VIII.—*A Review of the Economic and Social Condition of Ireland.*

By Joseph Todhunter Pim, Esq.

[Read Tuesday, June 27th, 1899].

Several of my predecessors in the office of President have taken as the subject-matter of their addresses a review of the economic and social condition of Ireland as revealed to us in the statistics furnished by the General Register Office, and by other Departments of Government. That I should follow their example may, perhaps, be considered appropriate, seeing that the fiftieth anniversary of the foundation of this Society has passed during my term of office.

I do not propose to travel over the whole field of Irish statistics, nor would it be desirable that I should do so. After the Census of 1881 and of 1891, Dr. Grimshaw, the Registrar-General, gave us most valuable addresses, in which he dealt with great ability, and in the most comprehensive manner with the wide range of statistical records with which his important office is conversant.

I desire to draw your attention only to some particular branches of enquiry, regarding which I purpose making some observations as the figures pass under review.

Population.

Naturally, in considering the condition of a country, the first item we look at is the number of its inhabitants. In Ireland, we have to record a continuing reduction in the population. Between

1841 and '51	the population was reduced by		1,622,739
1851 and '61	.....	„	753,418
1861 and '71	.....	„	386,590
1871 and '81	.....	„	237,541
1881 and '91	.....	„	470,086

In fifty years the population has suffered a diminution of 3,470,374. As, however, the population is estimated to have been about 120,000 greater in 1845 than at the Census of 1841, and the population in the year 1898 was estimated to be about 160,000 less than at the Census of 1891, we have a loss of population from the famine to the present time of 3,850,000 persons.

POPULATION OF IRELAND AT DIFFERENT DATES.

Estimated	1801	5,216,329
Census	1841	8,175,124
Estimated	1845	8,295,061
Census	1891	4,704,750
Estimated	1898	4,543,782

Emigration.

This great reduction in the population is, of course, immediately due to the direct and indirect effect of the immense outflow of emigrants.

The official enumeration of emigrants dates from the 1st of May, 1851. It is estimated, however, that the emigrants between 1841—51 numbered 1,240,737. Since the 1st of May, 1851, the official figures record the numbers as follows: —

1st May,	1851	to 31st December,	1860 ...	1,163,418
1st Jan.,	1861	„ „	1870 ...	849,836
„	1871	„ „	1880 ...	623,933
„	1881	„ „	1890 ...	770,706
„	1891	„ „	1898 ...	347,006
	Total			3,754,899

It will be observed that the rate by which the population declined diminished rapidly between 1851 and the decade ending in 1881, in correspondence with a similar decrease in the rate of emigration.

The year 1876 was a high water mark in the condition of Ireland. The emigration, which had been as high as 190,322 in the year 1852, was only 37,587 in the year 1876, and the Registrar-General estimated that there was a small increase in the population of Ireland between the middle of 1876 and the middle of 1877.

The rate of emigration has fluctuated greatly from year to year, according to the condition of Ireland, and the attraction caused by the prosperity of other countries, especially of the United States. After 1852, the number of emigrants fell, in 1861, to 64,292, but rose again in 1863 to 117,229, falling again, in 1868, to 61,018, and rising again, in 1873, to 90,149. As I have mentioned, the number fell to a low point in 1876, but after 1876 we had three bad harvests, that of 1879 being the worst since 1816.

These bad harvests were followed by the Land War and political agitation, and in 1883 the number of emigrants rose to 108,724. Since that year, the rate has again declined, and in 1897, the number of emigrants was only 32,535, and in 1898,

32,241. This is the lowest number recorded in any year since the famine. The Registrar-General estimates that there was a small increase in the population of Ireland during the last quarter of 1898. Let us hope that the tide has at last turned. and that the drain on our population has ceased.

Irish Prosperity dependent on the Seasons.

The prosperity of Ireland, we all know, must always be dependent on the character of the seasons, so long as agriculture continues to be so largely the sole means of support for the great mass of the population, and the geographical position of our island exposes us to a peculiarly fitful climate.

The proportion of the population dependent upon agriculture, as compared with other industrial pursuits, is now less than it was, and the total population being so largely reduced, the country is able to live through vicissitudes of seasons that in former times meant prostration and famine.

I have remarked that the harvest of 1879 was the worst since 1816. With regard to that year, I take the following from Miss Martineau's "History of England During the Thirty Years' Peace":—"The heavens lowered, intense frosts prevailed "in February, the spring was inclement, the temperature of the "advancing summer was unusually low, and in July incessant "rain and cold stormy winds completed the most ungenial "season that had occurred in this country since 1799." Compare with this the record for 1879, which year, also, was ushered in by an unusually cold and protracted winter. I take the following from "Remarks on the Climate of Dublin, by Dr. J. W. Moore";—"As an instance of a cold year, 1879 stands out in "bold relief. . . Every month was colder than usual. . . "There was a singular absence of summer heat in July and "August. . . The low temperature was accompanied with—"to some extent dependent upon—a continuous, rather than a "heavy rainfall. During the six months ending September "30th, rain fell on 125 out of 183 days, that is to say, on two "out of every three days."

The Price of Wheat and Free Trade.

In 1816, by an Act passed the previous year, the importation of wheat was prohibited until the *Gazette* price rose to 80*s.* per quarter. In January of 1816 the average price of wheat was 52*s.* 6*d.*, in May it was 76*s.* 4*d.*, at the end of the year it had risen to 103*s.*, in June, 1817, it was 111*s.* 6*d.*, and the average price for the year 1817 was 96*s.* 11*d.*

Trade depression resulting from the reaction after the great war, bad harvests and dear food produced distress, discontent, and political agitation, and, in 1817, for the last time in England, the Habeas Corpus Act was suspended.

The partial failure of the potato crop in Ireland, in 1845, led to the Repeal of the Corn Laws in June, 1846. After the total failure of the potato crop in that year, the *Gazette* price of wheat, which was only 52*s*. 1*d*. in June, rose to 92*s*. 10*d*. in June, 1847, but fell again to 47*s*. 7*d*. by June, 1848.

After the bad harvest of 1879, the highest *Gazette* price of wheat was only 48*s*. 10*d*. in October, 1879, and the average for 1880 was 44*s*. 4*d*., as compared with an average of 69*s* 9*d*. for 1847, and 96*s* 11*d*. for 1817.

Free Trade and the steamship have made the world our granary, and freed our chief item of food from the control of local weather conditions. There are people who still sigh for the good old times of the Corn Laws. I had two relatives who used to tell me with reference to the bad harvest of 1879, how they recollected the bad harvest of 1816, when they were at school at Ballitore. The grain malted in the fields owing to the constant rain in the autumn. The flour would not rise. The bread was like dough, and when they got it at school, they used to knead it in lumps, and throw them to the ceiling, where they stuck. These men were two of the most uncompromising Free Traders that I have ever known, and I think the recollection of the bad bread of 1816 had something to do with their economic convictions. After 1879, we had troubles enough without being forced to pay double prices for bad bread. From this we were saved by Free Trade.

Agricultural Statistics.

It is commonly said that Free Trade has been the ruin of Ireland. But Irish farmers prospered after the abolition of the Corn Laws, and at no time did they seem more prosperous than in the early seventies. The change from tillage to pasture was largely due to the great growth of manufacturing industry in England, producing a corresponding demand for beef and mutton, bacon, butter and eggs, to the great advantage of Irish farmers.

What has hit Ireland so severely in recent years has been the improved means of ocean transport, which has enabled countries thousands of miles away to compete with Ireland in the supply to England of these perishable commodities, out of which the farmers of Ireland had for a generation, up to the end of the seventies, been taking their best profit.

The prices of live stock appear to have reached their highest level in 1875 and 1876. In "Thom's Directory" a table will be found giving the number and average prices of cattle and sheep sold annually at Ballinasloe Fair. I extract the figures as to prices for 1855, 1865, 1875, 1885, 1895, and 1898, which show a considerable fall in the price of the better classes of animals since 1875 :—

AVERAGE PRICES OF CATTLE AND SHEEP SOLD AT BALLINASLOE FAIR.

YEAR.	CATTLE (Oxen).				SHEEP (Wedders).			
	1st Class.	2nd Class.	3rd Class.	4th Class.	1st Class.	2nd Class.	3rd Class.	4th Class.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1855, .	21 17 6	18 5 0	15 0 0	9 5 0	3 0 0	2 9 0	2 0 0	1 14 0
1865, .	22 10 0	18 10 0	13 10 0	9 0 0	4 0 0	3 5 0	2 10 0	2 5 0
1875, .	25 10 0	18 10 0	12 10 0	7 0 0	4 0 0	3 3 0	2 5 0	1 15 0
1885, .	19 0 0	16 10 0	14 0 0	11 0 0	3 0 0	2 10 0	2 5 0	2 0 0
1895, .	16 10 0	14 0 0	11 5 0	10 0 0	3 0 0	2 12 0	2 3 0	2 0 0
1898, .	16 15 0	14 5 0	11 7 6	9 5 0	2 17 6	2 9 0	1 18 0	1 17 0

In the Appendix to the Report of the Royal Commission on the Land Law (Ireland) Acts, 1881—1885, a table of agricultural

prices is given furnished by the Registrar-General, from which I extract the following figures for 1855, 1865, 1875, and 1885:—

MEAN OF MINIMAL AND MAXIMAL PRICES OF IRISH AGRICULTURAL PRODUCE.*

Year.	Milch Cows.	Cattle. 2 Year Old.	Cattle. 1 Year Old.	Lambs.	Beef, per 112 lbs.	Mutton, per 112 lbs.	Pork, per 112 lbs.	Butter, per 112 lbs.	Eggs, per 120.	Wool, per lb.
	£ £	£ £	£ £	s. d. s. d.	s. d. s. d.	s. d. s. d.	s. d. s. d.	s. d. s. d.	s. d. s. d.	s. d. s. d.
1855	12 to 16	6 to 11	4 to 7	18 0 to 25 0	50 0 to 58 0	56 0 to 60 8	49 0 to 52 0	84 0 to 98 0	4 10 to 5 0	1 0 to 1 1
1865	14 to 20	8 to 12	4 to 9	20 0 to 40 0	63 0 to 67 6	72 4 to 77 0	55 0 to 58 0	118 0 to 120 0	6 0 to 7 0	1 6 to 2 0
1875	16 to 24	10 to 12	7 to 9	25 0 to 42 0	70 0 to 87 6	65 4 to 84 0	58 0 to 66 0	115 0 to 140 0	7 3 to 9 0	1 5 to 1 8
1885	11 to 20	7 to 13	4 to 8½	18 0 to 50 0	40 0 to 70 0	40 10 to 88 8	34 6 to 46 1 (1886)	54 0 to 136 0	5 9 to 11 3	0 6½ to 0 9½

* Cereals and Potatoes omitted.

These figures similarly show the rise in prices between 1855 and 1875, and the fall since. The great importance of these prices to Ireland is apparent when considered in relation to the number of live stock in Ireland at different periods, and especially in relation to the exports of live stock to Great Britain.

The following tables, taken from "Thom's Directory," will make this clear:—

NUMBER OF LIVE STOCK IN IRELAND.

—	1851.	1855.	1875.	1895.	1898.
Horses and Mules,	543,312	576,144	548,119	660,147	620,320
Asses,	136,981	151,742	180,355	224,408	231,533
Cattle,	2,967,461	3,564,400	4,115,288	4,358,032	4,486,242
Sheep,	2,122,128	3,602,243	4,254,027	3,913,449	4,287,274
Pigs,	1,084,557	1,177,605	1,252,056	1,338,464	1,253,682
Goats,	235,313	283,970	270,691	304,820	296,291
Poultry,	7,470,694	8,366,629	12,139,138	16,369,525	17,683,960

The tables as to live stock show the rapid growth, after the famine, between 1851 and 1855, in the number of cattle and sheep, and the less rapid progress between 1855 and 1875, and between 1875 and 1895. I should, however, mention that after the bad harvest of 1879 there was a considerable reduction in the number of live stock, from which, as the recent figures show, there has been a substantial recovery in each class from the lowest point touched since that date.

