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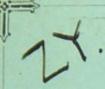
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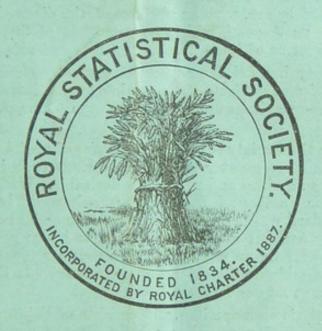


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RURAL DEPOPULATION.

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G. B. LONGSTAFF, M.A., M.D., F.R.



9, ADELPHI TERRACE, STRAND, LONDON, W.C.

READ BEFORE THE ROYAL STATISTICAL SOCIETY, JUNE 20, 1893.

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1893.

ROYAL STATISTICAL SOCIETY:

AN OUTLINE OF ITS OBJECTS.

The Royal Statistical Society was founded, in pursuance of a recommendation of the British Association for the Advancement of Science, on the 15th of March, 1834; its objects being, the careful collection, arrangement, discussion and publication, of facts bearing on and illustrating the complex relations of modern society in its social, economical, and political aspects,—especially facts which can be stated numerically and arranged in tables;—and also, to form a Statistical Library as rapidly as its funds would permit.

The Society from its inception has steadily progressed. It now possesses a valuable Library of more than 27,000 volumes and a Reading Room; Ordinary Meetings are held monthly from November to June, which are well attended, and cultivate among its Fellows an active spirit of investigation: the Papers read before the Society are, with an abstract of the discussions thereon, published in its Journal, which now consists of fifty-five annual volumes, and forms of itself a valuable library of reference.

The Society has originated and statistically conducted many special inquiries on subjects of economic or social interest, of which the results have been published in the *Journal*, or issued separately.

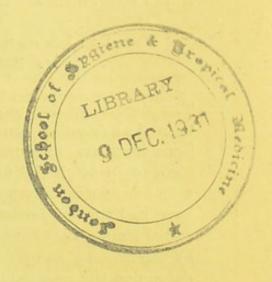
To enable the Society to extend its sphere of useful activity, and accomplish in a yet greater degree the various ends indicated, an increase in its numbers and revenue is desirable. With the desired increase in the number of Fellows, the Society will be enabled to publish standard works on Economic Science and Statistics, especially such as are out of print or scarce, and also greatly extend its collection of Foreign works. Such a well-arranged Library for reference, as would result, does not at present exist in England, and is obviously a great desideratum.

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RURAL DEPOPULATION.

RURAL DEPOPULATION. By G. B. LONGSTAFF, M.A., M.D., F.R.C.P.

[Read before the Royal Statistical Society, 20th June, 1893. Charles Booth, Esq., President, in the Chair.]

THE "alarming depopulation of our rural districts," has of late been the subject of many articles and even more speeches. Able journalists have discoursed on the causes, and ambitious politicians, anxious to catch the votes of an ignorant electorate, have vied with one another in suggesting remedies, but few persons seem to have had time or inclination to take a comprehensive view of the actual facts. It is the business of the statistician to clear the way by ascertaining and recording the precise state of the case, and so determine the geographical extension and numerical intensity of the phenomenon; when this has been done then, and then only, shall we be in a position to dogmatise as to causes and remedies. To make my meaning clear: if the alleged depopulation be the result of a bad method of government, or a prejudicial system of land tenure, we should expect to find the phenomenon coextensive with these evils; is this in fact the case, or is it not? present moment seems to be especially opportune for such an inquiry, not only because many "remedial measures" are now under discussion, but because a recent census has brought the facts up to date.

First, I would premise that the word "depopulation" is often very vaguely employed, but that here it will be used as denoting a diminution in the number of the inhabitants of a district, as compared with those enumerated at a preceding census, quite irrespective of the extent of such diminution. We shall find that, as a matter of fact, such diminution amounts as a rule to but a small fraction of the initial population, a loss of 10 per cent. in twenty years being unusually large, and a loss of 25 per cent. quite exceptional.

Taking the case of England and Wales first. The matter is not so simple as might be at first supposed; although everyone has a general idea of what is meant by rural as distinguished from urban population, it is not so easy in all cases to draw the line. On the one hand the country residences and suburban villas of more or less well-to-do townspeople are to be found invading the country and adding considerably to its population, yet their inmates though in the country are not of it, and they are not attracted or repelled by the same causes as the farmers and

labourers. Again the greater part of the smaller towns—all the organisation of the local markets and local government, as well as the tradesmen and professional men who supply the immediate needs of the scattered farms and villages—are an essential part of the rural organism. We are therefore only able to draw the line roughly, and on the one hand must exclude the fringes of growing cities, and on the other hand must include in our rural population the minor towns that are not obviously dependent on mines or manufactures. Of course this makes strictly accurate comparisons at successive intervals impracticable, yet with a little care we may make our limits of probable error so narrow as not to invalidate the argument. For this reason I shall not lay any stress on small differences nor usually go beyond the first place of decimals.

In the "Census of England and Wales, 1881" (vol. iv, p. 9), it is stated that whereas "the town population, i.e., inhabitants of "the districts and sub-districts, which include the chief towns," increased in the census intervals since 1851 by 19.41, 18.09, and 19.63 per cent. respectively, "the country population, i.e., the " inhabitants of the remainder of England and Wales, which com-" prises the smaller towns and the country parishes," increased by only 4.12, 7.32, and 7.42 per cent. respectively. Again, the " Preliminary Report of the Census of England and Wales, 1891" (p. viii), tells us that in the ten years 1881-91, the "urban "sanitary districts" increased by 15.3 per cent., whereas the "rural sanitary districts" increased by only 3.4 per cent., "and" the report adds, "these figures may be taken as representing with " sufficiently approximate accuracy the respective increases in the " urban and rural populations." If this be the whole of the matter cadit quastio, there is no rural depopulation. But of course it is not so; while our rural population, defined as above, and taken as a whole is still increasing, though it be but slowly, yet at the same time a local depopulation, or more exactly diminution of population, is actually occurring in many localities. That the average rate of increase in the country districts is less, considerably less, than that of the towns is not surprising, since not only does the country supply the towns with men, but the rural population which supplies our mushroom cities with food is (thanks to railways and steamships) to be found to-day on the prairies and pampas of America, on the sheep runs at the Antipodes, or on the sultry plains of India.

