

~~unsanitary area is a sanitary improvement for the benefit of the whole city, and may, therefore, be rightly treated as an outlay for sanitary purposes. At the present moment the London County Council has adopted the principle of providing dwellings, at a loss to the ratepayers, in a special case. Time prevents me from discussing this question, but the principle is of the utmost importance, and should not be adopted without very thorough consideration. The idea of confining the dwellings to the "very poor" is not one that seems to me wise or practicable. Rooms must vary in size and position, and, consequently, in value. More satisfactory results are likely to result from persons of different incomes living side by side, and renting rooms in proportion to their incomes. More information should be obtained as to what has been done in other cities. A large scheme has just been made public by Lord Iveagh. He proposes to take an area near St. Patrick's Cathedral, clear it, and build upon the site shops, dwellings, baths, gymnasium, public hall, &c. Such a scheme is deserving of our warmest approval, and all parties who have any influence should use it to facilitate its execution.~~

~~The extension of the city boundary to include the adjacent townships would give increased power and additional facilities for the improvement of the condition of the city. The well-to-do people who live in these townships escape at present their due share of responsibility. The question is not one to be settled simply by a reference to the effect upon the rates.~~

~~The present boundary is purely artificial. The people on both sides of it are, in fact, one community, and all should be willing to co-operate in the task of grappling with the social problems of the city. There is nothing new in this paper; the evils pointed out, their causes and the possible remedies, have been brought before the public time after time. There is no royal road to their removal. An improvement can only come from personal effort and self-denial on the part of the citizens of Greater Dublin.~~

III.—*Fifty Years of Irish Agriculture.*

By THOMAS KENNEDY, Esq.

[Read Tuesday, 17th January, 1899.]

IN 1847, the year of the famine, the Government first collected for the information of Parliament very ample Irish Agricultural Statistics. Similar returns have been annually published ever since. The result of these compilations extending over half a century is to furnish official figures from which the general condition of Agricultural Ireland may be fairly diagnosed, in

most vital respects, except, perhaps, that of values. Amongst the results most worthy of examination and of comparison at different periods are :—

- (1) The area under cultivation ;
- (2) The total yield of crops, and numbers of live stock ;
- (3) The number of people employed upon the land ;
- (4) The cost of transporting produce to market ;
- (5) The distribution and ownership of the land ;
- (6) The amount of income derived from the land.

The area of Ireland is 20,820,000 acres : of this three-fourths, or 15,090,000 acres were arable in 1897.

The Census Commissioners, in 1841, estimated the arable land of Ireland at 13,464,300 acres. Complete statistics of the area of Ireland under crops, including meadows, in 1847, are shown by a Parliamentary return to have been 5,238,575 acres, or more than one-third of the cultivable area. Since 1847 people have been moved to lands which were then waste, and in this way the cultivable land of Ireland has been increased from 13,464,300 to 15,090,000 acres, being an increase of 1,625,700 acres.

In 1847 the total area of Ireland under crops, including meadow, was 5,238,575 acres ; in 1897 the total area, including meadow, had diminished to 3,820,470 acres. Deducting from this latter area the 1,625,700 acres by which the cultivable land has been increased since 1847, and, as a result, it is a legitimate deduction, that of the 5,238,575 acres under cultivation in 1847, only 2,194,470 acres were in cultivation in 1897. That is, much more than half the land of Ireland which was under crop fifty years ago is now under permanent pasture, that is 3,044,105 acres have gone out of cultivation. If meadow be excluded there were 4,099,629 acres under crops in 1847, but only 2,498,423 acres in 1897. But for the famine, and the abnormally low area under potatoes, the area under crops in 1847 would have probably been well over five million acres.

The area under cultivation has increased both in England and Scotland. In the former there were 2,200,000 more acres under cultivation in 1890 than in 1830, in the latter 1,140,000 acres.

