

LECTURE
ON
MALT LIQUOR.

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LECTURE.

LADIES AND GENTLEMEN,

My Lecture to-night will consist of a series of arguments and facts explanatory of the nature and properties of Malt Liquor.* On this subject, I regret to say, our countrymen have long laboured under two serious mistakes. They have believed, in the first place, that Malt Liquor was a highly nutritious beverage, and, next, that when pure and unadulterated, it contained no noxious substance calculated to injure the human system. I think I shall be able to convince you that both these opinions are erroneous. The drunkenness of our country, I am persuaded, has been increased by our ignorance of the properties of this liquor, and if I can assist in dispelling this ignorance, so as to serve the cause of temperance, I shall be well rewarded for my labour.

I wish it were in my power to convince the public of the great error they are labouring under as to the usefulness of beer to the labouring class or to any other class. I don't know any article of consumption about which there is a greater delusion than beer, whether it goes by this simple name or assumes the garb of ale, pale ale, porter, stout, or bitter beer; for these are all essentially the same, and are all made, if genuine, from malt and hops. No doubt many drink beer because they have acquired a liking for it; some drink it for fashion's sake; and not a few take their glass of "bitter" in the forenoon, and their glass of ale to dinner or supper because they honestly believe that it gives strength and invigorates the frame. They have heard this so often asserted, and it has been so frequently recommended by the doctor and others, that they have no doubt as to its usefulness. Besides, if you reason with them to the contrary, they tell you they "feel it does them good." They swallow the spirit which the beer contains; it stimulates the nervous system, and they mistake stimulation for strength, taking no account of the depression that follows. You may often convince a man or woman of the impropriety of drinking whiskey in its naked form, but it is not so easy to convince them that it is this same whiskey which they take when they drink their ale or porter, though if the whiskey were taken out (as it is easily done by distillation) they would pronounce all the rest worthless. I am grieved every time I meet a servant girl going to or coming out of a public-house with a pint or quart of ale for dinner. The mistress will drink a full glass, whereas if it were water she would not take more than one-third the quantity, which would be quite sufficient. She thinks it helps to assist her appetite for dinner, eating probably much more than she ought, and far beyond the waste which her body has sustained by work or exercise. And, so far from the beer promoting digestion, as some allege, it stimulates and eventually weakens the nerves of the stomach. Ultimately the constant glass to dinner so weakens the nervous system by unnatural excitement that depression supervenes, followed by a craving for a stimulant between meals. This will have to be allayed by more beer, or probably by a little wine, and after some time by ardent spirit. This is the way by which thousands of females have become tipplers, and while there is a barrel in the cellar or while the beer-jug continues to go for dinner and supper, female intemperance, with all its horrors, is sure to remain. I knew a gentleman whose wife got to drinking to such an excess that she threatened the lives both of himself and the family. He was obliged to appeal to the magistrates for protection, and she was sent to prison for some months. I asked him how she came to take the drink to such an excess. "She started," said he, "with a glass of beer to dinner,

* This Lecture was first delivered in 1832, and the present edition was issued many years ago. Though the Malt Tax no longer exists, the same amount is charged upon Beer, and hence the calculations founded upon the cost of malting still remain correct.

and from that she began to take another betwixt meals, and she got on till it became her master completely." I hope that every lady that hears my voice will take timely warning and never allow this deceitful article to enter her dwelling. Not only is the family jug a dangerous article to females, but it is here that children become familiar with the taste of beer and receive their first favourable impressions of its supposed good qualities. "If it is good for mamma, it is good for me," they will reason, and when they are told, as they often are, that it is not suitable for children, this exceptionable article becomes more and more an object of envy, and opportunities are often seized to take a little on the sly. And when delicate daughters cannot eat, mothers naturally think a drop would help them; but though given in kindness it is often followed by mortifying results. Even if the beer had useful properties; if it were as nutritious as milk or as nourishing as bread, still, if we duly considered its dangerous *tendency*, its awful *consequences*, in society at large, we should never allow it to come within our doors. At some boarding-schools beer is always supplied to dinner, and a taste for it once acquired is not easily eradicated; it is much more likely to grow afterwards—especially under the fostering care of indulgent mothers—into a love for wine and ardent spirits. You who are fathers and mothers should see to this when selecting schools for your children. Custom is so powerful in perpetuating pernicious practices that persons fall in with them without counting the consequences. If workmen are engaged at any kind of repairs the lady of the house feels that she must give them "lowance," and that invariably means a glass or a pint of beer. The delivery of a message or the shaking of carpets is rewarded partly by beer. Cooks have their beer, and washer-women generally look for it. In engaging servants, especially in London, the question of beer, or "beer money," has always to be settled. With some it would seem to be considered an absolute necessary of life. The cellars of the higher classes without the beer barrel would be considered shabbily incomplete. The servants' hall is entitled to a liberal supply, and their calling friends are made welcome to it. What is there so potent at an election as the beer barrel? In fact, the country is drenched with beer, as you know, and London more especially. The great Franklin silenced the compositors of London both by argument and example as to the non-nutritive qualities of the porter which they never ceased drinking; but London has not grown much wiser since his day.

Before proceeding further, I wish to explain the nature and composition of this favourite English beverage. Born to believe in beer, we fall in with the popular notion that it is a most useful article, notwithstanding the crying evils to which it leads in every district where it is used. A thousand denunciations are uttered against the "beer house," but not a word against the *beer* itself, although it is the one article, the *alcohol* it contains, that does all the mischief. This is plain, from the fact that if milk, tea, or coffee were introduced instead of beer, this simple change would put an end to all the special odiousness attaching to beer-houses. The ignorance that exists on this subject is greatly to be regretted, for a very slight investigation of the processes connected with the brewing of beer would convince the shallowest understanding that the opinion that beer is a "highly nutritious beverage" is a great delusion, and that to make it the antithesis of "*spirituous* liquour" is a dangerous error. A fuddling party of beer drinkers would be startled if you said to them, "You are enjoying your whiskey and water," and yet you would be declaring the literal truth.