Horses stood at	561,000	in 1883
As compared with	620,000	„ 1898
Cattle at	3,921,000	„ 1880
As compared with	4,486,000	„ 1898
Sheep at	3,071,000	„ 1882
As compared with	4,287,000	„ 1898
And Pigs at	849,000	„ 1880
As compared with	1,253,000	„ 1898

The exports of live stock vary so much from year to year, that I have given the averages of periods of three years, instead of the figures for particular years:—

EXPORTS OF LIVE STOCK FROM IRELAND TO GREAT BRITAIN.

Average of 3 Years.	Cattle.	Sheep.	Pigs.
1854, 5, and 6, .	242,280	482,830	241,293
1864, 5, and 6, .	331,417	367,486	408,740
1874, 5, and 6, .	634,052	783,007	440,423
1884, 5, and 6, .	691,234	632,196	425,509
1894, 5, and 6, .	766,707	782,328	580,925
Year 1898,* . .	803,362	833,458	588,785

These figures show a large growth in the export trade between 1855 and 1875. Between 1875 and 1885 there was no progress.

* The figures for 1898 have been kindly supplied by the Veterinary Department; the other figures I have taken from "Thom's Directory."

The average for the three years, 1884—1886, shows a falling off in the exports of sheep and pigs, and a small increase in the exports of cattle, as compared with the figures for the three years, 1874—1876. Since 1885 the trade has again grown, the average for the three years, 1894—1896, largely exceeding the figures for 1874—1876, in both cattle and pigs, while the figures for the past year, 1898, show a considerable further increase in the exports of cattle and sheep.

That the bad harvests of 1877 to 1879 should lead to a reduction in the number of live stock was but natural. In "Thom's Directory," a table will be found giving the estimated annual produce and value of the principal Irish crops. According to this table, the total value of the agricultural produce of Ireland for the three years,

1874 to 1876, was	£104,905,335
And for 1877 to 1879	£84,154,415
Or an average for 1874–76 of.....	£34,968,445
As compared with	£28,051,472

for 1877–79, showing a loss to the farmers of Ireland of over £20,000,000 in the latter, as compared with the former three years. Comparing 1876, which I should state was a good year, with 1879, we have an estimated value of the crops in the former year of £36,528,831, against only £22,743,006 in 1879.

TOTAL VALUE OF PRINCIPAL CROPS.

	£		£
1874, . .	32,390,501	1877, . .	28,653,265
1875, . .	35,986,003	1878, . .	32,758,144
1876, . .	36,528,831	1879, . .	22,743,006
Total, .	104,905,335	Total, .	84,154,415
Average, .	34,968,445	Average,	28,051,472

When we take the figures relating to the three particular crops—potatoes, oats, and turnips—which are specially impor-

tant to the small farmers, the comparison is still more unfavourable, as the following table will show:—

COMPARATIVE VALUE OF PARTICULAR CROPS.

Crops.	1876.	1879.
	£	£
Potatoes, . .	12,464,382	3,341,028
Oats, . .	8,566,078	6,213,052
Turnips, . .	2,724,490	1,234,682
Total, . .	23,754,950	10,788,762

The potato crop of 1879 was less than one-third of the value of the crop of 1876; the oat crop was just two-thirds, and the turnip crop less than one-half, the total for the three being only £10,788,762 for 1879, as compared with £23,754,950 for 1876.

When we consider the enormous loss occasioned by these bad harvests, and the subsequent serious fall in the prices of live stock and other agricultural produce, we can scarcely be surprised at the strength of the land agitation and the demand for the reduction of rents.

Importations of Animal Food into the United Kingdom.

The following table, taken from the "Statistical Abstract,"* will show the enormous growth in the importation of various forms of animal food into the United Kingdom in recent years:—

* The Statistical Abstract for the United Kingdom presented to Parliament annually by the Board of Trade.

QUANTITIES OF IMPORTS OF ANIMAL FOOD.

ARTICLES.	1855.	1865.	1875.	1885.	1895.
Cattle, . . . No.,	97,527	283,271	263,684	373,078	415,565
Sheep, . . . „	162,642	914,170	985,652	750,886	1,065,470
Bacon, . . . Cwt.	241,494	713,346	2,638,875	4,058,454	5,352,936
Beef, . . . „	230,755	244,431	215,581	1,141,866	2,410,993
Butter and Margarine, . „	447,266	1,083,717	1,467,870	2,401,373	3,765,830
Cheese, ...	384,192	853,277	1,627,748	1,833,832	2,133,819
Eggs, . . Millions,	99	364	741	1,002	1,526
Meat, including Mutton, . Cwt.,	—	—	316,327	1,128,403	1,093,621* 2,611,435†
Pork, . . . „	204,326	222,419	266,663	383,636	508,452

* Meat, Salted or Preserved, &c. † Fresh Mutton.

It will be seen that since 1865 the increase in the number of live animals imported has been but small. The great increase has been in fresh and preserved meats and in cheese, butter, and eggs. The importation of live animals has varied widely from year to year. The number of cattle, which—

In 1885 was	...	...	...	373,078
„ 1890 rose to	...	...	...	642,596
„ 1893 fell to	...	...	...	340,045
„ 1897, rising again to,		...	...	618,321

In the case of sheep, the variations have been still wider,—

In 1885 the number being		...	...	750,886
„ 1886,	...	...	...	1,038,965
„ 1893 only,	...	...	...	62,682
„ 1895 rising again to		...	...	1,065,470
and „ 1897 falling again to		...	...	611,504

It would appear from these figures that the importation of live animals is not likely to exhibit much further growth.

The increase in the importation of fresh meat has been much more rapid, and seems likely to continue. The figures for fresh beef were separated from those for salt beef in 1881.

In 1881 the importation of fresh beef was	817,295	cwt.
„ 1885	902,951	„
„ 1895	2,191,037	„
„ 1897	3,010,387	„

The figures for fresh mutton were separated from those under the general heading of meat in 1882.

In 1882 the importation of fresh mutton was	189,847	cwt.
„ 1885	572,868	„
„ 1895	2,611,435	„
„ 1897	3,193,276	„

The figures for margarine were separated from those for butter in 1886

In 1886 the importation of butter was..	1,543,566	cwt.
„ 1895	2,825,662	„
„ 1897	3,217,802	„

The recent figures as to the importation of margarine show that it is not now a growing trade.

The importance of these importations of food will be more easily appreciated when the figures as to value are considered instead of the figures as to quantity. The following are the figures for 1875 and 1897:—

DECLARED VALUE OF IMPORTS OF ANIMAL FOOD.

Articles.	1875.	1897.
	£	£
Animals, Cattle, . .	4,885,462	10,460,996
„ Sheep, . .	2,185,750	919,096
Bacon and Hams, . .	6,982,470	12,549,812
Beef, Fresh, . .	454,337	5,783,667
„ Salted, . .		215,901
Butter and Margarine, . .	8,502,084	B. 15,916,917 M. 2,485,370
Cheese, . . .	4,709,508	5,885,521
Condensed Milk, . .	—	1,398,363
Eggs, . . .	2,559,860	4,356,807
Lard, . . .	1,634,769	1,993,143
Meat, Fresh or Salted, . .	419,019	727,273
„ Preserved, . .	592,196	1,702,315
Mutton, Fresh, . .	—	4,827,868
Pork, . . .	590,356	1,018,821
Poultry, Game and Rabbits, .	328,044	1,274,219
Total, .	£ 33,843,855	£71,516,089

In 1855 the values were computed by the Customs authorities at estimated average prices, instead of being declared by importers as in recent years. The total value of the articles imported in 1855, corresponding with the figures of £33,843,855 for 1875, and £71,516,089 for 1897, was only £6,830,964. In 1865 the corresponding figure had grown to

£19,127,330. It must not be forgotten, when considering the enormous increase in importations of food, that the population of the United Kingdom increased by over ten millions between 1851 and 1891, or by close on forty per cent.; and the estimated increase between 1891 and 1897 is over two millions, and these additional millions naturally require a large increase in the supply of food.

Whether any changes in methods of production or distribution would enable the farmers of the United Kingdom to provide a larger proportion of these necessary food supplies, it is not my purpose here to consider, nor is it of any use to speculate on what the result might have been in regard to agricultural industries, had the Free Trade policy not been adopted by the nation a generation ago.

The fall in the prices of Agricultural Produce.

Agricultural depression resulting from the fall in prices of produce is not peculiar to the United Kingdom, but has been felt in all the great producing countries of the world.

Whether the fall in prices is due wholly, or in part, to the appreciation of gold, I will not stop to enquire, but if we accept the dictum that the man who makes two blades of grass grow where only one grew before, is a benefactor of mankind, we ought to be prepared to accept the natural result of his beneficence in bringing about a fall in prices. Whether the supply of gold be or be not an important factor in the variation of prices we should recollect that the great aim of every producer is to reduce the cost of production. The chemist, the electrician, the engineer, the mechanic, the organizer of labour, the provider of means of transit, and the distributor, are each and all striving to reduce the cost of production and distribution. To the success of their combined efforts must be attributed some part of the great fall in prices.

It is of interest to note that the fall in the prices of the perishable supplies of animal food, in the production of which Ireland is specially concerned, has been, relatively, much less severe than the fall in the prices of other commodities.

In 1886, and regularly since, Mr. Augustus Sauerbeck has contributed to the journal of the Royal Statistical Society very valuable papers on the course of prices, in which he shows the annual fluctuations in the prices of forty-five selected commodities by means of tables of index numbers. He has made the average price of each item for the eleven years, 1867 to 1877, when prices were high, his basis. Taking these averages as 100 in each case, he shows the annual variation from these averages by means of index numbers, which vary from the figure of 100 in percentages proportionate with the variations of the prices of commodities in each year from the average of the prices of the same commodities for the years from 1867 to 1877:—

MR. SAUERBECK'S PRICES OF COMMODITIES.

—	Vegetable Food. (Corn, &c.)	Animal Food. (Meat, &c.)	Sugar, Tea, and Coffee.	Total Food.	Minerals.	Textiles.	Sundry Materials.	Total Materials.	Grand Total.
Average Prices, 1867-'77,	100	100	100	100	100	100	100	100	100
Year 1898, . .	67	77	51	68	70	51	63	61	64
Fall, per cent., .	33	23	49	32	30	49	37	39	36
Highest Prices between 1867 and 1877, .	(1867.) 115	(1876.) 108	(1873.) 106	(1873.) 107	(1873.) 141	(1872.) 114	(1872.) 108	(1872.) 115	(1873.) 111
Lowest Prices since 1877,	(1896.) 53	(1896.) 73	(1898.) 51	(1896.) 62	(1895.) 62	(1898.) 51	(1897.) 62	(1897.) 59	(1896.) 61
Fall from Highest to Lowest, per cent.,	62	35	55	45	79	63	46	56	50

The foregoing table will show firstly, the difference between the average prices for 1867—77 and the prices in 1898, and secondly, the difference between the highest price in any year since 1867, and the lowest price in any year since 1867. The fall from the highest year, 1876, to the lowest year, 1896, in the case of animal food, has been only thirty-five per cent., as compared with a fall of sixty-two per cent. in corn, &c., and seventy-nine per cent. in minerals, and sixty-three per cent. in the raw materials of textiles. And the fall in animal food from the average of 1867—77 to 1898 has been only twenty-three per cent., as compared with thirty-two per cent. in the total of all foods, and thirty-six per cent. in the total of food and materials combined.

