all drinkers will become drunkards, since a drink-crave depends on the frequency and quantity of alcohol drinking. 2d. That foolish speaking, quarrels, assaults, even murder, proceed from those who are not confirmed drunkards, and yet show the evil of drinking as forcibly as the cases of drink-crave. 3d. That it is not the design of Providence to give speedy and full retribution in this life to men, in order to exhibit every evil-doer bearing the punishment of his folly or sin, as a warning to others to refrain.

Q. 94. Why is it not the design of Providence to allow swift and visible punishment to fall upon evil-doers?

A. 1st. To try men's hearts whether they will or will not sin through the hope of escaping punishment. 2d. To give men time for repentance. 3d. To conceal the secrets of the last judgment until the proper hour.

God plans—1st. How to test men by giving them liberty of action: 2d. To allow space for reformation. 3d. To make this life tolerable, for it would be unbearable if all relatives knew from visible marks here the future doom of each other.

Q. 95. What effect has this general design of Providence upon men?

A. 1st. Because sentence against an evil work is not executed speedily, therefore the heart of the sons of men is fully set in them to do evil (Eccles. viii. 11). 2d. The darkness caused by Providence seeming to take the side of evil-doers, often distresses the simple, and even those who know and love God (Ps. lxxiii. 3-14).

Q. 96. But does Providence ever in reality take the side of evil-doers?

A. No; for the plain tendency and goal of Providence is to reward virtue and punish vice; and a sufficient number of cases of punishment are always given to con-

vince those who wish to do well that God is ever on the side of right.

Were God not in this life prevented by His own design of testing men He would always array virtue in the white shining robe of reward and vice in the dark gloomy garment of punishment. And yet He only partially conceals Himself, for the sunshine of His approval rests secretly on the heart of those who do well, there arises such a sweet complacency that men have come to say that "virtue is its own reward;" and there is, on the other hand, a dissatisfaction—a gloom in the hidden recesses of the sinner's soul, that makes Him often feel, what his fellowmen do not suspect, that a God of retribution is near. Dishonest men may seem to succeed and be happy; but men, from the general course of Providence, have come to say, "Honesty is the best policy."

Q. 97. Has God, in every age and church, given sufficient evidence of His approbation of abstinence and disapproval of the use of alcohol?

A. Since every evil that flows from drinking has always been prevented by abstinence, and drinking in every age, church, and nation has been visited with a certain amount of punishment, it is perfectly clear that God is on the side of abstinence and is against drinking. God is ever on the side upon which He sends no judgments, and is always against the side upon which He pours His judgments.

Men say that "intemperance is the greatest curse that ever afflicted our world;" but intemperance is only a result of drinking, a judgment flowing from it, therefore God is against drinking. The extent of drunkenness was sufficient in Jerusalem (during Isaiah's time), and in Nineveh, Babylon, Persia, Greece, Rome, &c., before their overthrow, to prove that God was against drinking, and is sufficient now in Britain to show He is still against drinking. The £142,000,000 spent annually in Britain on intoxicating drinks would carpet a pavement about four and a half feet broad with five pound notes the whole road between Glasgow and London, a distance of 404 miles. The returns from this annual ruin investment of one hundred and forty-two millions sterling could be thus placed in a parallel line with the five-pound note covered footpath. At every quarter of a mile there would be 115 public-houses, and around them, as the *yearly* result of the drink they sold, would be 67 persons dead, 32 lunatics, 3 suicides, 2 *public* cases of aggravated assault upon wives, and children, or of stabbing or murder, 1670 paupers, 220 cases of drunk and incapable in police cells, 98 cases of assault, 37 cases of illegitimacy, 98 prostitutes, 25 thieves, 124 vagrants, and 309 con-

firmed drunkards—all clustered together within *every* quarter of a mile, with 45 policemen looking on, and 1200 Sabbath-school teachers, city missionaries, and clergymen trying to prevent these evils; while along the road would be heard continually oaths, blasphemies, shrieks, and sobs, and at every few miles would be found a gibbet with criminals suspended, who, when made insane by the drink, had violently shed the blood of the innocent. Are these returns from our drinking customs not sufficiently large to show that Providence is against drinking? Since this mountain load of sin and misery would cease at once if abstinence, *the only cure*, were adopted by all, would not the entire cessation of the drink judgments be complete proof that God was on the side of abstinence—as forcibly and certainly prove it as if He sent all the angels in heaven with trumpets to declare to earth that with His whole soul He loved abstinence and hated drinking?

Q. 98. What answer can be given to the objection that all modern drinking nations do not become drunken?

A. Many just answers can be given; as, 1st. It is not to be expected that drunkenness will come from that portion of a nation which, from any motive or cause, entirely abstains. 2d. That among the drinkers of any nation drunkenness is found in proportion to the encouragement given to drinking by government, religion, or prevailing custom. 3d. That the evils of drinking are not to be measured by visible public cases of drunkenness, but by all the returns from the drinking, as poverty, assaults, murders, hospital cases of disease, insanity, suicide, and immorality.

A varnished nation like France may seem to be less drunken than an open-pored country like Britain, because the cases of *public* drunkenness are fewer in the streets of Paris than in those of London, Liverpool, or Glasgow; but the *total result* statistics of Paris show it is a drunken city. Besides, the course of Providence allows a difference between one nation and another, arising from climate, strength of liquors used, and other modifying causes, and yet in *every* nation God, by the evils which flow from drinking *in that nation*, shows that He is against drinking, even where the judgments upon it are least. No comparison between nations can, therefore, affect the argument.

Q. 99. What answers can be given to the objection that only a small proportion of drinking clergymen or other church office-bearers become drunkards?

A. 1st. That the evils flowing from their drinking are not to be estimated by the mere proportion of drunkards among them, but from the total results upon themselves and others. 2d. That since drunkenness is a sin which excludes from heaven, and the proportion of drunkenness among them could be entirely prevented were all personal abstainers, it is plain that God is on the side of personal abstinence and against the small-dose drinking which begins the drunkenness, excluding from heaven.

Though thousands of Christian men drink to the extent called moderation, and are believed by the public never to have gone to excess, still the fact remains that their moderation *is excess*. No man drinks a less quantity than is sufficient to produce a change of bodily sensations, for if his drink produced no felt result he would not be at the expense or trouble of taking it, and that felt change of sensations can be scientifically proved to be incipient or partial change in the nerves and brain, or, in other words, a faint intoxication. Luther could drink moderately of beer in company for hilarity's sake, but he had too much mind not to perceive that beer injuriously affected his clearness of thought, and therefore, when he was intent on hard study, he shut himself up in his room for days with no other drink than water. The least affecting of *calm* clearness of thought in company *is excess*, for at every moment a man requires all the mental penetration he naturally possesses; and when he is affected by alcohol he seldom fails to say what he ought not to say.

Q. 100. *What answer is to be given to the fallacy that in Providence evils attend actions which are right in themselves, as swimming is sometimes followed with drowning, walking with falling and breaking a leg, eating with being choked, and virtuous actions with being persecuted?*

A. 1st. That such evils are *accidents*, not judgments. 2d. That right actions, as swimming, walking, and eating, and virtuous actions, are adapted to the body, and therefore fitted to benefit it; whereas alcohol is not adapted to the body, and can only injure it.

Eating, though it were followed with gluttony, is a necessary action, whereas drinking is not necessary, since 400,000,000 of Mohammedans, Chinese, and Hindoos live without alcohol; and food in its natural action allays hunger for food, while alcohol in its natural action creates a thirst for more drink.

Q. 101. *Does the voice of God in Providence entirely agree with His voice in nature.*

A. Science proves that the use of alcohol is physiologically *injurious*; and *dangerous* in its tendency to produce the alteration in nerves and brain which constitutes the drink-crave. Providence teaches that alcohol is *injurious* to society in many respects, and is *dangerous* in its tendency to produce drunkenness. Both voices have but one sound, and that is condemnation of the drinking which inflicts the injury, and tends to the dangerous result.

THE VOICE OF GOD IN THE BIBLE.

Q. 102. *We have now heard the teaching of science and Providence on the use of intoxicating drinks. Since the three voices come from the same unchanging God of truth, what kind of teaching may we expect to find in the Bible regarding such drinks?*

A. That the Bible shall exactly agree with Nature and Providence, and contain appearances which may deceive, and facts which will guide to truth.

Q. 103. *The voice of God in Nature, speaking through science, has, in every land, styled alcohol a poison; what similar name does the Bible give it to describe its injurious action on the body?*

A. Moses calls fermented wine "the *poison of dragons*," or of great serpents (Deut. xxxii. 33); and Solomon says its bite is as the bite of a serpent (Prov. xxiii. 32), that is, poisonous in its action as well as unexpected in its occurrence. The Bible also agrees with science as to the tendency of alcohol to create a drink-crave, for it says of the drinker, "When he awakes out of his drunkenness he will seek the fermented wine yet again" (Prov. xxiii. 35).

Before the time of Moses the Egyptians were taught by their priests that fermented wine was *the poison of demons*. Pharaoh took no fermented wine, he used only the newly expressed juice from the grapes (Gen. xl. 11). Skilled in all the learning of the Egyptians,

Moses knew the phrase "poison of demons," but having described the chief of demons as the serpent in Eden, he probably, therefore, spoke of fermented wine as the poison of great and terrible serpents. Before and after the time of Christ many in Eastern lands held that fermented wine was of the devil. All men will, however, agree in this, that nothing in the world so stimulates men to do the devil's work as alcohol, and nothing so swiftly and certainly drives them, in such numbers, to his dark abode of doom.

Q. 104. Does the Bible agree with nature and providence in the sad fact that the number of those deceived by appearances has been greater than the number led to the truth by facts?

A. The three voices entirely agree in every respect; and so in the fact that man willingly receives mere appearances instead of the truth.

The fact was that Christ was born at Bethlehem—the appearance was that He came out of Nazareth, and by the appearance the whole Jewish Church and nation were deceived and led astray. Had Christ solemnly told them He was of Bethlehem they would not have believed him, because they were unwilling to receive Him. He said, "This is my body," and more millions of men in Christendom believe in this appearance of transubstantiation than in the fact that the body of Christ is one and indivisible, and abideth in heaven. In like manner the greater part of evangelical Protestant churches have been deceived by the appearances in the Bible that God is on the side of fermented wine, instead of receiving the facts that prove He has ever forbidden its use. It is melancholy to find even God-appointed church reformers in the dark on important subjects. Even Luther believed in the real presence of Christ's body in the Supper to the last hour of his life.

Q. 105. Is God to blame for the appearances which exist in the Bible?

A. The appearances in the Bible are only natural forms of expression, out of which man, in his ignorance and the waywardness of his fallen heart, creates fallacies to deceive himself. God therefore is blameless for the error into which man willingly falls.

Q. 106. Are men wholly inexcusable for the fallacy that because the saints of the Old Testament drank fermented wine, therefore the use of it is lawful for men now?

A. They are wholly without excuse, because the mere record of an action in the Bible is not God's authority for men to follow it. The Bible records the concubinage of Abraham and Jacob, the polygamy and concubinage of David and Solomon, yet that record is no more sanction for us than is the record of men having drank fermented wine.

When an action is simply recorded, without condemnation or approval being expressed, why does the heart of man not say, This action is not approved of, therefore I must beware, since I am at liberty to follow only actions which are known to be morally or constitutionally fit for man; instead of falsely reasoning thus: This action is not *expressly* forbidden, *therefore* it is lawful for me!

Q. 107. Are men without excuse for supposing that the Bible would, on the wine question, be written with words having but one meaning, instead of with nouns having all the varieties of meaning in common use among the people addressed?

A. They are without excuse, because in Hebrew, Greek, and other languages there are many generic nouns having several meanings, and if the writers of the Bible were to be natural, and use words understood by the people addressed, they could not avoid frequently employing generic nouns on the wine question, as well as on every other question. Almost every noun in the Bible has several meanings, as bread, flesh, faith, grace, salvation, angel, spirit, heaven, &c.

It is a law of the human mind to use an old word in a new sense rather than coin a new word to express the different meaning. Thus it is that in English, as well as in other languages, many nouns have fully a dozen shades of meaning. It would have required a perpetual miracle on the part of God to have forced the Jews to use the word "yayin" in only one sense, since it was the first or root word applied in the Hebrew language to the liquid produce of the vine.

Q. 108. Are men without excuse in supposing that the Bible could be written without a great variety of expression, since it was composed by about forty different writers, living in different ages, during a period of 1600 years?

A. They are without excuse, since only a perpetual miracle on the part of God opposing a law of the human mind could prevent language from changing during 1600 years, and force the writers of the Bible to be unintelligible by avoiding the changes which time had effected in the speech of the people.

The Koran of Mahomet, and sacred books of other false religions, having been composed by *one* writer, there is not a diversity of style or variety of expression, and so the priests of these false faiths have easily understood the *single* utterance or command. But the great variety of expression *unavoidable* in a progressive revelation as the Bible renders the interpretation of it more difficult than of the Koran or other book of heathen faith. Mahomet's single utterance is, "O, true believers, surely wine and lots are an abomination, a snare of Satan; therefore *avoid them*. Satan seeketh to sow dissension and hatred by means of wine and lots; will ye not therefore *abstain from them*" (Koran v. 7). Since the command here is one and uniform, "*avoid*" wine, "*abstain*" from it, interpreters could not differ. But when the Bible says, "Look not thou upon wine" (Prov. xxiii. 31), "drink no wine" (1 Thes. v. 6), which is equivalent to Mahomet's "*avoid*" and "*abstain*;" and also says "use a little wine" (1 Tim. v. 23), "not given to *much* wine" (Tit. ii. 3), it is plain that a knowledge of all the forms of expression, manners, and customs which prevailed during the 1600 years the Bible was being composed is required to harmonize the variety of expression which unavoidably exists in the Bible. During even 300 years the language of any nation undergoes a very great change. Were John Knox or Samuel Rutherford to preach in Scotland now as they did while they lived few would understand them. The English Bible is said to have fixed the English language, yet the word "*charity*" has drifted away from Paul's meaning of "*love*" to the lower one of "alms to the poor;" "*conversation*" has drifted from "behaviour" to "speech" or "discourse;" and "prevent" has drifted away from "to succour" or "go before" to the meaning of "to hinder."

Q. 109. *What is a generic word?*

A. A noun that includes a whole class of persons or things, and *also* the *various states or conditions* in which the whole of that class exists.

Q. 110. *Mention some generic nouns, and give illustrations of the various conditions in which each class may exist.*

A. The noun "*man*" includes men of every nation, also the conditions in which they exist, as weak or strong,

healthy or diseased, rich or poor, good or bad, &c. The nouns "salmon," "herring," and "cod," include all the varieties of these three classes of fish, and also the different states in which they are sold and used, as fresh, kippered, smoked, salted, &c.

It is quite common to employ only the generic word in purchasing or using these classes of fish; very often the qualifying adjective is not given which indicates the state in which they were bought or eaten.

Q. 111. *What is a specific word?*

A. A noun which is applied to only part of a class, as *negro* is part of the class *man*, or which is applied to only *one* condition, as "malt" is barley only in the state malted.

Q. 112. *How many generic nouns are used in the Bible to denote "wine?"*

A. "*Yayin*" and "*hhamar*" in the Old Testament or Hebrew, and "*oinos*" in the New Testament or Greek.

Q. 113. *How many specific nouns are used in the Bible to denote unfermented grape juice?*

A. "*Tirosh*," "*asis*," and "*sobhe*," in the Old Testament or Hebrew, and "*gleukos*" in the New Testament or Greek.

Q. 114. *In how many meanings is the word "yayin" used in the Old Testament?*

A. In three senses:—1st. *Unfermented grape juice*, which probably was its first or primary meaning; 2d. *Fermented grape juice*; 3d. By way of license it was used, though seldom, to denote, not a liquid, but *grapes*.

It is certain that men knew unfermented grape juice before they knew fermented wine, and quite as certain that the unfermented juice was used before men acquired the art of fermenting grape sugar into alcohol *without* allowing it to turn into vinegar, as it would rapidly have done in an eastern climate had art not interposed at the proper point to cover up the liquor, and thus prevent the contact of air supplying *more* oxygen to change the alcohol into vinegar. Until men by long practice had learned to *regulate* fermentation, the juice as it came from the grapes was no doubt called "*vayin*;" and then by a law of the mind, instead of coining a new

word to signify fermented wine, "yayin" received its secondary meaning, and both primary and secondary meanings are used in the Bible from the writings of Moses to those of Zechariah.

Q. 115. Repeat Job xxxii. 19, and give the meaning of "yayin" there.

A. "Behold my belly is as *wine* which hath no vent, it is ready to burst like new bottles!" "Yayin" in this verse means unfermented juice, because the eastern nations, as Christ says, put "*new wine*," that is, newly pressed out juice, into new skin bottles (Luke v. 38). Had the wine been fermented before being put into the new bottles they would not have been ready to burst, since the expansion process would have been over.

The first mention of "yayin" anywhere is in Job, the oldest book of the Bible, and in it "yayin" certainly has its primary meaning of unfermented wine. Fermentation was never attempted in *mouth-tied* skin bottles like those Job refers to, but in *open* jars, to allow the *necessary* contact with the air, and also room for the expansion and escape of the carbonic acid gas. Had the new juice been put into mouth-tied skin bottles to ferment they would certainly, as Christ says, have been burst, and that accident did happen when the juice was put into *old* skin bottles containing yeast or gluten sediment on their sides, or even when the juice had lain more than 15 hours or so in the wine-press before being put into new skin bottles, for then yeast-germs had been absorbed, and partial fermentation setting in, the bottles were ready to burst, as Job affirms. All the translations from the Hebrew have rendered "yayin" in Job xxxii. 19 as unfermented grape juice,—the Greek or Septuagint version having "*gleukos*," the Latin or Vulgate having "*mustum*," and the Targum or Chaldaic "*khamar khadath*," or *new wine*.

Q. 116. Quote Isaiah xvi. 10, and Jer. xlvi. 33, and give the meaning of "yayin" in these verses.

A. Is. xvi. 10, "The treaders shall tread out no *wine* in their presses; I have made *their* shouting to cease." Jer. xlvi. 33, "I have caused *wine* to fail from the wine-presses, none shall tread with shouting." In both these verses "yayin" means the unfermented juice as it came fresh from the trodden grapes, for the feet of treaders never since the world began trod *fermented* wine out of grapes.

"Yayin" in these two verses does not mean grapes, because when

yayin is mentioned in the Bible in connection with wine-presses it uniformly means a *liquid*, as in Micah vi. 15, "Thou shalt tread tiros (the solid), but shalt not *drink* yayin" (the liquid); and the Jews were accustomed to judge of the calamity of a bad vintage by the scarcity of *juice* in the wine-press. Thus Isaiah says (v. 10), "Yea, ten acres of vineyard shall yield one batl," that is, $7\frac{1}{2}$ gallons of juice; and Haggai says (ii. 16), "When one came to the press-vat for to draw out fifty vessels out of the press there were but twenty." Finding it impossible to deny that "yayin" in the Bible is applied to unfermented grape juice, the advocates of fermented wine have had recourse to a new *conjecture*, which is that the freshly expressed juice was called by men "yayin" because it was intended to manufacture it into fermented yayin or wine. To which baseless conjecture it may be replied—1st. That the speaker in these two verses is God, and that *He* calls the juice as it came from the grape, and as He gave it to man, "yayin." 2d. That the calamity or judgment of a bad vintage applied to *all* the wine-presses in the land, and so to *every purpose* to which grape juice was applied, and that the Jews never at any period in their history intended to convert *all*, or the greater part of, the juice from the wine-presses into fermented wine, since part of it was always consumed as unfermented juice, and a large portion of it was always boiled into gleukos and preserves called "debash" or "dibs," a present of which debash, or grape honey, Jacob sent by his sons to Joseph the ruler of Egypt (Gen. xliii. 11), and a trade in which debash was regularly carried on by means of camel caravans taking it yearly from Palestine to Egypt, where neither the kings nor priests could use fermented wine. If the intentions of men are to be taken into account, then those parts of the juice in years when the vintage was good, intended for immediate consumption as it came from the press, and for boiling into gleukos and dibs, were called by Isaiah and Jeremiah "yayin" equally with the part intended for fermentation. Thus it is undeniable that Isaiah and Jeremiah call unfermented juice in the press "yayin," *simply because yayin was its name*, and not because it would in the end be converted into one product or another. 3d. That if the unfermented "yayin" was intended to be all converted into fermented "yayin," the judgment of a bad vintage would have been no judgment, but a blessing, since every land is better without alcoholic drinks than with them.

Q. 117. Quote Joel i. 5, and give the meaning of "yayin" there.

A. "Howl all ye drinkers of yayin, because of the asis (new wine), for *it* is cut off from your mouth." The word "yayin" here means unfermented juice, because it is used as synonymous with "asis," which is a specific noun for unfermented juice. The drinkers of "yayin" were to howl because the "asis" was cut off from their mouth, so this

verse proves that unfermented juice was used as such, and called both "yayin" and "asis."

The translators of the English authorized version meant by the phrase "new wine," which they often use, the unfermented juice of the grape. This is plain from their applying "new wine" to *gleukos* (Acts ii. 13), to the juice as it passes from the trodden grapes into the wine-press (Prov. iii. 10), and to the juice as it is found in a cluster of grapes (Is. lxxv. 8). From the earliest times men used this new wine to quench thirst, as is plain from the words of Job xxiv. 11. The oppressors made the poor villagers tread the wine-presses, and yet the treadingers "suffered thirst," from not being allowed to taste the refreshing contents of the press.

Q. 118. Quote the Song of Solomon v. 1, and give the meaning of "yayin" there.

A. "I have drunk my yayin with my milk; drink abundantly, O beloved!" Yayin here means unfermented juice, for Solomon could not ask his young Egyptian wife or other woman, whose love he esteemed "better than wine," to make herself as insensible as a wine cask by drinking abundantly of fermented yayin; nor could Christ command believers to take the means to become intoxicated, since He gave a distinct command not so much as to look upon fermented wine (Prov. xxiii. 31).

Q. 119. Quote Gen. xlix. 12, and give the meaning of "yayin" there.

A. "Binding his foal unto the vine, and his ass's colt unto the choice vine, he washed his garments in 'yayin' and his clothes in the blood of grapes." Yayin here means unfermented juice, for while the ass that carried the grapes to the wine-press was bound to a tree, the treadingers were treading from the grapes the juice which was so abundant, that when it squirted upon their clothes, they, as it were, washed their garments in yayin.

By *synonymous parallel* interpretation we know assuredly that "yayin" in Gen. xlix. 12 means unfermented juice. Judah, upon whom this *blessing* of abundance of unfermented wine was pronounced, was the "fountain" (or offspring) of Jacob, and as representative of the tribe from which Shiloh was to come he inherited the blessing pronounced by Isaac upon Jacob, the representative of the church and true Israel of God. The blessing pronounced upon Jacob was plenty of "tirosh," or unfermented wine (Gen. xxvii. 28);

tirosk that could nourish the body like corn—"with corn and *tirosk* have I *sustained* him" (Gen. xxvii. 37); with tirosk that ever in Palestine so improved the health and personal appearance, whether consumed as grapes or as unchanged juice, that the countenance so beamed with the ruddy glow of vigour that the eye was, *as it were*, sparkling and red with yayin. Not that the eye was literally red with wine any more than the teeth were literally white with milk. Moses confirms this interpretation, "The fountain of Jacob shall be upon a land of corn and *tirosk*" (Deut. xxxiii. 28). If Jacob had pronounced a blessing of *abundance* of fermented yayin, Judah would have been better without the blessing, for it was when priest, and prophet, and people in Judah erred through the fermented yayin that they were sent into captivity in Babylon to learn to be content with tirosk. When they came back from Babylon they said, "Fermented wine is *wicked*, it causeth all men to err that drink it" (1 Esdras iv. 37; iii. 18).

Q. 120. Quote Neh. xiii. 15, and give the meaning of "*yayin*" there.

A. "In those days saw I, in Judah, some treading wine-presses on the Sabbath, and bringing in sheaves and lading asses, as also yayin, grapes, and figs, and all manner of burdens, which they brought into Jerusalem on the Sabbath-day, and I testified against them in the day wherein they sold victuals." Yayin here very probably means unfermented juice, which was trodden out fresh on the Sabbath, and offered for sale and use that very day.

Nehemiah saw some treading wine-presses on the Sabbath, and the Sabbath labour, against which he contended, was in connection with the sale of victuals to the inhabitants of Jerusalem on the Sabbath. If the yayin was intended for fermentation there was no need of treading it out on Sabbath, as it could not that day, nor for many days after, be ready for consumption—not until the process of fermenting had been completed and the poisonous gluten yeast had entirely subsided. And when we remember that the Jews returned from Babylon with a hatred of fermented wine, and that Nehemiah recommended the people to eat the fat and "*drink the sweet*" (Neh. viii. 10) (alcoholic wine is never sweet like unfermented juice), and that grapes and figs were carried into the city along with the yayin for Sabbath use, we have some evidence that the yayin was unfermented and none whatever that it was fermented.

Q. 121. Quote Zec. x. 7, and give the meaning of "*yayin*" there.

A. "Their heart shall rejoice as through yayin, yea,

their children shall see it and be glad; their heart shall rejoice in the Lord." Yayin here means unfermented juice, for the rejoicing in the Lord, as if he had blessed them with abundance of vintage, the token of His love, was to occur at a time of great spiritual revival, when, as in ver. 6, God says, "He would restore them and have mercy upon them." The senseless hilarity caused by intoxicating wine in the brain is never like joy in the Lord during a time of revival and outpouring of the Holy Ghost.