The encomiums passed upon malt liquors by our public men are quite sufficient to have misled the poorer classes, who are ready enough to embrace any current opinions which chime in with their own indulgences. Gentlemen call beer "one of the necessities of life to the labouring classes," and one, I remember, went so far as to honour this beverage with the title of "liquid bread." "It will supply nourishment to the working-man," says another, "and give his family the glowing bloom of

strength." And so valuable is this "national beverage" that a reverend gentleman at Ipswich went beyond his lay brotherhood, not only in stating its nourishing and healing qualities, but in fixing the precise quantity which the labouring-man ought to take. The Rev. William Potter said, "*it was necessary to support his health and strength.* He had been for nearly thirty years incumbent of a Suffolk parish, and in the habit of going among the labourers and administering to them in sickness, and he found that *what they wanted was a little home-brewed beer; it was the best medicine they could have.* The married labourer required his *three pints of home-brewed beer daily!*"

I proceed now to prove to your satisfaction, that malt liquor is *not* a "necessary of life." The fact that millions of individuals do without it, as is easily proved, and far better than with it, comprising not merely young people and non-workers, but men and women of all ages, and engaged in all kinds of labour, the hardest and hottest, and the coldest that it is possible to be employed at, is a pretty strong proof if we had no other. If it were important I might cite the testimony of masons, bricksetters, labourers, furnacemen, moulders, glass-blowers, sawyers, porters, plasterers, haymakers, shearers—in fact, all trades, and of persons both on sea and land, even those who have been exposed in the most northern latitudes to the hardest work and the severest cold. These all work, and do their work better without beer. Ask the hard working-men of Lancashire, and nine out of every ten will tell you they are never so well as when they are without beer, that "those get the best share who get the least," and tens of thousands of these who do the hardest work are healthy, robust men. The fact is, that malt liquor, having so little *feeding* or strengthening material in it, cannot give what it does not contain. You might as well ask the clouds to create sunshine, or the sun to freeze the ponds, as to hope for true muscular strength from beer drinking. But it is so important to disabuse the public mind as to the notion that beer is feeding, that I hasten to explain the processes of brewing, which will at once show that, though it is *intoxicating* it is *not a feeding* article. Good beer, as it is called, is brewed from malt and hops. The hop gives flavour and helps to preserve the liquor, but it contains no feeding properties. The malt, then, is the only substance that can make the liquor feeding. Malt is simply vegetated barley. Barley is food next in nutrition to wheat, and in this enquiry all we have to do is to ascertain *how much* of this feeding substance is found in the beer when men drink it. There are two ways of ascertaining this; the first is by analysing the beer, and the next by tracing the different processes in brewing, and noting the operations of each of these processes, *viz., mashing, fermenting, and fining*, as they bear upon the question of food. By either method we shall easily arrive at the truth.

And, first, I take a quart of strong ale, 6d. per quart, and I find it weighs 29ozs. I get a chemist to analyse it, and the following are the components of 100 parts:—

Alcohol.....	5.000
Extract of Barley	3.885
Acetic Acid.....	.030
Water	91.085
	100.000

The following presents the component parts of the quart in a more popular form:—

Quart of Ale	39 ounces.
Water	35 do.
Alcohol, or pure Spirit	1½ do.
Remnants of Barley	2¼ do.
Total.....	39 do.

I now come to explain, step by step, the different processes in brewing beer, and to show how the barley—the nutritious barley—is *abstracted, wasted, and changed*, so as to produce as much as possible of the intoxicating ingredient, alcohol. In making a gallon of the strongest ale (nine gallons to the bushel), 6lbs. of barley are used, which, to commence with, are 6lbs. of good nutritious food, excepting the husk. I will here explain the processes of converting this into ale, and show you how, when the ale is served up, these 6lbs. are reduced to ½lb., and in very fine ale to not more than eight or nine ounces. The barley has to undergo *four processes* before it becomes beer, in every one of which it loses part of its nutriment.

The first step is *malting*. The barley in the first instance is immersed, in cisterns of water, about two days and nights; it is then spread upon a floor, six or seven inches deep, for eight or nine days, turned over every day (the Sabbath not excepted), and occasionally sprinkled with water. The heat created by this causes the grain to germinate, that is, to produce germs and rootlets. In this state it is placed on a kiln to dry, and then being put through a machine, the sprouts are taken off and sold to farmers as "malt combs." The barley comes to the maltster about fifty-two pounds to the bushel, and returns in the shape of malt, about thirty-eight pounds, so that about one-fourth of the nutriment is lost. When I remind you of analogous cases, you will not question the truth of this. If wheat stands out and sprouts in unseasonable weather, it is scarcely fit for domestic purposes; if potatoes or onions sprout in spring, they are neither so heavy nor nutritious as they were in autumn when taken from the ground; and it is just the same with barley. But why *sprout* the barley? It ought to be generally known, that the basis of all spirit is saccharine matter, and the chief reason for malting the barley is to obtain more *sweet matter*, which will yield by fermentation more spirit than unmalted barley would. The more saccharine or sugary matter, therefore, any substance contains, the more spirit can be obtained by fermentation; and that is simply the reason why ale is made from *malt* in preference to *barley*. Very few people have paid attention to what *malting* means. You have heard the lamentations of the nation when we have had unusually wet and warm weather in harvest time, and the wheat has begun to sprout. The year 1817, I remember well, when there was scarcely a sack of sound flour to be got; the people, steeped in poverty, had to bake their flour into cakes, instead of loaves, and the country was on the eve of revolution. Now, a *field of sprouting wheat exactly resembles the floor of a malt kiln*; and that which we look upon as a calamity in nature, is regarded by the beer world as exquisite skill! If we heard the voice of rejoicing throughout the Kingdom that all the farmers' wheat was being sprout, and the farmers' servants employed to open out the sheaves every day, Sundays not excepted, to catch the wet, so that no grains might escape sprouting, what would Colonel Barttelot and his malt tax repealing friends have to say to such an exhibition? And yet this is exactly what is being carried on throughout the malting season at 6,000 malt houses spread over the country!