Firstly let us consider the counties (geographical) of which this country is made up (see Tables I and II). In the majority there has been an increase, varying indeed in extent but yet continuous. In some there has been a to and fro movement, thus Cambridge has gone up and down in numbers since 1851, and its population is now

only 3,345 more than it was forty years ago; Dorset lost 4,746 in 1871-81, but regained 3,518 in 1881-91; Norfolk lost 7,916 in 1851-61, but had more than recouped this in the next twenty years; Suffolk experienced a trifling decrease in the decade 1851-61; Wilts lost no less than 6,969 in the twenty years 1841-61, but has been increasing ever since; Westmoreland lost 819 in 1871-81, but it gained 1,907 in 1881-91. On the other hand Cornwall has decreased continuously since 1861, and has lost in all 46,801, Hereford since 1871 has lost 9,571, Huntingdon since 1861 has lost 6,478, Rutland since 1851 (with a trifling exception) has lost 2,536, and Shropshire since 1871 has lost 11,795. The total loss has amounted to 4.8 per cent. in Salop, 7.5 per cent. in Hereford, 10'1 per cent. in both Huntingdon and Rutland, and 12'7 per cent. in Cornwall. As regards the Welsh counties there has been an intermittent decrease in Merioneth, Montgomery, Radnor, and Anglesey, but since 1871 Montgomery, Radnor, and Cardigan have decreased continuously; Brecknock and Pembroke continuously since 1861, whereas in Carnarvon and Flint the first decrease showed itself at the last census, when indeed it was found that nine out of the twelve Welsh counties had decreased during the decade, Cardigan and Montgomery having been truly decimated. The total loss in the Welsh counties varies from o'g per cent. in Carnarvon, and 4'0 per cent. in Flint, to 14'4 per cent. in Radnor, 14.8 per cent. in Cardigan, and 16.7 per cent. in Montgomery.

Another way of putting these facts is as follows: In the English and Welsh counties the first signs of a diminution of population showed themselves at the census of 1851 in Wilts, Merioneth, Montgomery, and Radnor. In 1861 the movement was found to have continued in Wilts and Montgomery, but to have ceased in Merioneth and Radnor, it had however commenced in Cambridge, Norfolk, Rutland, Suffolk, and Anglesey. The census of 1871 showed an increase in all these counties except Anglesey, but on the other hand there was a diminution in Cornwall, Huntingdon, Brecknock, and Pembroke. In 1881 it was found that the depopulation of the four last named counties continued, while Cambridge, Rutland, Montgomery, and Radnor were again decreasing, and a decrease was observed for the first time in Dorset, Hereford, Shropshire, Westmoreland, and Cardigan. The decrease in Anglesey was however checked. Finally the census of 1891 proved that the decrease had been checked in Cambridge, Dorset, and Westmoreland, that it had continued in Rutland, Cornwall, Huntingdon, Hereford, Shropshire, Montgomery, Radnor, Brecknock, Pembroke, and Cardigan, while the decrease had reappeared in Anglesey and Merioneth, and had shown itself for the first time in Carnaryon and Flint.

The result may be stated in yet another way: while the population of England and Wales as a whole has been steadily growing, the following counties are practically in the same (absolute) position now as they were many years ago, viz.: Dorset as in 1871, Shropshire as in 1861, Hereford, Huntingdon, Brecknock, and Pembroke as in 1851, Cornwall, Rutland, and Anglesey as in 1841, Cardigan as in 1831, Montgomery and Radnor as in 1821.

Tables I and II show that the depopulation of rural Wales began somewhat earlier, and has been much more general and intense than that of rural England.

But the facts thus set forth are likely to convey a false impression, the boundaries of the geographical counties are very artificial, comprising the most diversified areas, the inhabitants of which are differently affected by the operation of like causes.

To take a few instances: while Cambridgeshire increased by only 3,345 in forty years, the town of Cambridge alone increased double as much as this in twenty years, so that there must have been in reality a considerable rural depopulation in that county. Again, in Dorset the town of Poole has been growing rapidly; in Norfolk also, if allowance be made for the growth of Great Yarmouth and Norwich, it will be found that the rural portions of that county have continued to lose population. The gain of population in Westmoreland in 1881-91 was mainly confined to Kendal and Ambleside, some of the districts losing 10 per cent. during the decennium. In Wiltshire the growth of New Swindon (17,245 in twenty years) and Salisbury (3,077 in twenty years) more than doubled the growth of the whole county.

"The Preliminary Report of the Census of England and "Wales, 1891" (p. vi), says: "The increase of population was by "no means equably spread over the country. In 271 of the 632 " registration districts into which England and Wales are divided " for registration purposes, the returns show an actual falling off "in the number of inhabitants, and in 202 out of these 271 "districts there had also been a decline of population between "1871 and 1881." I have endeavoured to examine this statement somewhat closely. 'The method I have selected is this: all the registration districts (or in a few cases sub-districts) in each registration county, which have exhibited a decrease of population in either of the last two decennia, have been noted, then all districts (or sub-districts) comprising towns of considerable size have been excluded (since the loss of citizens, which the central parts of large towns often suffer, is obviously quite a distinct phenomenon), and the populations of the districts so selected (amounting in all in 1871 to 5,033,022) have been then lumped

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together for each county, and taken to represent their rural populations. I have thus been enabled to compare the behaviour of the more rural populations of each part of the country in the two periods 1871-81 and 1881-91. Individual registration districts are two small for valid comparisons, but by this method of grouping, sufficiently large units are obtained; moreover the county units admit of grouping into registration divisions. My reason for not adopting the more obvious method of taking for the rural population that of the county less the towns, is that I wished as far as practicable to exclude those rural districts which are gaining population by becoming more and more residential. I wished as far as possible to deal with a population dependent solely upon the cultivation of the soil.

It will be observed from the table that during the decade 1871-81 the rural portions of England and Wales here compared lost, in nine registration divisions, 173,677 persons; but as a set off against this there was a gain of population in the North-western and Welsh divisions of 11,965, leaving a net loss of 161,712 persons, or 3.2 per cent. During the decade 1881-91 all the registration divisions lost rural population, amounting in all to 160,145 persons, or 3'3 per cent. It thus appears that taking England and Wales as a whole the amount of rural depopulation was practically the same in the two decades, both in absolute amount and relatively. Nevertheless there were considerable local differences, thus in the first decade the rural depopulation was greatest in the South-western, South-midland, and Eastern registration divisions, amounting to 130,723, or eight-tenths of the whole, but in the second decade the depopulation of these divisions fell off to 47,733, or less than three-tenths of the whole. Per contra, in the first decade, the rural depopulation of Yorkshire was trivial, amounting to only 4,757, and in the Welsh division there was an actual increase of 8,853, whereas in the second decade Wales headed the list with 42,213, and Yorkshire stood third with 18,724, so that these two divisions made up together three-eighths of the whole.

As regards the individual counties, in the following the rural depopulation was very notably less in the last decade than in the preceding, viz.: Hampshire, Berkshire, Buckingham, Oxford, Bedford, Cambridge, Essex, Suffolk, Wilts, Dorset, Devon, Cornwall, Somerset, Stafford, Worcester, Derby, Westmoreland, and Brecknock.

In the following counties the movement was very markedly greater in the second period, viz.: Sussex, Northampton, Shropshire, Rutland, Lincoln, York, Northumberland, Monmouth, Carmarthen, Pembroke, Cardigan, Montgomery, Flint, Denbigh, Merioneth, Carnarvon, and Anglesey.