The great value and necessity of *synonymous parallel* interpretation is finely seen in the light it throws upon this verse. Worldly blessings were to the Jews the promised proof of God's love, while scarcity of harvest or vintage was the promised token of His curse. "Blessed shall be the fruit of thy ground" (Deut. xxviii. 4). "Cursed shall be the fruit of thy land" (Deut. xxviii. 18). The Jews, therefore, always rejoiced at a plenteous vintage and yield of *unfermented juice*, for God had said, "The Lord will love thee and bless thy 'tirosh'" (Deut. vii. 13), and of tirosh, not of yayin, it was said, it "cheereth God and man" (Judg. ix. 13). The Hebrew verb "*samaakh*," which in Zec. x. 7 is translated "*rejoice*," is in Judg. ix. 13 translated "*cheereth*," man rejoicing in the possession of abundance and God rejoicing in receiving the drink-offerings of unfermented juice upon His altar from the grateful hearts who were glad in the abundant gifts of His love. Judg. ix. 13 is the parallel interpreting verse for Zec. x. 7, and proves that the yayin was unfermented. In the day of conversion, when the Holy Ghost pours His grace upon the heart, man does not betake himself to rejoicing in intoxicating wine. The records of all revivals show that then he abstains from alcoholic drink, though he would gladly use grapes or innocent unfermented grape juice.

Q. 122. Prove that "*yayin*" is used in the Bible to denote grapes.

A. Moses, in Deut. xxviii. 39, says, "Thou shalt plant vineyards and dress them, but shalt neither drink of the yayin, nor gather it, for the worms shall eat it." Here Moses uses yayin as a liquid that men could drink, and also as a solid that worms could eat.

Very seldom indeed was yayin used to denote *solid* vine fruit. It may mean grapes in Deut. xiv. 26, and also possibly in Jer. xl. 10, 12, where yayin is said to be *gathered* with summer fruits.

Q. 123. We have seen that sometimes yayin was used in

the Bible to mean unfermented juice, but more frequently it was employed to denote fermented juice; what was the reason of this?

A. Fermented juice caused the drunkenness of Noah, Lot, Nabal, Solomon, priest and prophet, and other evils which the Bible, as a record of human life, had to state, whereas unfermented juice caused no drunkenness or evils to be recorded, and therefore had no need of being frequently mentioned.

Q. 124. *Are men then without excuse when they say that because fermented wine is most frequently referred to in the Bible no other kind was used by the Jews?*

A. They are without excuse, because, though the Bible very seldom states that the Jews did eat grapes, men never reason that *therefore* the Jews did not eat grapes, and they know that fermented, not unfermented, juice is the disturber of the peace of individuals, families, and nations, and so its acts alone required to be recorded.

Q. 125. *How many meanings has the generic noun "khamar" in the Bible?*

A. Two meanings: 1st. Unfermented juice, as in Deut. xxxii. 14, "Thou didst drink the blood of the grape wine." 2d. Fermented juice, as in Dan. v. 1.

The Targums or Chaldaic versions use khamar to denote both fermented yayin and unfermented juice in the wine-press, also as the equivalent of tirosh and asis. Eighteen centuries have, however, effected a change, for now, in Syria, "khamar" means fermented wine alone.

Q. 126. *What proof is there that "oinos" is a generic noun denoting grape juice of every kind, and in every state or condition?*

A. The Septuagint or Greek version of the Old Testament was used by Christ and His apostles, by all the Christian churches during the first four centuries, and even by the Jews in their synagogues 280 years before Christ, and the noun "oinos" is, in the Septuagint, used as the meaning of yayin in every state, fermented, unfermented and boiled, and of tirosh and asis.

The Septuagint calls the butler, who squeezed the juice from grapes into the cup and then gave the cup into Pharaoh's hand, the "oino choos," or wine-pourer. Philo, the learned Jew of Alexandria, who lived in the time of Christ, applies the same Greek word to the butler. The Septuagint translates yayin in Is. xvi. 10; Jer. xlviii. 33, and other passages where it means unfermented juice, by the generic noun "oinos," also "tirosi" in Prov. iii. 10; Joel ii. 24; and "asis" in Joel i. 5; iii. 18. Homer (*Od.* book ix. line 205) applies "oinos" to thick boiled grape juice, which required twenty times its measure of water to dilute it. Aristotle (*Meteor.* book iv. chap. ix.) to "gleukos." Hippocrates, Suidas, Nicander, Athenæus, apply "oinos" to juice newly pressed from the grapes, and Hesychius to *boiled* gleukos.

Q. 127. *What is the meaning of "tirosi" in the Bible?*

A. It had two meanings: 1st. Grapes or *solid* fruit of the vine, which was its primary meaning. 2d. Unfermented grape juice, which was its secondary meaning.

It is a law of the human mind to use a word in different meanings rather than coin new words for the different meanings. Thus the words "tea" and "coffee" apply to the *solid* tea and coffee when growing—to their *solid* state when in the shops for sale, and *also* to the *liquid* state in which they are drunk. But no doubt the words "tea" and "coffee" were *first* applied to these substances in their *solid* and *especially* to their *growing* state. Precisely so with the Hebrew word tirosi. It was *first* applied to *the whole of the grapes growing on the vine-trees*. And when it was so *specially* applied the Hebrews had "anab" to denote a grape, "anabim" for a little bunch, and "eshkol" for a large cluster of grapes. At that time "yayin" was applied to the juice of the grape both in its unfermented and its fermented state. In course of time "tirosi" began to be used for the *unfermented* juice, just as in Britain we use "tea" or "coffee" for the *liquid* which is got from the solid tea and coffee. Thus Isaiah in the same passage speaks of *gathering* the *solid* tirosi or produce of the vine and *drinking* the *liquid* tirosi which had been got from the solid.

Q. 128. *Prove that tirosi generally in the Bible means grapes.*

A. It is said *to be eaten*, "Eat thy tirosi" (Deut. xii. 17; xiv. 23); *to be trodden*, "Tread the tirosi (or solid), but not drink the yayin (or liquid)" (Mic. vi. 15); *to be laid up in heaps* (2 Chr. xxxi. 5); *to be growing* when it receives rain (Hos. ii. 22); and *to be dried up on the tree under a drought* (Hag. i. 11; Joel i. 10; Is. xxiv. 7).

Q. 129. *Prove that the secondary meaning of tirosh is a liquid, and is unfermented grape juice?*

A. Isaiah uses the word in both of its meanings (chap. lxii. 8, 9: "The sons of the stranger (thine enemies) shall not *drink* thy tirosh, for the which thou hast laboured, but they that have *gathered it* (brought it together) shall *drink it in the courts of my holiness.*" Here the Jews are said to have gathered the *solid* and drank the *liquid* tirosh, and drank it in the courts of God's holiness, where no intoxicating liquor was allowed to be used. In Joel ii. 24 and Prov. iii. 10 the wine-presses are said to be full to overflowing with the trodden-out liquid tirosh, and there it was unfermented.

The last time that tirosh is *certainly* known to have been used to denote grapes, or the *solid* fruit of the vine, is in Hag. i. 11, about 520 years before Christ. Nehemiah may have employed it in this sense some ninety years later, or 430 before Christ. He *may* have ordered the *temple* tithe of the tirosh to be brought in the *solid* form to the store chambers of the temple (Neh. x. 39), as appears to have been done in the days of Hezekiah, when the first-fruits of corn, olive-berries, tirosh, and dates were brought and laid up in heaps (2 Chr. xxxi. 5, 6). But if the primary meaning of tirosh continued to be used until 430 years before Christ, a change very rapidly took place, since in the year 280 B.C. the translators of the first part of the Septuagint, or five books of Moses, rendered tirosh as a liquid by using the generic noun "oinos." The translators of *this* part of the Septuagint *were* learned men, and unless the *primary* meaning of tirosh had become *obsolete* in their time they could not have made such a mistake, or got their translation introduced into all the synagogues of Palestine, as well as those of Alexandria and lands remote from Judea, without the mistake being discovered. The fact that "*tirosh*" is seldom mentioned in the *liquid* state in the Bible is no proof that the Jews did not use it to denote both the solid fruit and the juice which is got from it, as we in Britain use tea and coffee for both solid and liquid. One single instance—that of Isaiah—would be sufficient to settle the point, because the liquid tirosh being only *must*—that is, unfermented wine—it could cause no crime to be recorded, and so in its liquid state did not require to be mentioned often. At what precise time the secondary meaning of tirosh was introduced is a matter of no consequence to the discussion of the temperance question (see *God's Remedy for Britain's Drunkenness*, page 41). The only point of importance is to show that it never meant *fermented* juice, and so the following list of Hebrew dictionaries is given, with their meanings of tirosh:—

Fuerst.—Mustum expressed from grapes.

Fuerst (Lexicon by Davidson).—What is produced from grapes, new wine.

Callellus.—Mustum, or liquor of grapes when first expressed.

Gussetius.—Mustum.

Simon.—Mustum; Vinum.

Verdier.—Vinum; novum Vinum.

Buxtorf.—Mustum.

Dietrich.—Mustum.

Bagster.—New wine, must.

Newman.—New wine, or juice *yet in the grape* (from its intoxicating quality by which it takes the head).

Gesenius.—Mustum (because it occupies the brain by inebriation).

The definition of Newman and Gesenius is correct, though their inference is wrong—mustum or unfermented grape juice having no intoxicating quality. To prove both that mustum is unfermented juice and is also called wine in English, we have only to turn up the standard English dictionaries. Webster's definition of "must" is "wine" produced from the grape, but not fermented. In Collins & Sons' *Library Dictionary* it is "wine pressed from the grape, but not fermented," and in Blackie & Son's *Imperial Dictionary* it is "new wine expressed from the grape, but not fermented."

Q. 130. *What is the meaning of "asis" in the Bible?*

A. Generally it means unfermented juice of the grape, as in Joel iii. 18, where the juice from the ripe grapes, bursting on the branch, dropped on the hill terraces; sometimes it meant the juice of the pomegranate by itself, or mixed with grape juice, as in Song of Solomon viii. 2.

Q. 131. *What is the meaning of "sobhe" in the Bible?*

A. Grape juice boiled to keep it from fermentation.

Q. 132. *What is the meaning of "gleukos" in the Bible?*

A. Unfermented grape juice either boiled or unboiled.

Josephus, the Jewish historian, who lived in the days of the apostles, applies "gleukos" to the juice newly pressed by hand from grapes and given to Pharaoh to drink; the Septuagint, to juice taken from the wine-press and put into skin bottles to preserve it from the air, Job xxxii. 19; Aristotle and other classical Greek writers, to grape juice boiled down to a syrup; and Pliny, to the juice preserved by cold and exclusion from the air to prevent fermentation. The gleukos of Acts ii. 13 was not intoxicating: the mockers merely jeered at the apostles—these men are drunk, aye, and on gleukos too! The meaning of the mockers may have been, "give the fools a vomit,"

since Lucian says, "I came, by Jove, as those who drink *gleukos*, swelling out their stomach, require an emetic."

Q. 133. *What special care did God take to inform all men that "yayin" in one of its meanings denoted unfermented wine?*

A. He made the primary meaning of "yayin" synonymous with the secondary meaning of "tirosh," and thus supplied synonymous parallel verses which can guide to the truth.

Liquid "yayin" in the wine-press from newly-trodden grapes (Is. xvi. 10 and Jer. xlvi. 33) is precisely the same juice as liquid "tirosh" (Prov. iii. 10; Joel ii. 24) in the wine-press, and since tirosh was never applied to an intoxicating liquid it is plain that when tirosh is the parallel word for yayin that the yayin is not fermented. Why is it that the clergy of no church have never perceived God's intention and special care in using liquid *tirosh* as synonymous with unfermented yayin when they know the power and value of synonymous interpretation in other subjects? The only Scripture authority for the Presbyterian form of church government, or for any Dissenting denomination rejecting Episcopacy, rests entirely on parallel synonymous words. Because Paul in Acts xx. 17, 28, and in Titus i. 5, 7, calls the teaching elders by two names—"Presbuterous" and "Episcopous"—and Peter in 1 Peter v. 1, 2 says that the "Presbuterous" (of which class he himself was one) were to exercise the office of "Episcopous" or bishops, the Dissenting churches rightly judge that, in God's sight, and according to His word, a bishop is only a presbyter. How is it then that they have never applied the same law of interpretation in the wine question? When God calls unfermented grape juice newly expressed by two names, "tirosh" and "yayin," why will they not believe that yayin in such context means unfermented juice, even as tirosh means unfermented juice? Why this unbelief, since they are so ready to believe that presbyter and bishop are one? When God, in appointing the religious duty of leaving home to reside close to the tabernacle or temple until the tenth part of the year's produce and vintage was consumed, ordered the Jews to eat "tirosh" (Deut. xii. 17), and then, in referring afterwards to the same institution, used a different word, and allowed the Jews to eat "yayin" (Deut. xiv. 26), why has the church been so blind as not to see that tirosh and yayin in such reference mean the same thing, even as presbyter and bishop mean the same teacher?

Q. 134. *What special care did God take to inform the Jews that only unfermented yayin was to be used as drink-offerings in the temple?*

A. The drink-offerings were to be offerings made by fire (Num. xv. 10), and the imperative general law was, "Ye shall burn no leaven in *any* offering of the Lord made by fire" (Lev. ii. 11); and still further to keep the Jews from error God commanded them to bring the tithes for the temple to the priests in the form of "*tirosh*" only. (Num. xviii. 12; 2 Chr. xxxi. 5; Neh. x. 39.)

The heave-offering to the Lord of the tithes of *tirosh*, which was a tenth part of the total tithes brought by the people to the Levites (Num. xviii. 26), was taken to the store-chambers of the temple (2 Chr. xxxi. 11, 12; Neh. x. 39). The *tirosh* stored in the chambers of the house of the Lord was intended both for the sustenance of the priests ministering in the temple (2 Chr. xxxi. 10; Neh. xiii. 5, 10, and 13) and for the drink-offerings of the daily sacrifice (Ex. xxix. 40); and as the temple had not fermenting jars as part of its furniture, and the priests had no authority to convert the *tirosh* in the temple into fermented *yayin*, it is plain that the *yayin* commanded for the drink-offering was the same as God referred to when He said, "I have caused *yayin* to fail from the wine-presses" (Jer. xlvi. 33), that is, unfermented *yayin*. The Mishna declares that all things the product of corruption were by the law against leaven to be excluded; and certainly fermented wine is the product of corruption, and as such was forbidden in the drink-offerings, though in their passover observance some of the Jewish rabbis did not carry out their own principle, abstaining from fermented *beer* and yet drinking unfermented wine! It is necessary to conclusively prove that the words in Lev. ii. 11, "Ye shall burn no '*seor*' or *leaven* in any offering of the Lord made by fire," excluded *liquids* which had fermented as well as *solids* which had undergone fermentation. Every offering made by fire, as the meat and drink offering in connection with the daily sacrifice of the lamb, was a type of Christ, who was to see no corruption like the first Adam, but was to stand *unchanged* throughout His life and death in the uncorrupted holiness in which He was ushered into the world by the Holy Ghost. The lambs, the flour, the *wine*, typifying Christ (Ex. xxix. 38-41), daily burned on the Jewish national altar, had to be without *seor* or leaven. In the Passover also, which typified Christ, no *seor* was allowed—indeed, the command was, "Seven days shall there be no '*seor*' found in your houses" (Ex. xii. 15, 19). In the roasted Paschal lambs there was no *seor*, in the unleavened bread no *seor*, in the bitter herbs no *seor*. And as to wine in the Passover the Israelites at their first observance of the institution in Egypt had not a drop; and in after-ages the Jews quenched their thirst at the Passover feast with water, milk, *gleukos*, honey wine, or fermented wine, according to their taste. The only question which now arises is this, Did the Jews understand that the prohibition of

"seor" during the seven days of the feast applied to fermented liquids? The undeniable fact is, that the Jews did understand that "seor" excluded fermented liquids as well as leavened solids. We quote from the Mishna treatise *Pesachim*, chap. iii. 1:—"The law concerning the due observance of the Passover will be transgressed by using the following articles: Median beer made from barley or wheat, and Edomite vinegar made in the Idumean manner by the fermentation of barley and wine. This is the general rule. Whatever is composed or derived from any kind of grain can cause a transgression of the Paschal laws."

Since the Jewish Rabbis knew that God's prohibition of "seor" applied to fermented beer made from barley, they were quite inexcusable in not applying the prohibition to fermented wine. They said they had no liberty to take anything upon which they could not ask a blessing; and the law which they themselves made was, "No blessing should be pronounced over things which had their origin in corruption" (or fermentation) (Mishna treatise *Berachoth*, chap. vi. 13). Now, undoubtedly, alcoholic wine has its origin in corruption or a decay and breaking up of the elements of the grape sugar, and being the product of corruption it could not, according to God's law (Lev. ii. 11), be used as a drink-offering on the Jewish altar to typify Christ. So anxious was God to show that Christ would see no corruption and remain free from sin, however tempted by devil or by men—so anxious to show that Christ was Heaven's own prepared sacrifice for the sins of the world, and that God would not receive any human addition, would not receive from the sinner anything more or less than presenting Christ as his substitute, that He forbade a tool to be lifted on any stone on the altar, declaring the altar to be polluted if a chisel were applied to a single stone (Ex. xx. 25)—so anxious that He ordered the flesh of the lamb to be placed on the altar directly after the animal was killed, the flesh unchanged in its chemical constituents and before it had seen corruption, the flour was to have its chemical constituents unchanged and before it had seen corruption, the wine likewise, with the chemical constituents of the grape juice unchanged and before it had seen corruption. And since the lamb, the flour, the grape juice, unchanged in elements as they came from the Creator's hands, and uncorrupted, were fitted to sustain the life of man's body, so would Christ, the uncorrupted and unchanged, as He came from the Holy Ghost, be the sustaining food for the sinner's soul.

To all this reasoning it may be said that the Jewish Rabbis and nation generally did not understand that the Passover laws excluded fermented wine, or that the law in Lev. ii. 11 excluded fermented wine being used as a drink-offering on the altar. To which it is replied that the question is not what the blinded Jews understood—for the New Testament shows that they misunderstood nearly the whole of God's laws—the only question is, *What is the true meaning of God's law?* Christ, when on earth, knew the true meaning of all God's laws

though the Jewish Rabbis did not. Unquestionably the *essential* object of the Passover and of the lambs, flour, and wine on the Jewish altar was twofold: 1st. To typify Christ as God's atonement for sin; and 2d. As God's *uncorrupted* and *incorruptible* atonement. Since this second object was an essential element in God's intention He took very special care that the Jews would clearly understand Him. To typify Christ as *an atonement only* there was no need of *salt*, the substance that preserves from corruption. And after Christ came, and His spotless life was portrayed in the four Gospels, there was no need of salt being mentioned as necessary with the bread and wine in the Lord's Supper. But to show the Jews who looked forward to a deliverer with whose life they were not acquainted—to show them that Christ would be uncorrupted and incorruptible—God commanded that salt was to be used every day upon the Jewish altar: "With *all* thine offerings thou shalt offer *salt*." 2d. Still further to keep the Jews from misunderstanding His law He made Moses use generic and specific words with regard to the Passover and the offerings on the altar. "Seven days shall ye eat '*matsoth*' (that is, unleavened bread); whosoever eateth '*khahmats*' (that is, leavened bread) from the first day unto the seventh day that soul shall be cut off from Israel," Ex. xii. 15. Here Moses, after using two *specific* words applying to *solids*, as *bread*, changes his language to a *generic* term, and says, "Seven days shall there be no '*seor*' found in your houses." Now if the Passover law was meant to exclude only fermented bread what use was there for Moses to substitute "*seor*," the *generic* word for *all* substances that had fermented or could produce fermentation? It could not be that Moses intended by "*seor*" to point to dough or sponge not yet made into bread, for "*khahmats*" in Lev. ii. 11 covers dough or flour leaven: "No meat-offering which ye shall bring unto the Lord shall be made with '*khahmats*.'" And with regard to the offerings on the altar what was the use of Moses saying, "Ye shall burn no '*seor*' in *any* offering of the Lord made with fire," if by "*seor*" he did not mean leaven *different* from the "*khahmats*" or *bread* leaven he had in the line before forbidden? The Jews did understand that "*seor*" covered more than "*khahmats*," and therefore kept no fermented beer or fermented vinegar, which they called Edomite vinegar; and they were perfectly inexcusable in not excluding fermented wine though produced from grapes instead of from grain, because the salt on the altar was at once the emblem of incorruption and the saviour from corruption; and they should have known that alcoholic wine was not grape juice unchanged and pure as it came from the hands of God. If their blindness is not to be excused still more inexcusable is the blindness of modern Christian critics, who ought to see that an emblem should truly represent Christ in His two qualities of freedom from corruption and in being not a Destroyer but a Saviour, and that alcohol, the product of corruption and the most grievous destroyer of men the world has ever known, could not, in God's intention, typify Christ either in the Passover, offerings on the altar, or in the Lord's Supper.

Q. 135. If through a bad vintage there was a scarcity of tirosh for the drink-offerings, what substitute did God command to be used?

A. Shakar, or the unfermented juice of dates (Num. xxviii. 7): "In the holy place thou shalt cause the shakar to be poured unto the Lord for a drink-offering." The shakar for a drink-offering was subject to the law in Lev. ii. 11; it had to be unfermented, since nothing that had seen corruption could be a type of Christ.

In a time of necessity date or palm juice could be used instead of wine. This passage justifies the missionaries in the South Sea Islands using the juice of the cocoa-nut in the celebration of the Lord's supper. God in every nation will accept what that nation has to offer when the proper emblem cannot conveniently be obtained. Better the innocent fruit-juice of any land than the mocking serpent-like fermented yayin. The reason why God appointed shakar as a substitute for yayin in the drink-offering was probably to provide beforehand for maintaining the daily sacrifices during years when He, as a judgment upon the people, blasted the vintage, and so "caused yayin to fail from the wine-presses." During such years of drought the palm-trees which abounded in Judea would still bear dates, and a tithe of the dates the Jews were bound to bring to the temple. (See marginal reading of English Bible, 2 Chron. xxxi. 5.) The people treated dates as they did grapes, consuming them in three forms—in the solid, as boiled preserves, and as fermented shakar.

Q. 136. What is the common meaning of "shakar" in the Bible?

A. The fermented juice of the palm-tree or of dates. In the English Bible it is rendered "strong drink." Occasionally shakar was applied to dates, or thick-boiled juice of palm-trees (Deut. xiv. 26).

Date juice ferments more readily than even grape juice. If date juice be exposed freely to the air fermentation will begin in twelve hours, while grape juice in Palestine will stand from eighteen to twenty-four hours, according to the less or greater surface exposed to the air, before it begins to work and evolve carbonic acid gas. The modern Syrians do not delay longer than twenty-four hours in removing the juice from the press to the boiling cauldrons when they intend to make dibs or other preserves. As to the strength of the fermented wines among the Jews, the grapes of Hebron and other parts of Palestine were fully as well adapted to yield alcohol as the grapes of Greece or of Syria at the present time. The average

strength of modern fermented wines in Greece, without being fortified with brandy or other product of distillation, is $12\frac{1}{2}$ per cent. of alcohol; that is, four glasses of such wine contain as much alcohol as one glass of whisky or brandy at 50 per cent. alcohol. The modern Syrian unfortified wines, in the Lebanon district, are fully more intoxicating than the majority of the unfortified wines of France, and therefore we may conclude that the ancient fermented wines of Palestine contained from 12 to 13 per cent. of alcohol, and so were neither *natural* wines nor *mild*.

Q. 137. In what form did God desire the greater part of the vintage to be consumed by the Jews?

A. No doubt the Creator, who adapted the grape for the human body, designed that a large portion of the vintage should be consumed as grapes. Moses said to the Jews, "Thou must *eat* the tithes of thy tirosh" (Deut. xii. 17, 18); "Thou shalt *eat* the tithe of thy yayin" (Deut. xiv. 26).

In his last address to the Jews in Canaan shortly before he died Joshua said to them, "Of the vineyards which ye planted not do ye *eat*." At that time, and throughout the greater part of their residence in Palestine, the Jews disposed of the vineyard produce as the Syrians do at this day, or as the inhabitants of Britain do with apples. As the largest portion of apples is consumed as apples, so the largest portion of grapes is and was used as grapes during six or seven months after the vintage (see 2 Ki. xviii. 31, *eat* of his vine; Is. lxx. 21, *eat* the fruit of the vineyards), and thereafter as raisins during the remainder of the year; a portion of apples is converted into cider, so a portion of grapes is and was made into fermented wine; and as a third part of the apples becomes apple-jelly, so a portion of grape juice was always boiled into grape-preserves, as dibs into which bread was dipped, or as gleukos for drinking.

Q. 138. Did the Jews then never keep a large stock of unfermented wine on hand?

A. Not having glass bottles, wooden casks, or other means of perfectly excluding the air, the Jews never at any time kept a large stock of unfermented juice in a state as *thin* as when trodden out from the grapes.

