

An inquiry into the effects of ardent spirits upon the human body and mind : with an account of the means of preventing, and of the remedies for curing them / by Benjamin Rush, M. D. professor of medicine in the University of Pennsylvania.

Contributors

Rush, Benjamin, 1746-1813.

Rush, Benjamin, 1746-1813. Inquiry into the effects of spirituous liquors upon the human body.

Richardson, Josiah, 1778-1857

National Library of Medicine (U.S.)

Publication/Creation

Exeter [N.H.] : Printed for Josiah Richardson preacher of the gospel, 1819.

Persistent URL

<https://wellcomecollection.org/works/e3zym7h5>

License and attribution

This material has been provided by This material has been provided by the National Library of Medicine (U.S.), through the Medical Heritage Library. The original may be consulted at the National Library of Medicine (U.S.) where the originals may be consulted.

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.

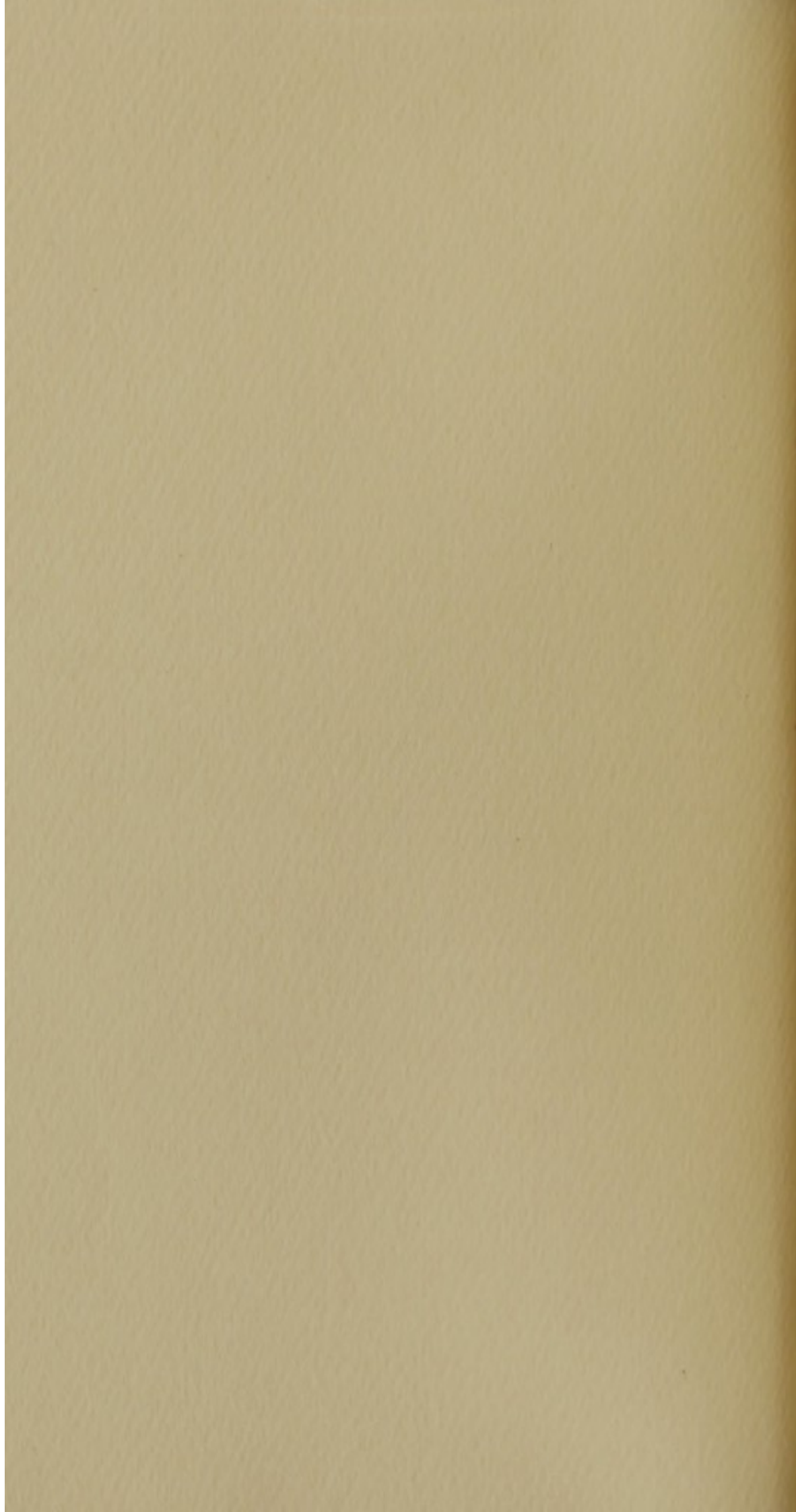
**wellcome
collection**

Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>



ARMED FORCES MEDICAL LIBRARY

Washington, D. C.



AN INQUIRY
INTO THE
Effects of Ardent Spirits
UPON THE
HUMAN BODY AND MIND,
WITH AN
Account of the Means of preventing,
AND OF THE
REMEDIES FOR CURING THEM.

—♦—
BY BENJAMIN RUSH, M. D.
Professor of Medicine in the University of Pennsylvania.
—♦—

THE EIGHTH EDITION, WITH ADDITIONS.

—♦—

EXETER :

Printed for JOSIAH RICHARDSON preacher of
the Gospel.
1819.

INTEMPERANCE.

		VICES.	DISEASES.	PUNISH- MENTS.
0—	Punch,	Idleness,	Sickness,	Debt,
10—				
20—	Toddy and EGG Rum,	Gaming, Peevish- ness, Quarreling.	Tremors of the hands in the morning, puking, bloatedness	Jail.
30—	Grog—Brandy and water,	Fighting, Horse Racing,	Inflamed eyes, red nose and face,	Black Eyes, and Rags.
40—	Flip and Shrub,	Lying and Swear- ing,	Sore and swelled legs, jaun- dice,	Hospital or Poor House.
50—	Bitters infused in Spirits and Cordials.	Stealing and Swindling,	Pains in the hands, burning in the hands and feet,	Bridewell.
60—	Drame of Gin, Brandy and Rum, in the morning,	Perjury,	Dropsy, Epilepsy,	State Prison.
70—	The same morning and evening, The same during day and night,	Burglary, Murder,	Melancholy, palsy, apoplexy, Madness, Despair,	do. for life. GALLOW'S.