Taking the twenty years 1871-91 the percentages of rural population lost vary in the following counties from 16.0 to 10.0 per cent., viz.: Durham, Cardigan, Westmoreland, Montgomery, Huntingdon, Radnor, Leicester, Cumberland, Cornwall, Monmouth, and Devon. That is to say that these eleven counties (as regards the selected districts) have lost from $\frac{1}{6}$ to $\frac{1}{10}$ of their rural population. In twenty-three other English and Welsh counties the total loss has varied between 8.7 and 5.0 per cent. or say from $\frac{1}{12}$ to $\frac{1}{20}$.

It should be borne in mind throughout these calculations that changes in the boundaries of districts have been made from time to time; but so far as possible adjustments have been made, and I believe that when several districts are grouped together any errors resulting from this cause may be neglected as trifling.

Lastly, in the case of three typical corn growing counties, far removed from the disturbing influences due to mineral wealth, namely, Norfolk, Suffolk, and Essex, I have carried the analysis much further back with, what I venture to think, interesting results.

These counties contain in all fifty-six registration districts, and each successive census proved that:—

In the decennium 1801-11 two districts decreased.

Adding together the recorded losses we get :-

```
In the decennium 1801-11 the aggregate loss was

'' 11-21 ''
'' 21-31 ''
'' 31-41 ''
'' 41-51 ''
'' 51-61 ''
'' 61-71 ''
'' 71-81 ''
'' 81-91 ''
'' 13,874
```

Thus we see that prior to 1851 the only decreases that occurred were trivial in amount, that the movement set in suddenly after 1851, but since that time has been strong and fairly constant, so that four Essex districts, seven Suffolk districts, and nine Norfolk districts have shown smaller numbers at every successive census, viz.: in 1861, 1871, 1881, 1891. (See Table VII.)

The loss in the Essex districts has varied from 7.4 to 18.8 per cent. of the 1851 population; the loss in the Suffolk districts from 8.9 to 26.8 per cent.; the loss in the Norfolk districts from 9.3 to 19.7 per cent.

The twenty districts had an aggregate population in 1851 of 377,312, but this dwindled in forty years to 325,575, involving

a loss of 52,081 inhabitants, or 13.8 per cent.

[It is curious that in another eastern county, Cambridgeshire, while every one of its nine districts increased in 1841-51 every one of them decreased in 1851-61, and again every one increased in 1861-71, and in 1871-81 seven out of nine once more decreased. In the decade last completed the movement was more nearly balanced, five districts increasing and four decreasing.]

Contrast with this a like examination of four typical south western counties,—Dorset, Devon, Wilts, and Somerset—now chiefly devoted to grazing.

The four counties in question comprise sixty-five registration districts; it appears that:—

In the decennium 1801-11 all increased.

The amount of the movement was as follows:-

In the decenni	um 1801-11 the a	aggregate gross lo	ss was } Nil
,,	'11-21	"	5 - "
,,	'21-31	,,	347
,,	'31-41	,,	1,918
,,	'41-51	,,	14,055
,,	'51-61	,,,	32,781
"	'61-71	,,	14,071
,, .	'71-81	,,	45,373
,,	'81-91	"	25,970

In Wessex then the rural exodus began ten years carlier than in East Anglia, and it began more gradually. In the two decades 1851-61 and 1861-71 the numbers were curiously alike in the two groups of districts chosen, but during the last twenty years the volume of the migration has been about twice as great in the west as in the east.

Table VIII shows that nine western districts have in fifty years lost on an average 22.2 per cent. of their initial population. While Table IX shows that seven other western districts have in forty

years lost 14.9 per cent. of their aggregate initial population. The extremes for individual districts range from 10.0 per cent. to 27.8

per cent.

I thought it best not to include Cornwall since the depopulation of that county, which, by the way, is not confined to the rural parts, is governed by the decay of a special industry—tin and copper mining. It is indeed not improbable that the same cause is responsible for the decline of one or two of the Devonshire districts included in my tables.

In many cases during the long period of time under review the boundaries of districts have been altered; in the more important cases these have been accurately adjusted so as to compare like areas throughout, in other cases rough adjustments have been made, while the numerous trivial alterations have been neglected,

as unimportant for my purpose.

In concluding this part of the subject, it should be noticed that selected areas have been chosen typical of the two parts of England in which the so-called rural depopulation is most marked. We find in the east a group of selected districts which has lost 13.8 per cent. of its population in forty years, in the west two groups, one of which has lost 22.3 per cent. in fifty years, the other 14'9 per cent. in forty years. Or, taking altogether, a selected population of two-thirds of a million has lost 100,000, or 16 per cent., in nearly half a century. When it is considered that side by side with these selected districts were others which either decreased intermittently, or not at all, and that the parts of England examined are those in which the loss of peasantry has been greatest, it will be admitted that deplorable as such loss may be-and it is deplorable on many grounds-we must not be led away by vague generalisations as to our country villages being emptied and the land left a solitude.

There is another way of looking at this: Wilts, Dorset, Norfolk, Devon, and Suffolk, contain few towns of any size, yet Suffolk, the most densely populated of the five, contains 249 persons to the square mile, and with the exceptions of Massachusetts and Rhode Island, no State of the American Union is so densely populated. Wilts is the most rural of the five, its largest town is New Swindon (27,295), yet its density, 193 persons to the square mile, is equal to that of New Jersey, and is far greater than that of Connecticut, New York, or Pennsylvania, and double that of Ohio or Delaware.

In Table VI the English and Welsh counties are arranged in order of their growth since 1851, and also in order of their density in that same year. From this it is clear that as a general rule the counties that were sparsely populated in 1851 have since

that date either actually decreased or remained nearly stationary. or at all events exhibited but a very moderate rate of increase; whereas, on the other hand, the counties that were densely populated in 1851, have for the most part increased very considerably since. The chief exceptions to this rule are: (1) Merioneth, North York, Cumberland, Northumberland, Glamorgan, and Essex, which have all increased much more rapidly than the rule would imply. The explanation is simple, Essex has been filled up with the overflow of East London, while the other counties have been the scenes of great mining developments. On the other hand the increase in Cornwall, Somerset, Flint, and Metropolitan Middlesex, has been much less than we might have expected. The failure of the mines, or rather foreign competition, explains the decay of Cornwall; the fact that the portion of Middlesex within the county of London was, even in 1851, to a great extent covered with houses, forced the growth of London into other directions.

As to the causes of such rural depopulation as we find to have taken place in England and Wales, I shall in this part of the paper refer only to one, viz., free trade. Free trade has almost certainly fostered the movement from country into town in two ways: its forces have been at once attractive and repulsive. By lowering the prices of agricultural produce, more especially wheat, it has made farming less profitable, turned cornfields into pastures, and so driven the people from the country. By increasing the volume of foreign trade it has increased the demand of the manufacturing districts for labour, and so has drawn the people into the towns.¹

Scotland.