No nation ever kept a large stock of unfermented wine in as thin a state as it is offered for sale in Britain. The luxurious Greeks and Romans, in the days of the apostles, kept a comparatively small amount of it, which they preserved by putting the juice, within a few hours after it was trodden out, into air-tight vessels, and placing these vessels for months under water, or by adding water to the

juice as it came from the wine-press, then boiling until the added water was evaporated, and immediately placing in air-tight vessels. The boiling destroyed the vitality of all yeast-germs. But as the plan of preserving *thin* grape juice required a large supply of vessels, and these perfectly air-tight, all eastern nations, from motives of economy and safety, adopted the plan of boiling down several gallons of the juice into one gallon. The Romans boiled two and often three gallons into one; the Greeks frequently made *gleukos* much thicker. The modern Syrians boil the juice about six hours, until four or five gallons are reduced to one, and they keep no stock whatever of *thin* juice as it comes from the press, because they have not the necessary air-tight vessels to preserve it, and can easily mix the thick juice with water when wanted. Even when boiled down to one-fourth they require to put the juice in earthen vessels, and carefully cover the mouth with skin to exclude the air. It is plain that the skin bottles of the Jews would not for many weeks preserve *thin* grape juice, for Aristotle (*Meteor* iv. 10) says that even the *thick* boiled *wines* of the Arcadians dried up in the goat-skins into such a consistency it had to be scraped off the sides; and as for casks, the Jews probably had none of them till towards the end of the first century.

Q. 139. *Though the Jews could not, and did not, keep a large stock of unfermented thin wine on hand, could they obtain it at any season of the year?*

A. During six months of the year they could get it from the preserved grapes hanging up in dry places, and during the remainder of the year by reducing the thick *gleukos* with water.

When five gallons of juice were boiled down to one, and then five gallons of water added to make a suitable drink, the juice was as much entitled to be called wine as if it had not been boiled; and so Homer, in the days of Solomon, called the thick juice "*oinos*" even when it required twenty parts of water to reduce one part of juice; and all the eastern nations, for more than a thousand years after, called the thick boiled juice wine. But now in Syria it is not called wine, but *dibs*; and if a traveller asks for unfermented *khamar*, or *thin* wine, they say they have none, and never heard of it; but if he asks for "*asir*," the name which the Syrians give to the juice as it comes from the wine-press, they will understand him, and get a supply. This word "*asir*," in Arabic, is the old Hebrew "*asis*" slightly changed, and the only word denoting unfermented juice which has not in the East changed its meaning during 2500 years. "*Khamar*," a generic noun so late as the first century, is now a specific noun, meaning fermented wine alone.

Q. 140. *Since, then, there is no doubt that both fer-*

mented and unfermented grape juice is called "yayin" in the Bible, what course must be followed in trying to interpret aright each verse referring to wine?

A. Sound rules of interpretation and harmonizing tests must be applied to each passage.

Q. 141. *Repeat the six essential rules of interpretation and the three harmonizing tests.*

A. Rule 1. *Bring all parallel passages into one view, for (Confession of Faith, chap. i. 9) "the infallible rule of interpretation of Scripture is the Scripture itself; and therefore, when there is a question about the true and full sense of any Scripture, it must be searched and known by other places that speak more clearly."*

Rule 2. *Hear as those to whom the books of the Bible were first sent heard, and understand as they understood, for the writers of the Bible, in order to be understood, composed in the language and forms of expression which prevailed among the people they addressed, not according to modern styles of thought and expression, manners and customs.*

First the whole light of the Bible is to be thrown on any disputed passage, then the whole light from the language, manners, and customs which existed at the precise time when the disputed passage was written.

Rule 3. *No evidence to be received but such as would be counted perfectly satisfactory in a civil court of law or justice; or briefly, No evidence, no inference.*

All mere conjectures are justly rejected as evidence before a judge and jury, and if a civil court would not receive conjectures in deciding a case amounting in importance to only a shilling, how much more necessary is it to insist on the most substantial evidence in settling the intoxicating drink question, since the consumption of alcoholic drinks throughout the world involves a yearly expenditure of more than 1000 million pounds sterling of money, and an amount of disease, sin, and woe which it is impossible for man fully to estimate.

Rule 4. *The mere record of an action is not God's sanction for men to perform that action, otherwise the concubinage of Abraham, polygamy of Solomon, murder by*

David, swearing by Peter, and suicide of Judas would justify men in following these.

Rule 5. A command not constitutionally fit for all men, but evidently particular in its application, is a command extending only to the particular person or persons to whom it was first addressed.

Rule 6. A command constitutionally fit for all men, and adapted to benefit them, is a moral command binding upon all men, even though it was at first addressed to only one man or class of men.

Test 1. *No interpretation is correct which does not naturally make all the parallel passages agree, for the Bible is truth, and truth is one.*

Test 2. *No interpretation of a Bible passage is correct which contradicts the voice of God in nature and providence, for God cannot contradict himself.*

Test 3. *No interpretation is correct which does not command men to follow the safest course they can adopt, for the whole intention of the Bible is to yield glory to God and peace to man, and God is glorified in the safety and welfare of man.*

The *substance* of these rules and tests may be thus briefly expressed to assist the memory of the children:—

Rules 1 to 3. Parallel passages; ancient customs; judge and jury evidence.

Rules 3 to 6. A mere record is not law; particular commands are for some; moral, for all.

Tests 1 to 3. Make the passages agree, the three voices agree; and safety lead the way.

Q. 142. *In what manner did God in the Bible begin to show His hatred of intoxicating drink?*

A. He began by giving it an infamous name—by representing it as the exciting cause of Noah's drunkenness, the sin of Lot, of making priest and prophet to err (Is. xxviii. 7), of woe, sorrow, contentions, wounds, and lust (Prov. xxiii. 29–35); of the drunkenness which excludes from heaven (1 Cor. vi. 10) and is His scourge for punishing a nation (Jer. xiii. 13, 14); as the tool of adulterers (2 Sam. xi. 13) and murderers (2 Sam. xiii. 28);

and because he could go no further he likened it to the serpent's bite (Prov. xxiii. 32) and the poison or cruel venom of asps (Deut. xxxii. 33).

Q. 143. *What was the second way in which God showed his hatred of fermented drink?*

A. He suddenly consumed with fire the two sons of Aaron, Nadab and Abihu, for having taken intoxicating drink before they began to minister in the tabernacle.

Q. 144. *Would they have been consumed with fire if they had taken bread, grapes, or unfermented grape juice?*

A. These would not have unfitted them for their duty, and so for using these they would not have been put to death.

Tirosh was stored in the chambers of the temple for the use of the priests, Neh. xiii. 10-13.

Q. 145. *What was the third way in which God showed his hatred of fermented drink?*

A. He induced or commanded those who were to do eminent service in his church to abstain; thus Samuel was a water-drinker all his life, Daniel would not defile himself with fermented wine, and John the Baptist was commanded never to taste wine or strong drink.

In instituting the Passover God did not command wine of any description to be used. Wine was entirely a human addition. To quench thirst at the Passover some used unfermented wine, while some rabbis introduced fermented wine. And since no wine was commanded, Samuel, Daniel, and any abstainer, could legally observe the Passover. The introduction of Christianity did not prevent the Christian Jews from taking the Nazarite's vow. With what liquid did the converted Christian Jews keep the Lord's Supper which was observed *every* Sabbath-day? God, the omniscient, always takes care not to place men in a dilemma by contradictory laws. If John the Baptist, who was a Nazarite, had lived after Christ had instituted the Supper, how could he have kept the ordinance with either fermented or unfermented wine, since he was to taste *nothing* that came from the *VINE-TREE*? Paul took a Nazarite vow *for a time* after he was an apostle (Acts xviii. 18), and Josephus informs us that it was common for the Jews in the days of Paul to take the Nazarite's vow. Very probably Timothy did so. Jesus Christ, not to place these men in a dilemma, did not *COMMAND* that *only* the fruit of the vine was to be the liquid symbol, though He *commanded* that the

Jews in observing the *Passover* sacrament *must* eat unleavened bread, bitter herbs, and *roasted* lamb. There was nothing in the condition of the Jews in Palestine to prevent the observance *as commanded*, and therefore there was no choice allowed. But, foreknowing all difficulties, Christ did not *COMMAND* either leavened or unleavened bread or fruit of the vine for the Lord's Supper. His example indicated the liquid symbol which He *preferred in ordinary circumstances* exactly as He preferred *yayin* for the *drink-offering* with the sacrifices on the Jewish altar (Ex. xxix. 40). But just as He allowed *shakar* or palm-tree juice to be used *OCCASIONALLY* for the drink-offering instead of *yayin* (Num. xxviii. 7), so no doubt He allowed Paul and all Christians under the Nazarite's vow to substitute some other juice for *yayin* in the observance of the Supper *while their vow continued*. And thus it is that Paul in 1 Cor. xi. cautiously refrains from saying what was in the cup of the Lord's Supper. Five times he mentions the *cup*, but not once does he refer to its liquid contents. Had John the Baptist lived he might have kept the ordinance with *honey wine*, and thus avoided violating his vow.

Q. 146. *What was the fourth way in which God showed his hatred of fermented drinks?*

A. He commanded all men to abstain from them.

Q. 147. *What was the first command God gave to men to abstain from intoxicating drinks?*

A. The command in Lev. x. 9—"Do not drink wine, nor strong drink, thou nor thy sons with thee, when ye go into the tabernacle of the congregation, lest ye die; it shall be a statute for ever throughout your generations.

Q. 148. *Was that order to Aaron and his descendants a moral command?*

A. It was a moral command, for it rested on the brain-deranging and thought-perverting power of alcohol in unfitting the priests to perform their duties of "putting a difference between holy and unholy—between clean and unclean, and teaching the children of Israel all the statutes which the Lord gave them by the hand of Moses" (Lev. x. 10, 11).

Aristotle well remarked that when a man has taken no intoxicating drink he has the full possession of his reason, when perfectly intoxicated he cannot reason at all, but when only partially intoxicated he reasons falsely, and then is dangerous to himself and others. God knew this fact as clearly as Aristotle, and He could contrive

no possible plan of preventing partial intoxication but forbidding drinking altogether, and that upon pain of death. The reason why total abstinence is the only possible way of preventing partial intoxication among any body of men, even priests or clergymen, is very apparent. Alcohol can intoxicate any man God ever made, and when intoxicated that man, whoever he be—Noah, Lot, or Solomon—would not have the control of his reason and will, and in consequence alcohol would make him play the fool. The intoxicating quantity is a limited quantity, and can be divided into parts—say ten parts—every one of which forces the drinker one stage towards the state of intoxication which all the ten parts would produce. Before taking one-tenth of the alcohol the drinker would have the full possession of his brain, his reason, and will, and so have all his natural resisting power against becoming partially intoxicated; but whenever he took this first part of the alcohol he would lose resisting power in two respects: that first part, when it fastened on the brain, would effect an appreciable change on its albumen, and so a diminution of power of will and self-control (for whenever the whole ten parts were taken the contraction would reach a degree in which neither reason nor will could operate at all), and the alcohol would give a new sensation of thirst for more alcohol. Thus the drinker, by taking only the first part of alcohol, would find himself assailed in two ways: he would have diminished will and power of self-control, and a thirst or desire for alcohol he had not before; and in exact proportion as he drank his will would become weaker and his thirst for more alcohol stronger. Since this is the nature of alcohol and the brain of man, what could God do but prohibit drinking in order totally to prevent partial or complete intoxication? No doubt in a large body of men, as 20,000 priests, there might be some of a sterner resolution than others, who could say, "I know that as the wine within me gets stronger my will and self-control get weaker, and therefore never while I live will I in any circumstances take more of it than a small measured-out quantity;" but where were such men in the days of Isaiah, when priest and prophet were swallowed up of wine, and when there was no place clean (Is. xxvii. 8). Dr. Samuel Johnson found by experience it was easier to keep from excess by total abstinence than by limited drinking with any number of good resolutions against going to excess, and the prohibition of drinking to the priests was a better plan to completely prevent brain derangement and inattention to duty than if the tabernacle had been filled with cherubims and flaming swords to warn and threaten the priests to beware of drinking to excess. Nadab and Abihu were not perfectly intoxicated when consumed in a moment. They were able to walk, to put fire in their censers, and wave the incense before the Lord. The alcohol was only in strength sufficient to make them forgetful of their duty, and thus, with that recklessness which distinguishes partial intoxication, they put common instead of sacred fire in their censers. Probably many a preacher

has gone to the pulpit in a more intoxicated state than they were when they met their fearful end.

Q. 149. *Was it the intention of God, by confining the death penalty to drinking in the tabernacle, to sanction drinking in any other place?*

A. Neither in human nor divine moral legislation is it the intention of the lawgiver to sanction at any time or in any place what he prohibits under a penalty in a specified place; and as the priests had priestly duties to perform when not at the tabernacle or temple, and alcohol would unfit them to discharge these duties aright, they were bound by the spirit of the prohibition to abstain from intoxicating drinks at all times and in all places. Alcohol, a deadly serpent in the tabernacle, would be a serpent everywhere.

When a father says to his son, "If I find you go with *that* bad boy T—B—, or to *that* theatre again, I will severely punish you," the intention of the father goes far beyond his expression. The prohibition, though *particular* in words, is *universal* in spirit—he forbids his son to go with *any* bad boy, or to *any* theatre. The law of Britain prohibits, under a penalty of fine or imprisonment, the subjects from becoming "*drunk and incapable*" in any street or public thoroughfare. This prohibition, though defining the place in which the penalty will be incurred, does not sanction being "*drunk and incapable*" in any place not specified, as at home. For if it did all the subjects might on the same day avail themselves of the sanction, and who then would be able to repel foreign invasion, extinguish public fires in cities, or attend to any public business? To sanction the being "*drunk and incapable*" at home would be political suicide. Nothing is more common in human life than for prohibitions in their spirit to go beyond their expression. An abstaining gentleman engages a coachman on condition of entirely abstaining from intoxicating drink while in his service, upon pain of instant dismissal. When the coachman gets some holidays to visit his friends his master would not approve of his drinking even then. Solomon says (Eccl. v. 1), "Keep thy foot—that is, thy heart and mind—*when* thou goest to the house of God, and be more ready to hear than to give the sacrifice of fools." He does not thereby mean we are to give the sacrifice of fools when away from the house of God. Precisely so with the law for the priests. Since the prohibition to them rested solely on alcohol being an enemy to man, in rendering him inattentive and unfit for his duty, it is evident that they were bound to abstain in all places and at all times. As priests they were bound to be in as perfect a condition of mind and body for teaching the

people and putting a difference between holy and unholy, clean and unclean, when they were absent from the tabernacle as when engaged in its service; and they could not be in as perfect a condition unless they abstained everywhere. In the time of David the priests were divided into twenty-four courses, so that they were twenty-three weeks at home for every week they were at the temple, and when at home they had to teach the people (Mal. ii. 7) and to stand before them as "messengers from the Lord of hosts." They had also to be *legal advisers*—interpreters of the laws of Moses (Deut. xvii. 9–11), and as such required to have the full possession of their mental faculties at all times. In substance, then, God said to Aaron, "I consumed your two sons for being unfit for their duty through having taken intoxicating drink, and now I announce to you and your sons that the penalty for drinking before engaging in tabernacle work shall be instant death. I do not intimate what the penalty shall be for drinking beyond the boundary of the tabernacle, for if I said, 'Death shall not be suddenly inflicted for drinking outside the tabernacle,' such is the proneness of men to evil they would suppose I approved of their drinking at home. Remember that at present I refer only to a *sudden death-penalty* to be directly inflicted by me, and the boundary within which it shall be incurred—not to drinking outside that boundary, nor to the judgments which shall more slowly follow it in the usual course of My providence." Had God sanctioned the use of intoxicating liquors at home, then all the priests might have availed themselves of that sanction on the same day, and which of them then could have had his brain free of alcohol if several of the people called to inquire the meaning and range of some law of Moses—which of them would have been in the best possible condition, that is, with the brain free from the disturbing influence of alcohol, so as to give a decision such as the people would feel they were bound to obey "without declining from it to the right hand or to the left?" (Deut. xvii. 11). God has more penetration than man, and it was therefore impossible for Him to give a sanction which all might lawfully use on the same day, and so be all lawfully unfit for duty at once. What man that had a case in the Court of Session would not wish that the brain of the judges was entirely clear of alcohol when his case was being decided?

Q. 150. Was it the intention of God, by addressing the prohibition to the priests, and the mention of a death penalty, to limit the prohibition to the priests alone?

A. No moral scripture is of private interpretation, and no inflicted penalty, whether special or common, indicated the full range of moral duty. The law to the priests is a law constitutionally fit for all men, and adapted for their benefit; therefore it is for ever binding upon all men.

There is no truth more certain than this, "that no moral scripture is of private interpretation." No man in Britain is an apostle, and yet every man is under the moral commands which Christ addressed to his apostles. The men to whom the various books of the Bible were first addressed have passed away many centuries ago, and yet the books are in force still. That no scripture is of private interpretation is evident from Christians in Britain who are not bishops applying to themselves Paul's advice to Bishop Timothy, to take a little wine for *his* stomach's sake; though it must be confessed we never hear of their applying to themselves the prohibition addressed to the priests, and yet the advice was *particular*, because all stomachs would not be improved by a little wine—while the prohibition is universal, since all men in health are improved by abstinence, and by it are kept from the possibility of drunkenness. As to specified penalty, it in no way limits the range of moral duty. The Jews, having God for their *civil* king and defender, were under severe *theocratic* penalties for violations of moral duty. Stoning to death was the penalty for violations of the fourth commandment (Ex. xxxi. 14), of the fifth (Deut. xxi. 21), of the third (Lev. xxiv. 16), and of the seventh (Deut. xxii. 24); and though the theocratic penalty is not in force in lands where God is not the *civil* king, these four commandments are binding upon all men still. The sudden death inflicted upon Nadab and Abihu was an *Aaronic* penalty, specially severe, because God has honoured and selected the family of Aaron alone to the priesthood; yet the Aaronic penalty no more limits the range of moral duty than the theocratic penalty. The severity of the punishment upon Achan, Ananias, and Sapphira, does not free men from being honest, uncovetous, and truthful. The Confession of Faith (chap. i. sec. 6) declares that the counsel of God, when not expressly set down in Scripture, may be deduced "by good and necessary consequence;" and by the very closest reasoning it can be shown that it is just and proper to extend to all men the prohibition addressed to the priests. No man, whether clergyman or layman, ever objected to Paul's reasoning from what was fit for an ox to what was fit for the Christian ministry. From the law "Thou shalt not muzzle the ox that treadeth out the corn," Paul deduced, by good and necessary consequence, the propriety of a provision for the man who treads out truth for the people. The use of such analogical reasoning was not with Paul accidental, for he repeats it in 1 Tim. v. 18, long after he had employed it in 1 Cor. ix. 9; nor was it far-fetched, for when he asks "Does God care for the sustenance of oxen *only*?" every one sees the justice of the reasoning. Had Paul applied to all men the prohibition addressed to the priests he would have had only to ask, "Doth God care for the safety and perfect sobriety of priests *only*?" and no man would ever have challenged his argument. What reason can at the present time, or in the future, deduce by good and necessary consequence from any moral command given to one man or class of men, is as binding upon all men as if

the inference had been drawn by St. Paul or by Jesus Christ himself. Christians are "a holy priesthood" (1 Pet. ii. 5), a peculiar, separated people, bound not in one sacred spot only, but in all places (John iv. 21), to offer up spiritual sacrifices to God—to seek God's glory in eating and drinking (1 Cor. x. 31), as well as in praise and obedience to moral law in general; and as alcohol acts on the brain independently of the will of the soul, and in its natural action on that instrument of thought, purpose, and feeling, is *contrary* to grace, conscience, and reason—for these three never make a man play the fool and forget his duty, as alcohol does—Christians as members of the holy and royal priesthood are for ever bound by the prohibition addressed to Aaron to abstain from intoxicating drinks. They are not their own (1 Cor. vi. 20), and over their brain, which is God's property, grace, conscience, and reason should alone for ever preside—never in the slightest degree an enemy so fleshly, blind and foolish as alcohol.

Q. 151. Repeat Prov. xxxi. 4, 5, and state if these verses contain a moral command.

A. "It is not for kings to drink wine, nor for princes strong drink, lest they drink and forget the law, and pervert the judgment of any of the afflicted." This is a moral command forbidding the use of alcohol, on the ground of its making men forget law and duty. It is therefore binding upon all subjects, lest they forget the law and sin in action; and binding upon all rulers, lest they forget the law and sin in giving unjust judgment.

Q. 152. Repeat Prov. xxiii. 31, 32, and state if these verses contain a moral command.

A. "Look not thou upon the wine when it is red, when it giveth his colour in the cup (through fermentation), when it moveth itself aright. At the last it biteth like a serpent, and stingeth like an adder." This is a moral command forbidding the very looking upon alcoholic drink, on the double ground of its being injurious and dangerous, it being in its action on the body a poison like that of a serpent, and dangerous as the sting of an adder in causing sudden, unexpected death.

If Solomon were allowed to be his own interpreter, his meaning of "Look not thou upon the wine" would be "Avoid it, pass not by it, turn from it and pass away (Prov. iv. 15) as you would from a path infested by poisonous serpents." He himself had sounded alcohol to its depths to find if its action upon mind and body was good for

the sons of men (Eccl. ii. 3), and his decision is, "Look thou not upon it." Though the injurious action of alcohol upon the human constitution be the chief and sufficient moral argument against its use, a second valid objection is its dangerous nature in making drunkards in every class and profession, among even clergymen, lawyers, and physicians, and in leading to many unexpected fatal accidents, and to deaths through drink-committed murders. Dr. Paley (*Moral Phil.* book i. chap. vii.) wisely said, "In every question of conduct, where one side is doubtful and the other safe, *we are bound to take the safe side.*" Not that it is *prudent* only to take the safe side, but moral duty obliges us, as men responsible to God for the right use of our reason, to take the safe side. Alcohol in Britain causes a yearly *direct* loss of fully ten thousand lives by the fatal accidents which befall men and women when intoxicated, and the murders committed through drink, and fully one hundred thousand more lives are indirectly lost through disease, neglect, and want, the result of drinking; while in India, a land infested with serpents, the annual loss of life through bites from snakes, &c., is under ten thousand. Considering the vastly larger population of India, the proportion is one death through the bite of snakes in India to sixty deaths per annum through the bite of alcohol in Britain. It is the wisdom of God then, as well as of Solomon, to command men not so much as to "look upon wine when it is fermented," which is an infinitely greater curse than if the land were infested with serpents.

Q. 153. Repeat 1 Thes. v. 6, 7, and give the meaning.

A. "Let us watch and be sober; for they that sleep, sleep in the night, and they that be drunken are drunken in the night." This is a moral command enjoining us to be abstinent, that we may be in the best condition for the watchfulness and attention to duty which is required of every Christian—Christ's command being, "Watch and pray that ye enter not into temptation" (Mat. xxvi. 41).