It would appear as though prices had reached their lowest, and were now tending upwards.

If a deficiency in the supply of gold was a cause of the fall in prices after 1875, the great increase in the production of gold in the past few years ought to have a reverse effect now. The production of gold last year was, in round numbers, £60,000,000, or about three times the amount produced in 1882 or 1883, and about double the production in the years succeeding the discoveries in California and Australia between 1851 and 1861.

It should be recollected that the loss consequent on the fall in prices only affects the farmer to the extent of the produce which he sells off his farm. The small farmers of Ireland consume on their farms, either for themselves or for their live stock, a considerable proportion of the produce of their farms, and to this extent they are uninjured by the fall in prices, while on the other hand, they gain by the fall in the prices of the various articles and commodities they buy for farming or domestic use. Taking Ireland as a whole, the country must have saved by the fall in the prices of its imports, a large proportion of what it has lost by the fall in the prices of its exports.

There seems no reason for taking a pessimistic view of the future of Irish agriculture, but neither does there seem reason to anticipate that agriculture alone will support an increase in population. In default of growth in other forms of industry we cannot but anticipate a continuance in the outflow of emigrants, though probably at a reduced rate.

Rate of Emigration from European Countries compared.

People sometimes speak as if emigration were peculiar to Ireland. The outflow from Ireland has certainly been unprecedented in its extent, but from most countries in Europe there is regularly a more or less considerable emigration.

As already stated, there have been wide variations in the rate of emigration from Ireland. In 1852 the rate was thirty per thousand of the population.

In	1858	10 per	1,000
„	1863	20 „	„
„	1876	7 „	„
„	1883	21 „	„
„	1898	7 „	„

For the purpose of comparison I have prepared the following table from figures given in the "Statistical Abstract"* and the "Statesman's Year Book," showing the population per square mile, and the emigration per thousand of the population, in some of the principal countries of Europe in recent years. I have given, in most cases, the years of highest and lowest emigration :—

Countries.	Population per Square Mile.		Emigration per 1,000 of Population.	
England and Wales,	1881	446	1883	7
	1891	498	1896	3½
Scotland,	1881	125	1883	8½
	1891	135	1896	4·2
Ireland,	1881	159	1883	20
	1891	144	1898	7
France,	1896	188	—	—
Belgium,	1896	571	1892	3·7
			1896	3·0
Saxony,	1895	654	1892	1·4
			1896	·35
Norway,	1891	16.1	1888	10·7
			1894	2·8
Sweden,	1896	28·7	1888	10·5
			1894	2·7
Denmark,	1890	146	1892	4·8
			1896	1·3
Prussia,	1895	236	1891	2·7
Baden,	1895	296	1891	3·6
Bavaria,	1895	198	1891	2·0
Wurtemberg,	1895	276	1891	3·0
Portugal,	1890	135	1885	2·8
			1895	9·6
Spain,	1895	93	1890	3·6
			1896	9·1
Italy,	1897	284	1890	6·9
			1896	9·7

* The "Statistical Abstract for the Principal and other Foreign Countries" presented to Parliament annually by the Board of Trade.

From France there is practically no emigration, and the population is almost stationary, the deaths in some recent years actually exceeding the births. Belgium and Saxony are the most thickly populated countries in Europe, but, although there is a considerable emigration from Belgium, as the number of immigrants to Belgium somewhat exceed the emigrants, the rate of population is not affected. From Saxony the emigration is very small, and from Germany generally, although the aggregate number of emigrants is very considerable, the proportion per thousand of the population is much below the proportion in the lowest year of emigration from Ireland. From Norway and Sweden in the North, and from Portugal, Spain, and Italy in the South, there is a considerable emigration, exceeding in some years the proportion per thousand of the population to which the emigration from Ireland has now fallen.

The great majority of the emigrants from Ireland, Germany, and Scandinavia, go to North America, whilst the emigrants from Southern Europe for the most part go to South America. In recent years, however, many of the Italian emigrants have gone to the United States, and there is always a considerable emigration from Italy to the other countries of Europe.

Marriage, Birth, and Death Rates.

I now turn to the consideration of a subject which is intimately connected with the depletion of the population of Ireland by emigration—the marriage, birth, and death rate.

There is a general impression, especially in England, that the Irish are very improvident in the matter of early marriages and large families, and that to this cause is largely due the want of prosperity in Ireland. This prevalent idea is exactly the reverse of fact.

The marriage rate, that is to say, the number of marriages per annum per thousand of the population, is lower in Ireland than in any country in Europe, and the birth rate is lower than in any country save France.

The following table will give the comparative figures for Ireland, England, and Scotland, kindly supplied by the Registrar-General, and those for some of the principal countries in Europe, extracted from the "Statistical Abstract":—

[TABLE.

MARRIAGES, BIRTHS, AND DEATHS PER 1,000 OF POPULATION.

Countries.	Year.	Marriages.	Births.	Deaths.	Excess of Births over Deaths.
Ireland, 10 Years ending (average).	1881	4·7	26·3	18·3	8·0
Ireland, 10 Years ending (average).	1891	4·3	23·2	17·8	5·4
Ireland, Year	1896	5·1	23·6	16·6	7·0
England and Wales, „	„	7·9	29·7	17·1	12·6
Scotland, „	„	7·2	30·9	16·9	14·0
France, „	„	7·5	22·5	20·0	2·5
Belgium, „	„	8·1	29·0	17·5	11·5
Holland, „	„	7·5	32·7	17·2	15·5
German Empire, „	„	8·2	36·3	20·8	15·5
Saxony, „	„	9·2	39·8	22·4	17·4
Baden, „	„	7·9	33·5	20·3	13·2
Austria, „	„	7·9	37·9	26·3	11·6
*Hungary, „	„	8·1	40·3	28·8	11·5
Italy, „	„	7·1	35·1	24·3	10·8
Sweden, „	1895	5·9	27·5	15·2	12·3
Norway, „	„	6·5	30·6	15·7	14·9

*Hungary is the country of early marriages, and of high birth and death rates:—"Early marriages are a distinctive feature of Hungarian life. According to the last census exactly two-thirds of the people over 16 years of age were married. . . . The proportion of marriages per 1,000 persons over 15 years old from 1888 to 1893 is reckoned at 78, a very high figure indeed: and 40 per cent. of the brides are under 20 years of age. . . . . The actual birth-rate is very high as compared with Western Europe, and during a long period there has been an annual average of 44 children born alive to every 1,000 inhabitants. . . At every period of life the mortality is greater than in Western Europe, and is especially high in the period of childhood."—See Report from our Consul-General at Buda-Pesth to Lord Salisbury in 1897. [C 8648-38.]

It will be seen that Sweden and Norway come nearest to Ireland in the marriage rate, and that France is a little lower in the birth rate. In Germany, Saxony has the highest, and Baden the lowest marriage and birth rates.

The excess of the birth rate over the death rate is very small in Ireland, and therefore even a moderate degree of emigration must have a marked effect on the population.

The low marriage and birth rate in Ireland are the natural result of the constant outflow of emigrants at marriageable and child-bearing ages.

Condition of the people in Ireland as to Marriage compared with the condition in England and Scotland.

The following table, compiled from the Census returns, will show the proportion of the population of Ireland 17 years of age and upwards that were unmarried at the date of each Census since 1841:—

PROPORTION PER CENT. OF THE POPULATION, 17 YEARS OF AGE AND UPWARDS, UNMARRIED.

YEAR.	Leinster.	Munster.	Ulster.	Connaught.	IRELAND.
1841	44·2	41·7	40·1	37·7	41·2
1851	45·0	44·4	43·7	41·7	44·0
1861	46·5	41·9	43·3	39·0	43·1
1871	45·2	37·4	43·0	36·6	41·2
1881	46·6	42·2	44·9	39·2	43·8
1891	49·3	46·6	47·2	43·1	47·0

It will be seen from these figures that the proportion of the population unmarried has increased by 5·8 per cent. since 1841, and that this increase is general in all four provinces.

In the following table I give a comparison between England, Scotland, and Ireland, as to the condition of the population in relation to marriage at the Census of 1861 and 1891:—

PROPORTION PER CENT. OF THE POPULATION, 15 YEARS OF AGE AND UPWARDS, UNMARRIED AND MARRIED.*

	Year.	Unmarried.	Married.	Widowed.
England and Wales,	1861	37·79	53·56	8·65
	1891	39·58	51·88	8·54
Scotland,	1861	44·27	46·38	9·35
	1891	45·18	46·02	8·80
Ireland,	1861	47·13	43·13	9·74
	1891	50·78	39·04	10·18

In this table the age of the population is taken at 15 years and upwards, not 17 years and upwards, as in the preceding table. The fact is, the proportion of early marriages is much greater in England and Scotland than in Ireland. It will be seen from this table that the proportion of the population unmarried is much greater in Ireland than in England or Scotland, and that whilst the percentage of the unmarried has increased in all three countries since 1861, the disparity between Ireland and England has increased from 9·34 per cent. in 1861 to 11·20 per cent. in 1891.

The following table will show that less than one per cent. of the population in the United Kingdom are married under the age of 20 years, and that, between the ages of 20 and 25, fourteen per cent. more of the population are unmarried in Ireland than in England, and eight per cent. more than in Scotland:—

PERCENTAGE OF THE POPULATION BETWEEN THE AGES OF 15 AND 25 UNMARRIED IN 1891.*

AGES.	England and Wales.		Scotland.		Ireland.	
	Males.	Females.	Males.	Females.	Males.	Females.
15 and under 20, .	99·62	98·05	99·79	98·76	99·88	99·10
20 and under 25, .	80·56	70·11	86·64	76·42	94·30	84·62

* The figures for 1861 are taken from the Census of Ireland, 1861, and the figures for 1891 have been kindly supplied to me from the General Register Office.

I think these figures completely disprove the notion that the inhabitants of Ireland are improvident in relation to marriage. They show, however, at the same time, that even if emigration from Ireland should fall to the rate of emigration from other European countries, there is no reason to anticipate much growth in the population of Ireland within an early period.

I pass now from the condition of the population and of agriculture to the consideration of some of the figures which indicate the financial circumstances of the country.

Registrar-General's Returns as to Banking and other Statistics.

The Registrar-General makes half-yearly returns of certain statistics as to banking, investments, and railways, in continuation of the returns formerly made by the late Doctor Hancock.

Taking first the figures as to Bank Note circulation, I may remark that though they are of great interest, especially to banks of issue, they do not give any definite indication as to the condition of the country. The tendency in recent years in Ireland has been rather towards a reduction than an expansion in the note circulation. The greater the banking facilities and the more extended the use of cheques, the less the need for note circulation to carry on the business of the country. In Ireland, notes are largely used for the conduct of the business of fairs and markets, and the reduction in the price of live stock *pro tanto* reduces the need for bank notes. There can be no doubt that there is much more gold in circulation in Ireland now than there used to be, and the use of cheques in the payment of accounts has become universal.

The Bank Note circulation in Ireland was:—*

In December,	1855	£7,043,000
„ „	1875	£7,967,000
„ „	1895	£6,459,000

In England and Wales the circulation at the same dates was:*

In	1855	£26,455,000
„	1875	£32,328,000
„	1895	£27,591,000

Notwithstanding the enormous growth in the trade of England in forty years, practically the same amount of notes suffices for its conduct.

It will be observed that both in England and Ireland the circulation rose between 1855 and 1875, and has fallen since. Possibly this is due to the high range in the prices of commodities in 1875, and the fall in prices since.