The total population of Scotland has like that of England increased in every decennium of the present century, but as regards its constituent parts the irregularities of growth have been even greater than in the larger kingdom.

Scotland is divided into thirty-three counties,² which, however, (with the exceptions of Lanark and Edinburgh) have such small populations that they are in this respect comparable with English registration districts rather than English counties. Of these thirty-three counties no less than twenty-one have exhibited a decrease of population at one or other of the last six enumerations of the people, so that only twelve have increased without inter-

¹ In the discussion which followed the reading of the paper, Mr. John Walter called attention to the effect of the relaxations of the Law of Settlement in promoting rural depopulation. This was alluded to in my article in the "Dictionary " of Political Economy," but it is really only a special form of the "improved " communications," on which I lay much stress in the latter part of this paper.

² Counting Ross and Cromarty as one.

mission for the past sixty years; indeed few countries exhibit the phenomenon of rural depopulation in a more marked degree or extending over a longer period.

There were fewer inhabitants in 1891 than in 1881 in sixteen counties.

,,	?71 " fifteen	"
	'61 ,, ,,	,,
**	'51 ,, thirteen	33
;	'41 ,, twelve	23
11	'31 ,, nine	,,
,,	'21 ,, six	27
,,	'11 ,, four	,,
"	'01 ,, three	,,
11	11	

The three counties which have the distinction of smaller populations in the present day than at the beginning of the century are Sutherland, Kinross, and Argyll.

Three counties reached their maximum in 1831, viz., Perth,

Kinross, and Argyll.

Inverness reached its maximum in 1841.

Five counties reached their maximum in 1851, viz., Sutherland, Ross with Cromarty, Dumfries, Kirkcudbright, and Wigtown.

Five counties reached their maximum in 1861, viz., Shetland, Orkney, Caithness, Berwick, and Roxburgh.

Three counties reached their maximum in 1881, viz., Nairn, Elgin, and Haddington.

The remaining sixteen counties had more inhabitants in 1891

than at any previous census.

It may here be remarked that the Registrar-General for Scotland deals with nine "principal towns," the census of 1891 showed an increase of population in eight of these (Greenock being the exception); moreover, eight of these principal towns are situated in counties which have exhibited a continuous growth, Perth being the solitary exception.

In strict accordance with this we learn from Tables X and XI (which are compiled from the "Appendix Tables" attached to the reports of the Censuses of Scotland, 1881 and 1891) that while the towns and villages, taken as a whole, have been increasing for the past twenty years, the rural districts, taken as a whole, have decreased, and consequently the town population forms now a notably larger proportion of the whole, and the rural population a notably less proportion. Where the population is dense it tends to increase, where it is sparse it tends to decrease.

Table XII gives the year in which each Scottish county reached its maximum, the population in that year, and, for comparison, the population in 1891; also the absolute and percentage decrease from the maximum to the last census. From this we learn that the

decrease was trivial in Elgin and Roxburgh, but exceeded 10 percent. in six counties, viz., Perth, Berwick, Sutherland, Wigtown, Argyll, and Kinross; in the last two it amounted to 25.7 and 30.8 respectively.

The total loss of population was 91,578, or exactly 10 per cent. of the aggregate maximum populations of the seventeen decreasing counties.

At this point it seems well to digress from the proper sequence, in order to say something about the causes of this depopulation in Scotland, since the question naturally arises, "Is not the depopulation in this case due to the creation of large deer forests and the "consequent displacement of the peasantry?"

The materials for an answer to this question are to a great extent furnished by a Return to the House of Commons, dated 4th August, 1891, which gives certain "particulars of all deer forests and lands "exclusively devoted to sport in Scotland."

In Tables XIII, XIV, and XV are embodied the chief results of a careful examination of this return, from which it may be gathered that prior to 1883 there were 2,292,153 acres in Scotland devoted to deer forests and grouse moors; of this area some two-thirds were within the counties of Inverness and Ross with Cromarty, and a quarter in Argyll, Aberdeen, and Sutherland, Since 1882 some 274,980 acres have been afforested in the counties of Inverness, Ross with Cromarty, Sutherland, and Argyll, making in all 2½ million acres devoted to sport.³

The number of persons displaced by afforestation is not stated, but there are several indications that at any rate the greater part of the land can be of but trifling agricultural value, thus:-(1.) Two-thirds of the estates comprised land having an altitude exceeding 2,500 feet above the sea level, while in only four estates was the highest land under 1,000 feet; it is therefore evident that they are largely composed of mountains. (2.) In about half the estates (comprising 1,240,000 acres) the rent both before and after afforestation is given; in the very great majority of cases the sporting rent is higher than the old rent, often several times as great. In the cases in Table XIV the reverse is the case. It will be noted in about 200,000 acres the rent has fallen 18 per cent., in 10,000 acres as much as 34 per cent., this being the extreme, though in 47,000 acres the fall ranged from 26 to 28 per cent. (3.) The next Table XV shows that the rent before afforestation as regards more than one-fourth of the acreage for which the facts are available, ranged from nil to $2\frac{1}{2}d$. an acre; as regards nearly half the acreage it ranged from 3d. to 8d.; and in less than

³ The forest in Bute and five of those in Inverness have been added to subsequently to 1883, but the precise amounts so added are not given.

one-fourth of the acreage from 9d. to 1s. 8d., the last being the highest rental recorded. It is therefore abundantly proved that these vast tracts of country can have contained but an insignificant proportion of land adapted to agriculture.

In this association it may be noted that although rural depopulation in Scotland is most striking in the Highlands, and more especially in the extreme north and west, yet six of the lowland

counties have together lost nearly 20,000 persons.

The proportion of females to males varies very greatly, being in 1891, for the whole of Scotland, 107 females to each 100 males, but ranging from 89, 99, and 100 in Linlithgow, Stirling, and Lanark respectively, to 122, 124, and 136 in Forfar, Bute, and Shetland (see Table XVI).

These varying degrees of disparity of the sexes bear no very obvious relation to increase or decrease of population. Although it is true that the four counties with the lowest proportion of females to males are all counties, the increase of which has been steadily maintained, yet Argyll, a county which has decreased to an extreme degree, shows also a low proportion of females (104), while at the other end of the list are found in close proximity, all with very high proportions of females, a rapidly decreasing county—Shetland, and two counties which have not ceased to increase—Selkirk and Forfar.

Table XVI shows also the density of each county of Scotland in 1851 (calculated from the areas given in the census of 1891) and in 1891. It will be remarked that, with the single exception of the tiny county of Kinross, every county which had in 1851 a density below the average of Scotland, had a like comparatively low density in 1891. Only two counties with low densities—Selkirk and Banff, have continually increased, whereas only three counties with high densities—Kinross, Haddington, and Clackmannan—have in any decade since 1851 failed to increase. The four most sparsely inhabited counties, Sutherland, Inverness, Ross with Cromarty, and Argyll, are among those which have suffered most from depopulation, while the three densest counties—Lanark, Renfrew, and Edinburgh are those which have exhibited the greatest growth.