The second process in ale making is called *mashing*. If the brewer were anxious to get a *feeding* liquor, he would boil the malt, and preserve the whole of the grain except the husk. He does no such thing. This, he knows, would produce a thick nutritious liquor, but a very unsuitable preparation for making it intoxicating. His object is simply to extract from the grain all the sugar that was developed in malting; and to effect that, he throws it into a vessel of hot water, at the temperature of about 170 degrees. It remains in that state for some time, till the sugar is dissolved. He then draws off the liquor with great care, until it ceases to run sweet. He uses the utmost diligence to prevent the other parts of the grain, and especially the starch, from coming off. I scarcely need to tell you, for if you will examine the "grains" for yourselves, you will find that in this process there is also a great loss of nutriment. What goes to the cows and pigs in the shape of grains, is not less than one-third of

the whole. You have now a sweet, palatable, and in some degree, feeding liquor. It is also perfectly innocuous; for although I would not answer for its effects upon the bowels, I assure you that whatever quantity you were to drink of the "sweet wort," it would not produce the least symptom of intoxication.

After hop water has been added, and the temperature adjusted, the liquor, by the mixture of yeast, is put to *ferment*. This I call the *third* process, and by far the most important, for it is here all the mischief is done. Up to this point it was really "malt liquor," un-intoxicating, but by the process of fermentation it becomes *alcoholic*. Carbonic acid gas and alcohol (the intoxicating agent) are here produced. The sugar becomes decomposed, and a re-composition takes place, forming these two. Sugar being nutritious, and spirit not so, the loss of nutriment by this change and by the overflow of barm (which is part of the barley) is about 1lb.; the only gain is the *gas* and the *spirit*, the latter being the same as whiskey, for whiskey is distilled from malt liquor. I would advise you all carefully to study this chemical process of fermentation. This vinous fermentation is the first step in the *decomposing* process of the grain, and if not arrested would lead to the next—the acetous fermentation—making the liquor into vinegar, and then to the putrefactive—presenting the whole as a putrescent mass of rottenness.

The next and final process is the *fining* of the liquor. People don't like *thick* ale, and though they talk a deal about its nutritious properties, they do all they can to get rid of these. The thicker it is, the more nutritious. But modern beer-bibbers must have it *fine, transparent, frisky*; so the brewer puts the liquor to settle, and a quantity of the real food—the barley—is found at the bottom of the barrel, sometimes thrown away, and sometimes disposed of to be used in distilling illicit whiskey. Like myself, I dare say my audience is fond of cream; in milk it rises to the top, but in beer it sinks to the bottom, and so precious is it that you see it flowing down the common sewer. Now, what has become of all the barley? In order to make a gallon of strong ale,

We begin with barley	6lb.
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In <i>malting</i> we have abstracted as "malt combs"	1½
In <i>mashing</i> we have disposed of as "grains"	2
In <i>fermenting</i> we have lost in producing alcohol as carbonic acid	1
In <i>fining</i> we have rejected as "barrel bottoms"	¾
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Total loss.....	5½lb.

So that when we come to examine the gallon of beer we find that there is not more than 12oz., often not more than 8 or 9oz., of barley left, and this chiefly gum, the worth of which, when compared with other food, is less than a penny. The "malt combs" are parts of the barley; the "grains" are parts of the barley; and the "carbonic acid gas" and "alcohol" may be said to be parts of the barley, being the production of its sugary matter, changed by fermentation; so that it is easy to see how 6lb. becomes not more than from 8 to 12 ounces. It is the alcohol or *spirit* in the ale—the whiskey in fact—which deceives people, and makes them believe they are getting strength, when they get only stimulation, which is a waste of strength. I maintain, then, that this statement demonstrates that the liquor we are contending about is not a "nutritious liquor," or a "necessary of life." The bit of gummy barley, drowned in the bulk, scarcely deserves the name of food. It is less than a pennyworth in a gallon, agreeing with the testimony of Baron Liebig, that "ten pints of ale would not supply as much nourishment as a pound of bread." Many persons speak of beer as the "juice of the malt." Now, it would be far more correct to call it the "juice of the pump, hopped and whiskied." There is one stage in beer-making, and one only, where the liquor—the "sweet wort"—could be called the juice of the malt, and that is at the

mash-tub; after this it undergoes the changes I have named, and instead of remaining sweet and innocuous, it becomes alcoholic. When we want to do honour to our "national beverage," we speak of "Sir John Barleycorn." This is libellous. In the farmer's hands he is "barley-corn;" in the maltster's hands a portion of his vital parts are abstracted and after the malt-crusher has broken every bone in his body, the brewer by scalding water and other agencies finishes his career, and turns the poor knight's best blood into poison, casting away his last remains as "barrel bottoms!" Poor Sir John! After all this, we are told he is "the source of England's greatness;" according to one authority, the very "harbinger of civilisation!" The prevailing idea is that the excellence of beer is to be measured by the quantity of malt it contains. People who are dissatisfied are heard to say, "I don't believe there is a particle of malt *in* it." Now, it should be understood that the brewer's aim is not to keep the malt *in*, but after securing the carbonic acid gas and alcohol, as much as possible to get it *out*. People like clear, transparent ale, and the less malt there is in the liquor the more it is relished. But then they say, "It is the *spirit* of the malt." The malt itself has no spirit. We might as well talk of the spirit of wheat in bread, or the spirit of oatmeal in the poor man's porridge. The only spirit is that which I have explained, and which is the product of fermentation—whiskey. I may here state that formerly beer was much sweeter than at present, being made without hops, and when the hop was first introduced it was denounced from the pulpit; the doctors declared the people were going to be poisoned; and Parliament passed an act to interdict its use; but still the hop succeeded. The colouring of beer arises slightly from the hop, but chiefly from the same cause as the colouring of coffee, that is, the charring of the grain, which is effected on the malt-kiln. The malt for "pale ale" is the least charred, for "nut-brown" more so, and for "porter" the most of all, being roasted black.