* The Statistical Abstracts.

In Scotland, on the other hand, the note circulation continues to expand. It was:—*

In 1855	£4,400,000
„ 1875	£6,277,000
„ 1895	£7,326,000

There is a still more marked contrast when we look at the figures as to the note circulation in France. Converting francs into £ sterling, the circulation of the Bank of France reached—*

In 1860	£32,000,000
„ 1875	£108,000,000
„ 1894	£147,000,000

Another test of Irish prosperity given by Doctor Hancock and the Registrar-General is the amount of Government Funds and India Stock entered in the books of the Bank of Ireland. The figure for 1857, the highest recorded, was £42,217,000—the corresponding figure for 1898 was £20,525,000, exclusive of Guaranteed Land Stock, the amount of which was £4,735,000.

Since 1857 the National Debt has been reduced by nearly one-fourth, and it is only natural that there should have been in the same period a large reduction in the amount of the debt held in Ireland.

The reduction in the rate of interest on Consols, and the large number of other forms of investment, yielding a higher rate of interest, that have been rendered legal as trustee securities, has led to the sale of Consols by Irish holders.

On the other hand, since 1855 £24,258,162 has been invested in Irish railways.

RAILWAYS.*

Year.	Miles.	Capital.
1855	987	£15,208,295
1897	3,168	£39,466,457
Increase	2,181	£24,258,162

In 1897, 121 miles of tramways had been constructed, at a cost of £1,546,521.*

In the same year, 1897, there were 976 public companies registered in Dublin under the Companies Act of 1862, having a total paid-up capital of £31,396,497. Much of this capital no doubt represented merely a transfer from shareholders to vendors, but there must also have been a considerable proportion of it invested in new enterprise of various kinds.

The deposits and cash balances in Irish banks have risen from £12,285,000 in 1855, to £39,438,000 in 1898, and the deposits in the Savings Banks have risen from £1,615,000 in 1855, to £9,500,000 in 1898.

* The Statistical Abstracts

DEPOSITS AND CASH BALANCES IN IRISH BANKS.*

1855	£12,285,000
1865	£18,619,000
1875	£31,815,000
1885	£29,370,000
1895	£39,008,000
1898	£39,438,000

DEPOSITS IN SAVINGS BANKS.*

1855	£1,615,000
1865	£2,044,000
1875	£3,064,000
1885	£4,419,000
1895	£7,678,000
1898	£9,500,000

These figures clearly indicate that notwithstanding agricultural depression and a declining population, the capital of the country is growing and the means of the people increasing.

If we consider these figures as to banking capital in relation to the diminished number of the population we shall find that in both the Savings Banks and the ordinary banks the deposits per head of the population are now four times as great as they were in 1855.

It may be noted that I have made 1855 my starting point in many comparisons. I have done so in order to get away some years from the immediate effects of the famine to a time when the condition of affairs had become normal.

Expenditure and Debts of Local Authorities.

In the "Statistical Abstract" tables are given showing the expenditure in each division of the United Kingdom by the various Local Authorities.

The earliest figures are for the year 1867—8. In that year the total expenditure by Local Boards in Ireland was £3,097,711. In 1895—6 the annual expenditure had risen to £5,093,658. In Scotland in the same period the total annual local expenditure rose from £2,580,600 to £11,516,116.

In the year 1895—6, £709,376 of the Irish expenditure was provided by loans and £1,897,144 of the Scotch expenditure.

The debts due by Local Authorities are growing rapidly. The amount of the outstanding loans in Ireland is not stated in the "Statistical Abstract," but the Scotch Local Debt, including the capitalized value of annuities, was £38,452,583 in 1896, and the English Debt in the same year was £242,305,996.

We hear a great deal about the reduction of the National Debt, but we are building up our local debts more rapidly than we are reducing the National Debt. The total of the local debts of England and Scotland was increased by £31,402,316 in the three years ending in 1896. In

* Dr. Hancock's and the Registrar-General's Returns.

the same three years the National Debt was reduced by £21,107,459. We borrow £10 with one hand, while we repay £7 with the other.

Tonnage of Shipping entering our Ports.

As an indication of the progress of the trade of the country, the tonnage of shipping entering the ports is of interest.

The following table shows that the total tonnage of vessels entering the Irish ports doubled between 1855 and 1875, but that between 1875 and 1895 the increase was much less rapid, some ports declining while others advanced.

TONNAGE OF VESSELS ENTERED AT IRISH PORTS WITH CARGOES AND IN BALLAST.*

Ports.	1855.	1875.	1895.
Ballina,	4,949	14,468	—
Belfast,	765,519	1,611,611	2,344,886
Coleraine,	32,278	52,664	65,524
Cork,	352,098	698,068	700,492
Drogheda,	130,059	136,573	131,204
Dublin,	910,393	2,065,650	2,308,565
Dundalk,	103,850	152,931	131,072
Galway,	12,399	36,570	43,991
Limerick,	83,585	138,913	182,291
Londonderry,	214,990	275,073	337,765
Newry,	86,482	316,898	283,232
New Ross,	50,715	54,429	—
Skibbereen,	12,974	20,952	58,718
Sligo,	43,178	81,478	100,525
Strangford,	22,595	—	—
Tralee,	18,817	36,312	71,554
Waterford,	204,292	531,549	537,254
Westport,	7,549	14,547	41,870
Wexford,	47,971	67,749	81,931
Youghal,	—	23,999	—
†Total,	3,104,693	6,332,434	7,420,869

* Thom's Directory.

† Ballina, New Ross, Strangford, and Youghal have ceased to be Customs Ports, and their returns are now included in the returns from other Ports.

Unfortunately these figures do not afford us a fair comparison as to the actual amount of trade between recent and former years. They give us only the net registered tonnage of the shipping entering the ports, not the weight or bulk of cargo carried.

Interpretation of the Law of Measurement of Ships.

Since 1875 changes have been made in the law as to the measurement of ships, and as to the interpretation of the law. The deductions now made from the gross measurement of ships, in arriving at the net register, on which harbour dues are paid, are so great, that the net registered tonnage no longer bears any definite relation to the carrying capacity of a ship.*

As an illustration of this condition of affairs, I may mention that the report of the Cork Harbour Board shows that while in 1879 304,003 tons of coal were imported in vessels having a total registered tonnage of 196,409 tons, in 1897, 375,655 tons of coal were imported in vessels registered at 138,062 tons.

In the case of Dublin, I learn from figures supplied to me officially that while in 1881 836,000 tons of coal were imported in vessels having a total register of 457,514 tons, in 1898 917,559 tons of coal were imported in vessels registered at 369,199 tons.

That is to say, that in Cork in 1879, one ton of shipping carried 1·54 tons of coal, and in 1897 one ton of shipping carried 2·79 tons of coal. In Dublin, in 1881, one ton of shipping carried 1·82 tons of coal, and in 1898 one ton of shipping carried 2·48 tons of coal.

The result of the reduction in the net registered tonnage of colliers in proportion to their carrying capacity means a saving to the coal importers, and a loss of dues to the Port of Dublin at the rate of £3,000 a year in 1898, as compared with 1881.

* In Thom's Directory returns will be found of the annual imports of coal, and the following figures may be taken as an indication of the growth of Irish Trade:—

IMPORTS OF COAL.

Ports.	1864.	1875.	1897.
	Tons.	Tons.	Tons.
Belfast, . .	562,217	794,930	1,420,118
Cork, . . .	264,199	250,904	409,217
Dublin, . .	674,741	789,521	1,043,751
Total Irish Ports, .	2,112,315	2,591,185	4,000,511

Looking at the Dublin Customs Bill of Entry, I find, on one day in May of this year, three steam colliers, whose united registered tonnage is 501 tons, delivering 1,600 tons of coal, or more than three tons of cargo to one ton of measurement; and on another day in the same month I find two steam colliers, whose united register is 188 tons, delivering 810 tons of coal, or more than four tons of cargo to one of register.

The largest payers of dues in the Port of Dublin are the London and North Western Railway Co. They have shown especial skill in so constructing their ships as to avail themselves of the opportunities for arriving at a small net register by deductions from the gross measurement.

This Company's newest ship for the express service, the "Cambria," is 329 feet long, and has a gross measurement of 1,842 tons, and a net register of 329 tons. Their ships, the "Rose" and "Shamrock," with which their express service was conducted twenty years ago, were 291 feet long, and had each a gross measurement of 1,186, and a net register of 524 tons. But the change is more marked in the case of their cargo ships, in which the "Anglesey" to-day, 301 feet long, and having a gross measurement of 980 tons, and a net register of 134 tons, compares with the "Duke of Sutherland" of twenty years ago, which was 244 feet in length, and had a gross tonnage of 860 and a net register of 410 tons.*

I mention these facts to show that the returns of the tonnage of vessels entering the Irish ports in recent years do not afford a fair indication of the actual trade of the ports as compared with the figures in former years, and also to throw light on the following tables, which show the progress of the two chief ports of Ireland—Dublin and Belfast—since 1848.

* Lloyd's Register.

PORT OF DUBLIN

YEAR.	Tonnage paying Dues.	Income, excluding Loans.	Expenditure on Maintenance.			Outlay on New Works for periods of 10 years ending 31st December.	
			Maintenance.	Interest.	Sinking Fund.		
	Tons.	£	£	£	£		
1848, .	772,505	39,668	28,694	3,760	—	—	
1858, . .	946,189	47,842	31,770	3,711	—	1858.	£102,956
1868, .	1,420,292	58,296	31,964	3,241	—	1868.	£180,476
1878, . .	2,026,185	74,826*	28,808*	13,670	—	1878.	£471,376
1888, . .	1,600,913	54,484	23,721	20,155	9,613	1888.	£305,774
1898, . .	1,869,220	61,079	27,076	14,697	10,143	1898.	£67,100

* Excluding figures as to Ballast.

PORT OF BELFAST.

YEAR.	Tonnage paying Dues.	Revenue, excluding Loans.	Expenditure on Maintenance.			Outlay on Works for periods of 10 years ending 31st December.	
			Maintenance.	Interest.	Sinking Fund.		
		£	£	£	£		
1848, . .	506,953	23,911	9,435	12,583	—		—
1858, . .	766,574	35,471	13,480	19,956	—	1858.	£131,121
1868, . .	1,201,306	57,574	24,610	24,882	—	1868.	£187,477
1878, . .	1,605,897	103,144	54,758	30,331	—	1878.	£140,554
1888, . .	1,658,335	112,051	53,319	38,931	—	1888.	£440,123
1898, . .	2,369,908	157,550	72,768	42,373	5,783	1898.	£438,716

COMPARATIVE CAPITAL ACCOUNTS.

—	Dublin.		Belfast.	
		£		£
Surplus Revenue, applied to Outlay on Works, . .	Previous to 1869,	266,865	1849 to 1898,	352,621
	1869 to 1898,	325,006		
		591,871		
		£		£
Outstanding Debt, 1848,		94,015		276,200
Borrowed, 1848 to 1898,		507,150		1,021,141
Debt paid off, do.,		183,750		87,115
Debt outstanding, 1898,		417,415		1,210,226
At Credit of Sinking Fund, 1898, . .		24,482		17,340

I have to thank Sir Richard Martin and Sir James Musgrave, the respective Chairmen of the Port Boards of Dublin and Belfast, for the figures contained in the foregoing tables.

You will notice from these tables the rapid growth in the trade of both ports between 1848 and 1878.

Between 1878 and 1888, owing chiefly to the change in the method of calculating the net register of ships, the trade of Dublin appears to fall off considerably, and that of Belfast to remain stationary. Between 1888 and 1898 the tonnage entering the Port of Dublin has again increased, but not to the level of 1878, whilst in Belfast there has been a greater increase than in any previous decade.