Ireland.4

This country presents almost as many peculiarities and points of especial interest to the statistician as to the politician.

Hitherto we have considered the question of local depopulations met with in the midst of large communities, which, taken as a

Several passages in reference to Ireland, as well as some others in the paper are borrowed, with the kind permission of Messrs. Macmillan, from the author's article on Depopulation in the "Dictionary of Political Economy."

whole, exhibit rapid and vigorous growth. In the case of Ireland, and as regards the countries to which I shall call your attention to-night, in the case of Ireland alone, do we meet with a large community which, in almost all its parts and for a very long term of years has constantly and very considerably retrograded in population. It will be a proper matter for consideration whether the same causes have been at work in Ireland as elsewhere, or whether the causes have been as exceptional as the results; whether, that is, we have here the same phenomenon in a much more intense form, or something quite different.

In Table XVII are given the population of Ireland at each census from that of 1821, the increase or decrease in each decade, both in absolute numbers and percentages, also the number of persons to a square mile.

At the beginning of this century the Irish were steeped in poverty, the country was densely populated even in the more barren parts (for one-fifth of the area of Ireland is made up of bog, marsh, and barren mountain), yet the people had few other resources than tilling the soil, which they did in a careless and slovenly manner, demoralised as they were by long dependence upon the potatos, a crop which in fair seasons feeds 40 persons by the labour of one. Their standard of living was the lowest: poorly clothed and fed, and miserably housed, they were chronically on the verge of starvation; and famines occurred in 1814, 1816, 1822, and 1831. Under these distressing circumstances they continued to multiply till the census of 1841 showed a population of 8,175,124. But already the pressure of population upon the means of subsistence had begun to seek relief by emigration, and the Census Commissioners of 1841 (Census of Ireland, 1841, Report) state, in explanation of the fact that the census numbers fell considerably short of their anticipations, that no less than 428,471 emigrants were recorded as having left Ireland for the colonies, and 104,814 for Great Britain, during the decade 1831-41. Nevertheless the population continued to increase, and is believed to have reached about 8,295,000 by the middle of the year 1845. Now such a population in Ireland involves a density of 263 to the square mile, whereas in 1890-91 we find the following densities in the countries named below :--

Scotland	135	Wales	206
Austro-Hungary	171	Germany	237
		Italy	

If we consider that these countries have either mineral resources, manufactures, or more genial climates and more fertile soils—or even several or all of these advantages—we may realise

how over-populated Ireland was on the eve of the great famine. It may be said, perhaps, that England supports a population of 541, Belgium 577, and Saxony 605 to the square mile, while Mr. Baines has recently told you that there are in India "nearly 47 million people living in the proportion of 600 to the square mile and over, and more than 36½ millions of them are packed to the extent of 800, or 1½ persons per acre." But then the first named countries only maintain their populations by enormous importations of food paid for by manufactures, and the conditions of the plains of the Ganges are quite incomparable to those prevalent in the Emerald Isle.

Under circumstances such as these the potato rot appeared in 1845 and again in 1846; the staple food of the people failed, and famine was the inevitable consequence. This reached its height in 1847, and brought in its train severe epidemics of typhus and relapsing fevers. So far as can be ascertained fever and starvation between them carried off about 729,000 persons. Truly such an appalling disaster is without any recent parallel, at all events in Europe.

When the people were again counted in 1851, the population had shrunk to 6,552,385, or 1,622,739 less than in 1841, but 1,742,676 less than the supposed maximum of 1845. The population had thus diminished by 20 per cent. in six years. Nearly three-fifths of this startling depopulation was due to the great exodus of 1847 and the following years, when the Irish poured into Liverpool and Glasgow to spread themselves over England and Scotland, while every ship sailing for Canada or the United States was crowded with men, women, and children, driven, in spite of an ardent love for their native land, to seek new homes in the then almost unknown western lands far over the sea.

The decrease was least in Leinster, greatest in Connaught; it affected every county in Ireland except Dublin; yet while this unexampled depletion of the rural districts was taking place, there was actually an *increase* in nine town districts, amounting in the aggregate to 77,519. Belfast and Dublin each added some 25,000 to their citizens, and the increase amounted to 6 per cent. in Cork, 10½ per cent. in Limerick, 11 per cent. in Dublin, and 33 per cent. in Belfast. Waterford, Kilkenny, Galway, Londonderry, Newry, Wexford, and Queenstown all increased more or less, but Drogheda, Clonmel, Sligo, Tralee, Carlow, and Armagh all declined. Mean-

⁵ Distribution and Movement of the Population in India. By J. A. Baines. Journal of the Royal Statistical Society, vol. lvi, p. 8.

⁶ See "Facts and Figures about Ireland," p. 6. By T. W. Grimshaw, M.D., Registrar-General for Ireland. Dublin, 1891. This gives the proportion of one death to every eleven inhabitants.

while the census of 1851 showed that the extent of land under tillage had increased by 2,091 square miles, and the value of the agricultural stock and crops was greater than any previously recorded. No fewer than 355,689 "fourth-class houses," mostly mud cabins, had disappeared, whereas the "first-class houses" had increased by 10,084, and the "second-class houses" by 54,574. In short, the depopulation was accompanied by a very notable rise in the standard of living. Subsequent enumerations have shown the same thing-a continuous (though less rapid) diminution of population accompanied by an improvement in the conditions of life, more especially as regards house accommodation. The 491,278 mud cabins of 1841 were represented by only 20,617 in 1891; in 1846 about 42 out of every 100 families in Ireland lived in a mud cabin having only one room and one window, but in 1891 only 4 families out of every 100; we must however set off against this some increased overcrowding of tenement houses in the large towns.7

The census of 1861 recorded a further loss of population, amounting to 753,418, or nearly 12 per cent.; that of 1871 again a loss, but much smaller, 386,590, or nearly 7 per cent.; that of 1881 a still smaller loss, 237,541, or only 4 per cent.; but the last census, that of 1891, brings us back to larger figures, the loss amounting to 470,086, or 9 per cent.

The total loss of population in the half century amounts to 3,470,374, or 42.5 per cent.; this was distributed among the four provinces in the following manner:—

P	Loss of Population in Fifty Years.	
Province.	Absolute.	Per Cent.
Ulster	766,559	32.1
Leinster	785,971	39.8
Connaught	694,085	48.9
Munster	1,223,759	51'1
Ireland	3,470,374	42'5

The facts are shown in detail for each county in Table XVII. With the exceptions of Antrim and Dublin (and for the decade, 1871-81, Kerry), every county showed a decrease at each successive census. The total loss in fifty years ranged from 27.5, 31.6, 37.4, 38.3, 38.7, and 39.0 per cent. in Down, Londonderry, Donegal, Armagh, Kildare, and Kerry respectively, to 56.5, 56.9, 57.0, 57.8, 58.1, and 60.2 in Clare, Kilkenny, Monaghan, Queen's County,

⁷ See "Facts and Figures about Ireland," pp. 17 and 18.