When these facts cannot be denied, the "abominable adulteration" of the brewer is made the scape-goat. The evils of drunkenness are allowed, but they are attributed to the base practices of adulterating the beer. "Beer brewed from nothing but malt and hops," ignorance says, "will never make people drunk." There is no theme so popular as "bad beer," and the denunciation of the brewers and publicans who supply it. There is no other trade where the article is so generally condemned, and mostly by the beer drinkers themselves. I could fill a volume with quotations of this kind, beginning with the daily and weekly papers, followed by *Punch*, and backed by the speeches in Parliament and at the anti-malt tax meetings. "Beer can now, with difficulty, be had *genuine*, and too often *money cannot procure wholesome malt liquor*," so says Mr. Smee; and, after stating the high price of beer, he adds, "even at these ridiculous prices, if beer could be had *pure and good*, the Londoners, whatever might be the case in the country, would not be disposed to complain." "Beer sold at a great multitude of places is shamefully—we had almost said wickedly—adulterated." "Poisonous adulterated mixture" and "rubbish" are the epithets with which our time-honoured beverage is distinguished. Now, is it not sad that not only "thirsty souls" but moderate men should be panting after a "glass of good ale" and cannot get it? that while there is plenty of profit, no company has been formed to secure the making of *pure* malt liquor, and to rescue the nation from the fangs of these unprincipled brewers? Could no home mission be established to purify the beer barrel, and bring these rogues to repentance? "Saccharine matter, water, and salt," people might put up with, but when it comes to "coculus indicus, grains of paradi quassia, chiaretta, and wormwood," I confess I am almost ready to call for the resurrection of the "ale-tasters" to prevent her Majesty's lieges being poisoned outright. But all this is "bosh." It is the result of ignorance and inattention to facts. People who talk so much about beer being "doctored" assume, at the onset, that liquor made only from malt and hops

must be good and will not intoxicate nor injure those who drink it. They are profoundly ignorant that *the purest beer is whiskey and hop water*, coloured and flavoured; and until they are disabused of these unfounded notions, they will continue to go on reiterating these silly tales about adulterations. And no greater error was ever committed by some teetotalers than to join in this cry, for it simply tends to convey the idea to the people that if they can get pure beer they will be all right. Though some brewers and publicans adulterate their drinks, yet the number of cases is much exaggerated. I believe that all respectable brewers confine themselves to malt and hops, and, of course, water, which, after all, is their best friend. The penalties for adulteration are so tremendous that, if there were no other check, few who brew on a large scale would run the risk of being convicted and exposed. Grant that some publicans do mix "water, salt, or saccharine matter," these are mixtures that can do little injury: and as for the "grains of paradise" (a species of pepper) and other drugs, I question if any of them are more injurious than the *alcohol* which the beer contains, amounting to from 9 to 18 per cent. of proof spirit, and if the beer was free from this alcohol not a man would touch it. Take it out, as they do in making whiskey, and where is the man that would wet his lips with it? The brewers have a fastidious set to deal with; for if the ale be weak they say, "It is not worth drinking," and if it be strong, and puts them out of order next morning, they are sure "it had something in it." They want it fresh and frisky, capable of touching the nerves and making them cheery; they want to be able to drink freely, and yet not to be much intoxicated; to be pretty well "up" in the evening, and yet not "down" in the morning. If it does not answer these expectations, it is "adulterated." While brewer's beer is charged with "flying into the head," making people ill and producing drunkenness, the home-brewed is always spoken of as "pure," "wholesome," and "nourishing." But the home-brewed produces the same effect when it is made equally strong with the brewer's; for instance, a man gets two horns-full of "my lord's," which was brewed for his son's majority, from nothing but malt and hops, and it makes his "head rive again next day." Now, how is this? There was no adulteration—no quassia nor grains of paradise. The simple explanation is, that the malt used contained a large quantity of saccharine; this was well washed out in mashing, and kept long enough to undergo a thorough fermentation; a large quantity of alcohol was secured, which, as usual, went into the man's head. And, though this was no more feeding than penny beer, it was far more *drunkifying*, and yet was unadulterated. And this I solemnly believe, that where grains of paradise and its worst companions have killed their tens, the alcohol has killed its ten thousands. Let me entreat the teetotalers never to be led off with a false scent; and if there be any real cause of quarrel betwixt publicans and their customers, let them settle it among themselves. The teetotalers should not lower themselves by acting as sentinels to protect the purity of the beer barrel.

But I must say a few words about home-brewing. Cobbett was a good defender of home-brewing, but he had not himself learned the nature and properties of the liquor. No more has Mr. Joshua Fielden, M.P., its present great advocate. I respect the motives of these defenders of the domestic "drink-pot;" but it is too late to bring back a practice almost obsolete, and certainly not desirable. That home-brewed beer is less injurious than public-house beer I grant, but not for the reason usually given, that public-house beer is drugged, but *because* the home-brewed contains *less spirit*—less of what Shakespeare called "devil." Drinkers now-a-days like to *feel* the effects of the liquor, and hence they go in for beer containing more alcohol, and if the publicans sold beer like the home-brewed, they would soon sell their customers. But the evil of the home-brewed is that it keeps the appetite alive and seasoned for stronger beer, and the stronger beer for something still more potent. Home-brewing, like home manufactures has long been on the decline. The people no doubt could

make beer much cheaper than they can buy it, but they cannot make it equal in quality, according to the taste which now prevails. When "washing, baking, and brewing" were the ordinary weekly duties of a good wife and her daughters, the drink was of a homely character. Science had nothing to do with it, and the saccharometer was an instrument they had never heard of. The "bree" was daily on the table more as a "victual" than a stimulant, and being drunk new had scarcely time to become intoxicating. In the reign of James I "it was the custom to allow every man and boy on board the King's ships *one gallon of beer a day*"—a clear intimation of the difference in the strength of the liquor compared with what the people demand at the present time. They take it now more as a luxury, and having means to pay for it they will have it "good," let the price be what it may. Try to bring down our jolly ale drinkers, or even the common artizans, to the "home-brewed" of our ancestors, and they would turn up their noses with disdain. The style of drinking, like dressing, has made great strides, especially among the lower classes; home-brewed has gone out of fashion, and I should doubt whether in Preston, out of 17,000 houses, seventeen can be found that brew their own. In the middle classes it is found cheaper and safer to run with the jug at meal times than to keep the barrel in the cellar. But I hope none of the ladies who hear me on this occasion will impose upon their female servants the unpleasant, not to say dangerous, task of visiting the public-house day by day for beer. It is a task, I am sure, that no respectable servant is disposed to envy.

