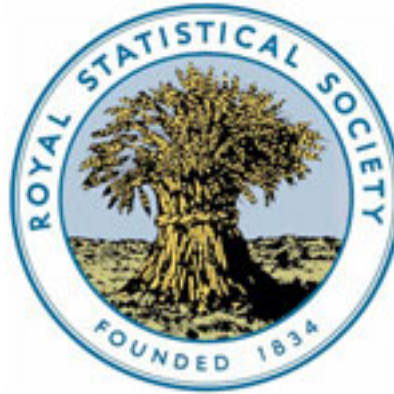


WILEY



The Consumption of Alcoholic Liquors in the United Kingdom

Author(s): Augustus D. Webb

Source: *Journal of the Royal Statistical Society*, Vol. 76, No. 2 (Jan., 1913), pp. 207-220

Published by: [Wiley](#) for the [Royal Statistical Society](#)

Stable URL: <http://www.jstor.org/stable/2340094>

Accessed: 10/06/2014 13:58

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at
<http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Wiley and Royal Statistical Society are collaborating with JSTOR to digitize, preserve and extend access to *Journal of the Royal Statistical Society*.

<http://www.jstor.org>

does not much exceed the interest paid on loan money. The difference appears to be roughly $\frac{1}{2}$ per cent. in favour of shares ; this is all there is to compensate for the disadvantage of a speculative income, and even this might easily disappear in a less prosperous period than the present. The preference which the public shows for bond issues is thus fully justified.

It is proposed to consider the differences between large and small issues subsequently.

This work was begun at the London School of Economics, on the suggestion of Mr. Pember Reeves, the Director. To him, and to other officials of the School the author wishes to offer his sincere thanks for good advice and courteous help.

THE CONSUMPTION OF ALCOHOLIC LIQUORS IN THE UNITED KINGDOM.

By AUGUSTUS D. WEBB, B.Sc. (ECON.).

IN Mr. George B. Wilson's Howard Medal Essay on the variations during the last twenty years in the consumption of intoxicating drinks in the United Kingdom, &c., published in the January issue of the last volume of the *Journal*, it is stated (page 190) that the statistics show "that the general trend of consumption has been downward. An individual wave may rise high, but the tide apparently is ebbing. The lowest point in 1909 is many degrees lower than the lowest point in 1884-86, or 1894, and the highest point in 1899 or 1900 is not nearly so high as the highest points in 1874-76." The conclusion here expressed is repeated in Mr. Wilson's last annual letter to *The Times* on the "National Drink Bill" (*The Times* of April 15, 1912), where he further states: "It is encouraging to note that during the last forty years the trend of consumption of alcoholic liquors in the United Kingdom has been downward." This is approximately true of consumption *per head*, which is what Mr. Wilson probably had in mind, although, as regards beer, the generalisation is rather too strongly expressed. But is the "downward trend" also characteristic of total consumption? In recent years, during which the total consumption of alcoholic drinks has been falling, this question would generally have been answered in the affirmative. It is noteworthy, however, that the Chancellor of the Exchequer in his last Budget speech (April 2, 1912: see House of Commons Debates, volume 35; columns 1053 *et seq.*) estimated for a normal *increase* in consumption in the current financial year, instead of a normal decrease. His remarks on this point were as follows:—

"There has been a curious change in the last year (*i.e.* the financial year 1911-12) in the matter of the consumption of alcoholic liquors. I remember the right honourable gentleman (Mr. Austen Chamberlain) . . . pointing out that for the first time in a period of prosperity the consumption of intoxicating liquors had gone down, and he rejoiced, with the rest of the Committee, in the

prospect that it was a permanent change in the habits of the people. It seemed for some years as if that prediction would be verified. . . . the consumption of alcoholic liquors steadily went down, and my advisers came to the conclusion that we must in future reckon upon a steady diminution in the quantity consumed. . . . But last year there was a change." The Chancellor then pointed out that there had been an increase in the consumption of beer and spirits, which he associated partly with the exceptionally hot summer and partly with the improved spending power of the working classes. He then estimated, after allowing for the exceptional circumstances of 1911-12, for a continuance of the upward movement in the present financial year, 1912-13.

This striking change in the official view of the probable course of consumption of alcoholic liquors makes it worth while to re-examine the statistics and the conclusions hitherto drawn from them. To obtain satisfactory results it is necessary to go back much farther than the starting-point (1890) laid down for Mr. Wilson's essay. I have accordingly traced the course of consumption of spirits, beer, and wine from about 1860. It would be of very doubtful utility to go back any farther. The spirit duties were not made uniform throughout the United Kingdom until 1858, and during the immediately preceding years changes of duty were fairly frequent. In 1860 a heavy increase in the duty was made (1s. 1^{d.} per gallon, or about 24 per cent.). Then no change occurred until 1890, when 6^{d.} was added. A further 6^{d.} was added in 1894, but lapsed in 1895. This was re-imposed in 1900, and in 1909 the heavy addition of 3s. 9^{d.} per gallon was made. These alterations of duty produced temporary disturbances in the clearances of spirits at the time they were made, but they do not appear to have permanently modified the trend of consumption. Even the increase of the duty in 1909 by about 33 per cent., although it lowered the general level of consumption, does not yet appear to have affected the trend.