Meath, and Tipperary respectively. On the other hand Dublin County increased by 12.5 per cent., and Antrim by 20.9.

Many of the towns of Ireland have shared in the general decline: this, while especially true of the smaller towns which are mainly dependent, directly or indirectly, on agriculture, is not confined to such, since Drogheda, and above all, Limerick, cannot be included in this category. Cork and the city of Dublin have not greatly altered in population in fifty years, but around the latter have grown up a ring of suburbs now comprising close upon 100,000 inhabitants. The details are given in Table XIX. Carlow, Clonmel, and Drogheda have decreased without intermission; eight towns reached their maximum in 1851, and have declined since. Clonmel, Kilkenny, and Carlow are now mere ghosts of their former selves, having lost no less than 38, 45, and 46 per cent. respectively. At the other end of the scale stand Londonderry and Belfast, which have shown themselves to be quite independent of the surrounding gloom and depression; the former has more than doubled, having added 18,000 to its population, whereas the latter, by the addition of ten times as many, has much more than trebled itself. Its decennial accretions have been 25,000, 21,000, 53,000, 34,000, and 48,000. As regards its growth and progress, at all events so far as measured by numbers, Belfast need not fear comparison with any city of the United Kingdom, or of the continent of Europe; it ranks indeed with such colonial cities as Montreal, Sydney, and Melbourne, and has not many rivals even in that land of mushroom cities, the United States of America.

My point in referring in such detail to the growth of these towns is to show that the depopulation of Ireland is, in the main, rural, in other words that it is largely a question of employment, or lack of it.

Dr. Grimshaw tells us (op. cit., pp. 19 et seq.) that the acreage under crops in Ireland, not counting meadow land, was 1,476,000 acres, or 33 per cent. less during the decade recently completed than in 1851-61, but that the meadow land, i.e., land devoted to the growth of hay, has in the same interval increased by 714,000 acres, or 53 per cent. He adds: "If we turn to the average "acreage under crops per head of the population, we find the "following remarkable result. In the ten years 1851-60, it was "0.95 acre per person; in the ten years 1861-70, 1.01; in the "following ten years 1.00; and in the ten years 1881-90, 1.02. "There has practically been no change in the proportion between "cropped land and the number of the people since 1861; and the "proportional area is now considerably greater than in 1851. If "the large town populations were deducted, and a calculation "made for the country population alone, a similar condition would

"be found to exist." The pasture land has increased since 1851 by 1,550,077 acres, or 18 per cent., partly land formerly under crops, but largely reclaimed land now for the first time brought under cultivation. Sheep have increased by 5, and cattle by 18 per cent., while the pigs, which must on no account be omitted, have multiplied to the extent of 13 per cent. All this tends to show that the Irish farmers pay more and more attention to grazing, less and less to tillage.

A careful examination of the densities of the various counties, as given in the last two columns of Table XVIII, fails to show any marked tendency, such as we find in many countries, for the most sparsely peopled districts to decrease, and the converse.

France.

In the case of France we are again, as in the case of Ireland, confronted with a special problem, which, at all events upon the face of it, appears to be quite exceptional.

French vital statistics are dominated by one fact, a fact the causes of which I do not propose to discuss; of course I allude to the persistently low and ever falling birth-rate. For the twenty years 1872-91, the birth-rate in France averaged 24.65. It may surprise many to hear that for the same period of years the Irish birth-rate was even a trifle lower, viz., 24.61, but the marriage rate in the two countries was very different: in France 15.40, in Ireland 8.95. For comparison it may be stated that the rates in England and Wales for the same periods were 33.78 and 15.51. The low birth-rate in Ireland is sufficiently explained by the small number of married women of child-bearing age. Thus when we compare the number of births with the number of married women of child-bearing age in the three countries, we find that the proportion in Ireland falls but little short of that of England, whereas that of France is little more than two-thirds:—

Census, 1881.

The state of the s	Married Women, Age 15-45.	Average Annual Births, 1879-83.	Rate per Cent.
England and Wales	2,943,186 432,298	885,082 126,014	30·07 29·15
France	4,387,889	933,455	21.27

The small proportion of married women in Ireland is explained by the abnormal age distribution of the population, brought about by the large emigration that is constantly taking place. If the age and sex constitution of England and Wales prevailed in Ireland, there would have been in that country in 1881 about 69,000 more men and about 54,000 more women between the ages of 20 and 45; on the other hand, there would have been 81,000 fewer men of more than 45 years of age, and 59,000 fewer women. Emigration has most attraction for young men and women, and it may be added that those left in the old country are not likely to be the most eligible.

The division of France into départements and arrondissements are very convenient for my purpose; moreover, in the census report of 1886,8 there is given in a long table the increase or decrease in every arrondissement since the census of 1801, from which I have extracted the following facts:—

France increased from the beginning of the century to 1886 by 41.8 per cent.

France is divided into eighty-seven départements, of which at the census of 1886 no less than twenty-nine were decreasing in population. Moreover the following nine; Basses-Alpes, Calvados, Eure, Jura, Lot-et-Garonne, Manche, Orne, Haute-Saône, and Tarn-et-Garonne actually had smaller populations in 1886 than at the beginning of the century. On the other hand the following départements have increased without a break from 1801-86:—Allier, Bouches-du-Rhône, Loire, Loire-Inférieure, and Nord.

As regards the first group, though Caen (population 45,201) is in Calvados, and Cherbourg (population 38,554) is in Manche, it may be said that it contains no town of first rate importance. The increasing group on the other hand contains Marseille, Saint Etienne, Nantes, Roubaix, and Lille, all towns of over 100,000 inhabitants.

Again there is a group of twenty-one départements which has increased at almost every census, the exceptions being neither numerous nor important; amongst these may be mentioned Corse, Finistère, Gironde, Marne, Pas-de-Calais, Rhône, and Seine. This group contains Paris, Lyon, Bordeaux, Le Havre, Rouen, and Reims, not to speak of such towns as Bourges, Besançon, Brest, Tours, Orléans, Boulogne, Calais, Perpignan, and Limoges.

Lastly, there is another group of départements of which six:—Basses-Alpes, Eure, Gers, Lot-et-Garonne, Manche, and Orne have decreased in every census interval since 1846, and of which another six:—Ariège, Calvados, Jura, Sarthe, Tarn-et-Garonne, and Vaucluse have, with unimportant exceptions, decreased steadily during the same interval. These twelve départements only contain four towns with over 30,000 inhabitants (in 1891), viz.:—Cherbourg, Caen, Avignon, and Le Mans, the last, which is also the largest, only containing 57,412 citizens.