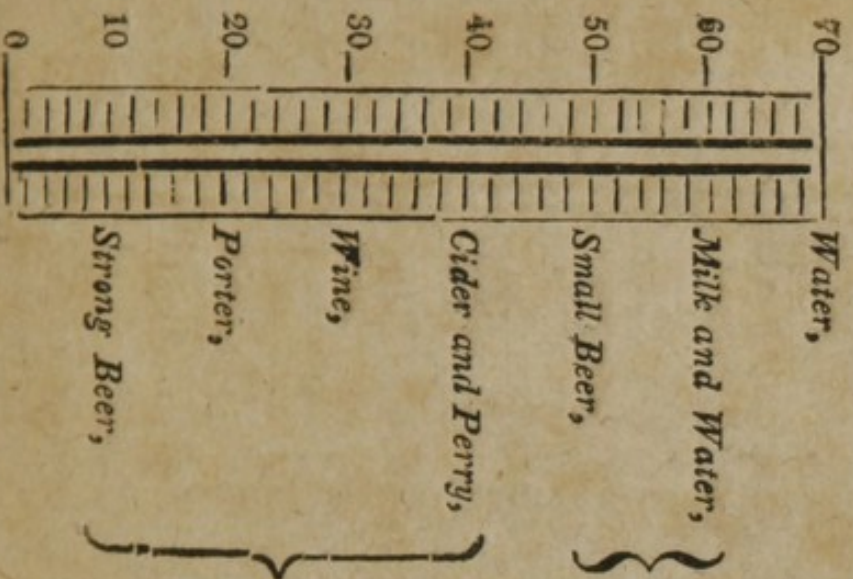
A MORAL AND PHYSICAL THERMOMETER.

A scale of the progress of Temperance and Intemperance.—Liquors with effects in their usual order.

TEMPERANCE.

Health and Wealth.

Serenity of Mind, Reputation, Long Life, and Happiness.



Cheerfulness, Strength, and Nourishment, when taken only in small quantities, and at meals.

CONTENTS.

PART I.

Of the effects of ardent spirits, as they appear in a fit of drunkenness, - - - - -	5
Of the chronic effects of their habitual use upon the body - -	9
Of their effects upon the mind, - - - - -	11
Of their effects upon property, - - - - -	12
Arguments in favour of their use answered, - - - - -	13
Cases in which a small quantity of them may be taken with safety, - - - - -	15

PART II.

Substitutes for ardent spirits, - - - - -	15
Cautions and directions to sundry classes of people, with respect to the use of ardent spirits, - - - - -	20
Means of preventing their general use suggested to civil and ecclesiastical bodies of men, - - - - -	27

PART III.

Remedies for a fit of drunkenness, - - - - -	29
Remedies for preventing the pernicious effects of the ha- bitual and intemperate use of ardent spirits, - - -	30

AN
INQUIRY, &c.

PART I.

BY ardent spirits, I mean those liquors only which are obtained by distillation from fermented substances of any kind. To their effects upon the bodies and minds of men, the following inquiry shall be exclusively confined. Fermented liquors contain so little spirit, and that so intimately combined with other matters, that they can seldom be drunken in sufficient quantities to produce intoxication, and its subsequent effects, without exciting a disrelish to their taste, or pain, from their distending the stomach. They are moreover, when taken in a moderate quantity, generally innocent, and often have a friendly influence upon health and life.

The effects of ardent spirits divide themselves into such as are of a prompt, and such as are of a chronic nature. The former discover themselves in drunkenness; and the latter, in a numerous train of diseases and vices of the body and mind.

1. I shall begin by briefly describing their prompt, or immediate effects, in a fit of drunkenness.

This odious disease (for by that name it should be called) appears with more or less of the following symptoms, and most commonly in the order in which I shall enumerate them.

1. Unusual garrulity.

2. Unusual silence.
3. Captiousness, and a disposition to quarrel.
4. Uncommon good humour, and an insipid simpering, or laugh.
5. Profane swearing, and cursing.
7. A disclosure of their own, or other people's secrets.
8. A rude disposition to tell those persons in company whom they know, their faults.
9. Certain immodest actions. I am sorry to say, this sign of the first stage of drunkenness, sometimes appears in women, who, when sober, are uniformly remarkable for chaste and decent manners.
10. A clipping of words.
11. Fighting ; a black eye, or a swelled nose, often mark this grade of drunkenness.
12. Certain extravagant acts which indicate a temporary fit of madness. These are singing, hallooing, roaring, imitating the noises of brute animals, jumping, tearing off clothes, dancing naked, breaking glasses and china, and dashing other articles of household furniture upon the ground, or floor. After a while the paroxysm or drunkenness is completely formed. The face now becomes flushed, the eyes project, and are somewhat watery, winking is less frequent than is natural ; the under lip is protruded,—the head inclines a little to one shoulder ;—the jaw falls ; belchings and hiccup take place,—the limbs totter ;—the whole body staggers ;—The unfortunate subject of this history next falls on his seat,—he looks around him with a vacant countenance, and mutters inarticulate sounds to himself ;—he attempts to rise and walk. In this attempt, he falls upon his side, from which he gradually turns upon his back. He now closes

his eyes, and falls into a profound sleep, frequently attended with snoring, and profuse sweats, and sometimes with such a relaxation of the muscles, which confine the bladder and the lower bowels, as to produce a symptom which delicacy forbids me to mention. In this condition he often lies from ten, twelve, and twenty-four hours, to two, three, four, and five days, an object of pity and disgust to his family and friends. His recovery from this fit of intoxication, is marked with several peculiar appearances. He opens his eyes, and closes them again;—he gapes and stretches his limbs,—he then coughs and pukes,—his voice is hoarse,—he rises with difficulty, and staggers to a chair; his eyes resemble balls of fire,—his hands tremble,—he loaths the sight of food;—he calls for a glass of spirits to compose his stomach.—now and then he emits a deep-fetched sigh, or groan, from a transient twinge of conscience, but he more frequently scolds, and curses every thing around him. In this state of languor and stupidity, he remains for two or three days, before he is able to resume his former habits of business and conversation.

Pythagoras, we are told, maintained that the souls of men after death, expiated the crimes committed by them in this world, by animating certain brute animals; and that the souls of those animals in their turns entered into men, and carried with them all their peculiar qualities and vices. This doctrine of one of the wisest and best of the Greek Philosophers, was probably intended only to convey a lively idea of the changes which are induced in the body and mind of man by a fit of drunkenness. In folly, it causes him to resemble a calf,—in stupidity, an ass,—

in roaring, a mad bull,—in quarrelling and fighting, a dog,—in cruelty, a tyger,—in feter, a skunk,—in filthiness, a hog,—and in obscenity, a he-goat.