Among the powerful causes which retard the progress of teetotalism there are none more powerful than this *ignorance* of the properties of beer. On this subject the English mind is thoroughly beclouded. Tradition and not science has been the nation's instructor. This beer—this wonderfully nutritious beverage—is nothing more or less than *adulterated water*. A pint of beer is a pint of water, coloured and flavoured, and containing sufficient of *whiskey* to excite the nerves and lead people to think it imparts strength. Notwithstanding all that has been said, and all that has been published, we find in every class—clergy, laity, rich and poor—a great want of information as to the nature and properties of our popular drinks, and as to how they act upon the human system. And while such associations as the "Society for promoting Christian Knowledge" can go out of their way to recommend beer, no wonder that this ignorance should remain. It is to this ignorance that we chiefly attribute the falling back of many of the more educated teetotalers, especially the ministers of religion. They sign the pledge for the good of others, all the while retaining a favourable opinion of the drink if taken in moderation. In doing this they exercise an act of self-denial (while thoroughly informed teetotalers deem it self-enjoyment), and the first time they feel unwell, it becomes a question whether their abstaining is not the cause, and conceiving that they are not called upon to sacrifice their health, even for the good of others, they make shipwreck of their teetotalism. In coming to this conclusion, the doctors and their old friends give them every encouragement.

It is not, however, the non-nutritive properties of beer that constitute the main ground of our opposition to it; and I have only dwelt on this so long because its nutritive properties are always urged by its votaries as their reason for using it. I oppose it because it stands in the front ranks of *intoxicants* in the minds of the people. In the whole list, I regard beer as the worst, for three reasons. First, because public opinion runs so strongly in its favour in preference to what are called "spirituous liquors." Next, because it is usually looked upon as "food," and hence it is not reserved for special occasions, but is on the table of most families with means daily, and often twice a day. And thirdly, because while wine is taken in small glasses and ardent spirits by "bottoms," "squibs," and "nips," beer is

drunk in full tumblers, and I have seen a lady empty two of them at dinner without appearing at all conscious that she was going beyond moderation. Notwithstanding all that has been written respecting the *identity* of the spirit in beer and wine with that in rum, gin, brandy, and whiskey, we still find the great bulk of the people ignorant upon the subject. This ignorance is daily expressed in such words as these: "I take a little beer, and I like a glass of wine, but I never taste spirits." On every licensed victualler's sign we find something to this effect: "Licensed to sell beer and wine, and *spirituous* liquors," as if beer and wine were not spirituous; and even in the last Queen's Speech we had these words:—"Her Majesty has likewise to recommend that you should undertake the amendment of the laws which regulate the granting of licenses for the sale of fermented and spirituous liquors." If persons want to exhibit any offensive forms of intemperance they speak of "*gin* drinking," and "*gin* palaces;" but associate beer and wine with the "necessaries" and "enjoyments of life," and not unfrequently with the "gifts of Providence." They seem inattentive to the fact that more beer than gin is sold at these "palaces;" that in many districts five-sixths of the intemperance among the operatives is from beer, and that in England, at least, the first liking for unnatural stimulants begins with beer and wine. It is needful, therefore, that we make it quite plain that the *same* intoxicating ingredient exists in all, only in different quantities. If things were called by their right names this delusion would get exploded. If a man spoke correctly when he wants a tumbler of beer, he would say, "bring me a glass of whiskey and hop-water;" or wine, he would say, "a drop of diluted brandy." We must labour to get this point fully understood. Alcohol (pure spirit) is the same, no matter whether you get it in its rectified state at the druggists'—called "spirits of wine," or in gin or whiskey, or in Jamaica rum, or in the best or worst wines, or in malt liquors, perry, or cider. It is simply the result of fermenting any kind of liquid containing saccharine matter, the flavour and colour varying according to the article used. The broad difference made betwixt "fermented" and "distilled" liquors is also calculated to keep up this delusion. All intoxicating drinks are fermented, though all are not distilled. For instance, we take a quantity of malt, and after mashing it we ferment the produce, and *spirit* is produced. In this state it is called *beer*, yet it is from this same liquor—minus the hop—that *whiskey* is obtained. Whiskey is the soul of beer, and no one can drink beer without drinking whiskey. The distiller puts the beer into a retort, forming part of the "still," and when heat is applied, the spirit, being specifically lighter than water, ascends, and then passing through a spiral tube called the "worm," it condenses, and is then called whiskey. This is converted into gin by redistillation, with a mixture of juniper berries. Hence in making gin and whiskey we have both fermentation and distillation. When the whiskey is taken out of beer, what remains is water, and a little indigestible stuff, chiefly gum, so distasteful that no old fuddler could be induced to swallow it. So then, after all, the Scotchman that dilutes his whiskey sufficiently with pure water is not more foolish than the Londoner, who swallows all together, whiskey, hop, gum, and dirty water!

In legislation, beer has always been treated with tender feelings. Unusually large penalties have been annexed to any breach of the excise laws in relation to it. The problem of perpetual motion is not more difficult than that which our senators have all my time been endeavouring to solve, which is that men shall drink intoxicating beer and not be intoxicated. It was this ignorance that passed the Beer Bill in 1839. The Legislature, believing that beer was highly nutritious, and supposing it to be in direct antagonism to "spirits," thought they were doing the country a service in trying to bring cheap beer as near to every man's door as possible. And though the Bill has been fiercely condemned for forty years by the few better informed, yet all the evils it produced have not been sufficient to enlighten the public as to the cause being in

the beer itself. When this Bill passed, supported and defended by the leading philanthropists and politicians of the day, it is affirmed that the Duke of Wellington said the passing of this Bill was a greater achievement than any of his military victories! The consequences were soon felt, and the predictions of the dissenting few fully verified. The strongest supporters of the measure were surprised by the sudden and general demoralisation produced. The Rev. Sydney Smith, who had attached great importance to the repeal of the beer tax and the establishment of beershops, writing only a fortnight after the Act came into force, says:—"The New Beer Bill has begun its operations. *Everybody is drunk*. Those who are not singing are sprawling. The sovereign people are in a beastly state." This was a glorious time for the demoralizers of the people. In Liverpool, within nineteen days from October 10th, as many as 800 licenses were taken out under the Act; and at the end of the year the licenses applied for and granted in England and Wales rose to 24,342. Now we have to undo the work of our grandfathers, after forty years of crime, poverty, misery, and death, produced by this Bill. And I doubt whether many of the present occupiers of St. Stephen's are even yet much wiser than their predecessors. You hear the "beer shops" condemned, but when did you hear or read of the *beer* itself being ill spoken of by these gentlemen? On the contrary, either through selfishness or ignorance, there is a clamour for the repeal of the malt tax, so that the people may drink more beer and the farmers sell more barley. To untax malt would, in fact, be a measure resembling that of 1830. It would do immense harm, and no good to any one. The seven millions of tax would have to be laid upon other articles. There would be more drunkenness than ever, and as for the farmers benefiting by an increased demand for barley, they must be stupid not to see, that while our ports are open to all the world, every increase of a shilling a quarter would be met by increased foreign importations, and prices kept down to the world's level. Barley in its natural state is as free from tax as oats, wheat, or any other grain, and it is only when it is converted into malt that the Government says—and says very properly:—"First, as a protection to morals, and next, as a source of revenue, we will tax this material, being the most convenient stage in beer-making, as we do wine and other intoxicating beverages." I feel confident that if the tax were either repealed or laid upon beer instead of malt, in a short time after the change no higher price would be obtained for the barley, with this disadvantage, that a share of the increased burden of poverty and crime would fall upon the farmers themselves.