The year 1860 marks an extensive downward revision of the wine duties, as a result of which consumption increased very considerably. Compared with this change, later alterations of the duties were insignificant and appear to have produced no permanent effect on the general trend of consumption.

Exact statistics of the consumption of beer are not available for the first twenty years of our period. During that time there was no direct tax on beer as such, but on malt, and the figures used for these years are deduced from the diagrams of alcoholic beverages, &c., published as a House of Commons Return (No. 329) in 1894. The figures for individual years are therefore approximations, but their general trend can be accepted as accurate. The malt tax was converted into a duty on beer in 1880, and the figures for 1881 onwards are accordingly based on exact records. (See Appendix II for table showing dates on which changes of duties took effect.)

The quantities of potable spirits (British and imported together), beer, and wine retained for consumption in the United Kingdom in

each year since 1860 are given in Appendix I. An examination of these figures shows clearly that, during the last fifty years, there have been two periods of rising consumption and two periods of falling consumption. They are as follows:—

Spirits (total of British and imported).—The first period extends from 1862 or 1863 to 1875, during which the trend was upwards, with a temporary decline in 1867 and 1868. The next period lasted until 1887, during which the trend was downwards, with temporary increases in 1881 and 1883. This was followed by the second upward movement, lasting until 1900, with a temporary depression in 1893 and 1894. Then succeeded the second downward movement lasting until about 1910, with a temporary check in 1907.

Beer.—The first upward movement was from 1860 to 1876, with temporary checks in 1866, 1867 and 1871. Then the course of consumption was irregular until about 1885, but the trend was downwards. This was succeeded by the second upward trend, lasting until 1899, with a temporary break in 1892. Then followed the second downward movement lasting until 1909, with a break about 1906.

Wine.—The large increase shown in 1861 was due mainly to the revision of the duties. We may start with, say, 1863. From that year, the course of consumption was upwards until 1876 with temporary decreases in 1869 and 1874, then downwards until 1886, with a temporary increase about 1880, then again upwards until 1899, with temporary decreases in 1888 and 1891-94, and then again downwards until about 1908, with temporary increases in 1902 and 1906-07.

These characteristics are summarised in the following table:—

Period.	Average annual increase (+) or decrease (–) in total consumption.		
	Spirits.	Beer.	Wine.
	Per cent.	Per cent.	Per cent.
First: until 1875-76	+ 4·4	+ 3·1	+ 7·3*
Second: until 1885-87	– 1·7	– 1·4	– 3·2
Third: until 1899-1900	+ 2·4	+ 2·2	+ 1·8
Fourth: until 1908-10	{ – 2·3 (to 1908) – 4·2 („ ’10)	{ – 1·3 (to 1909)	{ – 4·0 (to 1908) – 3·5 („ ’09)

* Average from 1860 to 1876. From 1863 to 1876 the average is + 4·7 per cent.

The same broad features are disclosed if the annual fluctuations are eliminated by averaging. The results are given in the next table. Nine-year continuous averages have been taken (*i.e.*, the average of 1860-68, 1861-69, 1862-70, and so on). Nine years have been selected as the period to average as being sufficiently long to eliminate all temporary and casual disturbances, and also, as a matter of convenience, permitting the average being placed opposite the fifth year of the period, whereas, say, a ten-year period would have brought the average between the fifth and sixth years.