It belongs to the history of drunkenness to remark, that its paroxysms occur, like the paroxysms of many diseases, at certain periods, and after longer or shorter intervals. They often begin with annual, and gradually increase in their frequency, until they appear in quarterly, monthly, weekly, and quotidian or daily periods. Finally they afford scarcely any marks of remission either during the day or the night. There was a citizen of Philadelphia many years ago, in whom drunkenness appeared in this protracted form. In speaking of him to one of his neighbours, I said, "Does he not *sometimes* get drunk?" "You mean," said his neighbour, "is he not *sometimes* sober?"

It is further remarkable, that drunkenness resembles certain hereditary, family and contagious diseases. I have once known it to descend from a father to four out of five of his children. I have seen three, and once four, brothers who were born of sober ancestors, affected by it, and I have heard of its spreading through a whole family composed of members not originally related to each other. These facts are important, and should not be overlooked by parents, in deciding upon the matrimonial connexions of their children.

Let us next attend to the chronic effects of ardent spirits upon the body and mind. In the body, they dispose to every form of acute disease; they moreover *excite* fevers in persons predisposed to them, from other causes. This has been remarked in all the yellow fevers which

have visited the cities of the United States. Hard drinkers seldom escape, and rarely recover from them. The following diseases are the usual consequences of the habitual use of ardent spirits, viz.

1. A decay of appetite, sickness at stomach, and a puking of bile or a discharge of a frothy and viscid phlegm by hawking, in the morning.

2. Obstructions of the liver. The fable of Prometheus, on whose liver a vulture was said to prey constantly, as a punishment for his stealing fire from heaven, was intended to illustrate the painful effects of ardent spirits upon that organ of the body.

3. Jaundice and dropsy of the belly and limbs, and finally of every cavity in the body. A swelling in the feet and legs is so characteristic a mark of habits of intemperance, that the merchants in Charleston, I have been told, cease to trust the planters of South Carolina, as soon as they perceive it. They very naturally conclude industry and virtue to be extinct in that man, in whom that symptom of disease has been produced by the intemperate use of distilled spirits.

4. Hoarseness, and a husky cough, which often terminate in consumption, and sometimes in an acute and fatal disease of the lungs.

5. Diabetes, that is, a frequent and weakening discharge of pale, or sweetish urine.

6. Redness, and eruptions on different parts of the body. They generally begin on the nose, and after gradually extending all over the face, sometimes descend to the limbs in the form of leprosy. They have been called "Rum-buds," when they appear in the face. In persons who have occasionally survived these effects of

ardent spirits on the skin, the face after a while becomes bloated, and its redness is succeeded by a death-like paleness. Thus the same fire which produces a red colour in iron, when urged to a more intense degree, produces what has been called a white heat.

7. A fetid breath, composed of every thing that is offensive in putrid animal matter.

8. Frequent and disgusting belchings. Dr. Haller relates the case of a notorious drunkard having been suddenly destroyed in consequence of the vapour discharged from his stomach by belching, accidentally taking fire by coming in contact with the flame of a candle.

9. Epilepsy.

10. Gout, in all its various forms of swelled limbs, colic, palsy, and apoplexy.

Lastly, 11. Madness. The late Dr. Waters, while he acted as house pupil and apothecary of the Pennsylvania Hospital, assured me, that in one third of the patients confined by this terrible disease, it had been induced by ardent spirits.

Most of the diseases which have been enumerated are of a mortal nature. They are more certainly induced, and terminate more speedily in death, when spirits are taken in such quantities, and at such times, as to produce frequent intoxication; but it may serve to remove an error with which some intemperate people console themselves, to remark, that ardent spirits often bring on fatal diseases without producing drunkenness. I have known many persons destroyed by them who were never completely intoxicated during the whole course of their lives. The solitary instances of longevity which are now and then met with in hard drinkers, no more disprove the deadly effects of ardent

spirits, than the solitary instances of recoveries from apparent death by drowning, prove that there is no danger to life from a human body lying an hour or two under water.

The body after its death, from the use of distilled spirits, exhibits by dissection certain appearances which are of a peculiar nature. The fibres of the stomach and bowels are contracted ;—abscesses,—gangrene,—and schirri are found in the viscera.—The bronchial vessels are contracted,—the blood-vessels and tendons in many parts of the body are more or less ossified, and even the hair of the head possesses a crispness which renders it less valuable to wig-makers than the hair of sober people.

Not less destructive are the effects of ardent spirits upon the human mind. They impair the memory, debilitate the understanding, and pervert the moral faculties. It was probably from observing these effects of intemperance in drinking upon the mind, that a law was formerly passed in Spain, which excluded drunkards from being witnesses in a court of justice. But the demoralizing effects of distilled spirits do not stop here. They produce not only falsehood, but fraud, theft, uncleanness, and murder. Like the demoniac mentioned in the New-Testament, their name is "legion," for they convey into the soul a host of vices and crimes.

A more affecting spectacle cannot be exhibited than a person into whom this infernal spirit, generated by habits of intemperance, has entered. It is more or less affecting according to the station the person fills in a family, or in society, who is possessed by it. Is he a husband? How deep the anguish which rends

the bosom of his wife ! Is she a wife ? Who can measure the shame and aversion which she excites in her husband ? Is he the father, or is she the mother of a family of children ? See their averted looks from their parent, and their blushing looks at each other ! Is he a magistrate ? or has he been chosen to fill a high and respectable station in the councils of his country ? What humiliating fears of corruption in the administration of the laws, and of the subversion of public order and happiness, appear in the countenances of all who see him ! Is he a minister of the gospel ?—Here language fails me.—If angels weep—it is at such a sight.

In pointing out the evils produced by ardent spirits, let us not pass by their effects upon the estates of the persons who are addicted to them. Are they inhabitants of cities ?—Behold ! their houses stripped gradually of their furniture, and pawned, or sold by a constable, to pay tavern debts. See ! their names upon record in the dockets of every court, and whole pages of newspapers filled with advertisements of their estates for public sale. Are they inhabitants of country places ? Behold ! their houses with shattered windows—their barns with leaky roofs,—their gardens overrun with weeds,—their fields with broken fences, their hogs without yokes, their sheep without wool,—their cattle and horses without fat,—and their children filthy and half clad, without manners, principles, and morals. This picture of agricultural wretchedness is seldom of long duration. The farms and property thus neglected, and depreciated, are seized and sold for the benefit of a group of creditors. The children that were born with the prospect of inheriting them, are

bound out to service in the neighbourhood; while their parents, the unworthy authors of their misfortunes, ramble into new and distant settlements, alternately fed on their way by the hand of charity, or a little casual labour.