Notwithstanding all that has been said and all that has been written, the idea of a pint of beer being good for the working man is still urged by many. Now, I must have a few words with you, my working men, on this point. I want to know *how* the pint is good for the working man? In the first place: Is it calculated to *quench your thirst*? I say, no. Just in proportion to its alcoholic strength, instead of diminishing it increases thirst. The nearer it approaches to water the more adapted it is to quench thirst. The beverage of nature—"too weak to be a sinner"—can quench thirst, and with this every animal is satisfied, excepting man. And, indeed, after all our boasted discoveries in the Temperance Cause, we have just learned to be wise as the brutes that perish. The temperance man is seldom thirsty, and requires but little drink; the drinking man is always dry, and never has enough. Let him swallow quarts of his favourite beverage, and visit him the next morning and you will find his tongue parched with thirst, with beautiful tide marks upon his lips. The more he drinks the thirstier he is. For after all, what is your ale but spirit and coloured hop-water? I have shown you that three gills and a half in every quart are literally water. If, therefore, you don't prefer water in its best and natural state, by the addition of a little vinegar, ginger, lemon juice, or a burnt crust, you can colour and flavour it as you please. There is nothing so good as "honest water" for quenching

thirst, and as food in a liquid form there is nothing equal to milk. Look at that beautiful sparkling glass of water as it stands beside your plate; it costs you nothing, it is one of the best of God's gifts; it will do you good and no harm; it will assist digestion; it will not excite and then depress; you will drink no more of this fluid than is proper. And will you, then, instead of drinking the clear, nice, transparent element in its natural state, insist upon its being coloured with charcoal, bittered with hop, and fired with whiskey? and instead of having it for nothing, consent to purchase it at 4d., 5d., or 6d. per quart? Could folly go further than this? If, again, you plead for a pint of ale as a source of *strength*, I hope the exposition already given to-night will fully show the futility of such a plea. It is the *solids*, and not the *liquids*, upon which labouring men are to work. I have often been asked, "Can a man perform his labour on cold water?" to which I answer no, nor on cold ale either. What is it that gives strength to the miller's horse (*which drinks nothing but cold water*), and makes its ribs wrinkle with fat? It is the *food* which it eats. And it is good food, my working friends—bread, beef, and barley pudding—from which you are to derive your strength. Again, if you drink your pint of ale for the purpose of *stimulation*, I agree that it will answer that purpose; but the effect of this stimulation, in most cases, is to injure the human system. To work by stimulation is to draw upon the constitution, and to avail yourselves of muscular power before it is due. Ale may lift you higher than yourselves, but it sure to let you fall again. You have a full development of the effect of stimulation in the Saturday night drinker. He lives twice too fast; he gets Sunday morning's life on Saturday night. And such is the excitement that, were he even to refrain from his cups on the Sunday, the rest of the Sabbath is insufficient to restore nature to her equilibrium against the hour of labour on Monday morning. Alcoholic stimulation ought to be regarded as the parent of insanity; and every one who seeks after it seems to aim a blow at that noble and heavenly gift of God—the gift of reason.

A word or two here to our kind friends, the ladies. What is so interesting as the babe hanging at its mother's breast? and what more important than to know that this same mother, by taking her beer, is transgressing the teachings of nature, and doing an injury to herself and her darling child? And yet traditional ignorance, backed by the doctor's indulgence, demands a supply of porter or beer for the nursing mother! It is taken by some to keep up their strength; a delusion in this, as in most other cases, for the beer does not, and can not, impart to the mother's milk any nutritive properties. It is often taken, as it is conceived, to secure a fuller supply for the little one, and the alcohol does this for a while as a "forcing" agent, at the same time wasting the mother's strength, endangering the future health of the child, and in many instances, creating on its part an hereditary liking for the drunkard's drink. Beer or diluted spirit is sometimes taken by mothers before bed-time to prevent restlessness on the part of the infant during the night. This is just as good as "Godfrey's Cordial" or "quietus" with which poor women are so guilty of drugging their children; only in one case the child gets it at the first, and the other at second hand. If the child is restless at night, find out the *cause* and remove it, but in any case it is far better to bear up under present inconvenience than to purchase temporary rest by undermining its future health. Numbers of medical gentlemen have given their testimony against this pernicious practice of narcotising children by beer or gin and water at second hand. "Women who act as nurses are strongly addicted to the practice of drinking porter and ale," says Dr. Maenish, "for the purpose of augmenting their milk. This common practice cannot be sufficiently deprecated. It is pernicious to both parties, and may lay the foundation of a multitude of diseases in the infant." "Alcohols are largely used by many persons in the belief that they support the system and maintain the supply of milk for the infant," says Dr. Edward Smith, "but I

