

## ON THE MARRIAGE-RATE.

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THE marriage-rate of the country has an unquestioned intimate relation with its social welfare, but it can scarcely be considered any longer as the "barometer of its prosperity," as it was once described by Dr. Farr.

When commenting recently in *Public Health*\* on the great fall in the birth-rate in the last twenty years, I assigned as its chief though not the only cause, a considerable and nearly contemporaneous fall in the marriage-rate, and in doing so several interesting problems arose, some of which deserved fuller consideration than the mere recognition they then received. In order to keep properly in touch with the social questions of the hour, it is very desirable to have an understanding as to the extent to which the marriage-rate has fallen, the length of the period over which the fall has extended, the probable causes—or, at least, the most likely explanation—of its occurrence, and how far in recent years marriage has been undertaken in altered circumstances as to age.

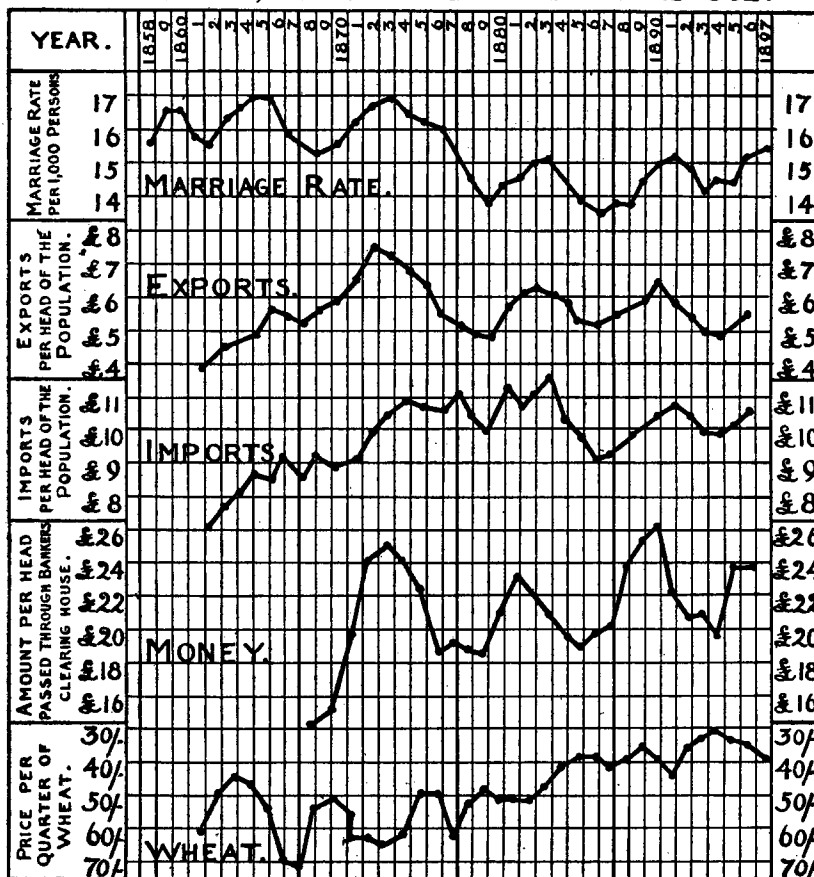
The rise and fall of the marriage-rate during the last forty years is shown graphically on the accompanying chart. The Registrar-General, in Table A of his Annual Reports, has, since 1862, set out in parallel columns the annual marriage-rate, the amounts per head of exports, of imports, and of money passing through the Bankers' Clearing-house, and the price of wheat. These are shown upon the accompanying chart. The line of the marriage-rate shows a marked absence of sudden fluctuations, and the changes in it have evidently been the result of slowly-moving influences. There is an evident coincidence between them and periods or series of years of commercial prosperity and the reverse, especially as these find expression in the amount of money (not necessarily gold or silver) in circulation; but there is no correspondence noticeable between the frequency of marriage and the cheapness of bread.

The rate reached its maximum of 17·6 in 1873. It fell in six years to 14·4, and then continued at a comparatively low level until 1896-97. If the forty years be divided into four equal parts, the comparative estimation of matrimony in each would be as follows :

	1868-67.	1868-77.	1878-87.	1888-97.
Average marriage rate ...	... 16·8	... 16·6	... 14·9	... 15·2

\* See *Public Health*, x. 408.

CHART OF THE MARRIAGE RATE AND OF THE AMOUNT OF EXPORTS AND IMPORTS, OF MONEY PASSING THE BANKING CLEARING HOUSE PER HEAD, AND THE PRICE OF BREAD SINCE 1862.



But the whole period may fairly be divided into two equal parts, with the wide difference in their averages of 16.8 and 15.1, showing a decline in the latter half of 10 per cent. The parallelism between rises and falls in the rate and periods of prosperity is also less noticeable in the latter half.