Thus we see poverty and misery, crimes and infamy, diseases and death, are all the natural and usual consequences of the intemperate use of ardent spirits.

I have classed death among the consequences of hard drinking. But it is not death from the immediate hand of the Deity, nor from any of the instruments of it which were created by him. It is death from SUICIDE. Yes—thou poor degraded creature, who art daily lifting the poisoned bowl to thy lips—cease to avoid the unhallowed ground in which the self-murderer is interred, and wonder no longer that the sun should shine, and the rain fall, and the grass look green upon his grave. Thou art perpetrating gradually, by the use of ardent spirits, what he has effected suddenly by opium—or a halter. Considering how many circumstances from surprise, or derangement, may palliate his guilt, or that (unlike yours) it was not preceded and accompanied by any other crime, it is probable his condemnation will be less than your's at the day of judgment.

I shall now take notice of the occasions and circumstances which are supposed to render the use of ardent spirits necessary, and endeavour to show that the arguments in favour of their use in such cases are founded in error, and that in each of them, ardent spirits instead of affording strength to the body, increase the evils they are intended to relieve.

1. They are said to be necessary in very cold weather. This is far from being true ; for the temporary warmth they produce, is always succeeded by a greater disposition in the body to be affected by cold. Warm dresses, a plentiful meal just before exposure to the cold, and eating occasionally a little gingerbread, or any other cordial food, is a much more durable method of preserving the heat of the body in cold weather.

2. They are said to be necessary in very warm weather. Experience proves that they increase, instead of lessening the effects of heat upon the body, and thereby disposes to diseases of all kinds. Even in the warm climate of the West Indies, Dr. Bell asserts this to be true. "Rum (says this author) whether used habitually, moderately, or in excessive quantities in the West-Indies, always diminishes the strength of the body, and renders men more susceptible of disease, and unfit for any service in which vigor or activity is required."* As well might we throw oil into a house, the roof of which was on fire, in order to prevent the flames from extending to its inside, as pour ardent spirits into the stomach, to lessen the effects of a hot sun upon the skin.

3. Nor do ardent spirits lessen the effects of hard labour upon the body. Look at the horse : with every muscle of his body swelled from morningtill night in the plough, or a team, does he make signs for a draught of toddy, or a glass of spirits to enable him to cleave the ground, or to climb a hill ?—No—he requires

*Inquiry into the causes which produce, and the means of preventing diseases among the British officers, soldiers and others in the West-Indies.

nothing but cool water and substantial food. There is no nourishment in ardent spirits. The strength they produce in labour is of a transient nature, and is always followed by a sense of weakness and fatigue.

But are there no conditions of the human body in which ardent spirits may be given? I answer—there are. 1st. When the body has been suddenly exhausted of its strength, and a disposition to faintness has been induced. Here a few spoonfuls, or a wine-glass full of spirits, with or without water, may be administered with safety and advantage. In this case we comply strictly with the advice of Solomon, who restricts the use of “strong drink” only “to him who is ready to perish.”—2dly. When the body has been exposed for a long time to wet weather, more especially if it be combined with cold. Here a moderate quantity of spirits is not only safe, but highly proper to obviate debility, and to prevent a fever. They will more certainly have those salutary effects, if the feet are at the same time bathed with them, or a half pint of them poured into the shoes or boots. These I believe are the only two cases in which distilled spirits are useful or necessary to persons in health.

PART II.

BUT it may be said, if we reject spirits from being part of our drinks, what liquors shall we substitute in their room? I answer in the first place,

1. SIMPLE WATER. I have known many instances of persons who have followed the most laborious employments for many years, in the

open air, and in warm and cold weather, who never drank any thing but water, and enjoyed uninterrupted good health. Dr. Mosely, who resided many years in the West-Indies, confirms this remark. "I aver, (says the Doctor) from my own knowledge and custom, as well as the custom and observations of many other people, that those who drink nothing but water, or make it their principal drink, are little affected by the climate, and can undergo the greatest fatigue without inconvenience, and are never subject to troublesome or dangerous diseases."

Persons who are unable to relish this simple beverage of nature, may drink some one, or of all the following liquors, in preference to ardent spirits.

2. CYDER. This excellent liquor contains a small quantity of spirit, but so diluted, and blunted by being combined with a large quantity of saccharine matter, and water, as to be perfectly wholesome. It sometimes disagrees with persons subject to the rheumatism, but it may be made inoffensive to such people, by extinguishing a red hot iron in it, or by mixing it with water. It is to be lamented that the late frosts in the spring so often deprive us of the fruit which affords this liquor. The effects of these frosts have been in some measure obviated by giving an orchard a north-west exposure, so as to check too early vegetation, and by kindling two or three large fires of brush, or straw, to the windward of the orchard, the evening before we expect a night of frost. This last expedient has in many instances preserved the fruit of an orchard to the great joy and emolument of the ingenious husbandman.

3. MALT LIQUORS. The grain from which these liquors are obtained, is not liable, like the apple, to be affected by frost, and therefore they can be procured, at all times, and at a moderate price. They contain a good deal of nourishment; hence we find many of the poor people in Great Britain endure hard labour with no other food than a quart or three pints of beer, with a few pounds of bread in a day. As it will be difficult to prevent small beer from becoming sour in warm weather, an excellent substitute may be made for it by mixing bottled porter, ale, or strong beer, with an equal quantity of water or a pleasant beer may be made by adding to a bottle of porter, ten quarts of water, and a pound of brown sugar or a pint of molasses. After they have been well mixed, pour the liquor into bottles and place them loosely corked, in a cool cellar. In two or three days, it will be fit for use. A spoonful of ginger added to the mixture, renders it more lively and agreeable to the taste.