Of the arable land of Ireland in 1897, 11,384,279 acres were in permanent pasturage, and 1,251,490 acres under clover and mature grasses, and only 2,523,254 acres under crops. That is, only one-sixth of the cultivable land of Ireland was under crops, or 12 per cent. of the entire area. In England, in 1897, there were 16,512,886 acres in permanent pasture, 4,853,800 acres under clover and mature grass, and 10,756,000 acres under crops. One-third of the cultivable land of England was under crops, but only one-sixth of the cultivable land of Ireland. That is, the ratio of the area of the cultivable land of England to that under crops is *double* that of Ireland. But a comparison of the amount of land

of other countries in Northern Europe under crops, with the total amount available for cultivation, reveals a closer approximation between both than exists in Ireland. The countries most worthy of comparison are those which the Recess Committee selected as examples of agricultural wealth and progress, and whose methods could be most advantageously followed in Ireland. In Holland more than half the cultivable land of the country is under crops, that is, the ratio of the area of the cultivable land of Holland to that under crops is *three* times that of Ireland. In Belgium 67 per cent. of the entire area of the country is under crops, and of the cultivable land of Belgium, seven-eighths is under crops, that is the ratio of the area of the cultivable land of Belgium to that under crops is *five* times that of Ireland. In Denmark, half the cultivable land is under crops; accordingly, the ratio of the area of the cultivable land of Denmark to that under crops is *three* times that of Ireland. In Saxony, 81 per cent. of the entire area of the country is under crops, and as only 12 per cent. of the area of Ireland is under crops, the proportion of the cropped soil of Saxony is *seven* times greater than that of Ireland. In Wurtemberg two-thirds of the entire area of the country are under crops, and the remainder is almost entirely under forest. The ratio of the cropped soil of Wurtemberg is *five* times greater than that of Ireland. In France, 55 per cent. of the cultivable land of the country is under crops, and 14 per cent. under forests. In France, only one-tenth of the entire area of the country is under pasture, whilst in Ireland four-fifths of the cultivable land are under pasture. In Bavaria, one-half the soil is under crops, one-sixth under grass, and one-third under forest.

AREA UNDER CROPS IN 1847.

Crops.	Acres.	Produce.
Wheat	743,871	614,575 Tons.
Barley and Bere	332,655	248,933 "
Oats	2,200,870	1,612,921 "
Rye	12,415	12,784 "
Beans	23,768	16,891 "
Potatoes	284,116	2,048,195 "
Turnips	370,344	5,760,616 "
Mangels	13,766	247,269 "

AREA UNDER CROPS IN 1897.

Crops.	Acres.	Produce.
Wheat	47,235	36,301 Tons.
Barley and Bere	170,652	129,356 "
Oats	1,175,118	813,236 "
Rye	13,058	7,084 "
Beans	1,376	1,271 "
Potatoes	677,216	1,498,416 "
Turnips	308,966	4,133,585 "
Mangels	54,649	751,057 "

In 1847 the total yield of grain crops reached 2,548,723 tons; in 1897 it was only 985,974 tons, being a decrease of 61.4 per

cent. The yield of wheat has diminished by 94·1 per cent., of oats 50 per cent., and of barley 49 per cent.

In 1847 the yield of potatoes was 2,048,195 tons, but as 1847 was the year of the great failure of the potato crop, it will be interesting to examine the returns for several succeeding years.

1848	...	...	...	2,880,814	Tons.
1849	...	...	...	4,014,122	„
1850	...	...	...	3,945,989	„
1851	...	...	...	4,441,022	„

The average yield of potatoes for the five years 1847-51 was 3,466,028 tons. In 1897 the yield was 1,498,416, being 27 per cent. less than that of 1847. As the yield was abnormally low in 1847, it is interesting to compare the average of the five years 1847-51 with the average of the ten years 1887-96. In the former period it was 3,466,028 ton ; in the latter, 2,748,291 tons, showing a decline of 21 per cent.

In considering the statistics of Irish Live Stock, a fundamental distinction must be made between numbers and value, as there have been considerable fluctuations in both. First, as regards the numbers :—

			1841.		1847.
Horses	...	...	576,115	...	557,917
Cattle	...	...	1,863,116	...	2,591,415
Sheep	...	...	2,106,189	...	2,186,177
Pigs	...	...	1,412,813	...	622,459

			1855.		1888.		1897.
Horses	...	556,000	...	507,000	...	534,133	
Cattle	...	3,560,000	...	4,100,000	...	4,157,581	
Sheep	...	3,602,000	...	3,627,000	...	4,463,935	
Pigs	...	1,180,000	...	1,398,000	...	1,327,226	

These figures show considerable increase between the 'forties and the 'fifties, but only a slight increase since the 'fifties.