The revenue of the Port of Belfast in 1898 was two and a-half times greater than the revenue of Dublin in the same year. This is due to the fact that in Belfast they have a

revenue from dues on goods equal to the revenue from the tonnage dues on ships, whereas in Dublin there are no dues on goods, with the exception of timber and building materials. As in Belfast, so in Cork, they have a revenue from dues on goods equal to the revenue from tonnage dues.

The large revenue of Belfast has enabled its Harbour Board to continue to expend large sums on works of permanent improvement; but for the past ten years the deficiency in the revenues of the Port of Dublin has necessitated the stoppage of all outlay on works not imperatively necessary. The port, in fact, has been starved, and until the shipowners and the traders of Dublin are willing to contribute the revenue necessary for the maintenance of a condition of progress, we must expect the trade of the Port of Dublin to stagnate, while that of the Port of Belfast advances, and serves a larger and larger area of Ireland.

Dublin has the advantage however of a much smaller debt than Belfast and has already repaid so much of its loans that the annual charge for interest has been substantially reduced, whilst the powers conferred on the Board by the Act of last year will enable it to still further reduce the annual charge for both interest and sinking fund, and also to borrow a considerable sum for outlay on works.

The following table shows the comparative circumstances of the ports of Belfast, Cork, and Dublin in 1898:—

[TABLE

COMPARISON OF FIGURES FOR THE YEAR 1898.*

Port.	Tonnage paying Dues.	Revenue, excluding Loans.	Expenditure, excluding Outlay on Works.			Outstanding Debt.
			Maintenance.	Interest.	Sinking Fund.	
	Tons.	£	£	£	£	£
Belfast, . .	2,369,908	157,550	72,768	42,373	5,783	1,210,226
Cork, . .	673,833	41,747	24,930	9,860	6,493†	277,558
Dublin, . .	1,869,220	61,079	27,076	14,697	10,143	417,415

*Reports of Harbour Boards. † Including depreciation.

Calculating the revenue and cost of maintenance per ton of shipping entering the three ports, we have the following comparative figures for the year 1898:—

PORT.	Revenue per ton of Shipping.	Cost of Maintenance per ton of Shipping.
	s. *d.*	*s.* *d.*
Belfast, . .	1 3·95	0 7·36
Cork, . .	1 2·86	0 8·88
Dublin, . .	0 7·84	0 3·47

These figures show that Dublin is a cheap port to the shipowner, and is maintained at a very small cost.

Necessity for improving the position of Irish Agriculture.

I have dealt at some length with the figures relating to our harbours, because the disadvantageous geographical position of Ireland makes the management of her means of communication with Great Britain and the rest of the world a matter of the utmost importance for her welfare.

Periodically, public opinion is roused on the subject of manufactures, and special efforts are made to stimulate the increase of manufacturing industries in Ireland.

The starting of manufactures where they have not previously existed is attended with many difficulties. The greatest of our Irish industries is agriculture, and it appears to me that a vigorous and sustained effort to improve its condition is of more immediate importance to Ireland than desultory attempts to start new industries.

The figures I have already given as to the enormous importations of animal food into the United Kingdom show, that, as compared with our powers of production in Ireland, the demand is practically unlimited for such items as poultry, eggs, butter, and bacon, and I may add to these, vegetables and flowers from the south-west of Ireland, with its mild climate and early springs.

For these trades to meet the competition of other producing countries the articles must be good and regular in quality—properly and attractively made up and packed, and delivered rapidly and in good condition, and at a moderate charge for carriage.

Are we doing all that can be done to bring the agricultural industry of Ireland in these respects up to the level required to enable it to compete on profitable terms with other countries?

Is our system of national education such as it ought to be in the interest of both the agricultural and manufacturing industries of Ireland?

A Commission was recently appointed by the Lord Lieutenant to "determine how far, and in what form, manual and practical instruction should be included in the educational system of the primary schools under the Board of National Education in Ireland."

That Commission reported in 1897, making very valuable recommendations for such changes in the system of primary education in Ireland as they thought requisite to make it of real value "to those (to use the words of the Commission) whose lives are to be mainly devoted to industrial arts and occupations." . . . . . "At present, no doubt, it (the system) is excellent in some respects, but in other respects it seems to us seriously deficient. Insisting too much, as it does, on the study of books, it leaves the faculty of observation, and other important faculties, comparatively uncultivated. And it neglects almost entirely that training of the hand and eye which would be so useful to the children in their after life, and which is now regarded, both in England and on the Continent of Europe, as an element of great importance in primary education." . . . . . "The great bulk of the pupils attending primary schools under the National Board will have to earn their bread by the work of their hands; it is, therefore, important that they should be trained, from the beginning, to use their hands with dexterity and intelligence."

Let us hope that the recommendations of this Commission will be adopted and bear practical fruit.

Much has been done by the Royal Dublin Society in its long career of usefulness, and in recent years, by the Irish Industries Association, and by the various co-operative and other creameries in Ireland for the benefit of the agricultural classes.

The Congested Districts Board, in the particular parts of Ireland to which its operations are specially directed, is doing excellent work, and the establishment of an Irish Board of Agriculture and Technical Instruction, if the Bill just introduced for this purpose be carried into effect, may be hoped to bring about a condition of industrial progress in Ireland.

Means of Internal Communication—Our Railways.

I desire now to occupy your attention for a short time with some considerations as to the means of internal communication, and for the conveyance of traffic.

Although the old highways of the country have been made by public money and under public control, the British Government has held that the new highways—the railways—should be made by the enterprise of individuals, without State assistance,

and free from State control in the ordinary management and working of the lines. For the most part, in European countries and in our Australian Colonies, the opposite view is held, and the railways have been originally constructed by the State, or have since been purchased and worked by the State.. In India the railways have either been made by private enterprise, encouraged by a State guarantee, or directly by the State.

Finding that private enterprise could not be relied on to push the railways of Ireland further into the least prosperous parts of the country, where the people were most in need of being brought into communication with the outer world, an attempt was made by Government by the Tramways Act of 1883 to provide such assistance from the State as would induce capitalists to invest their money in undertakings which, without some form of public guarantee of dividends, investors would not embark in.

Under that Act about £1,250,000 has been invested in the construction of sundry light railways and tramways in various parts of the country.

Instead of giving a direct Government guarantee to the investor and so raising the capital on the cheapest terms, the Tramways Act provided that the Government guarantee of 2 per cent. should be filtered through the guarantee of the Baronies locally interested in the lines.

In most cases it was found necessary to give a local guarantee of 5 per cent.; in some cases 4 per cent. sufficed, to induce subscribers to provide the funds. Even at these rates it was in several cases found so difficult to raise the capital that the Government had to assist further by lending the money required, on the security of the shares, for which at first subscribers could not be found, and these shares have since been gradually sold to the public.

The market price of the £1,250,000 of capital is now about £1,750,000, greatly to the advantage of the contractors and other original subscribers, but the guaranteeing Baronies are saddled with a responsibility to pay dividend on the original capital at the rate of 5 per cent. or 4 per cent., recouped to them to the extent of 2 per cent. by the Government. The capital might have been raised by a direct Government guarantee of 3 per cent., or perhaps less, and by a division of responsibility between the Treasury and the Baronies the charge to each party would have been only 1½ per cent.

I presume this very wasteful financial arrangement was devised for the protection of Her Majesty's Treasury, by placing it in the position of owing money to the Baronies instead of having money owing to it by the Baronies. If statesmen who undertake projects for the improvement of Ireland would think more of how they can make those projects

work well and successfully in Ireland, and less of how they can protect the Treasury from possible risk of loss, they would do more good to Ireland and save public money.

In 1888, the Royal Commission on Irish Public Works recommended the construction of sundry railways in the West of Ireland by means of a direct Government guarantee of 3 per cent., with a counter guarantee from the Baronies interested, limited to a rate of 6*d*. in the £, applicable in the first instance to the recoupment of any possible loss on the working of the lines, and secondly, towards the repayment to the Government of its guarantee.

Mr. Balfour adopted almost all the recommendations of the Commission as to the railways to be constructed, and in some districts he even pushed the lines further than the recommendations, but brushing aside the suggestions as to guarantee and counter guarantee, he applied the public money directly to the object in view.

Instead of dealing, as the Tramways Act dealt, with a number of separate little companies, with their *posse* of directors, secretaries, and engineers, he dealt directly with the existing railway companies, and induced them to make the new railways as extensions to their systems without break of gauge, on certain terms as to maintenance and working, in return for a free grant of public money towards the cost of construction.

Probably, public money has never been spent in Ireland to such great advantage as it was in this instance, the reason being that Mr. Balfour set himself to see that the money expended should be expended in the most effective manner possible, instead of following the usual policy of being particular to limit the amount to be expended and careless as to the manner of its expenditure.

With the extension of railways in Donegal to Carndonagh and Burton Port now in progress, close on £1,500,000 of public money will have been spent on the Balfour railways. All are of standard gauge excepting those in County Donegal, which are extensions of existing narrow gauge lines. When the Donegal Railway Company's line is completed between Strabane and Londonderry, the whole of the County Donegal will be in the hands of narrow gauge railways, having their port and terminus in Derry. Had this county been opened up by the Great Northern Railway Company it would have been brought into direct railway communication with the rest of Ireland without break of gauge, instead of being, as it now must be, the appanage of the city of Derry. The lines constructed under the provisions of the Tramways Act of 1883 have almost all been made by separate companies as narrow gauge lines, necessitating trans-shipment at the point of contact with the regular railway system, to the great disadvantage of all through traffic.

As the Government can now raise money at less than 2½ per cent. interest the difference to the Treasury between Mr. Balfour's free gift and the ineffective guarantee of 2 per cent. under the Tramways Act is inconsiderable, whilst in the former case the localities interested are free from the responsibility in which the Tramways Act has involved the guaranteeing Baronies in perpetuity.*

Movement for State Purchase of Railways in 1865.

A generation ago there was an active movement in favour of the purchase of the railways by the State. The movement was particularly strong in Ireland. What set it going was the fact that the Railway Act of 1844 became operative in 1865. By that Act the Government was empowered to purchase, after the lapse of twenty-one years, any railway the construction of which was authorized in 1844 or subsequently, at the rate of 25 years' purchase of its average net profits for the three years preceding the purchase.

A Royal Commission was appointed in 1865, under the presidency of the Duke of Devonshire, to consider whether the powers conferred on the State by the Act of 1844 should be put into operation. That Commission for various reasons reported adversely, one reason being the magnitude of the operation, necessitating the raising by Government of the sum of £500,000,000, the estimated purchase price of the railways of the United Kingdom. The case of the Irish railways taken separately, they admitted, stood in a different position, the sum involved being comparatively small, and the condition of several of the companies being unsatisfactory.

The case for the purchase of the Irish railways was vigorously pressed by public meetings and by the Irish Members of Parliament in both Houses. A small Commission was appointed in 1867 to enquire into the condition of the Irish railways, so that Parliament might be placed in possession of the facts and figures necessary as a preliminary to taking action in the matter. In its Second Report, published in 1868, the Commission gave a comparison between the rates and fares then charged on the Belgian and the Irish railway systems respectively, and they presented an estimate of the probable result of reducing the Irish tariff to the level of the Belgian tariff.

The Commission estimated that the reduction in rates would amount to an average of 42 per cent., and involve an immediate loss of receipts of £655,000 a year, against which there would be a substantial saving in working charges by reason of the concentration of management. They estimated that at the end of eleven years the increase of

* In one or two cases the free grant has been for only part of the cost, and a part of the capital has been raised with the aid of a local guarantee.

traffic would be sufficient to make the railways profitable to the State, paying interest not only on the original capital invested in their purchase, but also on the sums added thereto from year to year to make good the annually diminishing loss.