3. WINES. These fermented liquors are composed of the same ingredients as cyder, and are both cordial and nourishing. The peasants of France who drink them in large quantities, are a sober and healthy body of people. Unlike ardent spirits, which render the temper irritable, wines generally inspire cheerfulness and good humour. It is to be lamented that the grape has not yet been sufficiently cultivated in our country, to afford wine for our citizens; but many excellent substitutes may be made for it, from the native fruits of all the States. If two barrels of cyder fresh from the press, are boiled into one, and afterwards fermented, and kept

for two or three years in a dry cellar, it affords a liquor which, according to the quality of the apple from which the cyder is made, has the taste of Malaga, or Rhenish wine. It affords when mixed with water, a most agreeable drink in summer. I have taken the liberty of calling it POMONA WINE. There is another method of making a pleasant wine from the apple, by adding four and twenty gallons of new cyder to three gallons of syrup made from the expressed juice of sweet apples. When thoroughly fermented, and kept for a few years, it becomes fit for use. The blackberry of our fields, and the raspberry, and currant of our gardens, afford likewise an agreeable and wholesome wine, when pressed, and mixed with certain proportions of sugar and water, and a little spirit, to counteract the disposition to an excessive fermentation. It is no objection to these cheap and home-made wines, that they are unfit for use until they are two or three years old. The foreign wines in common use in our country, require not only a much longer time to bring them to perfection, but to prevent their being disagreeable even to the taste.

4. MOLASSES and WATER, also VINEGAR and WATER sweetened with sugar or molasses, form an agreeable drink in warm weather. It is pleasant and cooling, and tends to keep up those gentle and uniform sweats on which health and life often depend. Vinegar and water constituted the only drink of the soldiers of the Roman republic, and it is well known they marched and fought in a warm climate, and beneath a load of arms which weighed sixty pounds. Boaz, a wealthy farmer in Palestine, we find treated his reapers with nothing but

bread dipped in vinegar. To such persons as object to the taste of vinegar, sour milk, or buttermilk, or sweet milk diluted with water may be given in its stead. I have known the labour of the longest and hottest days in summer supported by means of these pleasant and wholesome drinks with great firmness, and ended with scarcely a complaint of fatigue.

5. The SUGAR MAPLE affords a thin juice which has long been used by the farmers in Connecticut as a cool and refreshing drink in the time of harvest. The settlers in the Western countries of the middle States will do well to let a few of the trees which yield this pleasant juice, remain in all their fields. They may prove the means not only of saving their children and grand-children many hundred pounds, but of saving their bodies from disease and death, and their souls from misery beyond the grave.

6. COFFEE possesses agreeable and exhilarating qualities, and might be used with great advantage to obviate the painful effects of heat, cold and fatigue upon the body. I once knew a country physician who made it a practice to drink a pint of strong coffee previous to his taking a long or cold ride. It was more cordial to him than spirits in any of the forms in which they are commonly used.

The use of the cold bath in the morning, and of the warm bath in the evening, are happily calculated to strengthen the body the former part of the day, and to restore it in the latter from the languor and fatigue which are induced by heat and labour.

Let it not be said, ardent spirits have become necessary from habit in harvest, and in other

seasons of uncommon and arduous labour. The habit is a bad one, and may be easily broken. Let but half a dozen farmers in a neighbourhood combine to allow higher wages to their labourers than are common, and a sufficient quantity of *any* of the pleasant and wholesome liquors I have recommended, and they may soon, by their example, abolish the practice of giving them spirits. In a little while they will be delighted with the good effects of their association. Their grain and hay will be gathered into their barns in less time, and in a better condition than formerly, and of course at a less expense, and an hundred disagreeable scenes, from sickness, contention and accidents, will be avoided, all of which follow, in a greater or less degree, the use of ardent spirits.

Nearly all diseases have their predisposing causes. The same thing may be said of the intemperate use of distilled spirits. It will, therefore, be useful to point out the different employments, situations, and conditions of the body and mind which predispose to the love of those liquors, and to accompany them with directions to prevent persons being ignorantly and undesignedly seduced into the habitual and destructive use of them.

1. Labourers bear with great difficulty, long intervals between their meals. To enable them to support the waste of their strength, their stomachs should be constantly, but moderately stimulated by aliment, and this is best done by their eating four or five times in a day, during the seasons of great bodily exertion. The food at this time should be *solid*, consisting chiefly of salted meat. The vegetables used with it should possess some activity, or they should be made

savoury by a mixture of spices. Onions and garlic are of a most cordial nature. They composed a part of the diet which enabled the Israelites to endure, in a warm climate, the heavy tasks imposed upon them by their Egyptian masters; and they were eaten, Horace and Virgil tell us, by the Roman farmers, to repair the waste of their strength, by the toils of harvest. There are likewise certain sweet substances which support the body under the pressure of labour. The negroes in the West-Indies become strong, and even fat, by drinking the juice of the sugar cane in the season of grinding it. The Jewish soldiers were invigorated by occasionally eating raisins and figs. A bread composed of wheat-flour, molasses, and ginger (commonly called gingerbread) taken in small quantities during the day, is happily calculated to obviate the debility induced upon the body by constant labour. All these substances, whether of an animal or vegetable nature, lessen the desire, as well as the necessity for cordial drinks, and impart equable and durable strength to every part of the system.

2. Valetudinarians, especially those who are afflicted with diseases of the stomach and bowels, are very apt to seek relief from ardent spirits. Let such people be cautious how they make use of this dangerous remedy. I have known many men and women of excellent characters and principles, who have been betrayed by occasional doses of gin and brandy, into a love of those liquors, and have afterwards fallen sacrifices to their fatal effects. The different preparations of opium are much more safe and efficacious than distilled cordials of any kind, in flatulent or spasmodic affections of the stomach

and bowels. So great is the danger of contracting a love for distilled liquors by accustoming the stomach to their stimulus, that as few medicines as possible should be given in spiritous vehicles, in chronic diseases. A physician of great eminence, and uncommon worth, who died towards the close of the last century in London, in taking leave of a young physician of this city, who had finished his studies under his patronage, impressed this caution with peculiar force upon him, and lamented at the same time, in pathetic terms, that he had innocently made many sots by prescribing brandy and water in stomach complaints. It is difficult to tell how many persons have been destroyed by those physicians who have adopted Dr. Brown's indiscriminate practice in the use of stimulating remedies, the most popular of which is ardent spirits; but it is well known, several of them have died of intemperance in this city, since the year 1790.— They were probably led to it, by drinking brandy and water to relieve themselves from the frequent attacks of debility and indisposition to which the labours of a physician expose him, and for which rest, fasting, a gentle purge, or weak diluting drinks would have been more safe and more certain cures.