^{8 &}quot;Statistique Générale de la France: Résultats Statistiques du dénombrement de 1886," 1ère partie, pp. 8—21.

If we now proceed to take account of the 362 arrondissements into which France is further divided, we get still more interesting results. The 1886 census showed 205 of these to be increasing, and 157 decreasing. Of the increasing arrondissements 125 had shown a continuous increase for twenty years or more, whereas of those that showed a decrease in the period 1881-86, as many as eighty-one had been decreasing for at least twenty years.

Yet further, in 1886 it was found that no less than fifty-seven arrondissements were smaller than they had been at the beginning of the century, though of course it does not follow by any means that they had all, or even many of them, decreased continually; quite the contrary is the fact. Of these fifty-seven shrunken arrondissements, thirty-four had decreased by less than 1000 per cent., and twenty-three by upwards of 1000 per cent. The greatest losses of population, as compared with 1801, were the following:—

Lectoure (Gers)	20 p	er cent.
Argentan (Orne)	20	,,
Falaise (Calvados)	21	,,
Pont Audemer (Eure)	23	,,
Agen (Lot-et-Garonne)	23	"

The table in the "Statistique Générale," from which I have derived these facts, makes it easy also to group the arrondissements by the census years in which they attained their maximum. Thus we get:—

8	arrondissements reached	their maximum at the	
13	"	,,	'26
8	***	,,	'31
15	,,	,,	'36
17	,,	,,	'41
56	,,	"	'46
44	,,	,,	'51
9	"	"	'56
14		,,	'61
25		,,	'66
2	"	,,	'72
		,,	'76
16		"	'81
			'86
124	33	- 33	

From this it would appear that some crisis in rural economy occurred between the years 1846 and 1851, which led to no fewer than 100 out of a total of 361 arrondissements reaching their maximum at about that time.

The départements of the Seine, Nord, Rhône, and Seine Inférieure were the four densest alike in 1801, 1846, and 1886; moreover, the five départements of Basses-Alpes, Hautes-Alpes, Lozère, Corse, and Landes were the five most sparsely inhabited throughout, and

there has been a general tendency for the dense departments to get denser, and the sparse departments to lose population, but it must be admitted that there are many and important exceptions. (See Tables XX and XXI.)

It is possible that the *petite culture*, aided by a fertile soil and a genial climate, has produced the same effect in France as the potatoe did in Ireland, *i.e.*, it may have caused a local over population. It scarcely needs mention, although the fact is of great importance, that the conditions of land tenure in the two countries are as different as can well be imagined.

Table XXII shows that there is a close correspondence between the decreasing departments and those in which the average size of the family is lower even than the low average of France. Two departments that seem exceptions—Gironde and Seine—contain Bordeaux and the capital, and therefore have largely increased owing to immigration, as nearly all large towns do.

In the volume of the "Statistique Générale de la France," from which I have taken these facts, we shall find (p. 37) a table which shows that whereas the "urban population," or that contained in towns of 2,000 inhabitants and upwards, made up in 1846 only 24.4 per cent. of the total, it amounted in 1886 to no less than 36.0 per cent.; conversely, the rural population had diminished from 75.6 per cent. to 64.0 per cent.

As regards the shorter period, 1881-86, the report enters into considerable detail, and we learn (p. 41) that as regards the urban population:—

77 departments increased by 704,495 13 ,, decreased ,, 34,529

Whereas as regards the rural population:-

27 departments increased by 171,430 59 ,, decreased ,, 294,541

Further, by taking into consideration the births and deaths during the five years, it is possible (p. 44) to ascertain, with some approach to correctness, that the towns gained in 1881-86 by excess of immigration over emigration 626,301 persons, while during the same time the rural parts lost by excess of emigrants over immigrants 455,554. The balance of 170,747 is accounted for by the immigration of foreigners into France, a number fairly confirmed by the returns of birth-places in the census, which gave an increase of the foreign-born of 145,000.

And this brings us to the last point. The French population increases very slowly, but inexorable economic laws exact a revenge which no doubt the French people feel very keenly. The lack of men to do the requisite hewing of wood and drawing of water is

made up by foreign immigrants, more especially Italians and Belgians. The foreigners in France, who made up only 1.1 per cent. of the population in 1851, increased to 2.9 per cent. in 1886, or from 380,831 to 1,126,531. At the census of 1891 there was a decrease of 13,416, but this is probably more apparent than real, since the law of 21st June, 1889, led to the naturalisation of very large numbers of foreigners, who consequently now appear in the census in another category.

Table XXIII shows that in the twenty-five years 1861-86, while the population of France increased by 2,384,001, the foreigners domiciled in France increased by no less than 629,440, so that 26.4 per cent. of the total increase of the population was due to the foreign element.

The census of 1891 more than confirms its predecessors. No less than fifty-five out of the eighty-seven departments decreased, losing collectively 399,001 inhabitants. Of the thirty-two that together increased by 523,210, no less than seven showed a decrease of their rural parts when the large towns were deducted. On the other hand, forty-seven towns, of 30,000 inhabitants and upwards, increased by 350,026 souls, while but nine decreased, and these by only 9,630. It is not surprising that the French government is greatly exercised by this state of affairs.

Spain.

The census of 1887 showed that the population of the whole country, including the Balearic Isles and the Canaries, had increased by only 915,901, or 5.5 per cent. in ten years. Of the forty-nine provinces into which Spain is divided, four were practically stationary, two gaining and two losing two or three hundreds apiece, while four, with an aggregate population of over a million, lost between them 21,080, or 2.0 per cent. These stationary and decreasing provinces contained but two towns with over 30,000 inhabitants, and six out of the eight were sparsely populated, but on the other hand the five largest cities of Spain increased by 151,850, or 14.6 per cent. The provinces are large, with an average of 350,000 inhabitants, and doubtless an examination of their smaller sub-divisions would reveal a much more intense depopulation locally.

Italy.

The returns of the Italian census of 1891 have not yet come to hand. The census of 1881 showed a small decrease in the provinces Belluno and Siena. The provinces are divided into circondari, or districts, about five to each. They vary in population from 10,000 to half a million, but numbers between 40,000

and 150,000 are the rule. The 1881 census declared that thirty-six *circondari*, distributed over twenty-three provinces, had decreased. As regards ten of these *circondari*, comprising a total population of about 860,000, the loss amounted to 36,850 in all, and in the various districts ranged from 1,161 to 8,513 in absolute numbers, or from 1.6 to 11.1 in percentages.

The census of 1871 showed a decline in eight *circondari*, distributed over six provinces. Curiously enough in no instance was a decrease recorded in the same district at the two censuses, but this may be partly explained by the fact that as regards eight of the decreasing *circondari* of 1881, no comparison is possible.

Having in view the enormous emigration from Italy to South America, France, and the United States, it would be interesting to go into further details, but I have not been able to spare the requisite time.