The phrase used by Paul, "Watch and be sober," is in the Greek "*Gregoromen kai nephomen*"—"gregoromen" being from the verb "*egregoreo*," to be "*watchful*," as translated in 1 Thes. v. 8, or to be "*vigilant*," as translated in 1 Pet. v. 8,—be watchful or vigilant as those who are fully awake. "*Kai*" is the Greek conjunction equivalent to the English one "*and*." "*Nephomen*," from the verb *nepho*, has a literal and a metaphorical meaning. The primary or literal sense refers to wine, and then the word signifies *to drink no wine at all*, as every standard Greek dictionary declares. Thus Liddell and Scott's definition is "*to drink no wine*;" Dunbar's is "*to abstain from wine*." Josephus, in the time of the apostles, used the word in this its primary meaning. Thus, speaking of the priests *in the temple*, he says, "They are *abstinent* (*nephalioi*), being forbidden to

drink wine while they wear the priestly robe," Lev. x. 9 (*Antiq.* book iii. 12, s. 2). The secondary or figurative sense refers to *mental states*, and then the word means to be watchful, vigilant, wary, circumspect. It is of little consequence whether we take "*nephomen*" in its literal or figurative sense, for both irresistibly conduct us to the conclusion that Paul enjoins abstinence from fermented wine upon all Christians. There can be no doubt that the apostle uses the word in its literal signification—for, 1st, when he says "They that be drunken are drunken in the night," no man will deny that Paul *literally* refers to the use of drink by those who drink in the night; and no man need deny that "*nephomen*" refers to the drinking described, not to mental states. The children of the night sleep and they drink, but the children of the day are to be *exactly opposite*; they are to be watchful like those fully awake, and they are to drink not. Liddell and Scott, under "*methuo*," the verb which Paul uses to denote drinking in the night, show that "*nepho*" was employed by Greek writers as the exact opposite of "*methuo*." 2d. By employing the conjunction "*kai*"—"gregoromen *kai* nephomen"—Paul shows that "*nephomen*" is to be understood in its literal meaning. "*Gregoromen*" signifies to be watchful or vigilant; what need was there then for nephomen being used in its figurative sense to signify the same thing? If we take "*nephomen*" in its figurative sense as applying to mental states, instead of to wine, then the meaning of the phrase "*gregoromen kai nephomen*" will be "Watch *and* watch!" an absurd tautological style of expression unworthy of Paul or of revelation, since the last word added nothing to the meaning of the first. 3d. Paul was a thoroughly educated Greek scholar, and knew the appropriate phrases of the language in which he wrote. In the 8th verse he represents the children of the day as Christian *soldiers*, who are to put on the breastplate and helmet, and no doubt Paul knew that Xenophon and other classic Greek writers employed the phrase "*egregoratas kai nephontas*" (the very words of Xenophon) as the order which generals gave to their soldiers when they commanded them to abstain from wine, and be vigilant on approaching the enemy they were to combat. Thus Epaminondas, the greatest of Greek generals, ordered his men to be *nephein*, to abstain from wine and watch against sleeping before their foes. The abstainers in the British army in India have a flag bearing a motto, "Let us watch and be sober." No man will imagine that the meaning of that motto is "Let us watch *and* watch," when its plain sense is "Let us watch and drink not," that we may be in a fit state for watching and action. In an emergency, when the troops ordered out could not be speedily formed, the general in India said, "Then order out Havelock and his *teetotal* saints; *they are always ready.*" Most men will admit that "Watch and drink not" is at once a more natural, wiser, and safer interpretation of "*Gregoromen kai nephomen*" than "Watch *and* watch," when addressed to Christian soldiers, the children of the day. But if some men will not take the natural

and *literal* meaning of Paul's words, then they shall find that the *figurative* sense of "*nephom*" as strongly enjoins abstinence as its literal sense. British, Colonial, and American Evangelical Churches generally take the Confession of Faith, the Larger and Shorter Catechisms, as their standard. The sixth rule given in the Larger Catechism (Question 99) for the right understanding of God's commands runs thus:—"That under one sin, or duty, all of the same kind are forbidden or commanded; together with all the *causes, means, occasions, and appearances* thereof; and *provocations* thereunto." If we take "*nephom*" in its figurative sense, then Paul commands all Christians to be watchful, vigilant, wary, circumspect—states of mind which Christians in the mass cannot preserve without abstaining from alcoholic drinks; for if they can be wary and circumspect during or after drinking, why does drinking separate so many of them from the membership of the church—why does drinking cause more cases of church discipline than all other sins or practices put together—why does drinking expel so many ministers from their churches if they can with drinking be wary and circumspect, for surely none ever desired to be deposed in disgrace? If Christians are to be watchful, vigilant, wary, circumspect, they must of necessity abstain from alcohol, which undeniably leads men to be unwatchful, unwary, uncircumspect. Drinking, in the language of the sixth rule quoted, is the "*cause,*" "*means,*" "*occasion,*" "*provocation,*" of unwatchfulness and drunkenness, and therefore is forbidden. In fact, the figurative meaning of "*nepho*" in Greek, and of "*sober*" in English, arose from observing the mental effects resulting from obeying the *literal* meaning. Men saw that when no fermented wine was drunk the abstainer did not become rash, unwary, or drowsy, like the drinker, but preserved his natural caution and activity; therefore for the metaphorical meaning of "*nepho*" they gave "*watchful,*" "*wary,*" "*circumspect.*" It was seen that the abstainer did not become, as it were, mad, or wild, or reckless through drink; therefore in English they made the figurative meaning of "*sober*" to be "*not insane,*" not furious or passionate, but calm, self-possessed. If Paul then used "*nepho*" in its figurative sense of applying to the mental states of a nephalist, he thereby bound Christians to the practice of nephalism. If he commanded the wariness, circumspection, watchfulness required from a Christian, he thereby bound all to the means of securing and preserving these mental states, and prohibited all means or agents opposed to the retaining of them; he therefore bound all to abstinence. If any thousand members of any church take what is called a moderation dose of intoxicating drink they will not preserve the same wariness of speech as if they had taken none. There will be the "*idle words*" which the Saviour condemns (Mat. xii. 36), and the want of "*speech seasoned with grace*" which Paul commands (Col. iv. 6). In Paul's time fermented wine was recognized as the efficient means to prevent the mental states commanded by the figurative sense of "*nepho.*" Thus Philo, the Jew of Alexandria,

with whose writings Paul was no doubt acquainted, says, "Wine was forbidden by God to the priests for four reasons: 1st, it produces sluggishness of body; 2d, forgetfulness of duty; 3d, rashness and infatuation; 4th, drowsiness or sleep. Philo applies the word "*nephonton*" to *abstainers*, and says that they have their senses more acute, clear, and discriminating, their minds more sharp-sighted and perspicuous, either to review the past or contemplate and provide for the future, than if they took wine (*De Monarchia*, book ii.). Thus it is evident that whether the literal or the figurative meaning of "*nepho*" be taken, Christians are bound to abstinence from a brain-ranger and thought-perverter like alcohol. This interpretation is the most natural as it is the *safest* for man—the one which agrees with Solomon's prohibition, "Look not thou upon it"—agrees with the teaching of science and providence, and is therefore the truth of God.

Q. 154. Repeat 1 Pet. v. 8, and state if it be a moral command.

A. "Be sober, be vigilant; because your adversary the devil as a roaring lion walketh about seeking whom he may devour." This is a moral command enjoining abstinence upon all, that they may preserve the vigilance necessary to guard them against the sudden attacks of Satan.

Peter in this verse employs the same two Greek verbs that Paul uses in 1 Thes. v. 6, "*nepho*" and "*egregoreo*." But Paul having to speak first of sleep and then of intoxicating drink, "They that sleep sleep in the night, and they that be drunken are drunken in the night," he naturally brings in "*egregoreo*" before "*nepho*," thus, "*Gregoromen kai nephomen*;" while Peter, addressing men who lived where drunkenness abounded, and who had themselves indulged in the "excess of riot" common in Asiatic cities at the time, for they had walked in "excess of wine," "revellings," "banquetings" (1 Pet. iv. 3), he as naturally brought in "*nepho*" before "*egregoreo*," and therefore begins the verse with "*nepsate*," "*gregoresate*," translated "Be sober, be vigilant." Beginning the verse with "*Drink not*," he ends it with "*kata-pie*," from "*kata-pino*," to drink down ("*pino*" = to drink; "*kata*" = down). He could have used other verbs to describe Satan as a *lion* DEVOURING, but none so fit for his purpose, for his pithy meaning is, "Drink not, lest the devil drink you down." As a deceiver and destroyer the devil and his legions spread many snares, but all of them put together are like burned cotton threads, from which any one may escape with a little pressure (Jam. iv. 7), compared with intoxicating drink, which is emphatically *the* snare of snares which men lay for themselves and one another—all the legions of the pit banded together not having so much power over a man as

six ounces of alcohol within his brain. When Paul refers to those who are in the snare of the devil, and are taken captive by him at his will (2 Tim. ii. 26), he employs an expressive verb to denote how they may recover themselves out of a snare—it is “*ana-nepsosin*” = to entirely cease being under the influence of wine. So long as men or women drink heavily they are in a snare, out of which there is no escape but by abstinence. It is of no consequence to our argument whether we take Peter’s verb “*nepsate*” in its literal or figurative meaning, as both lead to the same conclusion—the mental qualities of the nephalist demanding the bodily condition of the nephalist. Yet it is perfectly certain that the apostle uses the verb in its literal sense; for since his second verb is “*gregoresate*,” to be vigilant, why should his first one also mean be vigilant, and thus make him write, “Be vigilant, be vigilant,” a style of vain repetition which Peter in his calm old age did not indulge in. The literal meaning is the most natural, and conveys the wisest advice. If even men who are not abstainers were sleeping at night within a fire circle in Africa, with lions prowling outside, or were travelling in a railway train, they would prefer for a sentinel or a pointsman a person who had got no drink and been cautioned to watch, to one who had got a moderation dose of alcohol in his brain, and had been thus addressed, “Be vigilant, be vigilant!”

Q. 155. *What was the fifth way in which God showed his hatred of intoxicating drink?*

A. By making the use of it inconsistent with the general principles of the Bible.

Q. 156. *Mention some of these principles, and show how they oppose the use of intoxicating drink.*

A. 1st. Paul styles “drunkenness” a work of the flesh (Gal. v. 21), and his general principles against all works of the flesh are, “Make no provision for the flesh to fulfil or gratify its lusts” (Rom. xiii. 14), and “Crucify the flesh with its affections and lusts” (Gal. v. 24). Drinking in moderation, as it is called, is not crucifying either the flesh or its lust, drunkenness, but is a gratifying of the flesh and a sowing of the seeds of a drink-crave.

2d. Christ says, “Watch and pray, that ye enter not into temptation,” that is, into the means or occasions of temptation (Larger Catechism, question 99, rule 6). Going into drinking company is a wilful entering into the means or occasions of temptation to drink, as the experience of all drinkers has taught them.

3d. Paul says, "Do thyself no harm" (Acts xvi. 28), and "Abstain from all appearance of evil" (1 Thes. v. 22), and the voice of God in nature or science clearly proves that alcohol, even in small quantities, is hurtful to the body and mind, and is therefore the reality as well as appearance of evil from which we are to abstain.

Superintendents of Bands of Hope can illustrate many other Bible principles, 2 Cor. vi. 17; Rom. xii. 1, 2; Tit. ii. 12; Eph. v. 11; 1 Cor. x. 31; Mat. xviii. 7; &c.

Q. 157. *Having now considered the FACTS of revelation which prove that God hates the use of intoxicating drink by man (for God hates whatever action he forbids), it is our duty to look at the APPEARANCES in the Bible, or those passages which men have supposed to sanction the use of such drinks. Repeat Deut. xiv. 24-26, and give the meaning.*

A. "If the way from thy house to the tabernacle or temple be too long for thee to carry the tithes, or tenth part of all the increase of thy fields year by year, then thou shalt turn the tithes into money in thy village or city, and carry the money to the tabernacle or temple, and there buy what thou needest, as oxen, sheep, yayin, sheckar, or whatever else thou desirest; and there thou shalt eat before the Lord thy God, and thou shalt rejoice, thou and thine household." This passage means that the people were to eat yayin and sheckar in the solid form of grapes and dates, or thick-boiled preserves.

Rule 1st. Bring all parallel passages into one view. Deut. xiv. 23 shows that the object of making the people dwell about a month of each year, not at home, but close beside the tabernacle or temple until the tenth part of their crop or harvest was consumed, was to make them "fear the Lord their God always." The principal parallel passage by which to interpret the word "yayin" in Deut. xiv. 26 is Deut. xii. 17, 18. There God institutes the custom of leaving home with the tithes to be consumed at the tabernacle or temple, and there He binds all the people to eat, not "yayin," but "tirosch" (the Hebrew word in verse 17th being tirosch); and by using the word "tirosch" at the institution of the custom He took care to let the Jews for ever know His meaning—that it was not intoxicating wine they were to eat. The secondary parallel interpreting passage is Deut. xiv. 23. The word there used is "tirosch," not "yayin," and

there all the people were bound to *eat* their tithe in the form of "*tirosh*," except those who lived so far from the temple they could not carry the tithes, and for ease to themselves had leave to exchange it for money in their city or village, and carry only the money. Another secondary parallel passage is Lev. x. 9, where the priests at the tabernacle or temple were forbidden to use intoxicating *yayin* or *sheckar* upon pain of death. The last parallel passage required is Deut. xii. 26, which shows that the tithes were to be regarded as "*holy things*." Rule 2d. "Let ancient customs interpret the passages referring to them." From Is. lxxv. 18-21 we learn that when God would rejoice in Jerusalem, and his people rejoice before him, they would *eat* of the fruit of their vineyard; and from first to last God in instituting or re-enforcing the custom of yearly travelling to the temple with the tithes, uses the word *eat*—"eat thy *tirosh*" (Deut. xii. 17); "*eat thy tirosh*" (Deut. xiv. 23); "*eat thy yayin and sheckar*" (Deut. xiv. 26). It was the ancient custom of the Jews, as it is of the inhabitants of Palestine to-day, to consume more of the vintage in the form of grapes or raisins than of wine (Josh. xxiv. 13; 2 Ki. xviii. 31). Taking in now all these parallel passages at one glance we find that the custom was instituted as a means of *sanctifying* the people, that at its institution *all* the people were bound to the use of "*tirosh*;" that the priests, who had *the same moral nature* as the people, dare not take intoxicating wine; that the people were under the same obligation as the priests to be holy, for their onlooking God was holy (Lev. xx. 7); that on the second mention of the rules for the custom God binds down to the use of "*tirosh*" all the people who lived near the temple, consequently all dwelling in Jerusalem; that there was no physical or *moral* reason why those who had come from a distance should have intoxicating "*yayin*," which was not allowed to the rest of the people or to the priests, for though they were *bona-fide* travellers they were lightly laden travellers, having only money to carry, and not so wearied as those who had carried their produce a short distance, and were bound down to *tirosh*; that the tithes of all without exception were to be *holy things*; that they were to be *eaten*, not drunk, by *children*, by man-servant and maid-servant (Deut. xii. 18) *at the tabernacle*, and *before* the God who consumed Nadab and Abihu for drinking intoxicating wine at the tabernacle; and finding all this we are irresistibly shut up to the conclusion that the meaning of to "*eat yayin or sheckar*" in Deut. xiv. 26 is to eat grapes, or grape preserves, as debash, and to eat dates or thick-boiled preserves of the palm or other tree than the vine. For God to have sanctioned the use of intoxicating *yayin* by men, women, and children for a month before his tabernacle was the best plan to have corrupted the people instead of sanctifying and making them "*fear the Lord their God always*." That so many Christian ministers of the present day should believe and teach that in Deut. xiv. 26 God sanctions the *drinking* of intoxicating *yayin* is *the most* melancholy illustration of how little the character of God

and the nature of alcohol and of man is understood by these professed teachers of the people. Never in this world shall it be known how much that false interpretation has cursed the earth and made men turn into the ranks of infidelity, from a Bible and a God that could sanction to *children*, women, servants, and masters, during religious services, the use of a substance which the same Bible and God liken to the venom of asps and the serpent's bite—a God that could contradict himself by one day forbidding fermented wine to men called priests when at the tabernacle, and the next day give permission to a million men, women, and children, to use the very prohibited wine when they were at the tabernacle.

Q. 158. *Christ attended a marriage at Cana, and there turned water into wine. What proof is there that Christ ever made, used himself, or gave to others, any fermented wine?*

A. Rule 3d. "No evidence can be received on either side but such as would be perfectly satisfactory in a civil court before a judge and jury;" and since there is no verse in the Bible which says Christ took fermented wine, there is no proof whatever that at any time He used such wine, and from no evidence there can be no inference. On the other hand, as evidence that He never used intoxicating drink we have—1st. The declaration of the Holy Ghost that when Christ was at Golgotha He would not receive the intoxicating wine which was offered to him (Mark xv. 23). 2d. The declaration of Paul that Christ was made under the law, that by obedience to it he might redeem us (Gal. iv. 4, 5); that as High-priest He came into this world to do the will of God (Heb. x. 7); that as High-priest of the human race *every action of his life* was a SACRIFICE OF OBEDIENCE to the law on behalf of men; that therefore He was *continually* under the law, forbidding the use of fermented wine to priests *serving for the people* (Lev. x. 9), and being under that law he kept it all his life, for he was holy, harmless, and undefiled (Heb. vii. 26). 3d. Being made under all moral law, he was bound to keep all the commandments he had ordered men to keep, and therefore he kept all the commands in the Bible against the use of fermented wine, for what was his duty was always his practice.

In the year 1856 a man named John Brown died in Glasgow. He was a Scotchman of a peculiar cast, with strong individualities. From a letter written by his wife, who survived him four years, it appeared that he always took for breakfast porridge and milk, and a little fried ham and egg, bread and tea. In the year 1876, that is twenty years after his death, the question arises, What *kind* of milk did he use with his porridge? was it sweet or was it what is sometimes called "sour" or butter-milk? and what *kind* of fried ham did he take? was it smoked or unsmoked? The only evidence was the letter from his wife, which did not fix the quality of either the milk or the ham; and a hundred letters from trustworthy witnesses who lived in Glasgow twenty years ago stating that then it was quite common for people to apply the word "ham" without any qualifying adjective to both smoked and unsmoked ham, and quite as common to use the word "milk" to denote both sweet milk and buttermilk. The hundred and one letters are sent to a jury in every city in the civilized world to decide what kind of ham and milk John Brown had used. It is plain that the verdict of every jury in the world would be that the evidence did not warrant them in giving any decision whatever, and that through want of proof the case must be dismissed from court. But if in addition to the hundred and one letters, there was one which stated that one day when smoked ham and buttermilk were offered to John Brown he refused to take them; a second letter which stated that once he severely punished his two sons for taking buttermilk and smoked ham; and several other letters which stated that he was in the habit of dissuading people against using these things—then the verdict of every jury would be that the evidence justified the decision that it was sweet milk and unsmoked ham which John Brown had used for breakfast. If men would only exercise the same common sense in judging of Jesus Christ that they would employ in deciding the case of John Brown, how speedily would they arrive at the truth. Christ took wine or "*oinos*," and the question to be settled is, What kind of "*oinos*?" The Septuagint, or Old Testament in Greek, which was read in the synagogues of Judea every Sabbath during the life of Christ, called the pure juice from the grapes pressed into Pharaoh's cup "*oinos*," called the unfermented juice in the wine-press when newly trodden from the grapes "*oinos*" (Prov. iii. 10; Joel ii. 24; Is. xvi. 10; Jer. xlvi. 33), and also called fermented wine "*oinos*." Mark testifies that when intoxicating "*oinos*" was offered to Christ he would not take it. Moses relates that one day he consumed two of his sons, Nadab and Abihu, for using fermented wine; many writers of the Bible relate that he commanded men not to "look upon fermented wine, and to abstain from it," and yet with this clear evidence men cannot settle the case of Jesus Christ, though they could in a few minutes settle the case of John Brown. There seems to be a determination in the church not to give justice to Jesus Christ. Some ministers and others say they abstain from Christian *expediency*, others abstain

from regard to Bible principles. That is to say, their regard for the safety of others and to Bible principles has impelled them to abstain. What then? Had Christ no regard to the safety of others or to Bible principles? Had He possessed as much as modern Christians He would have abstained; but since it is said He did not abstain, though He knew all the havoc drink would cause in His church in every generation, the conclusion is that He cared less for the safety of others and for Bible principles than modern Christians!! Behold how the church crucifies Christ afresh, and treats Him worse than His Jewish murderers, for they said, "He saved others, himself he cannot save," which declaration was true, for in the garden He said to those who came to apprehend Him, "If ye seek me let these my disciples go their way." And He said, "For their sake, and for the sake of those who shall believe on me to the end of the world, do I sanctify, do I offer up myself," Jn. xvii. 19, 20. O Christ, the blasphemed, thou art wounded in the house of thy friends!

Q. 159 *What answer would you give to the fallacy that because Christ is called a "wine-bibber" (Mat. xi. 19), and did eat and drink in the house of a Pharisee, He must therefore have taken fermented wine?*

A. The assertion is a mere conjecture, and, by rule 3, all conjectures are to be passed out of court. "*Gleukos*" was used in Jerusalem in the days of Christ, for had it not been used the words "these men are filled with *gleukos*" would not have been found in Acts ii. 13. The unfermented juice of grapes in skin bottles was called by the Septuagint, or Bible of the synagogues and Christian churches, "*gleukos*" (Job xxxii. 19). The unfermented juice in Pharaoh's cup was called "*gleukos*" by Josephus, who lived in the days of Christ and wrote the same style of Greek as in the Septuagint and New Testament. Christ himself calls the unfermented juice "*oinon neon*" (Mat. ix. 17), new wine, and classical Greek writers call it "*oinos*," and since unfermented wine is thus proved to have been used in Jerusalem in the days of Christ, men who accuse Him of taking fermented wine must produce judge and jury evidence for their assertion, and that they never can do.

Q. 160. *What kind of wine did Christ make at the marriage in Cana?*

A. There is no proof whatever that it was fermented

wine, while all the evidence is on the side that it was unfermented.

The Greek of the New Testament is not so much classical as it is Jewish or Alexandrian Greek. It is precisely the same style of Greek as in the Septuagint, and as Philo of Alexandria and Josephus of Judea wrote. Therefore the Greek of the Septuagint, or Greek Old Testament in common use among the Jews, must interpret the Greek of the New Testament. The phrase "well drunk" in John ii. 10 is, in the Greek, "methusthosi," from "methuo," to drink, the effects of the drinking of course depending on what is drunk. The Septuagint uses that verb "methuo" in Ps. xxxvi. 8 to denote men being abundantly satisfied with the fatness of God's house, and in Ps. lxxv. 10 to denote the earth being plentifully watered with rain. In Jer. xlv. 10 it is applied to a sword drunk with blood. In these three cases there can be no reference to intoxication, and as little is there in John ii. 10; for, 1st. If the phrase "well drunk" means "well filled with intoxicating wine," then Christ was among wine-bibbers, and made more intoxicating wine to make the guests still better filled with fermented wine, and thus He broke His own command, "Be *not* among wine-bibbers" (Prov. xxiii. 20); "With such *not* to keep company, not so much as with them to eat" (1 Cor. v. 11). 2d. The company *in fact* were not "well drunk," for the governor had the full power of his sense of taste, and at once perceived the goodness of the wine made by Christ. There is thus not the slightest proof that the guests had been using anything before Christ arrived but the unfermented juice which their Greek Bible called "*oinos*." That it was unfermented wine Christ made is evident from these facts. The miracle was to show forth His glory, and it could not be for the glory of Christ to hurt men by making alcoholic wine at 13 per cent. of alcohol, which is the common strength of fermented, unfortified wines in the Lebanon districts at this day, and these are not stronger than the fermented wines of Judea in the days of Christ. Had He hurt men physiologically by providing such wine, it would have been the only time in all His life He did injure them, for He went about *curing* disease, not assisting to create disease, as alcohol certainly would have done. 2d. If He, on that occasion, made fermented wine, it would have been the only instance during nearly 6000 years. Every year before and after the marriage He made only the unfermented juice, which, when in the wine-press direct from the grapes, He Himself calls "*yayin*" in the Hebrew Bible and "*oinos*" in the Septuagint Bible (Is. xvi. 10; Jer. xlviii. 33). That Jesus Christ, "the same yesterday, to-day, and for ever," could at Cana cast aside His *immutability* to injure men in their bodies, in their souls, in their prospects of salvation, for alcohol turns men away from Christ, that He could in this way glorify Himself, is *perfectly incredible*. 3d. Christ Himself, in Is. lxxv. 8, had said, "The new wine was found in the cluster, and commanded men not to

destroy it for a blessing was in it"—had He made alcoholic wine, in which is no blessing—nothing to satisfy nature's thirst or the body's wants, He would have set the example to men of breaking His own law. 4th. How could Christ, after having commanded men "not to look upon fermented wine" (Prov. xxiii. 31), make that wine and encourage men to use it? 5th. How could Christ command men to glorify God in eating and drinking, how order them to watch and pray against entering into temptation, then supply them with intoxicating drink, when in every marriage company such drink would be the means of leading all into temptation and some into folly which would not glorify God? It is a mistaken notion to suppose that all the water in the six water-pots, about 120 gallons, was changed into wine. Had it been turned into unfermented juice then the wide open mouths of the water-pots would have exposed sufficient air space to set what was left fermenting in eighteen hours; if into fermented wine, then the air would soon have caused a movement towards vinegar. Christ said to the servants, "Draw out and bear unto the governor of the feast." They drew out of the pots not wine but *water*, ver. 9, and *while they carried it*, Christ in a moment turned the water into the same kind of wine that He usually takes months by means of the vine-tree to prepare for man. And it was of such delicious flavour and sweetness it could not but arrest the notice and secure the commendation of the governor. "This is truly the juice of Eschol, the good wine set apart for relatives and special friends on the first day of the feast, and yet thou hast kept it until now." The meaning of the phrase "*good wine*" must be gathered from the opinions of those living in the days of the apostles, not from modern notions. Pliny, who wrote more extensively than any other author on wine, declared that the most useful (*utilissimum omnibus*) wine for every one was that which had its gluten removed by the cloth-strainer or filter that it might not ferment, and Columella calls the wine styled "*amethyston*," which would not intoxicate and was unfermented, "*good wine*, which would not injure the nerves." No man can suppose that the unfermented wines described by Pliny, Columella, and others, as being made in the days of Christ, were not consumed. The fact that they were made is also the fact that they were used. The exceeding value of parallel synonymous interpretation is seen in the fine light which it throws upon John's narrative of the marriage at Cana. The verb which John uses to describe being satisfied or well drunk with wine is "*methuo*." Now in John's own Greek Bible, the Septuagint, from which Christ often quoted in his addresses, more frequently indeed than from the original Hebrew, Jeremiah employs that same verb "*methuo*" to denote the priests being satisfied or well drunk with "*tirosh*" or unfermented juice. The prophet, in foretelling the return of the Jews from Babylon, says they would come and sing in the height of Zion (the temple in Jerusalem when rebuilt), and would flow to the *goodness of the Lord* to wheat, *tirosh*, oil, and young of the flock and of the herd; that in

those days the virgin would rejoice in the dance, and young men and old would rejoice together. Then the priests were to be satiated with fatness or the best of the tithes stored by Nehemiah in the temple chambers, Jer. xxxi. 12-14. Literally was Jeremiah's prediction fulfilled, for Nehemiah says there was "a rejoicing with great joy (in the height of Zion), so that the joy of Jerusalem was heard even afar off" (Neh. xii. 43). But intoxicating yayin was no element in that great joy. The people were satisfied with the "*good wine*" or tirosh of God, and the priests were satiated, or well drunk, or satisfied with it, for nothing but "tirosh" did Nehemiah bring into the temple for their use. A second and better fulfilment of Jeremiah's prediction took place in Cana of Galilee, for there the people assembled, not around Zion, but around Zion's King. There likewise were to be found wheat, tirosh, olive-oil cooked with the food, and young of flock and herd; and the being "*well drunk*" in that marriage assembly no more meant having drunk fermented wine than the priests being "*well drunk*" in the temple under Nehemiah meant that they had taken intoxicating drink. It was not the first marriage Jesus Christ had attended; and as there was no alcohol in Eden when He gave Eve away to Adam, so there was none at that one in Cana of Galilee when His disciples believed in Him and He glorified Himself by producing the natural juice of the grape as speedily as He produced it in Eden, when, with a word, He commanded the vine-tree to spring above the ground with the heavy clusters for the first married pair in our world, and when it had not entered into His creative intentions that alcohol would ever be required at any marriage feast on earth.