There appears to have been a controlling and inhibitive influence during the last twenty years, hindering the marriage-rate from responding as freely as formerly to the sunshine of prosperity, or from serving as the index to commercial and industrial activity. The prosperity of Queen Victoria's reign is generally acknowledged to have reached its acme in the Diamond Jubilee year, but only sixteen marriages per 1,000 persons were entered upon during that year, which was no higher than the lowest number recorded in any year of the first half of the period.

The greater disinclination which has apparently grown up during the last twenty years to undertake the responsibilities of matrimony is probably the outcome of an intelligent selfishness, produced by modern civilization, and the existence of such a feeling is less problematical because there are manifestations of a similar nature to be seen in the moderate general postponement of marriage in life, and in a greater decrease in the proportion of births to the population than the fall in the marriage-rate will explain.

In my remarks on the birth-rate, I endeavoured to show that the cumulative effect of this fall in the marriage-rate in lowering the birth-rate would not exceed 10 per cent. The actual fall is from 15 to 18 per cent., justifying the statement that the disinclination to matrimony is accompanied and supported in its effects by a corresponding dislike to undertake bearing and rearing children.

(It is true wedlock does not cover the whole of the births, and to that extent the marriage and birth-rates do not correspond; but the small proportion of illegitimate births in this country is yearly becoming smaller, and these two rates have a closer relation now than formerly. Thirty years ago the number of illegitimate births was 63 per 1,000 births, in 1896 it had fallen to 42 per 1,000 births, or from 2 to 1.3 births per 1,000 persons.)

Further corroboration as to the existence of the sentiment to which I have referred is afforded by the postponement of marriage, and especially the diminution of early marriages. The marriages under twenty-one years of age have fallen in the twelve years 1885-96 from 81 to 59 per 1,000 males, and from 230 to 188 per 1,000 females, annually married. (The delay in marriage is greater among males than females, and its effect in reducing the birth-rate is therefore considerably diminished.)

The present Statistical Superintendent, who so worthily supports and enhances the reputation of his distinguished predecessors, analyzes the evidence concerning the general postponement in life of marriage in the last annual report, and arrives at the following conclusions:—The number of marriages under age has shown a steady decline in both sexes during several years past. The mean age at marriage shows a considerable increase during the twelve years 1885-96 over that when the rate was highest, and a slight but steady increase during the twelve years. A general increase is indicated in the ages at which bachelors marry, and a smaller increase among spinsters than bachelors; a considerable increase among widows, and a slight decrease among widowers. The result has been to increase the proportion of marriages over thirty by 94 per 1,000.

It was a doctrine of Malthus that extensive celibacy for the repression of population is a necessary condition of the happiness of human kind. The fall in the birth-rate has acted upon the age-distribution of the population by increasing the proportion of adults, and thus, with a smaller proportion of marriages, there now must be a considerable increase of persons of marriageable age who are living a single life. The nineteenth century is approaching its close at its highest development of material comfort, but with more celibacy, fewer marriages and later marriage, fewer births, fewer births per marriage, and fewer illegitimate births than in times of less prosperity and dearer food.

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THE NEW MEMBER OF THE LOCAL GOVERNMENT BOARD OF SCOTLAND.—In recommending Dr. Russell, Medical Officer of Health of Glasgow, for the vacancy on the Board, the Secretary of State for Scotland has made a choice which has given satisfaction not only to the sanitary service of Scotland, but of the whole United Kingdom. Dr. Russell enjoys a world-wide reputation, and it is unnecessary for us to dilate on his special fitness for his new Office. We congratulate him on the honour conferred on him by our Sovereign, and trust that he may be spared for many years to further the cause of preventive medicine.

ETIOLOGY OF RABIES.—Memmo of Rome described some time ago a blastomycete that he had found in cases of rabies, pathogenic, and, as he believed, the specific cause of the disease. He now (*C. B. für Bakt.*, Abt. I., Bd. XXI., Nos. 17, 18) adds that he has detected it in the blood of four dogs dying of natural rabies, and in rabbits and pigeons inoculated with the virus. In all it was present in the brain and cord, the cerebro-spinal fluid, the saliva, the parenchyma of the parotid, and in the aqueous humour. But he had not found it in the blood of the heart, nor in any other disease. It grows best in fluid media, especially in broth containing glucose made faintly acid with tartaric acid. The cultures begin to grow after about a week, but not freely, being easily inhibited by air infection, *e.g.*, the dust of the laboratory. Cultures of the third or fourth generation, purified from any traces of the original matter by repeated plate-culture, were injected into rabbits and guinea-pigs. Symptoms of paralysis of the hind legs appeared in the rabbits after eleven to twenty days, and in dogs after thirty to sixty. In all the disease ended fatally in a few days, and in dogs the phenomena were those of typical rabies. He believes that Foll, Rivolta, Ferran, and Spinelli have seen it too, and he was able to confirm Sanfelice's demonstration of its presence by staining in the spinal cord of a boy who died of hydrophobia.