Mr. Gladstone had spoken so strongly in favour of the policy of State intervention that it was generally believed his speech would be followed by action. He came into office however at the end of 1868, just as the Second Report of the Commission of 1867 was published, and as we all know, such a commonplace affair as Irish railway reform was pushed into the background by the Church, the Land, and the University Education questions. A great opportunity was lost. There is now once more an agitation for State intervention in the management of Irish railways. But the circumstances are greatly changed. Many of the worst evils in the condition of our railways have been cured, and the capital involved is a much more serious matter to deal with than it would have been in 1868.

In 1868, with the exception of the Dublin and Kingstown Company, the Ordinary shares of all the Irish railway companies were below par. Twenty-five years' purchase of the net profits would then have amounted to about £22,000,000. Twenty-five years' purchase of the net profits now would amount to about £40,000,000. This price is, however, much below the present market price of railway capital, being calculated to return interest at 4 per cent. per annum, whereas at present prices but few of the Ordinary Stocks will give such a return to the investor, and the Preference and Debenture Stocks are at prices that return less than 3 per cent., except in the case of some of the minor companies.

On the other hand, in 1868 the Government would have had to pay something like 3½ per cent. to raise money for the purchase, whereas now it could raise the money at from 2 per cent. to 2¼ per cent.

Under the Act of 1844, if a railway company was dissatisfied with the price as calculated at the rate of 25 years' purchase of its net profits, it was entitled to claim to have the question left to arbitration as to whether an additional amount should be paid, having regard to the "prospects" of the company. What this right may amount to I cannot estimate, but, if the strict letter of the Act of 1844 were not enforced, and the present market price of the railway capital of Ireland were made the basis, I think the total would be close on £50,000,000. If an extra allowance for compulsory purchase were added it would bring the price up to, say, £55,000,000, or 34½ years' purchase of the net profits of, say, £1,600,000 a year. Even if this high price had to be paid there would be a margin of profit to the State of £500,000 a year if the money could be raised at 2 per cent., and a margin of £362,500 a year if at 2¼ per cent.

Amalgamation of Railways.

Looking back to some of the literature of the railway agitation a generation ago, I find that, in a paper I read before this Society in 1866, I mentioned as one of the worst evils of the then condition of our railway system that it was composed of too many disjointed members. The 113 miles of railway between Dublin and Belfast was then in the hands of three separate companies. Many amalgamations have taken place since in different parts of Ireland, and the Great Northern Railway Company is the result of the amalgamation of eleven companies, on the management of which, according to the Report of the Railway Commission, the intellect of ninety-eight directors, with an appropriate army of officers, was lavished in 1867.

Further amalgamations are in prospect. There can be no doubt that one strong company can, if it lays itself out to do so, serve the public better than several weak ones. The if in this statement is important, because the amalgamation, by creating a monopoly, places it within the power of the single company to over-ride the public interest.

The creation of great railway monopolies in Ireland makes the claim of the public for the intervention of the State in restraint of the monopoly logically irresistible.

The Royal Commission on Irish Public Works, in its Report in 1888, summed up its recommendations with regard to the Irish railway system in the following words:—

"The remedy we propose for the present defects in Irish "railway organization and management is twofold: on the one "hand, centralization in the hands of a single company, and "on the other an external controlling authority, with powers to "inquire into and remedy grievances. We wish it to be clearly "understood that we would not recommend the first of these "without the second; and at the same time the second without "the first, though it would be very useful, would still be an "insufficient remedy for the evils which exist."

The controlling authority was to be an Irish Board, specially constructed for the purpose, to be called the Irish Railway Commission, and its functions were to be administrative rather than judicial.

Since the Report of the Royal Commission the condition of the Irish railways has continued to improve, and the stations, permanent way, and rolling stock of the main lines must, on the whole, be considered satisfactory. The public complaint now relates chiefly to the scale of rates and fares.

Ireland is for the most part dependent for its prosperity on its agricultural industries. During the past fifteen years the competition between ocean-borne produce and Irish produce has become increasingly severe in the markets of the United

Kingdom. The facilities afforded by ocean-going steamers have been steadily growing and the rates of freight declining. Under these circumstances it is but natural that the demand should be made on the railway companies to do what they can to enable Irish agriculture to meet this competition.

After all, the prosperity of the railways depends on the prosperity of the country, and it behoves both railway directors and Chambers of Commerce and business men to open their eyes to the position of affairs, and to make careful enquiry into the real facts with a view to remedying any proved grievances, in the interest of Irish farmers and traders.

Railway directors, whilst willing to admit the mistakes in policy made in the past, are rather inclined to assume a position of infallibility in the present.

Reduction of Passenger Fares.

Again looking back on the literature of the former agitation, I find that one of the main charges made against the railway companies was the scant accommodation provided for third-class passengers. The rule in both England and Ireland at that time was to run third-class carriages on only one through train per diem, and that train usually spent about double as long on the journey as an express.

In the spring of 1872, the Midland Railway Company of England, at the instance of Sir James Allport, started a revolution in railway passenger traffic, carrying third-class passengers by all trains at the rate of 1*d.* per mile, abolishing second-class carriages, and carrying first-class passengers at the rate of 1½*d.* per mile, no reduction being made for return tickets.

The other railway companies followed the example of the Midland in the matter of third-class traffic, but in most cases rather by compulsion than willingly.

There may be railway directors who still think the policy initiated by the Midland mistaken in the interests of the shareholders, but no one can doubt its immense public advantage.

The number of third-class passengers in England and Wales has increased from 225,000,000 in 1871, to 812,000,000 in 1897. Second-class passengers have fallen from 73,000,000 to 58,000,000; first-class passengers from 30,000,000 to 26,000,000. The total number of passengers has risen from 328,000,000 to 898,000,000, and the total passenger receipts have risen from £15,472,000 in 1871 to £29,172,000 in 1897. The receipts from third-class passengers have risen from £6,692,000 to £21,757,000; the second-class receipts have fallen from £4,596,000, to £2,051,000, and the first-class from £3,504,000 to £2,709,000.

In Ireland the total number of passengers has risen from 14,008,000 in 1867 to 24,995,000 in 1897, and the total receipts from £1,100,000 to £1,426,000. The number of third-class passengers has risen in the same period from 8,350,000 to

19,608,000; the second-class has risen from 3,910,000 to 3,973,000, and the first-class passengers have fallen from 1,747,000 to 1,413,000.*

The persistent falling off in first and second-class passenger traffic in England is remarkable. The falling off in second-class is of course largely due to the abolition of second-class carriages on several other lines as well as on the Midland. The policy of abolishing second-class carriages I always doubted, because it seemed to me that the fact that so many millions of passengers chose to travel second, proved that they desired to have second-class accommodation, and in the long run I think railway companies will make more money by providing the public with what they want than by forcing the public to take what it pleases the companies to supply.

Railway rates and fares are arbitrary and empirical, and the want of traffic is often the result of fixing the rates and fares at too high a level.

There has recently been afforded in England a remarkable proof of the benefit gained by railway companies by reducing fares.

The first and second-class passenger fares on the lines running out of London to the South and West were calculated on a high scale, but in 1896 the companies made a change, reducing the fares to 2*d.* per mile first-class and 1¼*d.* second-class. They had been on some of the lines as high as 2½*d.* first-class and 1¾*d.* per mile second-class. The idea was to make the second-class fare only a little higher than the third-class, which, as you know, is at the rate of 1*d.* per mile, the object being to meet the desire of passengers to save money without obliging them to travel third-class, in which the company may not always be agreeable to the fastidious. I see that Mr. Forbes states that the London, Chatham, and Dover took the initiative in this new policy. The adoption of it by one important system such as the London and South Western made it necessary for its neighbours to follow suit.

The tables of figures which I now give relating to four companies prove the remarkable success the policy has had in restoring the lost popularity of the second-class, and in improving the first-class traffic on all the lines. You will see there was a great falling off in first and second-class traffic between 1885 and 1895, but since the reduced fares came into operation in 1896, the second-class traffic has regained in numbers in two years what it had lost in ten years, with corresponding financial gain to the companies:—†

* These figures do not include the traffic by light railways.

† The figures for 1898 are taken from the Reports of the several Companies, the previous figures from the Board of Trade returns.

GREAT

Year.	Length of Line Open.	Number of Passengers Conveyed, exclusive of Season Ticket Holders.			
		1st Class.	2nd Class.	3rd Class.	Total.
	Miles.				
1885,	2,384	1,628,653	5,753,347	42,620,722	50,002,722
1890,	2,481	1,436,984	5,072,550	51,596,007	58,105,541
1895,	2,511	1,288,726	3,886,070	61,520,193	66,694,989
1897,	2,576	1,383,596	5,480,818	67,616,982	74,481,396
1898,	2,599	1,419,292	5,896,240	69,139,586	76,455,118

LONDON AND

1885,	1,828	2,170,442	3,700,459	48,978,129	54,849,030
1890,	1,877	1,915,100	3,326,066	55,303,465	60,544,631
1895,	1,908	1,879,988	2,811,982	64,648,716	69,340,686
1897,	1,908	1,977,342	3,274,976	71,468,023	76,720,341
1898,	1,912	1,976,723	4,239,454	75,853,207	82,069,384

LONDON AND

1885,	760	2,324,375	4,488,113	27,779,291	34,591,779
1890,	835	2,213,800	4,069,593	34,489,480	40,772,873
1895,	875	2,109,672	3,536,895	47,287,473	52,934,040
1897,	882	2,336,663	4,174,300	52,299,836	58,810,819
1898,	908	2,319,019	4,429,194	54,443,117	61,191,330

LONDON, BRIGHTON,

1885,	419	1,763,383	3,458,881	29,544,986	34,767,250
1890,	435	1,663,872	2,815,050	39,020,766	43,499,688
1895,	438	1,695,853	3,001,235	43,708,798	48,405,886
1897,	438	1,774,242	3,200,194	47,546,508	52,520,944
1898,	438	1,803,636	3,458,401	48,834,013	54,096,050

I think these figures deserve to be carefully considered by Irish railway directors. Third-class passengers are more liberally dealt with in Ireland than in England in the matter of fares, a reduction being made on return tickets from the charge

WESTERN.

Receipts from Passenger Traffic.				
1st Class.	2nd Class	3rd Class.	Season.	Total.
£	£	£	£	£
298,787	504,125	2,045,137	83,798	2,931,847
274,442	390,471	2,564,517	105,042	3,334,472
245,461	245,593	2,816,402	129,008	3,436,464
265,240	449,127	2,882,389	143,574	3,740,330
268,037	504,996	2,949,623	152,494	3,875,150

NORTH WESTERN.

500,833	361,650	2,290,883	148,437	3,301,803
523,712	332,110	2,718,408	210,966	3,785,196
501,152	236,330	2,962,025	265,823	3,965,330
529,038	289,021	3,163,208	305,712	4,286,979
519,482	402,583	3,202,276	304,600	4,428,941

SOUTH WESTERN.

248,014	270,368	1,044,725	154,973	1,718,080
263,537	237,381	1,259,131	185,891	1,945,940
258,007	188,327	1,552,833	186,624	2,185,791
276,098	259,936	1,643,431	203,058	2,382,523
260,969	282,290	1,679,480	211,551	2,434,290

AND SOUTH COAST.

199,395	212,242	805,771	178,275	1,395,683
218,304	193,135	1,026,708	217,254	1,655,401
207,233	156,537	1,169,242	235,354	1,768,366
209,142	175,649	1,237,088	235,918	1,857,797
210,527	199,296	1,250,120	264,330	1,924,273

of 1*d.* per mile, whereas the rule in England is to charge the double fare. But the rates charged for first and second-class passengers are open to question, especially the second-class rates.