None of these remarks are intended to preclude the use of spirits in the low state of short or what are called acute diseases; for in such cases, they produce their effects too soon, to create an habitual desire for them.

3. Some people, from living in countries subject to intermitting fevers, endeavour to fortify themselves against them, by taking two or three wine-glasses of bitters, made with spirits, every

day. There is a great danger of contracting habits of intemperance from this practice. Besides, this mode of preventing intermittents, is far from being a certain one, a much better security against them, is a tea-spoonful of the Jesuits bark, taken every morning during a sickly season. If this safe and excellent medicine cannot be had, a gill or half pint of a strong watery infusion of centaury, camomile, wormwood, or rue, mixed with a little of the calamus of our meadows, may be taken every morning with nearly the same advantage as the Jesuits bark. Those persons who live in a sickly country, and cannot procure any of the preventatives of autumnal fevers, which have been mentioned, should avoid the morning and evening air,—should kindle fires in their houses on damp days, and in cool evenings, throughout the whole summer, and put on winter clothes about the first week in September. The last part of these directions applies only to the inhabitants of the middle States.

4. Men who follow professions, which require constant exercise of the faculties of their minds, are very apt to seek relief, by the use of ardent spirits, from the fatigue which succeeds great mental exertions. To such persons it may be a discovery to know, that TEA is a much better remedy for that purpose. By its grateful and gentle stimulus, it removes fatigue, restores the excitement of the mind, and invigorates the whole system. I am no advocate for the excessive use of tea. When taken too strong it is hurtful, especially to the female constitution but when taken of a moderate degree of strength, and in moderate quantities, with sugar and cream, or milk, I believe it is in general innox-

ous, and at all times to be preferred to ardent spirits, as a cordial for studious men. The late Anthony Benezet, one of the most laborious schoolmasters I ever knew, informed me, he had been prevented from the love of spirituous liquors, by acquiring a love for tea in early life. Three or four cups, taken in an afternoon, carried off the fatigue of a whole day's labour in his school. This worthy man lived to be seventy-one years of age, and died of an acute disease, with the full exercise of all the faculties of his mind. But the use of tea counteracts a desire for distilled spirits, during great *bodily* as well as mental exertions. Of this, Captain Forest has furnished us with a recent and remarkable proof in his history of a voyage from Calcutta to the Marqui Archipelago. "I have always observed, (says this ingenious mariner) when sailors drink tea, it weans them from the thoughts of drinking strong liquors, and pernicious grog; and with this, they are soon contented. Not so with whatever will intoxicate, be it what it will. This has always been my remark! I therefore always encourage it, without their knowing why."

5. Women have sometimes been led to seek relief from what is called breeding sickness, by the use of ardent spirits. A little gingerbread or biscuit, taken occasionally, so as to prevent the stomach being empty, is a much better remedy for that disease.

6. Persons under the pressure of debt, disappointments in worldly pursuits, and guilt, have sometimes sought to drown their sorrows in strong drink. The only radical cure for those evils, is to be found in Religion; but where its support is not resorted to, wine and opium

should always be preferred to ardent spirits. They are far less injurious to the body and mind, than spirits: and the habits of attachment to them are easily broken, after time and repentance have removed the evils they were taken to relieve.

7. The sociable and imitative nature of man, often disposes him to adopt the most odious and destructive practices from his companions. The French soldiers who conquered Holland, in the year 1794, brought back with them the love and use of brandy, and thereby corrupted the inhabitants of several of the departments of France, who had been previously distinguished for their temperate and sober manners. Many other facts might be mentioned, to shew how important it is to avoid the company of persons addicted to the use of ardent spirits.

8. Smoking and chewing tobacco, by rendering water and simple liquors insipid to the taste dispose very much to the stronger stimulus of ardent spirits. The practice of smoking segars, has, in every part of our country, been more followed by a general use of brandy and water, as a common drink, more especially by that class of citizens who have not been in the habit of drinking wine, or malt liquors. The less, therefore, tobacco is used in the above ways the better.

9. No man ever became suddenly a drunkard. It is by gradually accustoming the taste and stomach to ardent spirits, in the forms of GROG and TODDY, that men have been led to love them in their more destructive mixtures and in their simple state. Under the impression of this truth, were it possible for me to speak, with a voice so loud as to be heard from the river St. Croix to the remotest shores of the Missi-

issippi, which bound the territory of the United States, I should say,—Friends and Fellow-Citizens ! avoid the habitual use of those two seducing liquors, whether they be made with brandy, rum, gin, Jamaica spirits, whisky, or what is called cherry bounce. It is true, some men, by limiting the strength of those drinks, by measuring the spirit and water, have drunken them for many years, and even through a long life, without acquiring habits of intemperance or intoxication ; but many more have been insensibly led by drinking weak toddy, and grog first at their meals, to take them for their constant drink, in the intervals of their meals ; afterwards to take them, of an increased strength, before breakfast in the morning, and finally to destroy themselves by drinking undiluted spirits, during every hour of the day and night. I am not singular in this remark. “The consequences of drinking rum and water, or *grog* as it is called, (says Dr. Mosely) is, that habit increases the desire of more spirit, and decreases its effects ; and there are very few grog-drinkers, who long survive the practice of debauching with it without acquiring the odious nuisance of dram-drinker’s breath, and downright stupidity and impotence.”* To enforce the caution against the use of those two apparently innocent and popular liquors still further, I shall select one instance, from among many, to shew the ordinary manner, in which they beguile and destroy their votaries. A citizen of Philadelphia, once of a fair and sober character, drank toddy for many years, as his constant drink. From this he proceeded to drink grog. After a while, nothing would

* Treatise on Tropical Diseases.

satisfy him, but slings made of equal parts of rum and water, with a little sugar. From slings, he advanced to raw rum, and from common rum, to Jamaica spirits. Here he rested for a few months, but at length finding even Jamaica spirits were not strong enough to warm his stomach, he made it a constant practice to throw a table-spoonful of ground pepper into each glass of his spirits, in order, to use his own words, "to take off their coldness." He soon afterwards died a martyr to his intemperance.

Ministers of the gospel, of every denomination in the United States !—aid me with all the weight you possess in society, from the dignity and usefulness of your sacred office to save our fellow-men from being destroyed by the great destroyer of their lives and souls. In order more successfully to effect this purpose, permit me to suggest to you, to employ the same wise modes of instruction, which you use in your attempts to prevent their destruction by other vices. You expose the evils of covetousness, in order to prevent theft ; you point out the sinfulness of impure desires, in order to prevent adultery ; and you dissuade from anger, and malice, in order to prevent murder. In like manner, denounce, by your preaching, conversation and examples, the seducing influence of toddy and grog, when you aim to prevent all the crimes and miseries which are the offspring of strong drink.