Q. 161. Repeat Eph. v. 15-18, and give the meaning.

A. Ver. 15: "See then that ye walk circumspectly, not as fools but as wise; ver. 16: redeeming the time because the days are evil; ver. 17: wherefore be ye not unwise, but understanding what the will of the Lord is; ver. 18: and be not drunk with wine, wherein is excess, but be filled with the Spirit." Paul's meaning is, "Be filled with the Holy Spirit, instead of with wine, the nature of which is to lead to riotousness and ruin, and which will keep you from redeeming the time, and walking wisely and circumspectly."

The apostle *cannot* mean, "Be not *drunk* or intoxicated to excess," because the state of being "*drunk*" or intoxicated is admitted by even drinkers to be excess, and Paul could never write, "Be not *excessively* drunk, be only *moderately* drunk." His meaning will be rapidly reached by looking at his own words in the Greek, with the true

English rendering below: *Kai me methuskethe oino, en ho estin*
 And not drunk with wine; in which is

asotia

The word in the Greek which our English riotousness and ruin. The word in the Greek which our English translators have rendered "*excess*" is "*asotia*," and yet they have rendered the very same word in 1 Pet. iv. 4 as "*riot*," "*excess of riot*," indulged in by the irreligious Gentiles who followed (ver. 3) lusts, excess of wine (or drunkenness), revellings, banquetings, and *blasphemed*; for "*blasphemantes*" is the word Peter used, and which in English is rendered "*speaking evil of you*." This same word "*asotia*" is used as an adverb in Luke xv. 13, "*Zon asotos*" = "*living riotously*," to describe the prodigal son wasting his substance. Paul's words then "*en ho estin asotia*" undoubtedly mean "*in which is riotousness and ruin*." Now small-dose drinkers have only two possible alternatives in interpreting Paul's words, and both shall irresistibly conduct them to total abstinence instead of to the small-dose drinking which this verse has been supposed to sanction. Either the "*asotia*" or riotousness and ruin are in the state of being "*drunk*" or intoxicated, or in the wine which intoxicates. If in the state of being intoxicated then Paul means, "*Be not drunk*." If the "*asotia*" be in the wine, the being drunk or *filled* with it *will* make a man *intoxicated*. In either sense then we come to the same conclusion, "*Be not in a state of drunkenness or intoxication*." Now Paul styles drunkenness a work of the flesh (Gal. v. 21), and his command regarding *all* the works of the flesh is to "*mortify*" them = starve them to death (Rom. viii. 13), to "*crucify*" them (Gal. v. 24). Why should "*drunkenness*" have moderate indulgence any more than the other works of the flesh enumerated in Gal. v. 19-21, since alcohol is the parent, the exciter to the commission of nearly all the rest? Is drunkenness a work of the flesh and a *sin*, or is it not? All small-dose drinkers confess that drunkenness is a sin, but say it is only a sin of *quantity*. Well, if they will turn up to their own standard of faith and practice, the Confession of Faith, Larger Catechism, Question 99, rule 1, they will find these words, "*The law of God "forbids the least degree of every sin," consequently the least degree of the sin drunkenness, which is only drinking a large dose instead of a small one, the small one producing hilarity and bodily sensation degree No. 1, while the large dose produces degree No. 4. Also these words, rule 6, "that under a sin all its causes, means, occasions, appearances, and provocations thereunto are forbidden," and certainly small-dose drinking is the "cause," "means," "occasion," since without drinking there never would be a single case of drunkenness. All drinkers began in moderation so called, and no one at first had any desire for the drunkard's miserable fate, or fear that he would reach that end. It is utterly fallacious to reply to this by saying that gluttony is also a sin of quantity or excess in eating, as drunkenness is excess in drinking, and that as moderate eating is lawful and right, so is small-dose drinking—utterly fallacious, for the two things compared, natural*

food and alcohol, will not admit of *comparison*, they being a perfect *contrast*. Eating is *absolutely* necessary to life; who ever said that small-dose drinking was absolutely necessary to life? Natural food is made by the *wisdom* of God out of organic refuse, and is exactly adapted to the body to preserve its health and life. Alcohol is made by the *folly* of man, not out of refuse but out of precious food, and is unfit for the body, since it produces disease and death. The nature of alcohol when used is to *generate* a *craving* for it; the nature of food is to *satisfy* natural hunger. Alcohol and small-dose drinking do, in fact, lead to intoxication, while bread and the moderate use of it no more tend to make gluttons than a moderate sleep of seven or eight hours tends to make children and adults sleep the whole twenty-four hours of the day. Being essentially different, the Bible commands moderate eating, while it condemns alcohol-drinking in every degree. When did God take the life of two priests for eating, or forbid all the priests to beware of moderate eating, when at the tabernacle, upon pain of death? For forty years in the wilderness God gave the Jews manna, flesh, and water, but not a drop of wine (Deut. xxix. 5, 6). From Genesis to Revelation the Bible condemns small-dose drinking. Paul by saying, "Be not in a state of drunkenness," no more sanctions moderate drinking than Solomon sanctions moderate wickedness by saying, "Be not wicked *overmuch*" (Eccles. vii. 17). Paul cannot contradict himself. The analogy of faith requires that we interpret his words in this verse consistently with his other commands, as in Timothy and Titus, where he commands bishops, who are to be ensamples to the flock, to be abstinent and not near wine. (See Question 164 of this Catechism.) The same abstinence conclusion is reached by another line of reasoning; Paul employs "*the Spirit*" (the Holy Ghost) as the contrast, antithesis, or autagonist of "*wine*," the grace of the Holy Spirit and *intoxicating* wine mutually opposing each other. And by ordering Christians to be *filled* with the Holy Ghost, to be filled like a cup up to the brim that it can hold nothing else, he *excludes* the use of wine altogether. His words are *plerousthe en Pneumati* filled with the Spirit, the same verb and noun his companion Luke applied to John the Baptist (Luke i. 15), who was filled with the Holy Spirit and took neither wine nor strong drink. The being *filled* with the one naturally excludes the other, for if a Christian be "*drunk*," the Holy Ghost, for the time being, deserts such a desecrated temple, and if a man be filled with the Holy Ghost he has no inclination to gratify the body with intoxicating wine, which would to a certainty remove the fine spiritual edge of grace. The natural meaning of Paul is, "Be filled with the Holy Spirit, instead of, like those Gentiles who walk after the flesh, being filled with wine, the nature of which is to lead to riotousness and ruin, misspending of time and walking foolishly." Like Solomon he directs attention to the nature and effects of wine. "Wine is a *mockery*," said the king of Israel, who knew its nature well. The

Septuagint gives "*incorrigible*" as the rendering of the Hebrew word "*mock*" = wine makes men incorrigible, incapable of reformation till they abandon it; and all directors of reformatory institutions know it is hopeless to improve drunkards until they abstain. Equally emphatic is the first book of the Apocrypha, which Paul well knew, "Wine is wicked, it *causeth* all men to err that drink it" (1 Esdras iv. 37; iii. 18). As strong is our Shakspeare, "Thou invisible spirit of wine, let us call thee *devil*." Now what concord is there between such wine and grace, or the Holy Ghost? What have Christians to do with what Solomon says makes men behold and follow evil-doers, and utter perverse things (Prov. xxiii. 33), instead of walking wisely and circumspectly, as Paul commands (Eph. v. 16). What have they to do but obey God's own voice, "Look not thou upon it." The man who says he can innocently and lawfully use *intoxicating, thought-pervverting* wine in small doses has yet to learn the contrariety between grace and alcohol, as well as the chemical and physiological science of his time. We know that from all this reasoning small-dose drinking will try to wriggle away. It will say that "drunkenness" is not a sin of *quantity*, but consists in a wrong frame of mind, in *a desire* to drink a large quantity, in a want of proper self-control. So be it. Then since small-dose drinkers have proper self-control, why do they not, as every wise man would do, adopt the *safest* plan possible in relation to intoxicating drink? In any thousand of small-dose drinkers, however selected that thousand may be, a certain number will become drunkards, for this has always been the case in the past. Why then do they not prevent the ruin of a certain proportion of themselves by all adopting the safe course of abstinence? Why do they not, for the sake of their children, adopt that safe course? Even from this they will seek to wind and twist away, and then we place directly in their path the proof that small-dose drinking is *immoral* (see Question 183), and ask, if they, as Christian men, will try to creep over the top?

Q. 162. Repeat 1 Tim. v. 23, and state if it be a particular or universal command?

A. "Drink no longer water, but use a little wine for thy stomach's sake and thine often infirmities." This is a particular direction, for Paul knows no more about the stomachs of the men of this generation than they know about the stomachs of the next generation as yet unborn. Consequently Paul did not prescribe for any one but Timothy, even as he asked no one but Timothy to bring to him the cloak, books, and parchment left at Troas with Carpus, 2 Tim. iv. 13.

How do all men not obey the words of Christ, "Sell all that thou

last, and give to the poor?" Just because they know it was a particular direction, and so only for the person addressed.

Q. 163. *What proof is there that the wine of which Paul recommended Timothy to take a little was fermented?*

A. There is no proof whatever that it was fermented—all the evidence goes to show it was unfermented, for the physicians and writers of the first century recommended unfermented wine alone as the medicine for stomach complaints.

Columella (book xii. chap. 38) says that "*myrtle wine*" was for "the gripes, and for a purgative for the bowels, and for *weakness of the stomach.*" Pliny informs us how the myrtle wine was made. Three gallons of must or unfermented juice were boiled down to 2 gallons, and a pound of myrtle leaves and tender twigs was added. It is plain that this was unfermented unalcoholic wine. Then there were wormwood wine and hyssop wine—the former being made by boiling down to one-third 60 English pints of *must* with one pound of wormwood (book xiv. 16, 5). Another kind of wine, named "*ady-namon*" (*i.e.* without strength), was prepared by boiling 30 English pints of *must* with 15 pints of water until all the 15 pints of water had evaporated. This beverage, which contained no alcohol, Pliny says "is given to *invalids* to whom it is apprehended that fermented wine *may prove injurious,*" book xiv. chap. 19. Salt was also mixed with *must* in preparing medicinal wines. It is particularly to be noticed that the science of physicians in the year 60 in Rome agrees with the advanced science of the year 1876. Dr. W. B. Richardson, of London, and other leading physicians, declare that alcoholic wine is injurious to the stomach and causes indigestion. In his Cantor Lectures he takes notice of un-intoxicating medicinal ancient wines. "Certain wines named Myndian, Halicarnassian, Rhodian, and Coan were made with salt water. They were considered not to be intoxicating, *but to promote digestion,*" page 7. The sooner the moderns return to the ancient medicinal wines the better—the pure unfermented juice boiled with herbs, and then preserved from fermentation by air-tight vessels, for such medicines would be far better in every respect than the alcoholic tinctures in use. Had Paul recommended alcoholic wine for Timothy's stomach he would have been against the skill of his own time as well as against modern science. Travelling so much with Luke, the beloved physician, Paul could not have been ignorant of the fact that the medicinal wines described by Pliny as *in use* throughout Rome and Greece were better for Timothy than alcohol, and Timothy being so much in the company of both Paul and Luke, would know to which kind of wine the apostle referred in his advice, though on that point the moderns must for ever remain ignorant.

Q. 164. Repeat 1 Tim. iii. 8, and give the meaning of the phrase "not given to much wine?"

A. Likewise must the deacons be grave, not double-tongued, not given to much wine, not greedy of filthy lucre. The meaning of the phrase "not given to much wine" cannot be ascertained until (Rule 1) all parallel passages in the epistles to Timothy and Titus are brought into one view, and then it is seen it must mean not given to much "*gleukos*."

The first epistle to Timothy and the epistle to Titus were written about the same time, and treating on the same subjects, the thoughts and language are nearly alike, and therefore the one epistle will interpret the other.

PERSON ADDRESSED.	DUTY COMMANDED IN GREEK.	TRUE MEANING IN ENGLISH.	ch. ver.
{ Timothy's bishops	Me paroinon ..	Not near wine	iii. 3.
{ Titus' bishops	Me paroinon ..	Not near wine	i. 7.
{ Timothy's deacons	{ Me oino pollo prosechontas.	{ Not to take } much wine. }	iii. 8.
{ Timothy's deacons' wives	Nephalious ..	Abstinent	iii. 11.
{ Titus' aged men	Nephalious....	Abstinent	ii. 2.
{ Titus' aged women	{ Me oino pollo dedoulomenas.	{ Not to take } much wine. }	ii. 3.

The first point to be settled is, "Does Paul in these six verses give directions as to the use of 'wine?'" That he does give instructions regarding the use of wine is very evident, since he says, "*Me paroinon*"—"me" signifying "not," "*par*" meaning "near," and "*oinon*" being the word for "wine;" "*not near wine*" meaning to have no dealings with it, even as to draw near to God means we are to have dealings with Him. The English translators have very fairly rendered the phrase, "*me oino pollo prosechontas*," by "not given to much wine"—"*me*" meaning "not," *oino* = wine, *pollo* = much, *prosechontas* = addicted to. The phrase, "*me oino pollo dedoulomenas*," is also fairly rendered by "not given to much wine"—*me* = not, *oino* = wine, *pollo* = much, *dedoulomenas* = enslaved to. The second point to be determined is, "Does Paul, by the use of the word '*nephalious*' give direction as to the use of wine?" That he

does so is evident from these three considerations:—1st. Unless “*nephalious*” in 1 Tim. iii. 11 refer not to mental states, as watchfulness, but to the use of wine, then Paul has omitted to give deacons’ wives instructions as to the use of wine, which it was plainly his intention to do, for he evidently intended to give the same instructions to them as to their husbands. In the 8th verse he instructs the deacons regarding four things: 1st. CHRISTIAN SERIOUSNESS—they were to be “grave;” 2d. TRUTHFULNESS—they were not to be “double-tongued;” 3d. THE USE OF WINE—they were “not to be given to much wine;” 4th. AVARICE—they were “not to be greedy of filthy lucre.” In the 11th verse he says, “Even so must the deacons’ wives be,” and then directs their attention to the same four things, and in the very same order; they were to be—1st. “GRAVE;” 2d. “NOT SLANDERERS,” that is, not double-tongued or untruthful; 3d. NEPHALIOUS, that is, abstinent from fermented wine; 4th. “FAITHFUL IN ALL THINGS,” which included not being covetous of the church funds in the hands of their husbands—“not greedy of filthy lucre.” 2d. It may well be presumed that, since Paul gives directions to the women under the charge of Titus with regard to the use of wine, he would not neglect to give instructions to the women under the care of Timothy. If ministers will turn up their Greek Testament to Tit. ii. 3 they will find that just before Paul gives instructions about the use of wine he directs regarding TRUTHFULNESS, the words in the verse running thus, “*me diabolous*” (that is, not slanderers—not indulging in the diabolical practice of slandering others)—“*me oino pollo dedoulomenas*” = not given to much wine. As proof that in Paul’s mind slander and the use of wine were linked by fixed association of ideas, we have now only to turn to the corresponding passage in 1 Tim. iii. 11, where, in giving instructions to the women under Timothy’s care, the words run precisely in the order as in Tit. ii. 3: “*me diabolous, nephalious*” = “not slanderers, abstinent from wine,” showing that Paul, after cautioning against slander, next spoke against the use of wine. In Paul’s mind the use of wine was associated as a cause of slander in women and as a cause of violence in men. Therefore he, in writing to Timothy, said a bishop must be “*me paroinon, me plekten*” = not near wine—not a striker (not one ready to use his fists). And to Titus he uses the same associated ideas, “*me paroinon, me plekten*.” 3d. That by the word “*nephalious*” in Tit. ii. 2 Paul refers to the use of wine, not to mental states, may be inferred from the fact that he did give instructions to men under the care of Timothy, as bishops (that is, presbyters) and deacons, about the use of wine, and therefore was not likely to omit giving similar instructions to the men under the charge of Titus. There can be no doubt whatever, then, that Paul in the six verses in the foregoing table refers to the use of wine. And now we lay before so-called moderate drinkers, who hold that there is only one kind of wine spoken of in the Bible—namely, fermented wine—we lay before them a task they will never

accomplish. Let them try, on their principle of only *one* kind of wine, to harmonize these six verses. Timothy's deacons and Titus' *aged* women are "*not to take much wine,*" while Timothy's deacons' *wives* and Titus' *aged* men are to be total abstainers. Why should a deacon drink, and his wife abstain—does she require to set a better example to the Church than the deacon himself? Why should Titus give his aged women leave to drink a little, and order his aged men to abstain? When Timothy's *drinking* deacons became "*aged men*" were they *then* to *abstain*, like the aged men of Titus? and when Timothy's *abstaining wives* of deacons became aged women were they *then* to *begin to drink*, like the aged women of Titus? Why should a deacon full of the Holy Ghost be allowed some wine, when the bishops were commanded to abstain, and not even to be near wine?

In no dictionary does the word "*nephalious*" mean anything when referring to wine but *total* abstinence. The best-published Greek lexicon, Liddell and Scott's, defines "*nephalious*" thus:—"of drink *without wine, wineless.*" The verb "*nepho*" they define thus: "*to live soberly, especially to drink no wine.*" Dunbar's definition is: "*to abstain from wine.*" Since these six verses can never be harmonized on the principle that the Bible speaks of only *one* kind of wine, it is plain that we must call in Rule 2d, that is, customs existing when Paul wrote, to harmonize these six verses. Timothy was himself an abstainer, and continued to be such even when he took a little *medicinal unfermented* wine for his stomach's sake and often infirmities. He was therefore quite prepared for Paul's command, a bishop must be "*nephalion*" (1 Tim. iii. 2) and "*me paroinon.*" Titus was labouring in Crete, where the inhabitants at the time were much given to drinking parties and sunk in intemperance. Paul therefore says a bishop must be "*me paroinon,*" literally not near wine—not near the drinking parties—and being not near wine, consequently an abstainer. Timothy's deacons' wives were to be "*nephalious*" or abstinent, which was the best of advice, since deacons were required to "*rule well their own houses and their children*" (chap. iii. 12), which they could scarcely do if they had drinking or drunken wives. The deacons themselves served the tables at the daily common meals (Acts ii. 44-47), or love feast gatherings of the Christians, and being seen by all as they served at the daily ministration (Acts vi. 1), they were not to be greedy in taking large draughts of the "*gleukos,*" or unfermented wine which *was* used in the days of the apostles (Acts ii. 13); for thereby they would have incurred the nickname of slowbellies, and caused their office to be evil spoken of. If any man thinks that the "*oinos*" to which Paul referred was fermented let him produce judge and jury evidence for his conjecture; let him prove that the wine which Pliny declared was most beneficial for all persons, which had its gluten removed with the cloth filter, and was unfermented, was not used, though it was made, *and also* show why deacons, who were to be men full of the Holy Ghost (Acts vi. 5), were to be allowed

intoxicating wine when bishops were to be "*me paroinon*," not near fermented wine at all. Still further let him show that intoxicating wine, holding 13 per cent. of alcohol, given to all persons, women, children, and men, at the daily ministrations would have assisted them to praise God (Acts ii. 47). The aged men of Titus were properly commanded to be "*nephalious*" or abstinent, since alcohol would not incline nor assist them to keep looking within heaven's gates. The aged women of Titus were not to take *much* of even the medicinal wine allowed to infirm aged females—for being medicine, and mixed with medicinal substances, it was not to be a luxury. With regard to even honey Solomon says, "It is not good to eat much honey (Prov. xxv. 27). Let ministers of the gospel fix their eyes on that phrase "*me paroinon*" not near wine. It is so simple that a school-boy can understand it, and having but one meaning it cannot be misunderstood. Let them cease to be near wine either in company or at home, and then setting a right example before the church their people will in many cases be induced to follow.

It may be objected to the plan of harmonizing these six verses here offered that Paul could not refer to the deacons' taking too much "*gleukos*," since *gleukos*, being unfermented, could not intoxicate them if taken to excess. Only ignorance of customs existing throughout the Roman Empire when Paul wrote can advance this objection: for, 1st. It is true that *gleukos* could not *intoxicate*, but if taken in large quantities direct from the wine-press before it was boiled it could disorder the stomach; 2d. That, notwithstanding its power in excessive quantity to disorder the stomach, men were so insane in the days of Paul as to wager on whose stomach could hold the most. All nations at one time in their history seem to reach such a point of insanity that the largest stomach is pronounced king of the company, and the Romans, when Paul wrote his epistles, had reached this pitch of madness. The phrase "*filled with gleukos*" in Acts ii. 13 is a literal description of the times. The Greek verb translated "*filled*" is "*memestomenoi*," from "*mestuo*," to be stuffed with, crammed" (Dunbar's *Lexicon*), to be filled or full of (Liddell and Scott's *Lexicon*). Alluding to this custom Lucian says, "I come, by Jove, as those who drink *gleukos*, *swelling out their stomach*, require an emetic" (Philops. 39). Among the authors who wrote while Paul lived none paints the prevalent drinking customs so faithfully as Pliny. We give a short extract from book xiv. chap. 28. A longer quotation will be found in *God's Remedy for Britain's Drunkenness*, p. 180.

We see the more prudent, who are given to this habit, have themselves parboiled in hot baths, from whence they are carried away half dead. Others there are, again, who cannot wait till they have got to the banqueting couch, no, not so much as till they have got their shirt on, but all naked and panting as they are, the instant they leave the bath they seize hold of large vessels filled with wine, to show off, as it were, their mighty powers, and so gulp down the whole of the contents, only to vomit them up again the next moment.

This they will repeat a second and even a third time, just as though they had been only begotten for the purpose of wasting wine, and as if that liquor could not be thrown away without having first passed through the human body.

It will be admitted Paul was justified in enjoining deacons not to be given to much gleukos, that they might not seem to countenance the insane stomach-stretching of the times, and that they might not seem to be greedy devourers of what was set before the members of the church at the common feasts or daily ministrations. But whether this scheme of harmonizing these six verses be accepted or not, every sensible Christian man will allow that Christ as the *shepherd* of the sheep would desire to lead them away from danger and into the safest possible path, and that therefore Paul's command to be "*nephalious*" was the safest and best for man, since in the drinking of fermented wine there ever has been danger. Let us act according to our light, and take the path of safety. We have not long to wait for full knowledge, since in the general assembly of those who dwell in the light we can soon ask Paul the meaning of his own words. Till then let us follow his advice, "*gregoromen kai nephomen*"—*watch and abstain*.

Q. 165. Repeat 1 Tim. iv. 3-5, and state if they apply to alcohol.

A. "Commanding to abstain from *meats* which God hath created to be received with thanksgiving. For every creature of God is good, and nothing to be refused if it be received with thanksgiving. For it is sanctified by the word of God and prayer." These verses have no reference whatever to alcoholic drinks, for Paul speaks only of "*meats*," not of drinks, and of such meats as God had created for the body's use. Alcohol is neither a creature of God, nor a good creature for man's use. Every creature of God existed before Adam was made, since every generation of animals or crop of earth's produce is only a repetition of the first which existed before Adam, while alcohol did not exist before Adam, and God never treads out grapes, or takes charge of fermenting vats.

Every creature of God is good for the special purpose for which God made it. Stones, brick, and lime are good for building houses, iron for machinery, wood for furniture, coal for fuel; but none of these is good for food. As for alcohol, the creature of man, for it is never produced without the agency of a two-legged law of nature, it is good for making varnishes, and for causing more disease in Britain than all other substances put together. That the Church and the nation should ever have so grossly misapplied Paul's words

as to take them for a sanction of drinking poison in moderation is the saddest possible proof of how alcohol can lead the reason of man astray. If things manufactured by man are to be called creatures of God, then heathen idols made by laws of nature like Aaron's golden calf are good creatures of God! The brief limits of this Catechism will not permit farther illustrations of how the *appearances* in the Bible which seem to sanction the use of alcoholic drinks vanish when the six rules of interpretation and three harmonizing tests are applied to them. Bands of Hope and Juvenile Lodges are referred to *The New Logical Bible Commentary on Wine Texts*, which has been prepared specially for them.

Q. 166. Does God in the Bible as strongly condemn polygamy and slavery as he condemns the use of intoxicating drink?

A. God in the Bible more frequently, more clearly, and more strongly condemns the use of intoxicating drink than he condemns polygamy or slavery. The whole three were evils of man's introduction which God in his three voices always condemned.