The Census of 1841 shows that 5,406,743 persons were engaged in agriculture, *i.e.*, were dependent for their livings on the land. The Census of 1891 shows that only 2,022,720 people were so engaged. In 1841 there were 1,844,000 persons employed in agriculture ; in 1891 there were only 925,000. That is, in round numbers, those who lived by agriculture in 1891 were less than half those who lived by agriculture in 1841, whilst a like decline has taken place in those who were employed at it during the same period. There were 1,326,000 farm labourers and farm servants in Ireland in 1841, but only 329,000 in 1881, and still smaller (only 258,042) in 1891.

Whilst enormous reductions have taken place in the cost of transit of agricultural produce from distant parts of the world to England, the cost of transit of Irish agricultural produce has remained very high. It costs seventy shillings to send a ton of

eggs from Cavan to London, and only twenty shillings to send a ton of eggs from Canada to London. The charge on a ton of butter from Tralee to Cork, eighty-three miles, is twenty-two shillings, the rate for the same distance on a Belgian State Railway would be seven shillings. A ton of flax is brought from Belgium to Belfast through Hull for eighteen shillings. It costs twenty-two shillings to bring a ton of flax from Donegal to Belfast, but it is unnecessary to multiply instances, the facts are notorious.

In Ireland, in 1847, there were 530,545 holdings, varying in size between one and thirty acres, and excluding holdings under one acre. In 1896 there were only 350,765 such holdings, showing a diminution in this class of 179,880. Compare this state of affairs with Belgium, where the tendency is to a great subdivision of holdings. There were in Belgium 572,550 in 1846, and in 1880, the date of the latest statistics, 910,396. Agriculture, apparently, attains to the highest excellence only where there is a minute subdivision of holdings. In Saxony, 164,537 out of 193,708 farms are of less than 25 acres each. In Wurtemberg, 270,268 farms, out of a total of 306,643, are less than 25 acres each. In Denmark, out of 226,000 holdings, as many as 150,000 are from 7 to 10 acres each. In Holland there are 7,000 farms, whose average size is 325 acres; 48,000 farms, whose average size is 48 acres; and 112,000, whose average size is 10 acres. In Bavaria, 375,000 farms, out of a total of 507,600, have an average size of 10 acres. In France, out of 3,460,000 proprietors, as many as 3,022,700 cultivate holdings of less than 50 acres. In a report issued from the Foreign Office, in April, 1898, the following remarks occur:—"A favourable circumstance for Bavarian Agriculture is that the land consists chiefly of small farms. Of the total area of Bavaria (11,410,000 acres), 25.5 per cent. form areas of farms of less than $2\frac{1}{2}$ acres; 51.5 per cent. of $2\frac{1}{2}$ to 25 acres; 19.3 per cent. of 25 to 100 acres; and 0.1 per cent. of over 250 acres."

The Land Purchase Acts are steadily transforming the present tenants into peasant proprietors. The Acts of 1885 and 1888 have substituted for 1,355 rent-receiving landowners, 25,365 peasant proprietors. The area which has thus changed proprietors is 942,585 acres, or one-fifteenth of the agricultural land of Ireland. The Acts of 1891 and 1896 have already substituted for 737 rent-receiving landowners 9,579 peasant proprietors. The area which has thus changed proprietors is 319,973 acres. In all, 1,262,558 acres have passed to tenant purchasers, or about one-eleventh of the agricultural land of the country in twelve years.