We have hitherto considered the effects of ardent spirits upon individuals, and the means of preventing them. I shall close this head of our inquiry, by a few remarks on their effects upon the population and welfare of our country, and the means of obviating them.

It is highly probable, not less than 4000 people die annually from the use of ardent spirits, in the United States. Should they continue to exert this deadly influence upon our population, Where will their evils terminate? This question may be answered by asking, where are all the Indian tribes, whose numbers and arms formerly spread terror among their civilized neighbours? I answer in the words of the famous Mingo Chief, "the blood of many of them flows not in the veins of any human creature." They have perished not by pestilence, nor war, but by a greater foe to human life than either of them.—Ardent Spirits. The loss of 4000 American citizens, by the yellow fever, in a single year, awakened general sympathy and terror, and called forth all the strength and ingenuity of laws, to prevent its recurrence. Why is not the same zeal manifested in protecting our citizens from the more general and consuming ravages of distilled spirits?—Should the customs of civilized life, preserve our nation from extinction, and even from an increase of mortality, by those liquors; they cannot prevent our country being governed by men, chosen by intemperate and corrupted voters. From such legislators, the republic would soon be in danger. To avert this evil,—let good men of every class unite and besiege the general and state governments, with petitions to limit the number of taverns—to impose heavy duties upon ardent spirits—to inflict a mark of disgrace, or a temporary abridgment of some civil right, upon every man, convicted of drunkenness; and finally, to secure the property of habitual drunkards, for the benefit of their families, by placing it in the hands of trustees, appointed for that purpose, by a court of justice.

To aid the operation of these laws, would it not be extremely useful for the rulers of the different denominations of Christian churches to unite, and render the sale and consumption of ardent spirits a subject of ecclesiastical jurisdiction?—The Methodists, and society of Friends, have for some time past, viewed them as contraband articles, to the pure laws of the gospel, and have borne many public and private testimonies against making them the objects of commerce. Their success in this benevolent enterprize, affords ample encouragement for all other religious societies to follow their example.

PART III.

WE come now to the third part of this Inquiry; that is, to mention the remedies for the evils which are brought on by the excessive use of distilled spirits. These remedies divide themselves into two kinds.

I. Such as are proper to cure a fit of drunkenness; and

II. Such as are proper to prevent its recurrence, and to destroy a desire for ardent spirits.

I. I am aware that the efforts of science and humanity, in applying their resources to the cure of a disease induced by an act of vice, will meet with a cold reception from many people. But let such people remember, the subjects of our remedies are their fellow creatures, and that the miseries brought upon human nature, by its crimes, are as much the objects of divine compassion, (which we are bound to imitate) as the distresses which are brought upon men, by the crimes of other people, or which they bring upon

themselves, by ignorance or accidents. Let us not then pass by the prostrate sufferer from strong drink, but administer to him the same relief, we would afford to a fellow creature, in a similar state, from an accidental and innocent cause.

1. The first thing to be done to cure a fit of drunkenness, is to open the collar, if in a man, and remove all tight ligatures from every other part of the body. The head and shoulders should at the same time be elevated, so as to favour a more feeble determination of the blood to the brain.

2. The contents of the stomach should be discharged, by thrusting a feather down the throat. It often restores the patient immediately to his senses and feet. Should it fail of exciting a puking.

3. A napkin should be wrapped round the head, and wetted an hour or two with cold water, or cold water should be poured in a stream upon the head. In the latter way, I have sometimes seen it used when a boy, in the city of Philadelphia. It was applied, by dragging the patient, when found drunk in the street, to a pump, and pumping water upon his head for ten or fifteen minutes. The patient generally rose, and walked off, sober and sullen, after the use of this remedy.

Other remedies, less common, but not less effectual for a fit of drunkenness are,

4. Plunging the whole body into cold water. A number of gentleman who had drunken to intoxication, on board of a ship in the stream near Fell's point, at Baltimore, in consequence of their reeling in a small boat, on their way to the shore, in the evening, upset it, and fell into the water. Several boats from the shore hurried to their re-

lief. They were all picked up, and went home perfectly sober to their families.

5. Terror. A number of young merchants, who had drunken together, in a compting-house, on James river, above thirty years ago, until they were intoxicated, were carried away by a sudden rise of the river, from an immense fall of rain. They floated several miles with the current, in their little cabin, half filled with water. An island in the river arrested it. When they reached the shore that saved their lives, they were all sober. It is probable terror assisted in the cure of the persons who fell into the water at Baltimore.

6. The excitement of a fit of anger. The late Dr. Witherspoon used to tell a story of a man in Scotland, who was always cured of a fit of drunkenness, by being made angry. The mean chosen for that purpose, was a singular one. It was talking against religion.

7. A severe whipping. This remedy acts by exciting a revulsion of the blood from the brain to the external parts of the body.

8. Profuse sweats. By means of this evacuation, nature sometimes cures a fit of drunkenness. Their good effects are obvious in labourers whom quarts of spirits taken in a day will seldom intoxicate, while they sweat freely. If the patient be unable to swallow warm drinks, in order to produce sweats, they may be excited by putting him in a warm bath, or wrapping his body in blankets, under which should be placed half a dozen hot bricks, or bottles filled with hot water.

9. Bleeding. This remedy should always be used where the former ones have been prescribed to no purpose, or where there is reason to fear

from the long duration of the disease, a material injury may be done to the brain.

It is hardly necessary to add, that each of the above remedies, should be regulated by the grade of drunkenness, and the greater or less degree, in which the intellects are affected in it.

II. The remedies which are proper to prevent the recurrence of fits of drunkenness, and to destroy the desire for ardent spirits, are religious, metaphysical, and medical. I shall briefly mention them.

1. Many hundred drunkards have been cured of their desire for ardent spirits, by a practical belief in the doctrines of the Christian religion. Examples of the divine efficacy of Christianity for this purpose, have lately occurred in many parts of the United States.

2. A sudden sense of the guilt contracted by drunkenness, and of its punishment in a future world. It once cured a gentleman in Philadelphia, who, in a fit of drunkenness, attempted to murder a wife whom he loved. Upon being told of it when he was sober, he was so struck with the enormity of the crime he had nearly committed, that he never tasted spirituous liquors afterwards.