For the expansion of this thought see *God's Remedy for Britain's Drunkenness*. Polygamy, slavery, and intoxicating drink were introduced by man without God's permission long before a single book of revelation was composed. Lamech had his two wives before the flood; Jacob his two wives and two concubines. Lot and his servants were carried into captivity and intended slavery by the four kings (Gen. xiv. 16), and Noah drank intoxicating wine long before Moses wrote the first chapter of Genesis. And when God was pleased to give a revelation he, in accordance with his fixed plan of testing men, gave in the Bible enough *facts* to show he condemned polygamy, slavery, and the use of intoxicating drinks, and to guide those willing in heart to a knowledge of the truth, and he also *allowed* in the very style of his condemnation sufficient *appearances* to confound and mislead those who were unwilling to receive the truth. In revelation there is light for the true Hebrews in heart, and darkness for the Egyptians in soul. The Latter-day Saints believe that the Bible sanctions polygamy; the American slave-holders believed that it sanctions slavery, and the drinking Christians in Britain believe that it sanctions the use of intoxicating wine. The purport of this question and answer must not be misunderstood. Our object is not to show that God *approved* of polygamy or slavery, for we distinctly affirm, and can prove, that he with sufficient clearness always condemned them in his three voices (Hebrew servitude was *not* like Roman or American slavery); our sole object is to show that God in revelation more frequently, more clearly, and more strongly condemned the use of intoxicating drink than he condemned polygamy or slavery. God

never consumed with fire two priests or two men for polygamy or slavery, as he did Nadab and Abihu for drink. God never plainly said to the Jewish kings, It is not for princes or kings to have several wives or concubines; as he said, It is not for princes or kings to drink wine. He forbade all the Jews to "look upon wine," but never so *distinctly* forbade them against polygamy or slavery. He never compared polygamy or slavery to the serpent's bite. He never made polygamy or slavery the expressed symbol of his indignation, as he made the wine-cup the emblem of his wrath (Jer. xxv. 15), and the expressed instrument of his punishing a guilty nation (Jer. xiii. 13, 14). He never forbade polygamy or slavery to the Jewish priests in specified circumstances upon pain of death, as he prohibited wine, and thus even a high-priest of the Jews had wives and concubines about a century before the birth of Christ. And coming to the New Testament, God never so plainly commanded men to abstain from, to be not near, polygamy or slavery, as he hath commanded them to be "*nephomen*," abstinent from wine, and "*me paroinon*," not near to wine. And never did God say that no polygamist or slave-holder would inherit the kingdom of heaven, while he has expressly declared no drunkard shall inherit the kingdom of God. From Genesis to the Apocalypse there is not a single verse which makes provision for men using intoxicating drink, while in Ex. xxi. 7-11 provision is made for a man having two wives, or a wife and a concubine, at the same time (this can be explained, but it is not our business at present); provision is made for Hebrew servitude, and in the New Testament believing slaves are commanded by Paul to abide in their slavery (1 Cor. vii. 20, 21); this can likewise be explained. David Livingston called slavery "the open sore of the world;" but slavery intensified a thousand fold cannot be compared with the ravages of strong drink. The slave in body may be free in soul, but the drink bondsman is enchained soul and body, and doomed to destruction. From correct data it can be shown that in Britain fully 120,000 men, women, and children annually perish through the direct and indirect effects of alcohol, and taking into account the drunkenness of America, Russia, indeed the vast quantity of alcohol consumed in three-fourths of our earth, it is probable that the number of lives annually sacrificed to drink throughout the world is not under a million. To slay that million requires a yearly expenditure of not less than one thousand million pounds sterling, a sum that would cover a footpath a yard wide and 4000 miles in length with five-pound notes, or if it were in gold 100 locomotive engines, each drawing a train of 95 tons of gold sovereigns, would be required to convey that amount along. The mere cost of the world's drink bill is at least £110,000 an hour, and when all the results of that ruin investment are summed up it is found that alcohol costs men an outlay of £250,000—a quarter of a million—every hour throughout the year. No doubt alcoholic drinks existed before the deluge, and estimating the number of those slain directly and indirectly through drink since time began it is an

under-calculation to suppose that a vast procession of fully six hundred millions of the dead could be formed of those who were hurried out of life through alcohol, a host fully three times the estimated population engulfed at the flood. War, famine, pestilence, African kidnapping, take a breathing time; alcohol *for ever* slays; its use is the ever open never closed sore of the world. Strong drink is worse than polygamy and slavery, its two brother curses, combined. Worse than disease and the bodily suffering it creates, is the soul blindness, the moral insanity it produces among the churches and nations of earth. If only ten thousand persons in Britain were poisoned accidentally in a year by druggists selling wrong medicines the people would rise in fury, and by lynch-law gibbet every apothecary in the land; but because it is the poison alcohol that slays six times that number almost every tongue is dumb. The British Parliament felt for the sighs and tears of the negro far away, and gave many millions to release him, while it cares not for the sighs and tears of starving children and women neglected through drink, nor for the tens of thousands who are annually slain by alcohol in our streets, and lanes, and alleys; and most mournful of all when in even enlightened Scotland one rises in our annual church-courts to ask the Synod or Assembly to recommend abstinence to the office-bearers and people, and establish Bands of Hope, that alcohol may not slay in the future as it has slain in the past, he is referred to Deut. xiv. 26 as proof that God sanctions the use of intoxicating drink, and is told that the Court is not prepared to recommend the formation of Bands of Hope. How long, O God, how long, shall this blindness exist in Zion? when shall thy church see that thou hast ever more strongly condemned the use of intoxicating drink than thou hast condemned polygamy or slavery?

Q. 167. Are the manufacture, sale, and use of alcoholic drinks as beverages moral or immoral?

A. The manufacture, sale, and use of alcoholic drinks as beverages are actions which are immoral.

Q. 168. What is an immoral action?

A. One which God, in planning the constitution of our world and the nature of man's body and mind, did not intend was to be performed by man, and, being opposed to God's intention, it is constitutionally unfit for man, injurious to his nature, and productive of misery.

The morality or immorality of an action arises out of God's CREATIVE intention. If it be obedient to the creative intention it is moral, if it oppose that intention it is immoral. God's creative intentions therefore constitute the moral law, which is the guide of man's life. The redemptive intentions of God, as faith in Jesus Christ, do not require to be introduced here.

Q. 169. *Is every intention of God with respect to man's conduct clearly embodied in a written law?*

A. Every intention of God for the regulation of man's life is not expressed in a clearly defined written law, but by good and necessary consequence it can be deduced from the known character of God and the general statements or principles he has given to man in the Bible; and being thus deduced it is as binding upon all men as if it had been one of the ten commandments proclaimed from Mount Sinai.

Q. 170. *What is the difference between an immoral and a sinful action?*

A. There is no difference between them, every immoral action being sinful—for sin is only opposition to God's intention, or, in other words, want of conformity unto or transgression of God's will expressed in either a commandment or a general Bible principle.

Q. 171. *What is the difference between sins of ignorance and sins against knowledge?*

A. The difference is very great, for he who sins against light opposes his conscience and much more hardens his moral nature than he who sins in ignorance. The soul that sinned presumptuously God threatened to cut off (Num. xv. 30), while he who sinned in ignorance did not altogether escape, for he had to bear at least the physical consequences of his sin, Lev. v. 17.

All true Christians, dead or living, who have used alcohol as a beverage in ignorance of its physiological action have sinned only against their constitution, not against their conscience, yet they have had to bear the physiological consequences of their error.

Q. 172. *Since true scientific and Biblical knowledge will add immensely to a man's power of refusing to take alcoholic drink as a beverage, is it a special duty to spread that knowledge?*

A. Every child should be taught that the manufacture, sale, and use of alcoholic drink as a beverage is immoral, and taught also the proofs of the immorality.

Q. 173. *Prove that the manufacture of alcoholic drink as a beverage is immoral.*

A. The intention of God is opposed to the waste or diminution of human food; for, 1st, He told Adam, and through Adam told all his posterity, that the produce of earth was for *meat* or sustenance, Gen. i. 29; 2d, He forbade cutting down a single fruit-tree in war, because it would diminish human food, Deut. xx. 19; and 3d, He ordered the fragments of barley loaves to be gathered up that human food might not be wasted, John vi. 12. And since fermenting grapes or grain into alcohol for a beverage is an enormous diminution and destruction of human food it is contrary to the intention of God, and is therefore immoral.

Yearly to convert the produce of a vine-tree into alcohol, which is not a flesh-forming or fuel-food, but a poison, is, in the eyes of reason, as completely to diminish human food as if the tree were cut down; and God in this respect sees as clearly as man.

Q. 174. *What then is the duty of wine manufacturers, brewers, and distillers?*

A. They know that the beverages which they produce yearly cause an incalculable amount of want, crime, misery, and death, without yielding any corresponding compensation; and as it is unmanly, not to say unchristian-like, for any one to live and make money from the sufferings of his brethren, it is their instant duty to abandon their destroying business and betake themselves to an employment conducive to the prosperity of their fellow-men.

Dr. Paley (*Moral Philos.* book ii. chap. 4) says:—"The method of coming at the will of God concerning any action by the light of nature is to inquire into 'the tendency of the action to promote or diminish the general happiness.' This rule proceeds upon the presumption that God Almighty wills and wishes the happiness of His creatures, and consequently that those actions which promote that will and wish must be agreeable to him; and the contrary." Dr. W. B. Richardson of London, who has scientifically inquired into the physiological action of alcohol, says in his *Cantor Lectures*, p. 114:—"If alcohol do really *for the moment* cheer the weary, and impart a flush of *transient* pleasure to the unwearied who crave for *mirth*, its influence, *doubtful* even in these modest and moderate degrees, is an

infinitesimal advantage, by the side of an infinity of evil, for which there is no compensation and no human cure."

Moderate drinkers admit that the conversion of food into alcohol is an enormous destruction, but contend that the good which the alcohol yields is equal to the evil which it produces. The burden of proof lies with them. Let them show that its good as a beverage balances the infinity of evil which it yearly creates.

Q. 175. If the brewers and distillers in Britain only took the barley to a field and consumed it with fire, what action would the churches with which they are connected take?

A. They would expel such destroyers of food and enemies of man from their communion.

For the smaller sin they would be expelled, yet, notwithstanding the greater sin of converting food into the soul and body consuming alcohol, scattering it among their fellow-men at home, and sending it out to foreign mission stations, they are pillars in the Church.

Q. 176. Prove that the business of the publican is immoral.

A. It is against the foundation principle of society as well as the intention of God for any man to live by a business which demoralizes other men, injures their health, wastes their substance, and afflicts their families or relatives.

Q. 177. What is the foundation principle of society?

A. That men receive good without any evil from each other, which principle allows no one to seek his own interest or to make money in *any* manner or business prejudicial to the general good, or, in other words, allows no man to be an internal foe to the other men of the community to which he belongs.

Men, feeling their individual weakness and inability to supply all their wants if they remained isolated from one another, they, from the earliest time, banded themselves together to repel external aggression and to mutually assist each other. The principle of the social compact was that they were all to be friends and of mutual advantage to each other; and this compact excluded the idea of any proving a foe or a burden to the community. The business of the publican is in exact opposition to this foundation principle. Judges on the bench who drink themselves declare that the liquor traffic is the cause of four-fifths of all the crime in the nation; directors of

parochial boards who drink affirm it produces three-fourths of the pauperism; commissioners over asylums for the insane ascribe to it six-tenths of the national lunacy; physicians who drink hold it is the cause of a vast amount of disease and death, and sends to hospitals and infirmaries ninety per cent. of all the cases of accident; the philanthropist who drinks, in searching for the fruits of the liquor traffic, looks only in the direction of evil—of poverty, rags, filth, neglect of children, of education, of religion; cruelty to wives, barbarous assaults, murders—he never looks in the direction of good. Now all the other trades, professions, businesses followed by men in the commonwealth, *when added together*, do not cause one-fifth of the nation's crime, public taxes, and burdens, while this single liquor traffic stands out as the cause of nearly all the demoralization and evil in the land. Is it not then in opposition to the foundation principle of society—that all the members of the community shall receive good and not evil from each other's business, and that they shall be mutually beneficial to each other. That the liquor traffic is intensely in opposition to the will of God, and therefore in the highest degree immoral, is seen from these considerations:—1st. By the eighth commandment God binds down men to further the wealth and outward estate of others as well as their own (Shorter Catechism, question 74), and the law for all is to "love their neighbours as they love themselves." So determined is God that men shall be mutually beneficial to each other that He commanded every Jew to lay hold of the straying ass or ox *of his enemy* and to return it to him, and to render the enemy help when his ass had fallen under its burden, Ex. xxiii. 4, 5. The Bible expressly declares that "a false balance is an abomination to the Lord" (Prov. xi. 1), which declaration binds men down in their sales to give a just equivalent or substantial good for the purchase money. Accordingly every *lawful* calling is founded on the principle that seller and buyer in their barter or exchange receive a mutual advantage. The man with worn-out shoes says, I have money, but I need shoes; the shoemaker has shoes, but he needs money. The hungry man has money, but he needs bread; the baker has bread, but he needs money. The physician has skill, but he needs money; the patient has money, but he needs skill. When they all relieve each other's necessities they have given each other substantial good, and mutually received a profit on the transaction. The baker, shoemaker, clothier have received a profit on bread, shoes, and clothes, and the purchaser has received a profit in the preservation of his health and life. In complete opposition to this God-commanded honest system of exchange is the liquor traffic. The publican receives a substantial good and profit in the shape of money, and in exchange he gives that which is not a substantial good or a profit. The treacherous and injurious commodity he sells begins to escape from the breath of his victims within a few minutes after it is taken, and after afflicting the body for a few hours is all expelled as an enemy, whereas, had the money been expended on shoes,

clothes, or furniture, the buyer would have had a substantial good for months or for life. If on a Sabbath morning the inquiry be put to ten thousand persons in police cells sent there by the publicans on Saturday night, Would it not have been far better for you if the publicans had only robbed you of your money or wages, then given you a drink of water and turned you out of doors, than taking both your money and landing you in these cells? the answer of the victims would be, It had been better to be robbed only, for the publicans rob us of character, health, and peace as well as of money. When the more than 200,000 cases of drunk and incapable and drunk and disorderly in Britain are annually brought before the magistrates for punishment all men know that the publicans alone received a substantial good and a profit on the sale of the drink. In Britain there are yearly more than ten thousand sudden deaths—fatal accidents through the liquor traffic. When these men and women, rudely hurried out of life, meet the publicans in another world, can they not, will they not, thus justly accost them? “You took from me my money—a substantial good—and in exchange gave me that which deprived me of life. You knew your drink took the reason from men, yet you gave me more and more of it; you did not discourage me from taking it, but you continued to take my money, and you made a profit on my destruction. Now go before your Judge and learn your doom.” 2d. The command of God to every one is, “Do good unto all men as you have opportunity,” Gal. vi. 10. The law of God binds publicans not to encourage men to drink, and *also to discourage them from drinking*, for (Larger Catechism, question 99) when the sin of *encouraging* is *forbidden* the contrary duty of *discouraging* is *commanded*. Every publican knows it is the nature of alcohol, if it be repeatedly used, to create a drink-crave, and that when the drink-crave is created the drunkard is a curse to himself and a pest to society; yet, knowing that every time he serves the same customer with liquor he is assisting to bind him in chains, he continues to sell instead of discouraging the man against wasting his time, health, and money in unprofitable drinking. And though every publican does not, what many a one in large cities does—take the last copper from shivering misery—yet where is the publican who, when he sees starving, cruelly neglected children and wives standing near his door to entice, if possible, drunken fathers and husbands home before the money be all spent, goes to the drinker and says, “Do not come here again, for I will not supply you with drink; it more becomes you to stay at home and care for your neglected family than waste your all here in unprofitable drinking?” and since every publican neglects this his bounden duty—since, in the words of St. John, he seeth the need of cruelly used children and wives and shutteth up his bowels of compassion, the question of the apostle may well be put, How dwelleth the love of God or of his neighbour in the breast of that publican? 1 John iii. 17. 3d. By the law of God every man is bound to follow a business that shall not excite or lead his fellow-men to blaspheme God,

the command being that eating and *drinking* and whatever is done shall be to the glory of God, 1 Cor. x. 31. Now the brain-deranging alcohol which the publican gives in exchange for good money leads many of his customers every day in his hearing to curse and swear and send out a stream of polluted thought. No man that shrinks from hearing the name of God taken in vain could abide for one week in the drinking rooms of a publican, far less could he be the means of exciting men, as the publican does by his liquor, to blaspheme the God of their life and heap up tribulation against the judgment-day. If any one will, on a Sabbath morning before one o'clock, go through the police cells of such cities as Glasgow or Liverpool, and listen to the shrieking, yelling, cursing, and maniac laughter of the drunken inmates, he will feel he is not in a Christian country, but near the very mouth of perdition's pit. 4th. By the law of God every man is bound to follow a business which shall not corrupt or demoralize his fellow-men. The liquor traffic makes men idle and dissipated, forgetful and neglectful of duty. Every public-house is a moral nuisance to the neighbourhood in which it is planted. The very children around are polluted by what they hear from drunken lips—for evil of itself sticks to the heart of a child, whereas good requires to be nailed to it. The legislature, by sanitary laws, can deliver the public from bad physical smells, but not from the moral putridity and filth that streams from public-houses. The liquor traffic is not only immoral—it is the sum of all the immoralities. Alcohol is manure for every vice. It stimulates the licentious to sin, it upholds illegitimacy and prostitution, it emboldens the thief to steal, and primes the murderer for his work. A publican, then, through his vice-evoking liquor, is a foe to the community—a breeder of disease, an increaser of crime, a creator of want and misery—and therefore whether he be on the side of heaven or of perdition does not require a moment's time to determine.

Q. 178. Since the business of the publican is immoral, what is his duty with regard to it?

A. It is his duty to give it up without delay, and betake himself to a calling in which he shall give substantial good in exchange for the money received; otherwise the God who rules over men, and makes sin find the sinner out, shall send leanness of soul, and a curse upon the guilty gains obtained from a brother's sin and suffering.

If a foe to the community, who lives and makes money by preying upon his fellow-men as a publican does, could *really* prosper, it would be a proof that there was no moral governor over the world. But God, while He conceals himself sufficiently to give liberty of action to evil-doers, also reveals himself clearly enough to allow well-doers to see that He is ever against those who live only to make money,

and do not treat their brethren with justice and compassion. As the business of the publican is more fatal to society than all others put together, Providence makes it most fatal to the publican himself. Statistics prove that between the ages of 45 and 55 the annual mortality of publicans is 28 per 1000, whereas among grocers who sell only tea for a beverage the rate is 16 per 1000. And as to the guilty profit of the publican, it is a proverb that a curse clings to it, that it consumes his family and descendants.

Q. 179. Prove that it is immoral for a landlord to lease his premises to a publican?

A. The landlord by knowingly and willingly leasing his premises for an immoral traffic is an accomplice of the publican in preying on society, is a sharer in the guilty gain of the traffic, and a partaker in the sin. He, as a professed Christian, is bound by the law of God to *discourage* drunkenness, whereas he leases his property to encourage the drinking which always leads to intoxication.

In many cases the publican is only the tool of the landlord. In large cities, as in Glasgow, building speculators and landlords order the architect who plans a new range of tenements to provide a shop at one or both corners to be used as a public-house, since it will bring a higher rent than if fitted up for any trader who gives substantial good in exchange for the money received. These whisky shops are erected before any tenant is found for them, the landlords believing that since the liquor traffic is a money-making business some man not a publican before will cast up to tenant the shop. These building speculators who deliberately plan how to increase the crime, want, and taxes of the city, are the enemies of their fellowmen; for while landlords who have public-houses are sure of their rents from their accomplices the publicans, those landlords who have only dwelling-houses to let often do not receive their rents from their drunken tenants. In like manner, every man who follows a lawful calling is injured by the liquor traffic. This infamous plan of landlords deliberately increasing the drunkenness and suffering of a city, only in order that they may make money, ought to be denounced from every pulpit in the land as an intentional violation of the eighth commandment.

Q. 180. Will God bless the rent which landlords receive for being accomplices with the publicans in preying on society?

A. The rent received from a publican is stained with tears and blood, and the Lord God of Sabaoth, who wishes the happiness, not the misery, of his creatures, and who

beholds the sufferings which the publican causes to children and wives, He must perish before such a rent prove a blessing (Jam. v. 1-4).

Q. 181. Since the liquor traffic is immoral what is the duty of landlords with respect to their shops leased as public-houses?

A. They ought at the least, without delay, to intimate to the publicans that the lease will not be renewed, even should they pay a rent a hundred-fold higher; or better still, they should make arrangements with the publicans to quit the business at once.

Those landed proprietors and town councillors who have feued their ground on condition that no building thereon shall ever be used as a public-house are greatly to be commended. May this wise course be more and more adopted everywhere!

Q. 182. Prove that it is immoral for a farmer intentionally to grow barley for distillery and brewery purposes, and when it is grown send it to the distillery or brewery to be destroyed.

A. He knows that God's intention in giving a regular harvest is to supply food for man; he also knows that intoxicating drink is not food—he therefore knows that by devoting the barley to destruction that he may have a ready sale and profit he is thwarting the intention of God, which action is immoral.

Any farmer who conscientiously grew oats or other grain in place of barley might depend that the God who feeds the birds of air, and finds for them a nest, would not allow him to suffer through refusing to have a hand in the ruin of his country.

Q. 183. Prove that it is immoral to use intoxicating drinks as a beverage.

A. The intention of God is that men preserve their health by abstaining from whatever injures it or "tendeth thereunto" (Shorter Catechism, question 69). And since science proves that the use of alcohol even in small quantities is opposed to the laws of life, and injures the body, and statistics prove that it shortens life, it is contrary to the intention of God for man to use it, and is therefore immoral.

There can be no greater delusion than the supposition that a moral law must have been proclaimed from Sinai. A moral law is man's *constitutional orbit line*—is the intention of God with regard to man's life on earth. *Promulgation* is not necessary to show the existence of a moral law, for the ten commandments were moral laws before they were proclaimed from Sinai, yea, before a single page of revelation was written. Nor is the being clearly expressed as a command or precept in the Bible requisite to show that a constitutional rule for life is a moral law, since the Confession of Faith justly declares (chap. i. vi.) that what is deducible is as much the counsel of God for man's faith and life as what is expressly set down in Scripture. Every man will admit these two truths—1st, That it is the intention of God that men preserve their health and seek to prolong their life; 2d. That to oppose the intention of God is not right, or in other words is immoral, since an immoral action is only one which is not right or suitable for man's constitution. We have, therefore, only to show that the use of alcohol is injurious to man's body and mind to prove that such use is immoral. In settling this question only judge and jury evidence, or in other words not men's bodily sensations or opinions, but the *facts* of science and experience, can be received. Men trust to thermometers, watches, scientific apparatus, instead of to their bodily senses in determining other questions, and they must trust to scientific tests in settling this question. When a man takes what is called a moderation dose of alcohol, the watch proves a hurrying of the heart above the natural speed, which is effected chiefly by the alcohol paralyzing the minute organic nerves which preside over the capillaries, and thus allow them to become dilated, which is an injury to the body; the thermometer proves a diminution of the natural internal heat, which is another injury to the body; the measurer (whether by chemical or physical analysis) of carbonic acid excreted proves a diminution of oxygen combining with carbon in the body, which is a third injury; and so on with every other scientific measurer of the effects of alcohol. The *facts* of experience, as the tables of the United Kingdom Temperance and General Provident Institution in London, show that the mortality among 1000 abstainers is always *more than one-fourth* LESS than among 1000 small-dose drinkers—that after the 1000 of small-dose drinkers were dead, no fewer than 275 out of the 1000 of abstainers would stand on the graves of the buried moderate drinkers to proclaim the value of abstinence—that, in fact, small-dose drinking shortens life—that it is thus opposed to the intention of God, who hath forbidden to man whatsoever *tendeth* to take away his life, and being opposed to God's intention it is of necessity immoral. Dr. W. B. Richardson, of London, or any educated physiologist, could easily prove to any one, by scientific apparatus, that a moderate dose of alcohol injures the body, even when the mocker deceives the drinker and makes him believe it is doing him good; and with regard to the effects of alcohol on his own body, Dr. Richardson says, "The

strongest men and women living are those who do not take alcohol in any form, and the experience of persons who fairly try abstinence is that more work and better work—whether the work be mental or physical—is performed without alcohol than with it. The general evidence on this point is most conclusive, and if I may venture to state my own individual experience, I would say that the evidence is as surprising as it is satisfactory. I have worked actively while abstaining altogether. In a word, I have made direct personal experiment on the subject, and I am bound to state that the work that can be done during entire abstinence is superior in every respect—in respect to amount, in respect to readiness of effort, in respect to quality, in respect to endurance, and in respect to mental ease and happiness—to that which can be done during times of moderate indulgence in alcohol." It is strange that some clergymen who with Dr. Richardson declare that abstainers can do more work, better work, and hold out longer than those who drink moderately, also at the same time affirm that they will oppose to the death the doctrine that the use of the alcohol which causes less work and worse work to be done, and diminishes a man's capability for work, is immoral! These clergymen hold that to take a moderate dose of alcohol, as three glasses of wine, is not a wise, but yet it is a Christian action. Passing strange it is that if the Christian action be repeated four times in one day, with only a short interval between, the acting Christian becomes drunk, or in other words, his four Christian actions constitute one sinful action. It will not do to say that if a man fill his stomach with food during four times eating he likewise has sinned, for God made the stomach for food and the food for the stomach; but He did not make the stomach for alcohol, nor did he ever make alcohol, which is never made except by a two-legged law of nature. And there being this slight difference between food and alcohol, four times eating will not take the reason from a man, while the four Christian acts of drinking will lodge him in a police cell, and then reward him with fine or fourteen days' imprisonment. It is needless for men to deny that what opposes the intention of God is immoral; for if it be not immoral, it will be moral or right, and thus it will be right to oppose God, which is a very strange doctrine for any Christian clergyman to hold. For a full discussion of this subject see *God's Remedy for Britain's Drunkenness*.

Q. 184. *Since the use of alcohol as a beverage is immoral, what is the duty of every man, especially of every Christian man, with regard to it?*

A. To abstain from it entirely, and discountenance its use in society by refusing to sell or to give it to others.

Q. 185. *Why should a personal abstainer refuse to give intoxicating drink to others?*

A. 1st. By purchasing drink to give to others the personal abstainer with his money perpetuates the drinking customs of society, he encourages alcohol manufacturers to continue their sinful waste of grapes and grain, and he encourages the Sabbath desecration of at least 40,000 men in Britain and 100,000 men on the continent of Europe, who on the Sabbath work to prepare intoxicating drink. 2d. He injures his friends by giving them that which is injurious to their body, and tends to produce a drink-crave. 3d. He corrupts the conscience of his own children, who cannot see why alcohol, that is bad for their father and them, can be good for his friends.