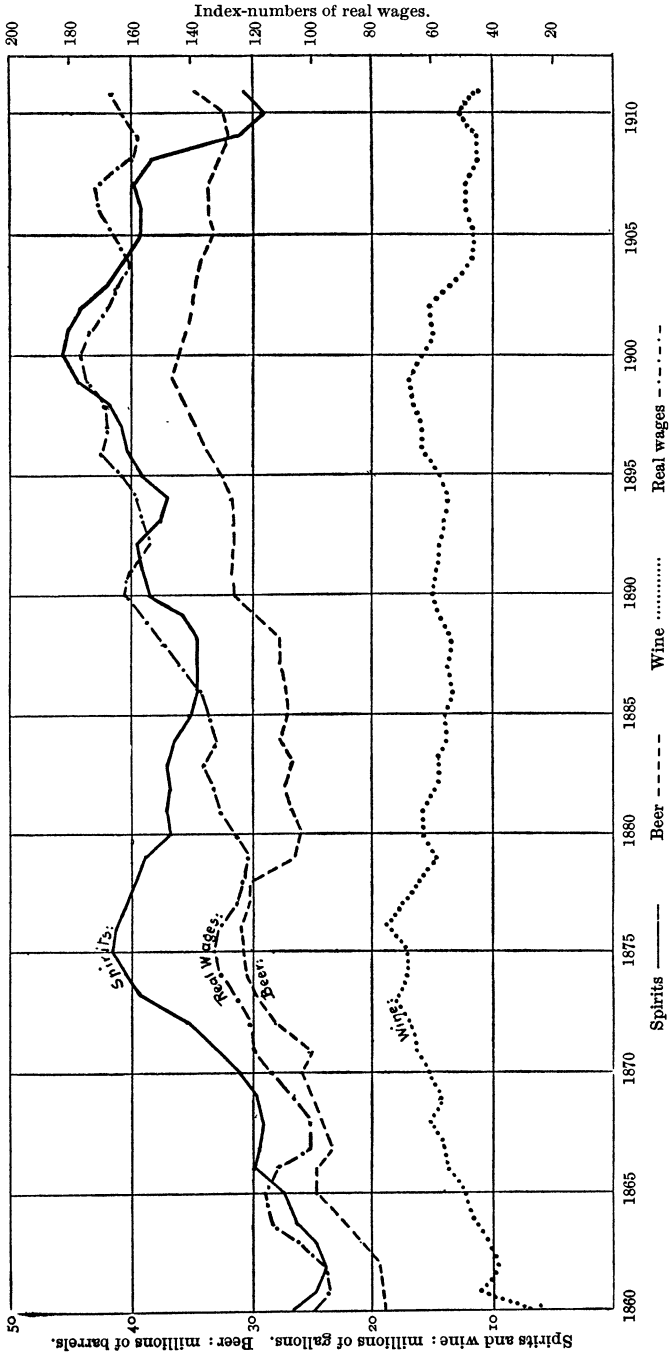
Period.	Trend of consumption.	Average annual rate of change in the average annual consumption (nine-year continuous averages).		
		Spirits.	Beer.	Wine.
		Per cent.	Per cent.	Per cent.
First	Upwards	+ 2·9	+ 2·4	+ 4·1
Second	Downwards ...	— 1·3	— 1·2	— 1·5
Third.....	Upwards	+ 1·3	+ 1·5	+ 0·9
Fourth	Downwards ...	— 2·2	— 0·8	— 3·0

The course of consumption is clearly represented in Diagrams 1 and 2. The first of these shows the annual fluctuations, and the second gives the curves of nine-year averages, *i.e.* the curves on the first diagram smoothed.

The quantities so far dealt with are the total quantities retained for consumption. The course of consumption *per head*, however, shows an exactly similar rise and fall between 1860 and 1885-87, repeated within the next twenty-five years. This is illustrated in Diagrams 3 and 4. It will be observed, however, that whereas the crest of the second wave of *total* consumption of beer and spirits was higher than that of the first wave (Diagram 2), the second wave of *per head* consumption did not reach such a high point as the first (Diagram 4). Thus, the general trend or "symptom" of *total* consumption over the whole fifty years has been upwards, but the general trend of consumption *per head* has been, as stated by Mr. Wilson, downwards, although the consumption per head of beer may almost be said to reveal no symptomatic movement. It may be noted that the heavy fall in the consumption of spirits in 1909, which pulled down the nine-year averages, was quite abnormal, being caused by the great increase in the duties.

It is interesting to note that the explanation of the ebb in the course of consumption during the late 'seventies and early 'eighties of last century was sought for in the growth of temperance, in the same way as the recent ebb is usually explained. Thus the Commissioners of Inland Revenue stated in their 28th Annual Report (1884-85, page 13) with reference to the consumption of spirits: "The enormous decrease that has occurred since 1875-76, in spite of the increase in the population during the last nine years, is most striking, and can hardly fail to be considered a convincing proof of the growth of temperance." The Commissioners of Customs stated in their 31st Annual Report (1886-87, page 13), also with reference to the consumption of spirits (British and imported): "However unsatisfactory the decline in the yield of the spirit duties may be to those to whom is entrusted the duty of collecting the revenue, there can be little doubt that, as has been frequently pointed out, it is indicative of improved habits of temperance in the use of alcoholic drinks amongst the general body of the population, and of a consequent advance in their material well-being." (The years 1884-86 marked a period of great depression!) Again, in a memorandum prepared by Sir Algernon West, K.C.B. (then Chairman of the Inland Revenue), for the Royal Commission appointed in 1885 to inquire into the depression of trade and industry then

DIAGRAM 1.
Curves of total consumption of spirits, beer and wine (allowing for unemployment).