Comparison with European Countries.

It seems to me that the passenger rates in Ireland have not been put down to the level of the capacity of the people, and that consequently the railways have not fully served their public purpose. The rates in Ireland have been struck in correspondence with the rates in England, the richest country in the world, and the comparative poverty of Ireland is used as an argument in favour of high fares, which seems to me contrary to reason. The experience of European countries seems to reverse this argument, for the fares are lower in the less prosperous, less industrial, and less thickly inhabited countries. The following tables show the passenger fares per mile in various countries, and the relative cost of journeys in the same countries.

PASSENGER FARES PER MILE.

COUNTRIES.	Ordinary.				Express.		
	1st.	2nd.	3rd.	4th.	1st.	2nd.	3rd.
	d.	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*
England, . .	2	$1\frac{1}{4}$	1	–	–	–	–
Ireland, . .	$2\frac{1}{8}$	$1\frac{5}{8}$	1	–	$2\frac{3}{8}$	$1\frac{7}{8}$	$1\frac{1}{8}$
France, . .	1·80	1·20	·80	–	–	–	–
Belgium, 10 miles,	1·55	1·05	·65	–	–	–	–
,, 50 ,,	1·52	1·04	61	–	–	–	–
Prussia, . .	1·54	1·15	·77	·38	1·73	1·28	·90
Austria, 10 kilos.,	1·22	·74	·42	–	1·79	1·12	·61
,, 50 miles,	1·22	·74	·42	–	1·72	1·06	·57
,, 500 ,,	1·14	·66	·33	–	1·63	98	·50
Hungary, 10 kilos.,	·96	·48	·32	–	–	–	–
,, 50 miles, or 100 ,,	1·20	·80	·50	–	1·50	1·00	·60
,, 140 ,,	1·16	·77	·50	–	1·50	1·00	·60

RELATIVE COST OF PASSENGER JOURNEYS.

100 KILOS. = 62½ MILES.

COUNTRIES.	ORDINARY.				EXPRESS.		
	1st.	2nd.	3rd.	4th.	1st.	2nd.	3rd.
	s. d.	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*
Ireland, . . .	11 0	8 5	5 3	–	12 4	9 9	5 10
France, . . .	9 4½	6 3	4 2	–	–	–	–
Belgium, . . .	8 0	5 4	3 2	–	–	–	–
Prussia, . . .	8 0	6 0	4 0	2 0	9 0	6 8	4 8
Austria, . . .	6 4½	3 10	2 1½	–	9 0	5 6	3 0
Hungary, . . .	6 0	4 0	2 6	–	7 6	5 0	3 0

200 KILOS. = 125 MILES.

Ireland, . . .	22 2	16 11	10 5	–	24 9	19 6	11 9
France, . . .	18 9	12 6	8 4	–	–	–	–
Prussia, . . .	16 0	12 0	8 0	4 0	18 0	13 4	9 4
Austria, . . .	12 8	7 7	4 2	–	17 9	11 0	5 10½
Hungary, . . .	12 0	8 0	5 0	–	15 0	10 0	6 0

800 KILOS. = 500 MILES.

Ireland, . . .	88 6	67 8	41 8	–	99 0	78 2	46 10
Austria, . . .	47 5	27 5	13 11	–	67 9	41 0	20 9

I have given the fares for single journeys only, because I have not been able to satisfy myself as to the scale for return tickets in some of the Continental countries.

In Ireland the usual scale of return fare is $1\frac{2}{3}$. In Germany it is $1\frac{1}{2}$. In Belgium $1\frac{3}{5}$th. In Austria and Hungary there appear to be no return tickets on the State Railways.

When comparing the relative passenger fares the charges for luggage must be taken into consideration. In Ireland the weight of luggage allowed free is—

1st Class, ...	120 lbs.
2nd Class, ...	100 „
3rd Class, ...	60 „

In France, 66 lbs. is allowed free, and for excess beyond that weight 1 centime per 22 lbs. per kilometre is charged.

In Belgium no free luggage is allowed (except hand luggage to 55 lbs.) and the charge is $1\frac{1}{2}$ centimes per 55 lbs. per kilometre.

In Prussia 55 lbs. are allowed free, and then a charge of $\frac{1}{2}$ pfennig per 22 lbs. per kilometre is made.

In Austria and Hungary the tariff for luggage is on the zone system, and is very moderate.

I calculate that for the weight of luggage allowed free in Ireland the charges on the Continent, in addition to the passenger fares, would be as follows:—

CONTINENTAL LUGGAGE CHARGES.

COUNTRIES.	For a journey of 100 Kilos. Classes. 1	2	3	of 200 Kilos. Classes. 1	2	3
	s. d.	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*
France, . . .	2 1	1 3	—	4 2	2 6	—
Belgium, . .	2 9	2 3	1 $4\frac{1}{2}$	—	—	—
Prussia, . .	1 6	1 0	0 $1\frac{1}{2}$	3 0	2 0	0 $2\frac{2}{3}$
Austria, . .	1 10	1 6	1 0	3 8	3 0	2 0
Hungary, . .	0 10	0 10	0 10	1 8	1 8	1 8

It should, however, be recollected that the ordinary traveller by foreign railways only occasionally carries with him as much weight of luggage as is allowed free with us, and on the other hand, that our railways are not exacting in the matter of excess luggage, and often allow, free of charge, a much greater weight than the stated maximum.*

I have not wished to appear to criticise the fares on any particular Irish railway, and have therefore taken an average between the rates on some of the principal lines. The French and Belgian fares are taken from Bradshaw, and the Prussian, Austrian, and Hungarian from the official German and Austrian time-tables. In Germany there is a slight variation between the rates in different states of the Empire. I have taken the Prussian State Railway, as being the most important, and its scale of fares is the same as that of Saxony and some other minor State lines. In Austria and Hungary I have taken the rates by the State railways; they vary somewhat from those in use by lines in the hands of companies. In

* On the Prussian State Railways only $2\frac{1}{2}$ per cent. of the total receipts from passenger traffic in 1897 was from passengers' luggage.

Belgium and Germany there is now but a very small proportion of the railways in the hands of companies. In Austria and Hungary they are about half in the hands of the State and about half owned by companies.

Railways in the German Empire.

Our Foreign Office published in January last a very interesting report on the condition of German trade, which is well worth consideration.* From this report I extract a few paragraphs with reference to the German railway system. Mr. Gastrell begins with this proposition:—"In order that there may be a continued and satisfactory expansion of British trade, it cannot be too greatly impressed upon the British public that in the United Kingdom it is especially to traffic interests, both by land and sea, that particular attention must now be paid." Then with regard to the history of railway development in Germany, he says:—"The growth of traffic by land and sea has been remarkable since 1871, and nothing affords a better insight into German development. Probably few countries have shown such a rapid development of carrying power. . . . . The German Government has systematically tried to establish in the country a combined network of waterways and railways; and they have recognised the practicability of both working well together, the canals taking the bulky part of the heavy traffic, which does not require rapid transport. . . . . The Continental nations, like Great Britain, began with private railway companies; but unlike her, they have mostly altered their views for various reasons."

"In Germany the change to State lines was not only brought about by political and, especially strategical reasons, but also by the firm conviction that such a system was absolutely needed in order to give full scope to the aspiration of a new commercial and industrial German Empire. And it must be said that Bismarck's railway policy, during the twenty years of its existence, has had an enormous success, both as regards the development of the network of the lines themselves, and with respect to the marvellous effect that they, in conjunction with other economic factors, have had on the expansion of commerce and industries. The State railway has this great advantage over private companies in developing the country's resources, that those places which would be left without means of transport by the latter system are not so left by the former; for the paying portion of the lines worked by the Government compensate for the non-remunerative sections.

* Report on the Development of Commercial, Industrial, Maritime, and Traffic Interests in Germany, 1871 to 1898, by Mr. Gastrell, Commercial attaché to H.M. Embassy at Berlin.

"And the public generally benefit considerably. One of the "principal objects aimed at was a simplification of freights, "together with greater uniformity and cheapness."

"A monopoly of the magnitude of the German State rail- "ways, extending over 29,384 miles of lines, has an immense "power over the destinies of a country from many points of "view."

With regard to German railway finance, Mr. Gastrell says:— "The actual capital expended on the broad-gauge system "(there are some narrow gauge lines in Germany) up to 1896-7 "was £580,186,600, or about £20,310 per mile. In 1897 the "gross receipts were £79,399,850; the working expenses stood "at £44,209,500, and the excess of the former over the total "expenditure was £35,190,350, or a return of 6 $\frac{3}{20}$ per cent. on "the invested capital."

. . . . . .

"Notwithstanding the many concessions already made by the "State Railways Administration, it appears that some leading "commercial and industrial men are of opinion that the general "railway rates are not yet low enough to give full play to the "productive powers of the country, and that even with further "reductions, the profits might be still larger from the increased "commercial and industrial activity that would probably ensue. "And in conclusion, it must be said that in Germany the system "of State railways has been a great success."

This is Mr. Gastrell's verdict on the State management of railways in Germany, and travellers who have had the opportunity of observing what has been going on in Germany in recent years must bear testimony to the progress of the German railway system in everything tending to the comfort and pleasure of travelling. The following table, taken from Mr. Gastrell's report and from our own official returns, will show in figures the comparison between the progress of the railways of Germany and of the United Kingdom during the ten years, 1887 to 1897:—

—	Miles.	Capital.	Gross Receipts.	Expenses.	Net Receipts.	Per-centage on Capital.
		£	£	£	£	
Germany, 1887, .	24,720	495,107,350	54,590,300	29,318,250	25,272,050	5·17
Germany, 1897, .	28,566	580,186,600	79,399,850	44,209,500	35,190,350	6·15
		£	£	£	£	
U. Kingdom, 1887,	19,578	845,971,654	70,943,376	37,063,266	33,880,110	4·00
U. Kingdom, 1897,	21,433	1,089,765,095	93,737,054	53,083,804	40,653,250	3·73

The complaint is now made in Germany that the railway system is being worked too much with a view of making a profit for the Government, and too little with a view of giving greater facilities to the public.

The Swiss Parliament has recently passed an Act for the purchase of all the Swiss railways by the State, and by that Act it is decreed that profits derived from the working of the railways shall be applicable only to railway purposes. This is sound policy and precludes the possibility of such a charge against the Government as is now not unfrequently heard in Germany.

The Zone System in Hungary and Austria.

Passing from Germany to Austria and Hungary, I desire to devote a few minutes to the consideration of the railway system of these two countries consequent on the introduction into Hungary of the Zone Tariff, in August, 1889. This system at first concerned only the passenger traffic, but within a year or two of its initiation it was applied also to the goods traffic. The merit of the change lay not so much in the adoption of the Zone system as in the very large reduction in the scale of charges for both passengers and goods, the reduction being estimated to amount to an average of 40 per cent. The introduction of this great change in Hungary necessitated a corresponding change in the Austrian railway system. And in both countries the railways owned by companies were obliged to follow the example of the State railways.

In Hungary there are three short distance zones up to the distance of twenty kilometres, and thirteen zones dividing the distance between twenty kilometres and 225 kilometres, the fares from the starting point to any part of each zone being alike. From 226 kilometres onwards there is no increase of fare, but, the capital, Buda-Pest, cannot be passed through without break of journey, and a fresh ticket being taken.

In Austria the zones are regular, being ten kilometres each.

In both countries the existing scale is somewhat different from what was originally fixed.