“If you respect your friend *hurt him*” is a deplorable maxim for a Christian abstainer who knows that alcohol is physiologically unfit for any man. It will not do to say, “I drink not, and I leave my friends to judge for themselves;” for why should you spend your money to buy and lay the wine before them, and thus tempt them—why should you minister to their drinking when you know that every act of drinking tends to produce the drink-crave, which may make you and them for ever repent you were so foolish as to keep wine in your house. You are bound in your purchases and the management of your house to act upon your own knowledge, not upon the ignorance, chemical and physiological, of your friends. Some societies in England call themselves *Temperance Societies*, and yet are composed of members who drink in what is called moderation. They have no just claim to such a title. They should be called “*Quarter Dose*,” or “*Limited Drinking Societies*.” (See Question No. 13.) The title of “*Temperance Societies*” must be confined to those who discountenance drinking in every degree and form. The temperance section of the Provident Institution in London is composed of those who drink no alcohol, not of small-dose drinkers. In Scotland there is at least one society whose basis is that the members may give but not take intoxicating drink. That society should be called “*The full and the empty glass Society*”—an empty glass for the members and a full one for their friends! If in the membership card there was a picture of a man with an empty glass in his left hand, kept close to his own mouth, and a full glass in his right hand stretched out for others, all would see at a glance that such a society was not discouraging the drinking customs as abstainers should, and that therefore it should not call itself a “*Temperance Society*.” All the mistakes and errors of the past must now be corrected, and children taught the true principles of temperance; for if they be defectively taught at first, truth may never find an entrance when they grow to maturity.

Q. 186. *Prove that it is immoral for a government to license publicans.*

A. To license an immoral traffic which preys on the community is to violate the foundation principle of a state, and is to license idleness, dissipation, poverty, rags, filth, disease, crime, physical and moral deterioration, suffering, national decay and ruin—for to license the *causes* is to license the *effects*.

To license a uniformly working cause is to license the effect. The government cannot plead that it does not intend the evils which the licensed liquor traffic creates should really flow from it. Want of intention cannot be pleaded in knowledge of the fact that during every previous year the evils have arisen, and will continue during every succeeding year while the cause operates. The fact that the government has made laws to punish men when "drunk and incapable," and to fine the publican for supplying liquor to drunk men, only convicts the government of hypocrisy and cruelty. For do they not know that all their penalties, not having prevented drunkenness in the past, will assuredly not prevent it in the future. They grant licenses well knowing that the publicans will make not a few men drunk; then they have the policeman ready to seize and punish the men when they are drunk. They set up machinery which they know will certainly create drunkenness, and also the machinery to suppress drunkenness. That rational men could act in this extraordinary manner would amaze all persons did they not know that the state draws in annually about £32,000,000 sterling from the liquor traffic. If the government were not silenced by an enormous revenue the liquor traffic would not exist in Britain for a month; and Christian men, by adopting abstinence, must diminish that revenue before the government will be forced to contrive a moral mode of meeting the national expenditure, and putting down the liquor traffic.

Q. 187. *What is the foundation principle of a state?*

A. The foundation principle of a state is to care for its own preservation by enacting laws which promote the growth of a vigorous and virtuous population, which tend to increase the industry, health, wealth, and virtue of the people, and diminish their public burdens. To license a traffic which opposes all these objects is to undermine the stability of the throne, and hasten national decay and ruin.

The total annual income of Britain, from that of the queen to that of the poorest beggar, is about £950,000,000 per annum; and as the money spent upon intoxicating liquor is £142,000,000 a year, and the results

of drinking, in poor-rates, police-rates, support of criminals, &c., with the loss of productive labour through idleness and dissipation, amount to about other £110,000,000, it is seen that other three trades like the liquor traffic, giving no substantial good for the money offered in exchange, would utterly engulf every penny of the national income and extinguish the nation in a year's time. Again, the governing of any people depends upon the healthy state of their brain; there is no governing of idiots or the insane by civil laws, and the distinctive action of alcohol is to derange the brain, to deprive a man of his reason, and when in that state to compel him to commit crime which he would never think of when sober. For a government that knows this is the characteristic action of alcohol—that it always has caused crime and murderous assaults in the past, and will cause them in the future—to license men who have a money interest in increasing the use of the brain-poison, and also to maintain men as policemen, jailers, and hangmen to punish men for the assaults they commit through the brain-poison, is not conduct befitting Christian men. It is unmanly trickery and cruelty. No madman is responsible for his actions, even though his insanity has been self-produced by evil conduct or folly, as is generally the case. Why then should the drunkard, when in a fit of insanity or intoxication, be held responsible for the actions he then commits, especially since the government, by means of its agents the publicans, has assisted to put him into the state of temporary madness?

Q. 188. *What is natural liberty?*

A. Natural liberty, as that of a man living in an island by himself, is freedom to annoy, hurt, or corrupt *nobody*, for there is no one beside him to disturb; and to bear all the consequences of his own actions or of external aggression without receiving help from any one, for there is no one beside him to give help.

The truth of this definition is self-evident, for there being no one near the man who enjoyed natural liberty in an island by himself, or in the backwoods of America, or interior of Australia, he would annoy, hurt, or corrupt nobody. His liberty would consist in hurting no one, and in bearing all his sufferings without help. As a man cannot expect greater liberty in society than he enjoyed when entirely free from all human control or law, he, on entering society, continues to possess in its full extent his first part of natural liberty, that is, he continues free to annoy, hurt, or corrupt *nobody*. But as society is a union of force to assist each other in distress, each man is not left to die through disease, or starve through want, without receiving aid from his fellow-men. Yet this claim to aid is *mutual*, and therefore each man by labour and frugality must hold himself in readiness to give help to others as well as to take help when he is disabled for working.

Q. 189. *What is civil liberty?*

A. Many definitions can be given. It is: 1st. Natural liberty with the element of mutual help added. 2d. Freedom to annoy, hurt, or corrupt *nobody*, and to take my due share of public burdens; and being protected against others annoying, hurting, or corrupting me, or throwing upon me their share of the public burdens. 3d. It is freedom to do whatever is not injurious to others, or tends to render me unfit for the duties of society, and protection against injury from others in every degree and form. 4th. It is freedom to all to promote the general good; for freedom to all to increase the general suffering would be tyranny, not liberty. God confirms this definition of civil liberty in these words, "Do that which is *good*, and thou shalt have praise of the ruler, who is the minister of God to execute wrath upon him that doeth *evil*," Rom. xiii. 3, 4.

Q. 190. *Prove that the suppression of the liquor traffic is consistent with civil liberty.*

A. Civil liberty is the being governed by laws which best promote the public good; and as the suppression of the liquor traffic would be more beneficial to the nation than enduring the evils it inflicts, it is plain that civil liberty demands the suppression of the liquor traffic.

The declaration of God in Rom. xiii. 4, that those who inflict evil upon society are to be punished is quite sufficient, yet we may add the definition of "*civil liberty*" given by Dr. Paley, as clear-headed a moralist as ever wrote on the subject. "Civil liberty is the not being restrained by any law, but what conduces in a greater degree to the public welfare" (*Moral Phil.* book vi. chap. 5).

Q. 191. *What answer is to be given to the fallacy that small-dose drinkers should not be deprived of their drink on account of the large-dose drinkers?*

A. Many just answers can be given: 1st. That every law to prevent evils must apply to all. 2d. That *all* men have not a civil right to sell alcoholic drinks, and therefore the state may refuse that permission to *any* man. 3d. That no man has a civil right to get drunk, and as fine and imprisonment have not hitherto prevented national drunkenness,

the State may take efficient means to prevent it, as suppressing the manufacture and sale of drink. 4th. And chiefly, that no man has a *moral* right to drink brain-poison as a beverage; that is, he has no leave from God to hurt himself by drinking in any degree, and a State may by civil law deny to every man that which is not a moral right.

Every law of prevention must apply to all persons, since it is not known beforehand from whom danger may come. The sober to-day may be drunkards ten years hence, since many drunkards to-day were sober men ten years ago. A lady might object to the law against muzzling dogs in summer by saying, "There is no danger to be apprehended from my little dog; go and look after the big wild dogs that are really dangerous in winter as well as in summer." A factory proprietor might object to fencing his machinery, on the ground that there never was an accident in his premises. In like manner many men object to every law of prevention; nevertheless, the law applies to all. The cry of the liberty of the moderate drinking subject being invaded is very silly indeed. Every druggist and apothecary is prohibited by law from selling certain substances, as strychnine, antimony, ergot, &c., to the public; they can be sold only to physicians. The whole of these prohibited articles, if freely exposed to public sale, would not cause one-fourth of the more than ten thousand sudden deaths and fatal accidents caused annually by the public sale of alcohol; and yet men never cry the liberty of the subject is invaded by the government prohibiting the public sale of things not so deadly as alcohol. And if a duke or lord banishes public-houses from his entire estate of twenty or thirty miles in extent not one voice is lifted up for the liberty of the subject. A landed proprietor suppresses public-houses in virtue of the rights of property; but property, as ground or a building, is without reason or will; it is in fact the will of the proprietor, the will of one man, that has put down it may be fifty public-houses. Why should not the will of a majority effect that which can be done by the will of one man?

Q. 192. *What answer is to be given to the remark, "You cannot make men MORAL by act of Parliament?"*

A. That it is a truth used as a fallacy, and for the purpose of deceiving. To make men moral is to change their heart, and no man in his senses ever asked for a law to change men's hearts, which can be done only by the grace of God.

Q. 193. *What is the province of moral suasion?*

A. *Moral* suasion is an appeal to men to "be good, and

do good." Being "*moral*," it seeks to control the thoughts as well as the actions. It has no penalty to inflict, and no sanction for its appeals but the will of God.

Q. 194. *What is the province of legal suasion?*

A. Being a *civil* law, it takes no control of the thoughts, or of the evil that is *inside* a man. It seeks only to prevent the evil coming out to afflict others, and therefore its simple utterance is, "Thou shalt not injure thy neighbour, or thou shalt suffer the penalty." A man may disregard moral suasion, but legal suasion he must obey or abide the civil consequences.

Legal suasion tends to make men better, or at least to prevent them from becoming worse. The law against the sale of obscene pictures was not designed to make men moral, but to prevent some men from corrupting others. Yet, by preventing them from corrupting others, it at the same time prevented themselves from being more hardened, as they certainly would have become in their desired course of sin. So legal suasion against the liquor traffic would very greatly improve men, keeping tens of thousands from being corrupted, and the publicans from becoming more hardened.

Q. 195. *Whether is moral or legal suasion the best for man?*

A. Both are absolutely necessary in the training of a family, or in the management of a nation. God, the great example in his government of men, unites both. He says, "Be holy and happy;" also, "If thou wilt be wicked thou shalt surely die."

Q. 196. *What answer is to be given to the fallacy, "You cannot make men SOBER by act of Parliament, that is by keeping the liquor from them?"*

A. That it is contrary to the facts. Criminals confined seven years in a penitentiary are sober all the time, though they were drunkards when at large, and in every parish in Scotland, England, or Ireland in which there are no public-houses the drinking, crime, and poor's-rates are greatly less than in adjoining parishes where public-houses are licensed.

Q. 197. *Since the liquor traffic is immoral, what is the duty of magistrates with regard to granting licenses?*

A. To use all their influence in getting a proper prohibitory-law enacted; and in the meantime to refuse new licenses, and by all lawful means rapidly reduce the number of old licenses.

Every publican by the condition of his license is bound not to make men drunk on his premises, or put them in such a condition that they cannot walk home. Magistrates, before granting the licenses, should remind all publicans of this condition, and assure them that its violation shall be followed with the forfeit of the license. They should also grant but one license to a publican, and inform him that the danger from his business is so great it will require his personal superintendence, for this is the spirit of the license law. The certificate of character which the publican brings is not for his servant but for himself, that he himself is a man to be trusted with the sale of so dangerous a commodity as intoxicating drink.

Q. 198. *What answer is to be given to the publicans who say they have a vested right in their traffic, and therefore it ought not to be suppressed without compensation?*

A. That their contract with the government to sell lasts only for one year, and may therefore be discontinued at the end of the year; that the Forbes M'Kenzie Act provided no compensation for cutting off one-seventh part of their sale and profit; and that, as they have for the sake of making money chosen an immoral traffic which is liable to fresh restrictions by Parliament every year, they must submit to the new restrictions, whether they limit the sale to eight hours a day or close the contract altogether. If not satisfied they can betake themselves to a lawful calling, over which government consequently imposes no restriction whatever.

Q. 199. *What is the duty of electors in regard to the immoral liquor traffic?*

A. Every man is bound to be on the side of God, who is for ever on the side of the general good; and therefore every man should vote for magistrates and members of Parliament who will suppress a traffic that gives no substantial good for the money it receives.

Q. 200. *What is the duty of every church in regard to the use of intoxicating drink?*

A. All the members, and especially the office-bearers, should abstain, and recommend abstinence to all persons, both young and old, that the gospel may have free course at home and abroad.

Q. 201. *Why should office-bearers, especially ministers, abstain?*

A. 1st. Because Paul commands them to be "*me*" = not, "*par*" = near, "*oinon*" = wine, "*not near wine*" (Tit. i. 7); and since these words cannot have any meaning but "*not near wine*" they for ever bind them to abstinence. 2d. Peter commands them to be "*nepsate*," or abstinent (1 Pet. v. 8), and to be ensamples to the flock (1 Pet. v. 3) in all that is lovely, pure, and of good report (Phil. iv. 8). 3d. Without personal abstinence they cannot recommend abstinence to others. 4th. With abstinence they could better discharge their duties than with small-dose drinking. 5th. Their drinking encourages their hearers to drink, and discourages abstinence everywhere.

Q. 202. *In what manner should the churches encourage the spread of abstinence?*

A. By dealing faithfully with the conscience of brewers, distillers, publicans, and landlords of public-houses, by having congregational Bands of Hope, and Adult Temperance Societies, and by recommending abstinence to all outside the church.

There are some who object to *pledges* on the ground that vows should be made to God only. It will be best to make *duty*, not *pledges*, the ground of abstinence, and therefore on enrolling members of a Band of Hope or Adult Society they have only to sign the heading at the commencement of the roll, "We, the undersigned, feeling it is our duty to abstain from the use of all intoxicating drinks, and to discourage the drinking customs of society by declining to sell or to give any of such drinks to others, have enrolled ourselves as members of — Band of Hope, or — Adult Temperance Society." The members to sign their name and date of enrolment, and to receive a card stating that they have been enrolled.

Q. 203. *In what manner does intoxicating drink hinder the progress of the gospel at home?*

A. By rendering the masses outside the church unpre-

pared for hearing the gospel, and by opposing the grace of the Holy Ghost in the hearts of church members.

Those addicted to drinking have in general neither clothes nor the will to attend a church; they can attend to only one thing—how to get more alcohol.

Q. 204. What is the difference upon the masses outside of the church between alcoholic suasion and moral suasion?

A. 1st. Alcohol gives a pleasurable excitement; good advice gives none. 2d. The love of liquor grows in strength the longer it is taken; the love of reproof or good advice grows weaker. 3d. Alcohol so changes the brain that the drinker becomes the slave of alcoholic suasion; but moral suasion, long received and rejected, hardens the mind against it.

To show the difference between alcoholic and moral suasion, let 2000 church members be addressed by the best preacher in Britain on the text, Mat. xii. 36: "For every idle word that men shall speak, they shall give account thereof in the day of judgment." At the close of the discourse give all the hearers three glasses of wine, and see whether the sermon or the alcohol will govern the tongues. Or, let the best Sabbath-school teacher address 500 children on the propriety of leaving school and walking home orderly on Sabbath, and when he has done speaking, give them all two glasses of wine. The consequent uproar would be such as Bedlam could not match. Alcohol, when in the brain, cares no more for moral suasion than a flowing river for a man who would stand on its margin and order it to stop. Better to set a dog to bay at the sun to keep it from setting than employ moral suasion or legal suasion to prevent alcohol in the brain from working with the certainty and irresistibility of a law of nature. Until the churches perceive and act upon the truth, that moral suasion may not operate, while alcohol infallibly will, little progress in our home mission work is to be expected. All the mission churches in Glasgow which have been a marked success, have had an abstaining minister and a powerful temperance organization.

Q. 205. Show the contrariety between the nature of grace and the nature of alcohol?

A. 1st. Grace grows only in a serious contemplative soil; alcohol excites to frivolous gaiety and forgetfulness of consequences and duty. 2d. Grace strives to keep men from the works of the flesh; alcohol excites to their commission. 3d. Grace grows only by reading the Bible, prayer, medita-

tion, and doing good to others; alcohol indisposes men for such acts. 4th. Grace requires a clear head and a sound body through which fully to manifest itself to men; alcohol beclouds the mind and weakens the body; therefore, in proportion as the brain is affected, grace is wasted and thrown away.

On this subject see *God's Remedy for Britain's Drunkenness*. Teachers should illustrate how alcohol leads to the commission of the works of the flesh mentioned in Gal. v. 19-21, and also prevents the growth of the fruits of the Spirit.

Q. 206. In what manner do British drinking and drinks oppose the progress of the gospel abroad?

A. By beholding the drunkenness of Britons, who have been baptized, and by being cursed with the drinks which British Christians send out, the heathen reject Christianity as the religion of drunkards and blaspheme Christ.

Q. 207. Why should every church banish intoxicating wine from the communion table?

A. 1st. Because it is impossible successfully to introduce the gospel among 450 millions of abstaining Mohamedans, Hindoos, Chinese, and other eastern nations having religions which teach abstinence, if fermented wine on the Lord's table gives them just reason to believe that Christianity is the religion of alcohol-drinkers. 2d. Because fermented wine on the communion table hinders the gospel's progress at home by soothing the conscience of the publican, and encouraging him to continue in his immoral traffic; by sanctioning and encouraging drinking at home by church members and the world, and by doing violence to the conscience of young communicants who have been taught from their childhood it is not right to take or encourage the use of the mocking wine which bites tens of thousands to death and doom like a serpent of the pit. 3d. Because there is no proof whatever that Christ instituted the Lord's supper with fermented wine, while all the evidence is on the other side; and, 4th. Because Christians as wise men are bound to use an emblem appropriate, wholesome, and safe, such as unfermented wine, which is

food for the body as truly as Christ is food for the soul, while fermented wine is inappropriate (for alcohol, a poison, is the product of corruption and decomposition, and therefore cannot symbolize Christ's body, which saw neither corruption nor decomposition), and in addition alcohol is injurious and dangerous, and cannot be a symbol of Christ, who is to man safety and salvation.

Not a few cases have occurred already of Hindoos and Mohamedans being induced, by breaking their abstinence practice at the Lord's table, to betake themselves to drinking at home, and ending their days as drunkards, their last and melancholy end being worse than the first; for in the judgment-day it shall be better to appear as a sober heathen than as a drunken Christian. There is but one argument for retaining fermented wine on the communion table, and it is a baseless conjecture. "Christ came and found intoxicating wine in use by the *Rabbis* at the passover, and he followed the *Rabbis* in drinking *their* kind of wine!" Could there be a grosser supposition, or a lamer argument? for the very men who say this admit these three points: 1st. That God did not command wine to be used at the passover, whether fermented or unfermented. 2d. That the *Rabbis* without God's authority introduced wine, that "a man might cheer his wife and family" at the passover, and that though the Bible had said "*tiros*" would cheer the young women (Zec. ix. 17), and cheer God and man (Ju. ix. 13), the *Rabbis* preferred for the use of *women and children*, not *tiros*, but intoxicating wine! 3d. That the ground upon which the *Rabbis* excluded solids or liquids at the passover was their having undergone *corruption* or fermentation, and consequently they banished from their houses *fermented beer*, though in utter inconsistency they retained fermented wine! The conjecture that Christ selected the *Rabbis'* intoxicating wine is monstrous indeed, when it is remembered he did not call the contents of the cup "*wine*," but "*this fruit of the vine*," *this* quality now in the cup; that alcohol is not the fruit of the vine (see Question 32); that he could have employed "*gleukos*" (Ac. ii. 13), or the wine which Pliny called the most beneficial for all persons, and which had its gluten removed with the filter, that it might not ferment or intoxicate; that on the night when the supper was instituted there were seven classes of abstainers in Jerusalem, Nazarites, disciples of John the Baptist, Rechabites, Therapeutæ, or abstaining Jews as Philo from Alexandria in Egypt, followers of the abstaining Essenes in Judca, Bible abstainers who followed Solomon's command, "Look not thou upon fermented wine;" and lastly, 20,000 priests in the temple who perfectly abstained all the day and night in which the last supper was instituted (see *God's Remedy*, pages 90-93). That Christ could not institute the supper with fermented wine is evident from his being then robed and prepared as the world's high-priest to offer God's

Lamb for the sins of mankind; that as high-priest he refused intoxicating wine the same day at Golgotha; as high-priest in the upper room at public ordinances of religion instituting and observing the sacrament in his Church he was bound to keep the law for priests (Lev. x. 9); as priest made under the passover law he was bound to exclude things which had seen corruption, or had fermented in *God's sense of these words*, not in the absurd and inconsistent sense of the Rabbis, whose opinions Christ opposed all his life; that as made under the law of universal obedience to the intention of God, he was bound to discourage the sinful waste of grapes by fermentation and keep the laws against the use of intoxicating drink—bound to use the symbol which would best promote the glory of God and peace among men—two objects which alcohol has ever opposed, since Noah with his grace beclouded lay helpless in his tent. There are some clergymen so weak in their reasoning as to firmly hold that Christ instituted the supper with fermented wine, and that it is our duty to follow him—yet they say if they were ministers in *mission churches* they would introduce unfermented wine! They would desert the imperative duty of following the example of Christ, that they might introduce a *safer emblem* than Christ's emblem! Behold how men in modern times care more for the safety of man than Christ in his omniscience, the Christ who gave his life for man! There are many other clergymen and members of the churches who abstain from an expedient regard for the safety of others, and a respect for Bible principle, as "abstain from all appearance of evil," and yet hold that Christ did not abstain but drank fermented wine! Had he possessed as much regard for man's safety or for Bible principle as they have he, of course, would, like them, have abstained; but having less he drank the intoxicating wine he had likened to a serpent's bite! Thus in their utter blindness they exalt themselves above the omniscient and infinitely perfect God who at the institution of the supper knew far better than they do that unfermented fruit of the vine was a safer emblem for mission and also for parent churches than the drink-crave producing wine. Thus unknowingly they blaspheme the Son of man.

Q. 208. *Though the use of intoxicating drink be immoral, is it the duty of any church to expel those members who will not abstain?*

A. The darkness and errors of the past still linger over all the churches, and their duty is not to expel, but to teach the truth, that the darkness may flee away. If, after many years' teaching and persuasion, some members will not even then abstain, let the abstainers not expel, but in the strength of God combine to form churches at home and missions abroad which shall faithfully proclaim

the truth that Jesus Christ never used fermented wine, and that Christianity that came from the heart of God to lead man to purity, peace, and heaven is not the religion of the drinkers of alcohol, the alcohol that in all ages and climes hath been man's sorest enemy and curse.

We have shown in Question No. 166 that God in the Bible more frequently condemns the use of intoxicating drink than He condemns polygamy or slavery. All three are violations of the constitution of Nature (see *God's Remedy for Britain's Drunkenness*), yet just as God did not desire David to be expelled from the Jewish Church on account of his sin of polygamy, nor the slave-holders in the early Christian Church for their sin in maintaining slavery, *because they sinned in ignorance*, so now God desires that time be given to dispel the darkness—that we begin by expelling *error*, not *church members*.

Q. 209. *Christian temperance is the regulation of every thought, word, and action according to the will of God—consequently of our appetites and desires. How many kinds of appetites are there?*

A. Two kinds: 1st. *Natural* appetites, as hunger, thirst, and a desire that the race of man be continued. 2d. *Acquired* appetites, and therefore not planted in the constitution by God, as alcohol-crave, tobacco-crave, opium-crave, chloral-crave, laudanum-crave.

Q. 210. *What is the intention of God with regard to all acquired appetites?*

A. That, by perfect abstinence from their causes, they never be acquired by any one, since they enslave the victim, and are the ruin of body and mind.

Q. 211. *Why should all abstain from the use of tobacco in any form?*

A. Because tobacco contains a deadly poison called "*nicotine*," one drop of which will kill a dog, and a few drops kill a man, and which in minute quantities never fails to injure the nervous system, and to interfere with digestion and other necessary processes of life.

Obtain two drops of nicotine from tobacco by the usual chemical process, mix them with half a teaspoonful of boiling water in a saucer, and place the saucer over a bowl of boiling water, that the heat may assist the evaporation of the two drops of nicotine into the room, the

doors and window of which are to be kept shut. When evaporated the vapour will be so irritating to the lungs that the experimenter will hastily flee to the open air.

Q. 212. Why should all abstain from smoking in any degree?

A. Because smoking is a practice injurious to all the principal organs in the body, and a waste of the saliva required to change the starch of our food into sugar, because it tends to produce the powerful tobacco-crave, and because the smoke which the law should compel the smoker to consume himself is offensive and injurious to those who have a right to be protected from such a nuisance.