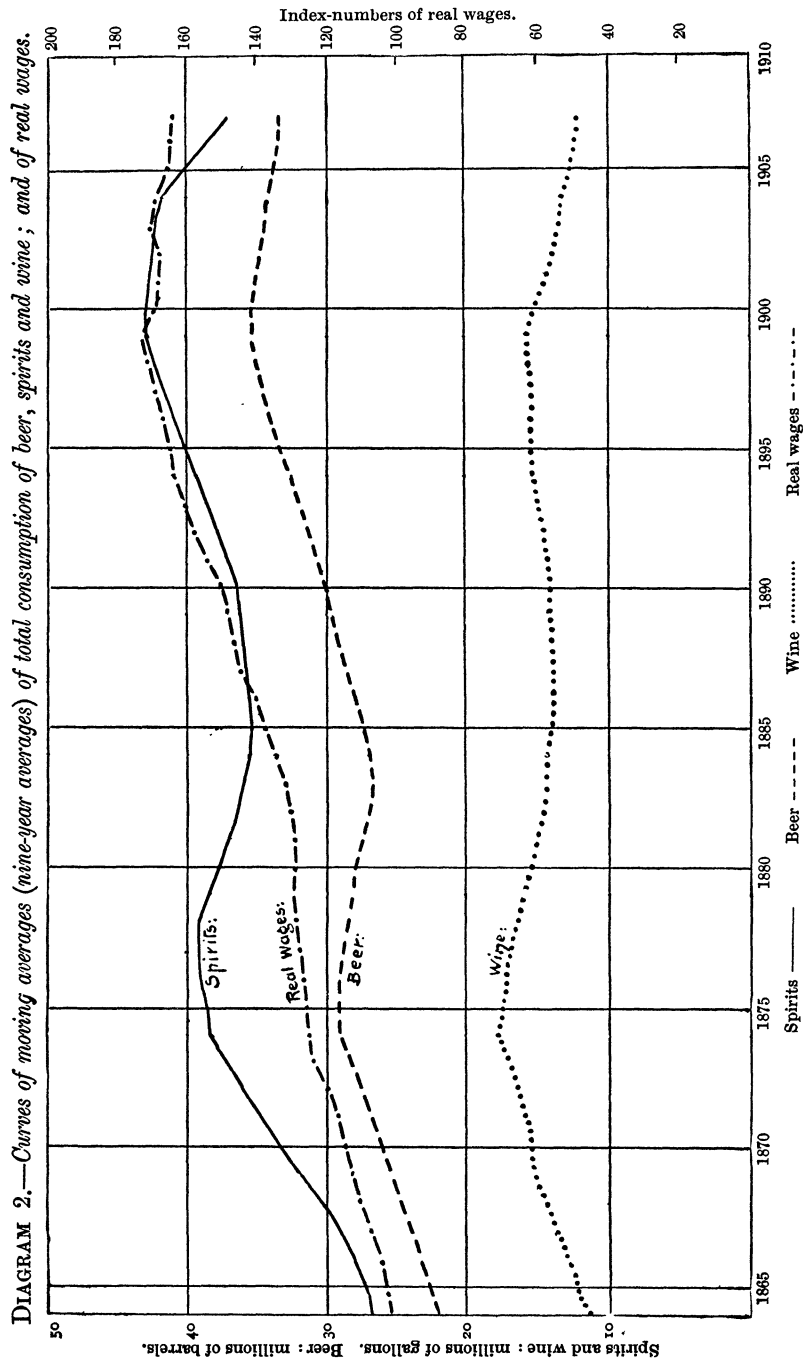


DIAGRAM 3.—*Consumption of beer, spirits and wine per head; and curve of real wages.*