In a paper presented to Parliament in April, 1891, containing correspondence from our representatives in Vienna and Buda-Pest on the Zone Tariff system in Austria and Hungary, much interesting information will be found. Sir Arthur Nicolson, then Consul-General for Hungary, in a memorandum addressed to Lord Salisbury, gives the reasons which animated the Hungarian Minister of Commerce in introducing his measure of reform. From this memorandum I make the following extract:—

"Some difficulties and disappointments, on which it is un-
"necessary to dwell, accompanied the extension of the railway
"system in Hungary, and it came to be generally admitted

"that the safer and wiser course would be, where feasible, to "substitute State for private management and control. The "purchase by the State has proceeded so far, that while in "1867 there were only seventy-five miles of railway in the "hands of the State, the length of State railways in 1889 had "increased to over 3,800 miles, out of a total railway network "of about 6,500 miles. Although great improvements were "made in the railway system, and although the management "by the State proved to be very beneficial, the general situa- "tion was not so encouraging and satisfactory as could be "wished. Fares were high, and the comparatively few trains "which ran were but sparsely occupied. The public showed "little disposition to take advantage of the railways, and while "it was estimated that in Austria each individual made two, "in Germany five, and in Great Britain fifteen journeys in the "year, the average in Hungary was not so much as one annual "journey per head. It was considered desirable from many "points of view to stimulate a movement among the population, "and not only to facilitate the inter-communication between "neighbouring places, but also from distant points of the "country to the capital and large towns."

"The Minister of Commerce and Communications, M. "Baross, had devoted much attention to the subject, and he "eventually elaborated a complete and radical reform in the "system of passenger traffic on the State lines. This system, "which came into force on the 1st of August, 1889, is now well "known as the Zone Tariff, and is as simple in its conception "as it has proved successful in execution. It was hoped that, "with more frequent inter-communication, the various races of "the country would become better acquainted with each other; "that the peasant would not remain stagnating in his native "village; and that, with a wider horizon opened to their view, "the general educational and intellectual level of the people "would be raised. Although, as is the case with several enter- "prises in Hungary, and it should be noted to the credit of the "country, philanthropic and patriotic motives were perhaps "chiefly operative, the financial interests of the State railways "were not left out of sight. It was on this point that criticism "was chiefly brought to bear when the new system was inaugu- "rated, and doubts were expressed whether the bold scheme of "M. Baross would not entail a serious pecuniary loss. Results "have successfully proved that there is no fear to be felt on that "score, and that the revenues of the State lines have benefited "as well as the public."

"Whether the system is applicable in countries where rail- "way traffic is more largely developed than in Hungary is a "question which can only be decided by those competent to "judge of local circumstances, but it may be accepted as an

"undoubted fact that, with the conditions existing in Hungary, "the measure of M. Baross has been an unqualified success, "from whatever point of view it is regarded. The conditions "existing in Hungary may be shortly stated to be a large tract "of country where distances are great, where the popula- "tion is relatively sparse and not animated with a restless "desire of movement, where the motives which induce people "to travel, for business or pleasure, were not so imperative as "to compel them to do so, irrespective of cost, and where the "trains were running half empty."

So much I have quoted from Sir Arthur Nicolson, and it seems to me that a good deal of his description of the condition of Hungary is applicable to Ireland. The results of the introduction of the Zone Tariff were immediate, and surprising in extent.

During the twelve months ending on July 31st, 1889, preceding the change, the number of railway passengers by the State railways was 5,684,845; during the following year, ending 31st July, 1890, the number increased to 13,456,312, and the receipts increased from £785,334 to £954,347. These figures are given by Sir Arthur Nicholson in his memorandum.

I now give a table taken from the "Statistical Abstract," showing the relative circumstances of the Austrian and Hungarian railways in 1887 and 1896:—

—	Miles.	No. of Passengers and Tons of Goods.		Gross Receipts.	Percentage of Net Receipts on Capital.
				£	
Austria, 1887.	6,874	No.	36,735,403	2,309,816	3·30
		Tons	47,596,255	7,809,464	
Austria, 1896.	10,374	No.	105,200,941	4,893,235	4·13
		Tons	100,000,305	16,731,976	
Hungary, 1887.	4,506	No.	8,103,613	835,004	3·03
		Tons	12,870,020	2,822,617	
Hungary, 1896.	9,236	No.	57,452,000	2,633,500	4·66
		Tons	34,991,000	7,289,750	

From these figures you will see that while in Austria the length of railway included in the return is greater by 50 per cent., the number of passengers have nearly trebled, and the receipts from passengers, the weight of goods carried, and the

receipts from goods have more than doubled, and the net return on the capital invested has risen from 3·30 per cent. to 4·13 per cent.

In the case of Hungary, whilst the length of line is doubled, the number of passengers is just seven times as great, the receipts from passengers more than three times as great, and the weight of goods carried and the receipts from goods nearly three times as great, while the net return on the capital invested has risen from 3·03 per cent. to 4·66 per cent.

Rates for Agricultural Produce.

I have not dealt in detail with the charges made on Continental railways for the carriage of goods. The subject is very complicated, and could only be effectively dealt with by a railway expert.* The charges are on the whole much lower than in this country, and it is customary in Germany, Austro-Hungary, and Denmark, to arrange a specially low preferential tariff on goods intended for export.

A special report from our Consuls abroad was presented to Parliament last Session on Bounties granted on the running of ships and on the granting of preferential railway rates,† which I recommend to the consideration of railway directors and to Agriculturists.

One of the special objects of the Hungarian zone tariff was to greatly reduce the rates on "articles of subsistence sent by express, "such as milk, butter, eggs, dead meat, &c."‡

In Denmark, railway rates are reduced on "perishable provisions" for export; and in return for a Government subsidy, the steamers plying between Denmark and England (Grimsby and Parkeston) have been fitted with refrigerators, and have reduced their freights by about 20 per cent. "It is expected," says Sir Charles Scott, our (then) Minister at Copenhagen, reporting in 1897 to Lord Salisbury, "that by this arrangement, perishable "goods destined for the Midland Counties of England will be "conveyed *via* Esbjerg in greater quantities than heretofore, and "will reach the consumers in better and fresher condition through "the increase and acceleration of the traffic." Possibly this accounts for the ready sale of Danish butter in our butter producing country.

Importance to Ireland of a Measure for the Reduction of Railway Charges.

Keeping the fact in view that agriculture is the greatest of Irish industries, it seems to me essential in the interests of Ireland that Irish agriculture should be put on the best possible footing,

* The Hungarian and Belgian Goods Tariffs were set out at length in Parliamentary Papers [C.—6817] and [C.—6423] of 1891.

† [C.—8720]. ‡ [C.—6817], p. 2.

by means of low freights and traffic facilities, to stand against the ever increasing competition of Continental and ocean-borne produce.

No practical measure would have so immediate and so wide-reaching an effect on the prosperity of Ireland as a large reduction in railway rates for goods and passengers.

Such a large reduction as is required cannot be looked for from railway directors whose horizon is necessarily their next dividends, but it can be effected by the intervention of the State.

The Royal Commission on Irish Public Works suggested in 1888 that this reduction might be required from the companies on their being given a guarantee by the State of a certain amount of gross receipts for a term of years.

Why should what has been successfully accomplished in various States of Europe under very varying conditions as to density of population and cost of railway construction be incapable of accomplishment in Ireland.

The cost of railways in Ireland has been very moderate, and our population per square mile is about the same as in Denmark and Hungary.

COMPARATIVE TABLE OF POPULATION AND COST OF RAILWAYS.

Countries.	Population per square mile.	Cost of Railways per mile.
		£
Ireland, . . .	144	13,000
Denmark, . . .	146	11,143
Hungary, . . .	140	10,303
Austria, . . .	206	21,365
Germany, . . .	250	20,317
Belgium, . . .	571	30,000
Scotland, . . .	135	44,600
England and Wales, . .	498	60,500

Conclusion.

My object, however, in writing this paper has not been so much to state opinions or to advocate a policy as to put facts and figures before the public for their consideration.

We often suffer in Ireland from the necessity for making legislation for Ireland conform in more or less degree with the ideas of the typical Englishman, who is firmly convinced that the existence of any institution in England is a proof not only of its wisdom, but also of its fitness for the rest of the world, regardless of circumstances—"Whether where equinoctial fervours glow, or winter wraps the polar world in snow."

In the days of Sir Robert Peel and Lord John Russell the doctrine of *laissez-faire* was in the ascendant, and so the statesmanlike proposal of Lord George Bentinck with regard to Irish railways was rejected.

In England the Railway System has grown up under the policy of *laissez-faire* and the rule of thumb, but at the cost of an enormous amount of needless outlay, due to the fierce struggles between company and company, both in and out of Parliament.

If you will look at Bradshaw's Railway Manual and contemplate the number of separate undertakings and the number of Acts of Parliament that have gone to the making of the London and North-Western System you may, in imagination, form some idea of the early struggles for existence of the various lines that have from time to time been swallowed by this railway Mammoth.

For forty years or more the opening up to civilization of Donegal, Western Connaught and Kerry was left to the policy of *laissez-faire*, till Mr. Balfour seemed to awake to the idea that Ireland was a neglected and mismanaged portion of a great estate, and that in accordance with the dictum of Henry Drummond, it was the duty of the owner to apply himself to its improvement.

Measures intended for the benefit of Ireland cannot be expected to prove successful unless the Minister, like Mr. Balfour, not only has faith in the efficacy of the remedy he proposes, but also takes care to ensure that it shall be efficiently applied.

Too often grants have been made to Ireland rather on the policy of throwing sops to Cerberus than in faith of producing good results; and Acts of Parliament professedly for our benefit have failed in their effect because the spirit of the preamble has been killed by the letter of the clauses.

It seems to me that the Imperial Parliament does not always sufficiently keep in view the fact that Ireland is part of the United Kingdom—I am not speaking politically but economically—that what depresses Ireland depresses the United Kingdom, and that what raises Ireland raises the United Kingdom. If the productive power of Ireland can be increased she will be producing the articles which Englishmen and Scotchmen are most in need of as consumers, and if Ireland can be made more prosperous

her prosperity will react beneficially on the prosperity of Great Britain, for Ireland is the best customer that England and Scotland have for their productions.

It remains with me to thank you for the honour you have done me in placing me in the chair of this Society, where now for over half a century every subject of importance to the welfare of Ireland, save those concerned with party politics, has been discussed with public advantage and whose meetings have been presided over by men of eminence in various positions of life, to whom I cannot but feel myself an unworthy successor. Whilst regretting that circumstances have for two years prevented me from performing the duty of addressing you as President, I must at the same time apologize for trespassing on your attention now, at such inordinate length.

IX.—*Proceedings of the Statistical and Social Inquiry Society of Ireland.*

FIFTY-SECOND SESSION.—FIRST MEETING.

[22nd November, 1898.]

The Society met at the Leinster Lecture Hall, 35 Molesworth Street, at 8.15 p.m. The President in the Chair.

Mr. Arthur Samuels, Q.C., read a paper entitled "Private Bill Legislation for Ireland.—A Tribunal."

The outgoing Officers and Council were re-elected.

SECOND MEETING.

[13th December, 1898.]

The Society met at the Leinster Lecture Hall, 35 Molesworth Street, at 8.15 p.m. The President in the Chair.

Mr. Charles Eason, junr., read a paper entitled "The Tenement Houses of Dublin; their Condition and Regulation."

Mr. Thomas Kennedy, Barrister-at-Law, was elected a member of the Society.

THIRD MEETING.

[17th January, 1899.]

The Society met at the Leinster Lecture Hall, 35 Molesworth Street, at 8.15 p.m. The President in the Chair.

Mr. Thomas Kennedy read a paper entitled "Fifty Years' of Irish Agriculture."