am convinced that it is a *serious error* and is not an unfrequent cause of fits and emaciation in the child." "I have in eight years attended 137 cases of midwifery," says Mr. A. Courtney, "and have invariably found that (other things being equal) those mothers who never tasted malt liquor, wine, or spirits, *during or subsequent to the period of labour, have had the easiest cases, the earliest recoveries, and the best health afterwards*. Thousands of children are cut off annually by convulsions, &c., from the effects of those beverages, acting through the mother." The same gentleman on a public occasion remarked:—"At our last meeting eleven nursing mothers presented themselves with their children, every one of whom had nursed her child on Teetotal principles. Healthier or finer children I have never seen; and, did all mothers pursue the same system, we should, in a dozen years, see very few such puny, rickety, diseased children as so often meet the eye at the present day." Mr. Chavasse, in his "Advice to a Wife," speaks most decidedly about the inapplicability of malt liquors to these cases.—"A nursing mother is subject to thirst: when such is the case, she ought not to fly to beer or wine to quench it; this will only add fuel to the fire. The best beverages will be—either toast and water, milk and water, barley-water and milk, or black tea. A lady who is nursing is, at times, liable to fits of depression. Let me strongly urge the importance of her abstaining from wine, and from all other stimulants, as a remedy: they would only raise her spirits for a time, and then would decrease them in an increased ratio. A drive into the country, or a short walk, or a cup of tea, or a chat with a friend, would be the best medicine." "The plain fact is," says Dr. Lees, "that if alcoholics are drunk by mothers, the alcohol goes into the milk, and so is given to the child indirectly. It never improves the quality of the milk, but makes it more watery, with less casein or nutriment, and even less oil, as analysis has often demonstrated." Let me say, then, to the ladies present who are blessed with children, or who hope to be, I could quote numerous authorities to the same effect, but I hope these will be sufficient to induce you to close your ears against any who advise Dublin Porter or Bass's Bitter for mothers and nurses.

I would now direct your attention to what is most appalling: *the amount of money spent* upon our popular drinks, the foremost of which is beer. Calculations differ, as they must do, from various causes. We know the amount of duty charged upon malt as a substitute for beer, and also the amount paid as duty upon spirits and wine. But no record is kept of the "length," as the brewers call it, that a bushel of malt is made to run in brewing. In some cases only nine gallons of water are used to the bushel of malt, whilst in others 18 gallons are used, with all the intermediate quantities. Nor have we any means, beyond probable estimates, of knowing the profits realised by brewers, "gin spinners," and the publicans. Assuming the excise standard as to the quantity of water and malt used in brewing, and calculating the retail prices of beer, wine, and ardent spirits, one statement makes the total annual amount spent in this country upon intoxicating liquors to be £101,397,316, in round numbers, say a *hundred millions*, that upon beer being £59,768,870! Another calculation, the lowest I have seen, makes the amount spent upon intoxicating drinks to be £87,317,280, that upon beer being £43,749,556. The *Economist*, some years ago, estimated the cost of beer at 60 millions. Taking any of these estimates, or taking the average of them, I need not say that we are guilty of a shocking misapplication of money; and when we add the unavoidable *cost of the consequences of consuming* these liquors, in the poverty, crime, and insanity of the people, their loss of time, health, and property, and all the other losses, we may indeed be surprised at the apathy of this nation in having borne with such an incumbrance so long. Need we wonder at "bad times?" Give up the drink and apply the money to the purchase of cotton and woollen cloth, furniture, and the necessaries and comforts of life, and it is impossible to say

the vast impetus that would be given to the trade of this nation. I would not for the world be a participator in this waste of wealth of which the nation is guilty, and of which every glass or jug of beer that stands upon your tables is a unit. Oh, let me advise you to banish it for ever!

Passing from the enormity of this curse, as represented by the tremendous amount of *money* spent upon intoxicating liquors, I would try to arouse you still more, by placing before you, as plainly as I can, the *quantity* of drink swallowed by the "thirsty souls" of this country every year. One year's consumption of wine and distilled spirits amounts to 44,575,930 gallons; and if this were collected, three feet deep and thirty feet wide, it would extend to the length of fifteen miles. Large as this may appear, it is not till the floodgates of Messrs. Bass, Allsop, Buxton, Guinness and Co., are let open, and the "bitter beer," "pale ale," double xx," "half and half," "Dublin porter," and all the rest be added, that we have a full exhibition of the incredible quantity of "fire water" consumed by the people. The annual home consumption of beer, calculating by the excise standard of 18 gallons of water to a bushel of malt, amounts to 888,294,132 gallons; and if it were made into a canal three feet deep and thirty feet wide, it would be 290 $\frac{1}{2}$ miles in length, in round numbers, say 300 miles! So that mixing these three distinctive articles together, beer, wines, and spirits, we have a canal, or rather I may call it a "Dead Sea," 315 miles in length! And all this under the fostering care of a "progressing," education-loving, mission-promoting, Bible-reading, evangelizing nation! Look at it, my friends; smell at it; but don't taste it. It "bites like a serpent and stings like an adder." Apply a burning taper and, with sufficient heat below to make the spirit ascend, you have a sea of fire 315 miles in length. Imagine, if you can, ye moderate drinkers, the awful sufferings, the amount of crime and poverty, and death and murder, in all their most appalling shapes, arising from the making, selling, and drinking of this immense quantity of alcoholic liquor; and if you can still continue your friendly visits to this fiery lake, filling glasses, decanters, bottles, and barrels, and gulp their contents, all I can say is, I pity your position and hope you will soon see your error.

But this is not all. There is another phase of the brewing and distilling system that we should never cease to expose. Intoxicating drinks are bad enough if they were made from the most worthless materials; but in order to make them, many of our valuable products of the earth are destroyed, not to name those of other climes imported to us in a liquid state. I may state that in our own country, in making ale, porter, gin, and whiskey, 60 million bushels of good grain, the gift of Heaven as food for man and beast, are annually destroyed. This barley, if laid 3 feet deep and 30 feet wide, would cover a road 162 miles in length! Behold this beautiful grain turned into a dead sea of liquid poison, from the fatal effects of which scarcely a family escapes. And though generation after generation are punished—and punished daily—yet our leading men give their sanction and perform their part in this desperate game of destruction. What should we say,—what amount of frenzy would our political economists manifest,—if by some infernal mandate this quantity of barley was deliberately carted and cast into the sea? Or, if at various points of this vast spread of barley, fuel was provided, and licensed officials engaged to apply the torch and set the whole into a blaze? What a tremendous conflagration; nothing remaining except the ashes to compensate for the loss; and yet I say most deliberately that this would be child's play compared with the loss of the health, morals, happiness, and lives of millions of our people, the well-known consequences resulting from the use of these British-made intoxicating liquors. And does our enlightened country bear all this without a national protest, without being roused to defend its fields from pillage, and without insisting upon its grain being stored for legitimate purposes? It does; it does more; it *compels* this waste; it commissions men to do it; it says, "We like the

drink, and we will have it if the people starve." Nursed in ignorance of the true properties of malt liquor; encouraged by the example and the teaching of senators, nobles, and great men, and backed by the press, in order to supply a hundred and fifty thousand whiskey-stores, gin-palaces, beer-shops, and other establishments, with the implements of demoralization and ruin, we deliberately devote the produce of 1,565,000 acres of British soil—1,500,000 for barley, and 65,000 for hops! And I may here mention that as the use of sugar is now permitted in the brewing of beer and the making of spirits, not less than 42 million pounds of this valuable article were thus used, or rather mis-used, during the last year. The sugar is wanted for no purpose but to increase the quantity of spirit, which is produced by fermentation. Nay, even this is not enough; though we complain of our limited area compared with population, and though we are obliged to get our corn and cheese and butter and bacon from the land of other countries, for which we have to pay an equivalent, yet there is a class clamouring for the repeal of the malt tax, that *more land* may be confiscated by the farmers to the brewing and distilling interest.