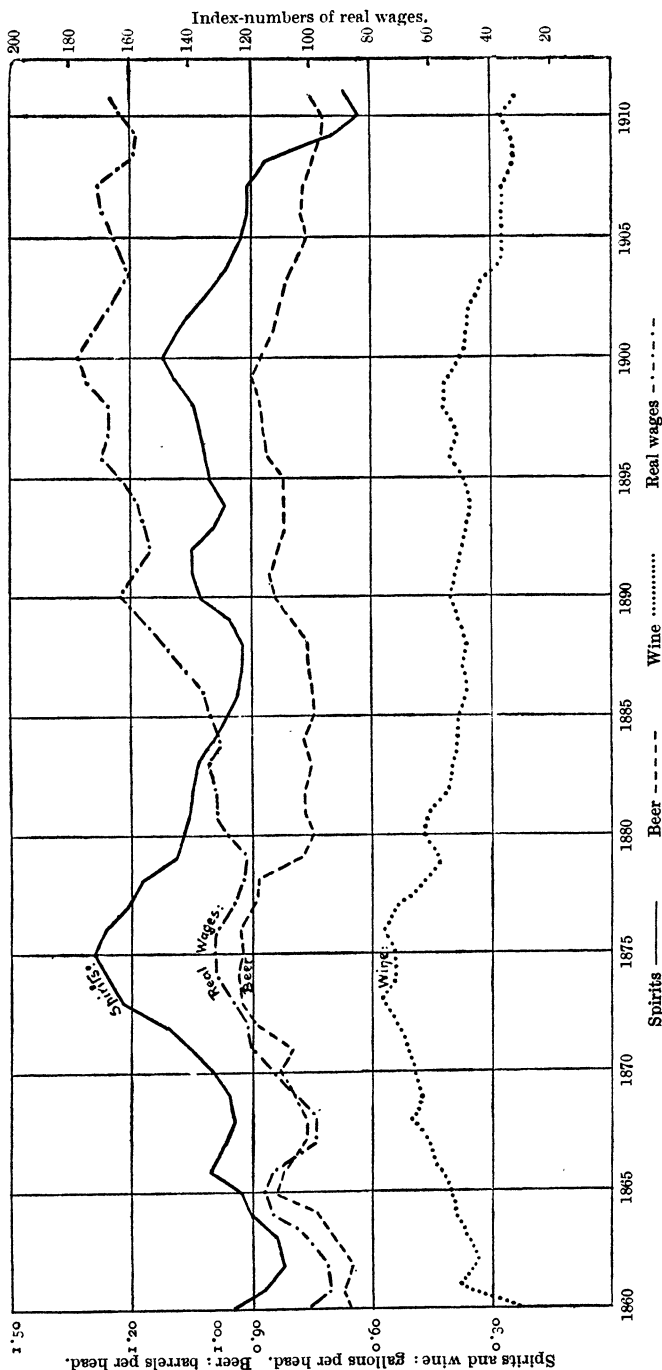
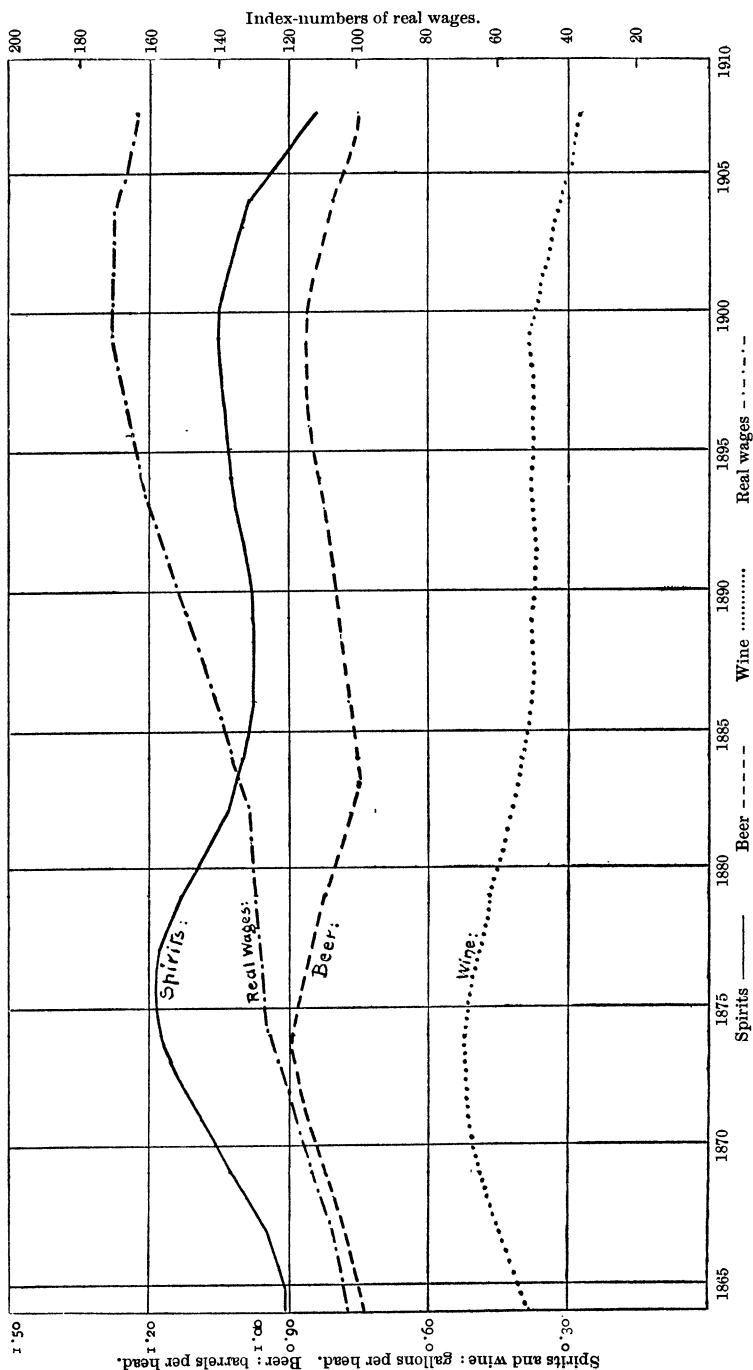


DIAGRAM 4.—Curves of moving averages (nine-year averages) of consumption per head of beer, spirits and wine; and curve of averages of real wages.