3. A sudden sense of shame. Of the efficacy of this deep-seated principle in the human bosom, in curing drunkenness, I shall relate three remarkable instances.

A farmer in England, who had been many years in the practice of coming home intoxicated, from a market town, one day observed appearances of rain, while he was in market. His hay was cut, and ready to be housed. To save it, he returned in haste to his farm, before he had taken his customary dose of grog. Upon coming into his house, one of his children, a boy of six years

old, ran to his mother, and cried out, "O ! mother, father is come home, and he is not drunk." The father who heard this exclamation, was so severely rebuked by it, that he suddenly became a sober man.

A noted drunkard was once followed by a favourite goat, to a tavern, into which he was invited by his master, and drenched with some of his liquor. The poor animal staggered home with his master, a good deal intoxicated. The next day he followed him to his accustomed tavern. When the goat came to the door, he paused : his master made signs to him to follow him into the house. The goat stood still. An attempt was made to thrust him into the tavern. He resisted as if struck with the recollection of what he suffered from being intoxicated the night before. His master was so much affected by a sense of shame, in observing the conduct of his goat to be so much more rational than his own, that he ceased from that time to drink spirituous liquors.

A gentleman in one of the southern states, who had nearly destroyed himself by strong drink, was remarkable for exhibiting the grossest marks of folly in his fits of intoxication. One evening, sitting in his parlour, he heard an uncommon noise in his kitchen. He went to the door and peeped through the key-hole, from whence he saw one of his negroes diverting his fellow-servants, by mimicking his master's gestures and conversation when he was drunk.—The sight overwhelmed him with shame and distress, and instantly became the means of his reformation.

4. The association of the idea of ardent spirits with a painful or disagreeable impression upon some part of the body, has sometimes cured the

love of strong drink. I once tempted a negro man, who was habitually fond of ardent spirits, to drink some rum (which I placed in his way) and in which I had put a few grains of tartar emetic.—The tartar sickened and puked him to such a degree, that he supposed himself to be poisoned. I was much gratified by observing he could not bear the sight nor smell of spirits, for two years afterwards.

I have heard of a man, who was cured of the love of spirits, by working off a puke, by large draughts of brandy and water ; and I know a gentleman, who, in consequence of being affected with a rheumatism, immediately after drinking some toddy, when overcome with fatigue and exposure to the rain, has ever since loathed, that liquor, only because it was accidentally associated in his memory with the recollection of the pain he suffered from his disease.

This appeal to that operation of the human mind, which obliges it to associate ideas, accidentally or otherwise combined, for the cure of vice, is very ancient. It was resorted to by Moses when he compelled the children of Israel, to drink the solution of the golden calf (which they had idolized) in water. This solution, if made as it most probably was, by means of what is called *hepar sulphuris*, was extremely bitter, and nauseous, and could never be recollected afterwards, without bringing into equal detestation, the sin which subjected them to the necessity of drinking it. Our knowledge of this principle of association upon the minds and conduct of men, should lead us to destroy, by means of other impressions, the influence of all those circumstances with which the recollection and desire of spirits are combined. Some men drink only

in the *morning*, some at *noon*, and some at *night*. Some men drink only on a *market day*, some at *one* tavern only, and some only in *one kind* of company. Now by finding a new and interesting employment, or subject of conversation for drunkards at the usual times in which they have been accustomed to drink, and by restraining them by the same means from those places and companions, which suggested to them the idea of ardent spirits, their habits of intemperance may be completely destroyed. In the same way the periodical returns of appetite, and a desire of sleep have been destroyed in an hundred instances. The desire for strong drink, differs from each of them, in being of an artificial nature, and therefore not disposed to return, after being chased for a few weeks from the system.

5. The love of ardent spirits has sometimes been subdued, by exciting a counter passion in the mind. A citizen of Philadelphia, had made many unsuccessful attempts to cure his wife of drunkenness. At length, despairing of her reformation, he purchased a hogshead of rum, and after tapping it, left the key in the door of the room in which it was placed, as if he had forgotten it. His design was to give his wife an opportunity of drinking herself to death. She suspected this to be his motive, in what he had done, and suddenly left off drinking. Resentment here became the antidote to intemperance.

6. A diet consisting wholly of vegetables cured a physician in Maryland of drunkenness, probably by lessening that thirst, which is always more or less excited by animal food.

7. Blisters to the ankles, which were followed by an unusual degree of inflammation, once suspended the love of ardent spirits, for one month, in a lady in this city. The degrees of her intemperance may be conceived of, when I add, that her grocer's accmpt for Brandy alone, amounted annually, to one hundred pounds Pennsylvania currency, for several years.

I. A violent attack of an acute disease, has sometimes destroyed a habit of drinking distilled liquors. I attended a notorious drunkard, in the yellow fever, in the year 1798, who recovered with the loss of his relish for spirits, which has, I believe, continued ever since.

9. A salivation has lately performed a cure of drunkenness in a person in Virginia. The new disease excited in the mouth and throat, while it rendered the action of the smallest quantity of spirits upon them, painful, was happily calculated to destroy the disease in the stomach which prompts to drinking, as well as to render the recollection of them disagreeable by the laws of association formerly mentioned.

10. I have known an oath taken before a magistrate, to drink no more spirits, produce a perfect cure of drunkenness. It is sometimes cured in this way in Ireland. Persons who take oaths for this purpose, are called affidavit men.

11. An advantage would probably arise from frequent representations being made to drunkards, not only of the certainty, but of the *suddenness* of death, from habits of intemperance. I have heard of two persons being cured of the love of ardent spirits, by seeing death suddenly induced by fits of intoxication, in the one case in a stranger, in the other in an intimate friend.

12. It has been said, that the disuse of spirits should be gradual; but my observations authorise me to say, that persons who have been addicted to them, should abstain from them *suddenly* and *entirely*. "Taste not, handle not, touch not," should be inscribed upon every vessel that contains spirits in the house of a man, who wishes to be cured of habits of intemperance. To obviate for a while, the debility which arises from the sudden abstraction of the stimulus of spirits, laudnum, or bitters infused in water, should be taken, and perhaps a larger quantity of beer or wine, than is consistent with the strict rules of temperate living. By the temporary use of these substitutes for spirits, I have never known the transition to sober habits, to be attended with any bad effects, but often with permanent health of body, and peace of mind.

THE END.

A.F.M.L.