If the law did compel smokers to consume their own smoke there would not be a single smoker in Britain or in the world. Men should pluck up a manly spirit and feel that under civil liberty they have "freedom to annoy or hurt *nobody*," then like true men cast the wretched weed away. As a complete answer to those who say that tobacco smoke is not injurious, at least it does not hurt *me*, let them try the three following experiments:—1st. Into a tin or wooden box 15 inches long, 10 inches broad, 20 inches high, which thus contains 3000 cubic inches of air space, being sufficient fresh air for a cat or a small dog for an hour, put either of these animals and close it in. Then quickly send into the box the smoke to be obtained from a quarter of an ounce of tobacco. In 30 or at the longest 45 minutes the animal will be dead; whereas, had there been no smoke in the box, and the animal been liberated in 45 minutes, it would have come out quite well, for the carbonic acid from the lungs being warm, would have remained above its head. 2d. Let a well-seasoned smoker get into a closely fitting sentry-box which yet contains after he is in 5000 cubic inches of air to breathe, which is a natural supply for about 15 minutes. Then let him begin to smoke vigorously a pipe containing one-seventh part of an ounce of tobacco, and he will never forget the experiment while he lives. Dr. W. B. Richardson tried it, and in 4 minutes was compelled to fly into the open air, all the symptoms of nicotine poisoning having set in. 3d. Let six veteran smokers who say that smoke does not hurt *them*, pass at six o'clock in the morning a pipe between them containing one-seventh part of an ounce of the innocent drug, each taking only five draws in at a time, and swallowing all the smoke. Before the tobacco is all consumed the six veterans will be stretched on the ground, and will not seek their work that day. To show the thoughtlessness and cruelty of smoking in a small dwelling a simple illustration will suffice. All eminent physiologists affirm that an adult requires about 800 cubic feet of sleeping accommodation. Many of the single apartments occupied by labouring men and tradesmen are not larger than 12 feet

long, 10 feet broad, 10 feet high, and so containing only 1200 cubic feet of air space. Yet into this confined space, which has air for only one adult and one child, the father will continue to puff smoke after he returns at night from work, though himself and wife with four or five children have to breathe the tainted air. How can a sick child recover in such a polluted place? If it be said that some doctors smoke and recommend smoking, the answer is, that the inflexible rule for the medical wards of all hospitals and infirmaries is, that the patients do not smoke within their *sleeping* apartments to contaminate the air, and that the man's single room is the sleeping apartment of his whole family. The working man who pollutes his dwelling with poisonous smoke spends upon tobacco more than a penny a day, and one penny a day amounts to £1, 10s. 5d. a year, and with interest it comes to fully £50 in 20 years, a sum he would wish in old age he possessed. The cry "Would you really take the glass and pipe and every *enjoyment* from men?" only shows how insane men can become under the rule of acquired appetites. The men know they are slaves; if they know not let them try to abstain for a year, and they will learn the strength of their chain; and yet they cry, "Would you really take the chains from us and set us free?" What was said of small-dose drinking in Question No. 57, may be said of smoking, that in a workshop employing 1200 smoking operatives, the same amount of work could be better done by 1000 men who did not smoke, and with greater ease and health to themselves. Every life assurance office should have four classes of the insured: 1st. Small-dose drinkers; 2d. Small-dose drinkers and smokers; 3d. Abstainers from alcohol only; 4th. Abstainers from alcohol and tobacco. The longer life of the fourth class would show the sin of creating artificial appetites. It is to be hoped that in the projected city of Hygeia there will be no public-houses or hotels, no tobacco shops, and no houses for irregular indulgence in one of the natural appetites. Modern worldly civilization that undermines the human constitution, and fills so rapidly hospitals, lunatic asylums, and graves, is only refined savagism. One man cannot in a railway carriage entreat an offender to desist from smoking without running the risk of being sworn at. Christian civilization makes no provision for the flesh—to form and then to gratify unnatural lusts; and the time shall surely come when human governments, being really under the influence of Christianity, shall insist on all their subjects faithfully observing the foundation principle of society: "Do whatever is not injurious to others, and does not tend to disable you from taking your due share of the public burdens." All acquired appetites do tend to render men unfit to be self-sustaining, do tend to make them burdens on society, and the *formation* of such appetites should therefore be prevented by salutary laws. Dr. W. B. Richardson said before the British Association: "Scarcely any of our mothers smoke, and thus to the credit of our women chiefly be it said, the integrity of the race is fairly preserved." The women of Britain and of the world should

insist that men care as much for the health of their race as do women; that as regards moral conduct, there should be but one rule for man and woman alike.

Q. 213. What is the intention of God with regard to the regulation of our natural appetites?

A. His command is, Whether ye eat, or drink, or whatsoever you do, do all to the glory of God (1 Cor. x. 31), which means we are to eat, drink, and act not to gratify present desire alone, but in such a manner as to promote ultimate and lasting benefit; for God is glorified in the ultimate and lasting happiness of His moral creatures. The angels' song at Bethlehem shows us that glory to God brings lasting peace to man.

Q. 214. As regards moral conduct do men and women stand on the same level before God?

A. God made man male and female (Gen. i. 27). He calls both man; in his sight they are but one class of moral beings, and in the Bible he has but one code of moral laws for both.

Q. 215. But since woman has less physical strength and a greater depth of tender feeling than man, is she not entitled to be treated with peculiar gentleness?

A. Both nature and revelation teach men to treat women with greater gentleness than they accord to men.

Q. 216. What doth Nature teach men with regard to the gentle treatment of women?

A. Nature teaches men that the strong ought to defend the weak; and that since the life of man in his infancy depended on the gentle, self-sacrificing love of a mother, he ought to repay the debt he thus incurred by a lifelong gentleness to the sex to which his mother belonged.

Q. 217. What doth Revelation teach with regard to the gentle treatment of women?

A. It commands men to give honour to their wives as unto the weaker vessel (1 Pet. iii. 7). Christ said to a woman found in transgression, "Go, and sin no more;"

while to a man not found in such transgression he said more sharply, "Sin no more, *lest a worse thing come upon thee*" (John v. 14). The Bible commands women to "love their husbands," while husbands are commanded to love their wives as Christ loved the church and gave himself for it (Eph. v. 25), with the tender unupbraiding love of the Redeemer for men.

Q. 218. *Should human laws for the same moral misconduct treat men and women alike?*

A. For human law to treat women for the same action with greater severity than men, is unchristian, unmanly, and despicable.

Q. 219. *Should all human laws be made in the interests of morality?*

A. Any human law not made in the interests of morality is in effect a law to teach men to be immoral, is to encourage them to continued acts of immorality, and thus prepare for the degeneracy of the people, national decay and ruin, and the overthrow of the throne.

The admission of Mr. Ward Hunt on the part of the government, during the debate on 19th July, 1876, that the acts were not made *in the interests of morality*, but in the interests of the physical health of those who *willingly* followed the sin that bred the disease, is condemnation complete of such iniquitous law, and proof that the intention of government was not to keep evil men from sin, nor evil women from the company of men, but by removing dread of consequences to encourage men to sin the more. If the government would expend one shilling in preventing evil-doers from coming together for every pound sterling it wastes in encouraging them to associate for sin, the disease complained of would be speedily stamped out; for when a cause ceases to operate, the effect ceases to appear. No legislation but such as prohibits and prevents the commission of sin can exterminate the fruit of sin. To say that no human government can prevent the commission of the sin, is to utter at once a fallacy and an untruth. A government cannot *wholly* prevent stealing, or assaults, or murder, yet *it is its duty* to forbid what it cannot *wholly* prevent, and by doing its duty, the prohibition with penalty attached *will always prevent* three-fourths of the commissions which would occur without the prohibition. Who in the world supposes that there would not be more thefts, assaults, and murders committed than actually occur if law did not prohibit them? In like manner with this sin; and the fallacy that a government cannot prevent it is a

false insinuation that it cannot in any degree prevent it,—is what no sensible man will advance, since it is a sophistical defence of all sin, a contemptible argument against all law and order. Sin is not *necessary* to man, since in *every* part of the world this truth holds good that where there is no prostitution there the number of illegitimate births is smaller than where prostitution abounds. The returns from registrars-general do but minister to vice by stating that the ratio of illegitimacy is larger in rural districts than in towns, whereas in *EVERY part of Europe* the rural districts, *in proportion to their UNMARRIED POPULATION*, have fewer illegitimates than the towns. The delusive plan of comparing illegitimate with legitimate births, *instead of with population*, ought everywhere to be abandoned. It would be easy for the returns to state how many births of each kind occurred, and the ratio of both to the population. The ratio of legitimate births *to the population* would at once show if there were few or many unmarried people in each district. From unmarried females alone illegitimacy could come.

Q. 220. *In looking at the results of sin does God fix his eyes upon the body or the soul?*

A. Upon the soul alone. When God said to Adam, "In the day thou eatest thereof thou shalt surely die," he spoke of the soul, for Adam's body did not die on the day he ate the forbidden fruit. And God has said to every sinner, "The soul that sinneth it shall die."

Q. 221. *Should any human government in legislating in reference to moral misconduct look only at the results of sin upon the body of men?*

A. Any government that will look alone at the results of sin upon the body of the *male* sinner instead of on the soul—the eternal me, of which the dying, ever-changing dust is but the *transient* robe—is an antichristian government; and the subjects professing Christianity who can tolerate such a parliament are highly guilty in the sight of God.

The United Presbyterian Church in Scotland has committed to its Temperance Committee the duty of opposing a law which is at once a disgrace and an increasing danger to Britain. Every church should follow the example. It may be yet necessary for men who see the sin and danger of such legislation, to overture their church courts to prepare pastoral letters on the subject to be read from every pulpit on the Sabbath when special sermons are being delivered against national impurity.

Q. 222. *Is it possible for any human legislation to*

encourage men to sin with their soul, and yet secure the body from disastrous results?

A. The omnipotence of God is pledged to make his threatening stand: "Though hand join in hand, the wicked shall not go unpunished." Repeated acts of immorality must weaken and destroy the body, as well as harden the heart, and thus it shall ever be found that what is morally wrong can never be physiologically right, and that government encouragement to sin always produces greater bodily disease than existed before the law became the patron of vice.

Q. 223. *Whether are wounds in the body or in the soul most to be dreaded?*

A. The wounds of the body cease when it is laid in the grave, the sin-wounds of the soul are eternal. The dread sentence of God is, "Let him that is filthy be filthy still" (Rev. xxii. 11); yea, for ever and for ever. Immoral legislation for the body then is a vain attempt to polish the casket while we consume the gem within, is a sure plan to provoke the Almighty to drive the arrows of his vengeance deeper in.

Q. 224. *What should be the nature of all human laws regarding immoral actions?*

A. Human legislation, like the law and government of God, should do nothing but absolutely forbid to men as well as to women immoral actions in every degree and form. To *regulate* any traffic or course of action which is immoral, is to declare that when followed under specified conditions it is lawful and moral—which declaration must of necessity demoralize and ruin a nation.

Let human governments provide for the curing of the diseases of men and women by giving each town or district permission to tax itself for the maintenance and management of its own hospitals, under the charge of those elected by the rate-payers, and at the same time have truly sanitary laws which *prevent* the *cause* of disease, which are public and open opportunities to sin. On healing each man and woman let both be thus addressed, "Go, and sin no more; do not by indulgence in the *cause* of the disease come to this hospital fifteen times or even twice, for society cannot be burdened by paying

taxes or contributions to allow you to continue in sin; such taxation of the virtuous for the *continued* sins of the vicious is an insult to Heaven, an injustice to virtue, and a premium offered to men to hasten to perdition." The fact that the special police of the British government do not *forbid* the *male* sinner to sin and walk among the female sinners, without *prohibiting* them from sin, is testimony clear as the sunlight that the immoral legislation is a cruel contrivance to sink the soul in sin, while attempting to whitewash the body. If the infirmaries and hospitals in each city, whether upheld by voluntary contributions or taxes imposed by the rate-payers upon themselves, or partly by individual contribution and partly by civic fund assistance, had a number of thoroughly educated female physicians as a proportion of the regular staff of medical attendants, then women in the lower ranks could apply to these female physicians for advice on many diseases not the fruit of sin, and be saved an amount of suffering not to be estimated.

Q. 225. As regards purity of intercourse between men and women what are the duties which God requires of both?

A. That men specially beware of putting a stain upon a sister's character and soul, that all earth's waters could not wash away; and that women, by modesty, prudence, and keeping out of temptation, encourage men to do well. His greater bodily and mental force is to be strength to her comparative weakness; and her greater depth of tender feeling and power of quick perception, are to be a guide to him in things gentle and beautiful, pure, lovely, and merciful.

Q. 226. Christian temperance requires the proper regulation of all human desires—mention the desires common to men.

A. Desire of, 1st, knowledge; 2d, of society; 3d, of esteem; 4th, of wealth or power; 5th, of superiority; 6th, of happiness.

Q. 227. What rule hath God given us for the regulation of our natural desires?

A. Even for these there is but one rule: "Whatever you do, do all to the glory of God." They are all to be followed in moderation, and in such a manner as to secure our *permanent* good. A shilling spent on sensual indulgence brings no pleasing recollection to-morrow, while a

shilling spent in doing good is a joy in the memory for ever.

Q. 228. What special rule has God given to guide us in the pursuit of wealth?

A. To provide things honest in the sight of all men; to look not upon our own things or profit only, but also upon the things or profit of those with whom we deal, and thus make sure that others receive a substantial good in exchange for the good we take.

Q. 229. Do boys who play at pitch and toss, and men who bet, give a substantial good for the good they hope to receive or take?

A. All gambling is robbery (Question 142, Larger Catechism), and boys who play at pitch and toss, and men who bet, are only robbers by mutual consent. They have no leave from God to gain a profit from each other's loss. Those who lose their money are in the same condition as if they had been robbed; and those who carry away the money have left no substantial good with those whose money they carry away.

Q. 230. Christian temperance requires the regulation of every thought, word, and action according to the will of God. But man naturally is unwilling and unable to yield such obedience. What then doth he need?

A. The grace of the Holy Ghost, and keeping company every hour with Jesus Christ by faith.

Q. 231. Is it possible for children and adults to walk with God?

A. Enoch walked with God, and we are commanded to do the same. We are to do justly to ourselves and others, love mercy, and walk humbly with the God of our life. We are to be not passive but active Christians, using the grace obtained. And when we take the offered hand of Christ and walk with him, we shall, notwithstanding our imperfections, reach abiding rest and peace; for "when Christ who is our life shall appear, then shall we also appear with him in glory."

TEMPERANCE CONFSSION OF FAITH

REGARDING ALCOHOLIC DRINKS.

I.—This world, with all the vegetable and animal tribes which it contains, was created by God after a DESIGN which he had formed; which design may be called *God's plan of creation*, or the *constitution of Nature*. In carrying out that plan, God *first* created food and drink which would be exactly adapted to the physical nature He had determined to give to man and the other animals. Then He called man and the other animals into existence, giving them a constitution or laws of life which would be nourished and sustained by the food and drink which He had specially prepared for them; but by no other food or drink, since He had created no other, and man could not create. Therefore man and the animals must live according to the laws of their constitution, or suffer and perish.

II.—The science of physiology shows that the constituents in food which the body of man constitutionally requires are heat-raising and flesh-forming substances; and the science of chemistry shows that natural food—as barley, wheat, and grapes—contains both these substances, and in the proper proportion to meet the twofold wants of the body. Both sciences agree that water, which is the natural drink of man and animals, is exactly fitted to meet the necessities of the body in being an indispensable instrument in its nutrition and purification.

III.—To take human food, as grapes or barley, which God in infinite wisdom and goodness DESIGNED and ADAPTED for FOOD to the body of man, and convert them, for a beverage, into alcohol—which is neither a heat-raising nor a flesh-forming substance—which is not an assistant in either the nutrition or purification of the body, but an enemy that opposes all the physical laws of life—is a DOUBLE violation of the constitution of Nature, since it is a double misapplication of God's gifts, a destruction of food, and an injury to health, which did not enter into God's creation plan; and being an opposition to God's creative design, it is of necessity IMMORAL. Either God designed that human food should be used by man as food, with its heat-raising and flesh-forming substances retained, or He did not. If He did not design that grapes and barley were to be consumed as food, why do they naturally contain the very heat-raising and flesh-forming substances the body requires? Since they contain the very food which the body absolutely needs, that *Divine adaptation* indisputably shows God's design; and to oppose that design by destroying food into alcohol, and using as a beverage the poison so produced, is to thwart the intention of the Almighty—it is to fight against God, and is therefore of necessity IMMORAL.

IV.—So far from fermentation being a law of nature to preserve the fruit of the vine, it is a law of nature to render the fruit of the

vine *unfit* for human use, *precisely* as putrefaction is another law of nature to render human food, as animal flesh or bread, *unfit* for human use. Both are branches of the one great law of decomposition which lays hold on human food not used in season, or preserved by ARTIFICIAL means, *devised by human skill* and *effected by human labour*, and breaking up the food which man is so careless or unwise as not to preserve by means the invention of his reason—breaking it up into such simple chemical combinations as vegetable life can easily feed upon, sends them to the vegetable kingdom that fresh food may be prepared in a coming harvest. There never was a law of nature which wrought spontaneously and independently of human skill and labour, as all laws of nature do—there never was a law of nature to preserve human food of any description. The only two laws of nature which affect human food are those of *growth* and *decomposition*, and these are *so close* to each other that if grapes be not gathered when ripe—when the laws of growth have completed their work—the laws of decomposition immediately step in, and make the neglected grapes *rotten-ripe*, even upon the tree. The law of fermentation will *never* work unless men call it into operation by exposing grape-juice to the air.

V.—Polygamy and slavery are violations of the constitution of nature, but are less aggravated opposition to God's creative design than the destruction of human food into alcohol for a beverage. According to the constitution of nature, it was God's will that a man should have one wife, and the labour of his fellowmen upon just conditions. Therefore polygamy is only taking *more* than God in nature intended—it is the abuse of the NATURAL; and slavery is only a form of enforced labour God did not design. But the destruction of human food, even in the *slightest* quantity, into a poison to be used as a beverage which injures the health and shortens the life of man, is in *every* degree or quantity, *even the least*, entirely UNNATURAL, because it is beyond and *contrary* to the creative design of God. Being a more heinous violation of the constitution of nature than polygamy or slavery, God has always in His providence, in every age and clime—in every church and nation, made the use of fermented drinks to be followed with greater judgments than He has sent upon polygamy and slavery *put together*; and in the Bible He has more frequently and strongly forbidden the use of fermented drinks than He has forbidden polygamy or slavery.

VI.—That though the violation of the constitution of nature by the manufacture and use of fermented drinks be of necessity *immoral*, since it never can be moral or right to oppose the designs or will of God, it is, notwithstanding, only a sin of *ignorance* in the case of all those who do not know that by such manufacture and use they are opposing God. Such consumers of alcoholic drinks do not therefore sin against the light of their conscience—they sin merely against their physical constitution; but though they sin in ignorance, they have still to suffer the physical and moral results of their error.

VII.—That since the majority of the members of the Christian

church are as yet in ignorance that by the use of fermented liquors as a beverage they are going against nature's constitution and the will of God, it is the duty of the church not to begin a Temperance Reformation by subjecting the ignorant to church discipline for their error, but, on the contrary, to begin by teaching the truth, so that error may be expelled from the church instead of church members. Both reason and the will of God, as deducible from Scripture and Providence, require this course to be followed. No member can be subjected to church discipline for conduct which is not opposed to the *standards* of the denomination to which he belongs. And as in neither Westminster Confession of Faith nor Larger Catechism is the use of fermented drink condemned as immoral, there is no legal ground of action against any member for such use, and cannot be until new church standards are drawn up and subscribed, which, in the present state of the church, is impossible, and in *existing* circumstances would not be wise were it possible. As to God's will with regard to violations of the constitution of nature, His usual course when the church was in ignorance of the violation has been to let in the light gradually, and by dispelling the darkness purify the church. When polygamy greatly prevailed in the Jewish church during the time of David, God did not send a prophet to demand church discipline upon David and similar transgressors, because they then sinned not presumptuously but in ignorance. And at the introduction of Christianity Paul did not order the expulsion of slave-holders from the church, nor even command them to give their slaves a weekly Sabbath of rest; but he laid down principles showing that slavery and Sabbath-breaking were contrary to the constitution of nature—slavery being incompatible with the brotherhood of man, and Sabbath-breaking incompatible with the rights of God, who claimed the *Lord's Day* as His own—and thus Paul, without convulsing society and the church to their foundation, made sure that by the application of his principle slavery would be exterminated from the world. In like manner it is the duty of the Christian Church at the present time, and for years to come, to teach that it is a violation of the constitution of nature to manufacture and use fermented intoxicating drinks; and the teaching of this truth, with the working of the Holy Ghost, shall greatly purify without much convulsing the church. But where error steadfastly resists the truth, after years of faithful teaching, the witnesses should ask direction from God whether they should continue patiently to teach within their own denomination or peaceably retire and form a witnessing church by themselves. Let them suffer for truth's sake, but not inflict suffering. Let them be expelled, but not expel.

VIII.—Since the use of fermented liquors is an encouragement to brewers, distillers, and wine merchants to continue their sinful destruction of God's gifts, and an inducement to the publican to continue in his *immoral* traffic—since it is also a use opposed to the creative designs of God—it is the imperative duty of all men to abstain entirely from the use of intoxicating drink. The same

reasoning shows that fermented wine ought not to be used in the celebration of the Lord's Supper.

IX.—Since the manufacture and sale of intoxicating drinks for a beverage is immoral, and being immoral is always followed by great national judgments, it is the duty of all civil governments to prohibit the manufacture and sale of alcoholic drinks, which drinks inevitably lead to national decay and ruin.

X.—That truth and the grace of the Holy Ghost must work together to effect a Temperance Reformation, and that therefore the witnesses for the truth do not adequately perform their duty unless they pray for the Divine Spirit to be poured upon all, that they may receive the truth and have strength to obey.

Note to Article III.—The doctrine of Christian expediency can apply to only such things as it is lawful and innocent to do or to use—it cannot apply to the *constitutionally unfit*, for such things are *injurious*, and are therefore *forbidden*. That doctrine can therefore apply to wholesome flesh, or to *gleukos*, which is unfermented wine, because both retain their heat-raising and flesh-forming substances, and thus are constitutionally fit for the body. In the days of Paul both flesh and unfermented wine were extensively used in Rome, in Corinth, and in eastern cities generally; yet there were some sects that would not taste flesh, and some life-long Nazarites who would not taste even *unfermented* wine. And therefore Paul could say, "It is good neither to eat flesh nor to drink wine, nor anything whereby thy brother stumbleth, or is offended, or is made weak. All things are lawful for me (that is, all useful and innocent things are lawful for me), but all things are not expedient; wherefore if meat make my brother to offend, I will eat no flesh (I will deny myself the innocent, wholesome, and nourishing) while the world standeth, lest I make my brother to offend." The abstinence cause was placed at first on the expediency principle, in entire ignorance of the scientific truth that alcohol, as a beverage, is not a lawful or constitutional substance for man to use, but that, on the contrary, its use is physiologically wrong, and therefore cannot be morally right; also in entire ignorance of the fact that both in the Septuagint or Greek version of the Old Testament, which was used every Sabbath in the Christian churches during the days of Paul, and in the Hebrew version, the word "*wine*" is employed in two senses—one denoting unfermented the other fermented wine, and that Paul could apply the expediency principle only to the *unfermented* quality, since its use was lawful, and since he applied the *prohibition of duty* to the *fermented* quality in such COMMANDS as "*me paroinon*" (Titus i. 7) = *not near wine*; "*nephali-ous*" (1 Tim. iii. 11) = *abstinent from wine*; and "*gregoromen kvi nephomen*" (1 Thes. v. 6) = *watch, and abstain from wine*. To make, then, Christian expediency the foundation of abstinence from alcoholic poison as a beverage is an entirely false application of the principle, for it teaches two fundamental errors: 1st. That it is lawful to *destroy* the food which God adapted to the body of man, and designed to be used as *food*, by converting it into that which is not food but a

poison. 2d. That it is lawful for man to injure his health and shorten his life by using as a beverage the poison prepared by violating the constitution of nature and opposing God. Since it *does*, by fair implication, teach these two heresies, it is an obstacle to the progress of the truth. It has enlisted comparatively but few abstainers, while it prevents the enlisting of far more than it ever did enlist, and many of those it has enlisted (even the most eminent of them) have changed their mind, and gone back to the use of alcoholic drink again. It can never lay hold of the national conscience—nay, it confirms and hardens drinkers, publicans, and alcohol manufacturers in their course by declaring that the article which they make, sell, and buy is a good creature of God—that it is lawful and right to use it in moderation, and that therefore they are only in the way of their duty when they manufacture, sell, and use the poison. It especially hardens and confirms wine manufacturers and publicans in their sinful course, by saying that the Saviour requires alcoholic wine for the holiest ordinance in His church, and therefore it practically says to them, "See that ye continue at your work, for the Saviour has need of you—He cannot do without you!" Either Christian expediency, applied to the use of intoxicating drinks, is a false application of the principle, or the *truths* of physiology and chemistry are false, and the *facts* of experience, as the tables of the United Kingdom Temperance and General Provident Institution (see note to Question No. 61), are not facts. But who shall prove that the truths of science are false, or that the facts of experience are not facts? Of necessity to place abstinence from the *injurious* upon the principle of expediency instead of on *duty* is a false application of the principle, and a mighty hindrance to the progress of temperance. If Christian expediency can be expected to be powerful anywhere, it must be in the church; and if in any church, one would expect to find its power in the Free Church of Scotland. Yet this year (1876) the Free Assembly declined to recommend abstinence on the principle of expediency, the leader whose opposite motion was carried declaring that "it was a principle that required to be very carefully applied—that each man must judge for himself if the principle would do for his *own* case and circumstances, and that for the church to come in and take from him the liberty he enjoyed according to the Word of God was going beyond the limits which the church was warranted to go." (Applause.) Clearly, then, a principle like this, which holds in some cases and in some circumstances but not in others, can *never*, NEVER lay hold of the national conscience to lead the people to abstinence.

THE END.