prevailing, it was stated: "As the revenue derived from the consumption of alcoholic drinks forms such an important item in the fiscal arrangements of this country, inquiries are made from time to time to discover the causes of its rise or fall; the result of which inquiries leads me to think that, although there are other disturbing influences which affect it at certain periods, but which are more or less transitory, the gradual decline in the consumption of alcoholic beverages must mainly be attributed to the growth of temperance habits amongst the people. This assertion must be taken for what it is worth, as in the absence of statistics it is impossible to estimate the number of persons who have joined the various temperance leagues in this country in the past few years, but it is beyond all doubt that the movement continues to make progress, and to exercise a large amount of influence upon the drinking habits of the community." (Final Report of the Commission; Appendix C (C. 4893, 1886).) In his evidence before the Commission on October 16, 1885, Sir A. West said: "I think it was four or five years ago, in my statement to the Chancellor of the Exchequer at the beginning of the year, I said that I should always look upon the revenue from spirits as a decreasing source of revenue." (Question 919.)

All these statements were made on the very eve of the upward trend of consumption (and revenue) which lasted for about thirteen years. Nevertheless, the fact that the second cycle of *per head* consumption was at a lower level than the first cycle may, perhaps, be regarded as evidence of a continuous downward "temperance pull," although this pull is periodically overpowered by other influences causing increased consumption.

The causes of the rhythmic rise and fall in the trend of consumption during the last fifty years are well worth investigation. On *a priori* grounds, it might be expected that the consumption of beer and spirits, if not of wine, would rise and fall with the variations in the spending power of the working classes, as measured by "real wages." Even wine consumption might be supposed to respond to these variations if they may be regarded as an index to the variations in the prosperity of the middle and upper classes. I find that, in fact, the fluctuations in "real wages" and in the consumption of alcoholic drinks are intimately connected together. (The connection between wages, employment, &c., and alcoholic consumption was briefly indicated by Mr. Wilson.) For my data of wages since 1860 I have taken the index-numbers of "real wages" calculated by Mr. G. H. Wood and contributed to the *Journal* in March, 1909 ("Real Wages and the Standard of Comfort since 1850," by George H. Wood.) These index-numbers are based on the course of money wages since 1850 as investigated mainly by Mr. Bowley and Mr. Wood, and in calculating the real wages Mr. Wood has allowed for changes in retail prices and rents (also calculated by him) and in the amount of employment (as given by the Board of Trade percentages of unemployment). Mr. Wood's figures end with 1902, and have been roughly continued by the present writer by means of the Board of Trade statistics of unemployment, wages, and retail prices.

All the data which go to make up these index-numbers of real wages are drawn from more or less limited fields of investigation, and it is therefore doubtful how far the index-numbers may be regarded as an accurate representation of the true course of real wages in the period they cover. But different investigations have tended to confirm the general movement of money wages established by Mr. Bowley and Mr. Wood, and different series of index-numbers of prices also tend to confirm one another in their general features. In the present state of our knowledge, therefore, it may not unreasonably be assumed that, although Mr. Wood's index-numbers of real wages may be too high or too low for any particular year, nevertheless they may suffice to show whether real wages in general moved upwards or downwards from year to year, and, with a reasonable margin for error, within what limits they moved.

These index-numbers are given in Appendix III, and they are also represented in the diagrams—in Diagrams 1 and 3, the annual fluctuations being shown, and in Diagrams 2 and 4, the nine-year continuous averages.

That the fluctuations of real wages and the consumption of alcoholic drinks are correlated is obvious from the diagrams. I have worked out the degrees of correlation, taking the fluctuations from the nine-year moving average in each case, and the results are given below. I find, what is perhaps to be expected *à priori*, that the correlation between the fluctuations of real wages and those of beer, spirits and wine taken one year later (*i.e.*, correlating real wages in, say, 1870 with spirits, beer and wine in 1871, and so on) is appreciably greater than the correlation between the fluctuations in the same years. This would mean that the effect of a rise or fall in real wages on the consumption of alcoholic liquors is not felt in its full force until after the lapse of some months.

Table of correlation results.

	Correlation between the deviations from nine-year averages, taking the deviations of beer, spirits and wine.	
	In the same year as those of real wages.	One year later than those of real wages.
Correlation between the deviations in <i>real wages</i> and in the total consumption of:—		
Spirits	+ '52 ± '07	+ '82 ± '03
Beer	+ '55 ± '07	+ '72 ± '05
Wine	+ '61 ± '07	+ '77 ± '04

All these results are highly significant.