The calculation of agricultural values at different periods is very difficult, and has given rise to much controversy. The

Registrar-General has furnished the following estimates for average annual value of crops and live stock disposed of :—

Annual average for the five years, 1851-55.	f Crops ...	£43,660,000
	{ Cattle ...	28,330,000
	Total ...	£71,990,000
Annual average for the five years, 1866-70.	f Crops ...	£27,935,000
	{ Cattle ...	44,280,000
	Total ...	£72,215,000
Annual average for the five years, 1884-88.	f Crops ...	£16,470,000
	{ Cattle ...	37,550,000
	Total ...	£54,020,000

Sir Robert Giffen, C.B., has calculated the average annual value of Irish Agricultural produce for the five years 1889-93, as follows :—

Crops going directly into human consumption	-	£14,863,000
Dairy produce	-	£11,000,000
Value of live stock consumed or exported	-	£17,800,000
Total	-	£43,663,000

From this, cost of manures, seeds, etc., must be deducted, say, about a tenth, and this leaves £40,000,000 as the annual value of agricultural produce in the early nineties. But since that calculation was made, land is still going out of cultivation, live stock are decreasing in numbers, and prices are falling, so that the average annual value of the total Irish Agricultural produce is still falling, and must be under £40,000,000, or about half the Registrar-General's estimate for the fifties and the sixties.

Wakefield estimated that 12,750,000 acres of Irish land in 1817 yielded a rental of £17,228,440. On the 31st March, 1898, according to the report of the Land Commission, the first statutory term Fair rent of 9,496,445 acres was fixed at £5,147,213. As the reductions for the second statutory term, already made, average 23 per cent., it may be calculated that as soon as the second statutory term applies as it does already partially, the rent of these 9,496,445 acres will be reduced to £3,963,354. The rental of 98,496,445 acres based on the rental of 1817 would be £12,859,768. In round figures it is now only one-third of it.

Speaking generally, and in the roundest figures, the change which has taken place in Irish Agriculture during the past fifty years may be thus indicated :—The cultivated area of the country, excluding meadow, has dwindled from about four million acres to about two million acres, a decline of one-half; the population deriving its existence directly from Agriculture has dwindled from about five millions to about two millions, a decline of one-half; and the money value of the agricultural produce has dwindled

from about seventy millions sterling to about thirty-five millions sterling, a decline of one-half. The agreement of these three vital tests in measuring the extent of the decay is noteworthy

When prices of agricultural produce fluctuate, and its character and nature—as, in Ireland, from grain to meat—changes, there still remains one unfailling universal measure with which to test its human utility, and that is its capability of feeding mankind. The average annual consumption of grain per head of the population in the British Isles, for all human wants, including alcohol, is reckoned at 410 lbs., or in the roundest figures one-fifth of a ton. The average annual consumption of meat per head of the population in the British Isles is 100lbs. The production of meat is computed on an annual slaughter of 20 per cent. of all horned cattle, 40 per cent. of sheep, and 100 per cent. of pigs, the average carcase being taken at 600lbs. beef, 70lbs. mutton, and 100lbs. pig. The total yield of corn in Ireland in 1847 was 2,531,611 tons, which on the hypothesis approved of was capable of feeding 12,658,055 persons for one year. The numbers of horned cattle, sheep and pigs in Ireland, in 1847, were, respectively, horned cattle, 2,591,415; sheep, 2,186,177; and pigs, 622,459, which on the hypothesis approved of were capable of feeding 4,344,286 human beings. The grain and meat produced in Ireland in 1847 were capable of feeding for one year 17,002,341 persons. Contrast this with fifty years later. In 1897 the total grain yield in Ireland 985,974 tons, capable of feeding 4,929,870 persons for one year. In 1897 the numbers of cattle, sheep and pigs were, respectively, horned cattle, 4,463,935; sheep, 4,157,581; and pigs, 1,327,226, capable of feeding for one year 7,848,070 persons. The grain and meat produced in Ireland in 1897 were capable of feeding for one year 12,777,940 persons. Taking the number capable of being fed in 1897 from those of 1847, and it follows that the grain and meat produced in Ireland in 1847 were capable of feeding 4,224,410 more persons for one year than the grain and meal produced in 1897, though 1847 was a year of abnormal scarcity and famine. But this startling deficiency does not take into account the increase of arable land during the same period from 13,464,300 acres to 15,090,000 acres, and also that as grain enters more largely into human food than meat, the real decline is much greater than the apparent decline thus disclosed.

IV.—*Over-Taxation and Local Expenditure in Ireland.*

By NICHOLAS J. SYNNOTT, Esq.

[Read Tuesday, 27th January, 1899.]

THE speech delivered by Mr. Arthur Balfour in the House of Commons on the 5th July, 1898, has evidently been considered a particularly effective and unanswerable reply to the financial