Tectotalers! the corn-fields of England claim your protection; you must come forward and defend the treasures of Heaven; it is for you to rescue the people from the ignorance of ages and the slavery of appetite and fashion. Let the subject be carefully canvassed. Let the waste be carefully exposed to the gaze of the whole nation; let the political economists be invited honestly to discuss this subject as they do others affecting the wealth of the community; let our statisticians, our chemists, our men of science, be invited to investigate the question. It is a serious matter to see the fat of the land turned wholesale into a stream of liquid fire, consuming the best blessings of so many families, and our great folks either looking on with indifference or helping forward the conflagration, instead of assisting by might and main to quench the devouring element. We have a hard work to do; but loyalty to the God of Harvests, and love to His suffering children will not allow us to be silent spectators, while the produce of the broad acres of this favoured land are being carted to the stores of the brewers and the distillers. We have a great work to do. There are 6,000 malt kilns, 33,000 breweries, and 150,000 drink sellers all engaged in turning the good grain of heaven into intoxicating liquor, or tempting people in every possible shape to drink it to their own injury, not to mention the distilleries which are ever at work rendering the beer more essentially poisonous by turning it into gin and whiskey. Oh, that the time may speedily arrive when our citizens will be sufficiently enlightened and have sufficient virtue and courage to elect a legislature who will absolutely prohibit the making and selling of all beverages containing alcohol!

Now, my dear friends, by this time I think you will be convinced that the admiration in which malt liquor has been so long held is nothing less than a national delusion. To enumerate the evils drink is producing is impossible, but I may just say that flood, fire, water, slavery, potatoe rot, rinderpest, cotton famine, and our worst calamities are dwarfs beside this great monster of iniquity, which spares neither age, sex, rich nor poor, ignorant nor educated. Like as in the plagues of Egypt, there is scarcely a house unsmitten. And the worst of all is, that this is no infliction of Providence; *it is the result of our own ignorance, and vice, and wickedness*, and those who should be the first to rush into the breach and rescue the sufferers are the most timid and cold-hearted, the advocates of a deceitful moderation—the very path in which every drunkard made a start. Are you prepared to help us in this severe conflict with the powers of the drinking world? I hope you are. Do you ask me what I want you to do? My sincere desire, my earnest wish is, that in the first place you would never again wet your lips with any kind of alcoholic liquor. That is your *first* step, and a blessed one it will be. Your *next* is, to drain your houses of this,

the worst of all nuisances. Let this deceitful enemy have no place under your roof, nor let the family table be disgraced with that which is the emblem as well as the cause of England's greatest degradation. These two steps taken, you must then brace yourselves up for duty to others. A virtuous teetotaler—enjoying the blessings of perfect sobriety—never feels happy unless he is planning and working to confer the same blessings upon others. Try to save the young before they are contaminated; and pity with all your hearts the grown-up hard drinkers, who, without brotherly help, will never be rescued. The poor drunkards, though generally despised, ought to be the object of our pity and commiseration. They are the *victims* of the ignorance, neglect, love of ease, and selfishness of which we have been guilty. Those who should have taught them better, and watched over them to prevent their first steps to ruin, are, unfortunately, drinkers themselves, rather than persons who set a safe example of abstinence. Does not our religion teach us that every man should be his brother's keeper? Cruel as we often are towards the hard drinkers, depend upon it they are great sufferers, and are ever labouring under a strong desire for deliverance. Do give them all the help you can; and if you persevere in your kind attentions, you will often find their hearts overflowing with gratitude, and be well rewarded by seeing many saved from ruin. You will be greatly encouraged and be the means of strengthening others if you united yourselves with the Bands of Hope and the Temperance Societies. Should these fail to be supported and to accomplish their mission, there is no hope for this drunken country. The tipplers and moderate drinkers will continue to look on with indifference, and it is only to those who become real abstainers—to those who are out and out enemies of the drink and all the drinking usages—that I look for the success of the temperance reformation.

I invite every *lady* in this assembly to engage in this labour of love, and to give effect to those feelings of compassion and sympathy which are inherent in the female breast. Your erring sisters call for your aid; many who have fallen into habits of intoxication would give the world to be delivered. Go to them in all kindness; show a sisterly tenderness towards them, however low they may have fallen. It may be true that females are not so easily induced to abandon the liquor as the other sex; but it is equally true that some may be won over, and the reason of so many failures is that the right means have not been used. There are but few unwilling to make a trial, and if some should sign the pledge and break it, as is too common, you must not forsake them, but visit them immediately, and with words of kindness help them to start again. I often think of these words "Not seven, but seventy times seven!" Oh, that we had the feeling that dictated that heavenly expression! At the same time, I hope you will not forget how desirable it is to *prevent*, if possible, any females beginning to like the drink. Try to introduce the abstinence principle at proper times into every circle in which you move. Teach the children, teach the young girls, the young women, the young wives, and all, in fact, never to touch the drink, and you will lay the foundation for much social and domestic happiness.

In conclusion, I would say that I have had the happiness to labour in this good cause nearly fifty years, and though I have always been among the unpaid, I have been greatly rewarded. The testimonies I constantly receive from individuals and families made happy by teetotalism prove that I have not laboured in vain. And now that I have nearly finished my course, my only feeling of regret is that I have not done more. To you, my dear teetotal friends, and to the others whom I hope will soon join your ranks, I look to carry on this great work—a work based on truth, sanctioned by Divine teaching, and proved by a world-wide experience to be an unmixed blessing.