It will be observed from the diagrams that not only are the annual fluctuations of real wages correlated with those of alcoholic drinks (Diagrams 1 and 3), but the long period fluctuations of the two sets of phenomena are not altogether dissimilar (Diagrams 2 and 4). During the first period of increasing consumption, the trend of real wages was upwards, rising fairly rapidly at the average annual rate of 1·8 per cent. During the next period, while consumption was downwards, the upward trend of real wages slackened off

to only 0.5 per cent. per year, *i.e.*, it was almost stationary. During the third period, when consumption again took an upward flight, the upward trend of real wages was also fairly rapid, averaging 1.7 per cent. per year. Finally, during the recent period of declining consumption, the trend of real wages was actually downwards, averaging 0.2 per cent. per year. If, instead of the curve of nine-year averages, we take the actual index-numbers of real wages with their annual fluctuations, we find that down to about 1874-75 there was an annual average increase of 2 per cent.; during the next decade the annual increase averaged only 0.1 per cent., then followed a rapid increase down to about 1899, averaging again 2.0 per cent. per year, while the succeeding decade showed an average annual decline of 1.0 per cent. These results should be compared with the description of the course of consumption of spirits, beer and wine given above on page 209.

Does this examination of the course of consumption of alcoholic liquors during the last half century, and of its relation to the movements of real wages, afford any indication of consumption in the future? Social and economic conditions are changing so rapidly that it would be foolish to prophesy far ahead as to the probable mode of living of the working classes. But we may perhaps look two or three years ahead, and we can say in reply to the above question that the trend of consumption of beer, spirits, and wine shows signs of turning upwards again and starting on another cycle similar to those of the last half century. Whether the cycle will complete itself only the future, of course, can reveal. The consumption of both beer and spirits increased considerably in 1911, even after a liberal allowance is made in the case of beer for the abnormally hot and dry summer. It may be argued that the increase in the consumption of spirits was due to a reaction from the very heavy reduction caused by the increase of the spirit duties in 1909. But this would not explain the increase under beer. As regards wine, the quantities cleared in 1910 for consumption were abnormally high, and were stimulated by rising prices consequent on the failure of the 1910 vintage, and also by the importation of the "1908 port," which was ready for bottling in the autumn of 1910. It is practically certain that a large proportion of these clearances went into stock and not into actual consumption in that year, and that part of the consumption in 1911 was met from these accumulated stocks. In that case, it is highly probable that even the consumption of wine actually increased in 1911.

Further, the trend of real wages, after a decade of stagnation or decline, appears to be turning upwards again. From the intimate connection shown above to exist between the fluctuations and course of real wages and those of alcoholic consumption, the upward trend of the former lends strong support to the view that the latter is also trending upwards.

On the facts and tendencies before us, therefore, we may conclude that the Chancellor was justified in breaking the tradition of estimating for a normal decline in consumption and in suggesting that the tide was turning. It will be extremely interesting to see if the event confirms the forecast.

APPENDIX I.

Quantities of alcoholic liquors retained for consumption in the United Kingdom.

Calendar year.	Total consumption.			Consumption per head.		
	Spirits (potable).	Beer.	Wine.	Spirits (potable).	Beer.	Wine.
	Mln. proof galls.	Mln. stand. brls.	Mln. galls.	Pf. galls.	Stand. brls.	Galls.
1860	26'86	19'30*	6'72	'93	'67	'23
'61	24'71	19'50	10'69	'86	'68	'37
'62	24'02	19'60	9'76	'83	'67	'33
'63	24'68	20'70	10'42	'84	'71	'35
'64	26'49	22'40	11'40	'89	'74	'39
'65	27'34	24'80	11'99	'92	'83	'40
'66	30'00	24'60	13'24	1'00	'82	'44
'67	29'52	23'70	13'67	'98	'78	'45
'68	29'39	24'50	15'06	'95	'78	'50
'69	29'78	25'40	14'73	'96	'81	'48
1870	31'03	26'20	15'08	'99	'84	'49
'71	33'07	25'30	16'14	1'04	'81	'51
'72	35'92	28'50	16'77	1'12	'89	'53
'73	39'15	29'90	17'91	1'22	'93	'56
'74	40'53	30'40	17'17	1'25	'94	'53
'75	41'91	30'50	17'24	1'28	'93	'53
'76	41'46	31'00	18'54	1'25	'94	'56
'77	40'53	30'30	17'57	1'21	'90	'53
'78	39'81	30'30	16'17	1'17	'89	'48
'79	37'49	26'50	14'80	1'09	'78	'43
1880	36'96	26'00*	15'75	1'07	'75	'46
'81	37'05	26'97	15'55	1'06	'77	'45
'82	36'87	27'02	14'34	1'05	'77	'41
'83	36'98	26'83	14'29	1'04	'76	'40
'84	36'12	27'59	13'99	1'01	'77	'39
'85	34'52	27'10	13'77	'96	'75	'38
'86	34'12	27'13	13'17	'94	'75	'36
'87	34'10	27'73	13'59	'93	'76	'37
'88	34'14	27'87	13'42	'93	'76	'36
'89	35'79	29'82	14'07	'96	'80	'38
1890	38'37	31'24	14'92	1'02	'83	'40
'91	39'14	31'67	14'77	1'04	'84	'39
'92	39'47	31'51	14'54	1'04	'83	'38
'93	37'69	31'59	14'09	'98	'82	'37
'94	37'51	31'75	13'78	'97	'82	'36
'95	39'04	32'23	14'55	1'00	'82	'37
'96	40'08	33'86	15'776	1'01	'86	'40
'97	40'96	34'76	15'780	1'02	'87	'39
'98	41'71	35'62	16'54	1'03	'88	'41
'99	44'42	36'84	16'59	1'09	'90	'41
1900	45'89	36'08	15'82	1'12	'88	'38
'01	45'21	35'51	15'20	1'09	'85	'37
'02	44'08	35'24	15'28	1'05	'84	'36
'03	41'89	34'95	13'87	'99	'83	'33
'04	40'73	34'22	11'93	'96	'80	'28
'05	39'33	33'25	11'89	'92	'77	'28
'06	39'26	33'92	12'278	'91	'78	'28
'07	39'98	33'79	12'282	'91	'77	'28
'08	38'08	32'94	11'29	'86	'75	'26
'09	31'06	32'29	11'40	'70	'73	'26
1910	29'27	32'83	12'67	'65	'73	'28
'11	30'69	34'25	11'22	'68	'76	'25

* Beer figures from 1860 to 1880 are approximations.

The figures in the above table are obtained from the following sources :—

Spirits.—British spirits down to 1875 have been taken from the Trade and Navigation Accounts, and after that date from the Statistical Abstracts of the United Kingdom. Imported spirits have been taken from the Statistical Abstracts, except that figures before 1875 have been amended by the deduction of perfumed spirits, methylated spirits, &c.

Beer.—The figure for 1860 is estimated. From 1861 to 1880 inclusive the figures are estimated from the diagrams of alcoholic beverages, &c., published in House of Commons Return, No. 329 of 1894. From 1881 the figures are from the Statistical Abstracts.

Wine.—The figures are from the Statistical Abstracts.

In making the calculations given in the text the figures have been taken in millions and the nearest first decimal place.

APPENDIX II.

Changes in duties on spirits, beer and wine since 1860.

Year of change.	Rates of duty on		
	British spirits.*	Wine in cask.†	Beer.
1860 (February 28)	Per proof gallon.	Per gallon.	Per standard barrel.
'60 (July 17)	—	Reduced to 3s.	(Malt Tax in force down to 1880. See note ‡).
'61 (January 1)	Raised from 8s. 1d. to 10s.	—	
'62 (April 4) ...	—	Graduated from 1s. to 2s. 11d.	
'80 (October 1)	—	Under 26°, 1s. " 42°, 2s. 6d.)	
'86 (August 15)	—	Under 30°, 1s. " 42°, 2s. 6d.	6s. 3d. per standard barrel of 1,057°.‡
'89 (April 16) ...	—	—	6s. 3d. per standard barrel of 1,055°.
'90 (" 18)	10s. 6d.	—	—
'94 (" 17) ...	11s.	—	6s. 9d.
'95 (July 1)	10s. 6d.	—	—
'99 (April 14) ...	—	Under 30°, 1s. 3d. " 42°, 3s.	—
1900 (March 6)	11s.	—	7s. 9d.
'09 (April 30) ...	14s. 9d.	—	—

* The rates on foreign spirits changed correspondingly.

† From 1888 there were additional rates on wine in bottle.

‡ The old Malt Tax which this superseded was equivalent to about 5s. 6d. per barrel of beer.

APPENDIX III.

Index-numbers of real wages (based on money wages, retail prices, rents and unemployment).

[G. H. Wood: "Real Wages and the Standard of Comfort since 1850." *Journal of the Royal Statistical Society*, vol. lxxii, March, 1909. The figures after 1902 have been roughly calculated by the present writer.]

Year.	Real wages.		Year.	Real wages.	
	Full work (1850=100).	Allowing for unemploy- ment.		Full work (1850=100).	Allowing for unemploy- ment.
1860	103	101	1886	151	136
'61	100	95	'87	155	143
'62	105	96	'88	157	149
'63	109	103	'89	159	155
'64	117	113			
'65	117	115	1890	166	162
'66	116	112	'91	164	159
'67	109	101	'92	163	153
'68	110	101	'93	167	155
'69	115	107	'94	170	158
			'95	174	163
1870	118	113	'96	176	170
'71	121	120	'97	176	169
'72	122	121	'98	174	169
'73	128	127	'99	180	176
'74	133	131			
'75	135	132	1900	183	177
'76	137	131	'01	181	174
'77	133	127	'02	177	169
'78	132	123	'03	174	166
'79	137	121	'04	172	161
			'05	174	166
1880	134	127	'06	177	170
'81	136	131	'07	178	171
'82	135	132	'08	174	160
'83	139	136	'09	173	159
'84	144	132			
'85	148	134	1910	171	163
			'11	172	166