As we have found in every other country examined, the great towns of Italy are growing very rapidly, so that we may fairly assume that the depopulation is mainly rural, and would no doubt appear greater still if the medium sized towns were excluded in our comparisons.

Switzerland.

The census of 1880 showed small decreases in the cantons of Aargau and Glarus, but the census of 1888 showed a more marked movement in the same cantons, and also in Uri, Schwyz, Obwalden, and Ticino. At the same time the large towns are all growing, though not to such an inordinate extent as in most countries.

Holland and Belgium.

In both of these countries it is evident enough that the towns are growing much more rapidly than the rural districts, but at present I cannot say more.

Norway.

Since Norway has for many years past sent large numbers of emigrants to the United States, numbers which in proportion to its population rival even those sent by Ireland, one naturally turns to its "fields" and "fiords" for evidences of rural depopulation, and not in vain.

Norway is divided into twenty prefectures. The census of 1875 showed that four of these had lost population since 1865, the loss amounting in all to 12,214 or 2.9 per cent. The census of 1891 showed that one of these four had more than recovered its losses, but that the other three had continued to decrease, though less rapidly, the total loss amounting to 7,951, or 2.5 per cent.

The three prefectures which exhibited a continued decrease for the twenty-six years—Nordre Trondjem, Hedemarken, and Kristians—lost 1,253, 1,313, and 16,904, or 1.5, 1.1, and 13.5 per cent. respectively (see Table XXIV). These three prefectures do not contain any town of 10,000 inhabitants. A more detailed examination of the figures would doubtless show that smaller districts in other parts of the kingdom had lost population, and that the depopulation was more intense in some parts of the prefectures specially referred to.

Table XXV, compiled from the "Annuaire Statistique de la "Norvège," 1892 (pp. 2 and 3), shows that the urban population has been increasing very much more rapidly than the rural ever since 1835; indeed, from 1865 onwards the rural population has become almost stationary.

Sweden.

The available statistics do not enable me to say whether or no local rural depopulation is taking place, but the big towns are growing rapidly, and some of the more rural provinces increase very slowly.

Germany.

The form in which the figures of the German Imperial census are presented does not readily lend itself to my subject, so that I am not able to put the matter in such a clear light as I should have wished.

The census of 1871 was taken under such exceptional circumstances that I have thought it better to confine my attention to those of 1875, 1880, 1885, and 1890, giving three periods of five years each.

From the population of each Regierungs-Bezirk, or government district, I have deducted the populations of all Gemeinden, or parishes, of 10,000 inhabitants and upwards, and have taken the residues to represent the rural districts. The free towns of Hamburg, Lübeck, and Bremen have small country districts attached to them, but they are so circumscribed, and are being so rapidly covered with suburbs in the cases of Bremen and Hamburg, that I think it best to omit them entirely from consideration.

With these exceptions then, the following general results hold good:—

In every government district, during each of the three periods, the increase in the towns of 10,000 inhabitants and upwards was greater than in the rest of the district.

Aggregating the towns of 10,000 and upwards for each district, in one case only (Stralsund) was there a decrease, and this only

amounted to 76 souls, or 0.2 per cent., and in one case only (also Stralsund) was there an increase of less than 1.0 per cent.

In the very large majority of the towns the increase ranged between 9.0 per cent. and 20.0 per cent. In the exceptional cases of Gera, the suburbs of Berlin, and Königsberg, such figures as 30, 32, and 35 per cent. have been reached.

On the other hand, in the residual populations, which I have taken to represent the rural districts, an increase of population exceeding 9.0 per cent. has been quite exceptional, but such figures as 1—5 are the rule; moreover, in forty-four cases a decrease appeared, usually under 3.0 per cent., but in the case of Königsberg (district) amounting in the last quinquennium to 5.4 per cent.

The following table shows this in more detail, and may perhaps make the matter clearer:—

GERMANY.	Rate of	Increase	of Government	Districts.
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200	Times in which such Rate occurred.		
Per Cent.	Town Districts.	Rural Districts	
Increase —			
30—	3	_	
25-30	2	_	
20-25	10	1	
15—20	33	2	
11—15	65	_	
9-11	55	4	
5— 9	50	35	
3— 5	8	69	
1— 3	_	56	
0-1	1	28	
Decrease-			
1-0	1	18	
3-1		22	
5—3		3	
-5		1	

The increase of the town districts was more marked in the earlier and later periods than in the middle; the decrease or stagnation of the rural districts was most marked in the middle period, least marked in the earliest. This is partly accounted for by the fact that the increase of the population of the German Empire was least in the middle period, in consequence of the very large emigration at that time.

German Empire.

Period. Emigrants.		Excess of Births	Enumerated Increase,	
	over Deaths.	Absolute.	Per Cent.	
1885-90	485,098	2,915,862	2,566,345	5.5
'80-85	857,287	2,597,218	1,621,643	3.6
'75-80	227,534	2,890,771	2,506,689	5.9

In fourteen districts, including the two Mecklenburgs, two Bavarian districts, one each in Baden and Würtemberg, Sigmaringen, one each in Silesia and Brandenburg, and the three districts of Pomerania, there was a decrease in both the later periods, i.e., from 1880-90.

If we turn to Prussia we can obtain some information for earlier years in considerable detail. The population is given for the smaller subdivisions or *Kreise*, the towns being given separately from the "open country" (*Plattes Land*).

Out of a total of 333 of these Kreise, the census of 1864 showed that thirty-eight had decreased in the three years since the preceding census. Of these thirty-eight Kreise, in seven the towns decreased as well as the open country, but in the remaining thirty-one they increased, with these results:—

Thirty-eight Kreise in Prussia.

Increase of towns	+ 42,640
Decrease of towns	- 1,430
Decrease of country	-16,910

The census of 1867 showed a much more rapid depopulation; no less than 133 Kreise decreased, twenty-six of them having also decreased in the earlier period.

Germany differs from England in having comparatively few very large towns, their place being taken (to the advantage of Germany) by numerous towns of more modest dimensions.

Table XXVI is derived from data furnished by M. de Beaucaire's paper? in the "Bulletin du Ministère de l'Agriculture de
"France," Février, 1886. It shows clearly enough that while all
the German towns are growing, the largest are growing the most
rapidly, but the rural districts are practically in a condition of
stagnation. The writer calls special attention to the number and
importance of village industries in Germany, as well as to the
increased demand for labour produced by the artificial stimulation
of the growth and manufacture of beetroot sugar.

The parts of Germany in which there is most evidence of rural depopulation are, as regards Prussia, the following: Pomerania, Posen, Silesia, Westphalia, and the Rhine Province. Outside Prussia it is most obvious in the two Mecklenburgs, Franconia, and Alsace.

The dominant local factors are clearly the rapid development of German manufactures, and the great stream of emigration to the United States.

"The Migration from the Rural Districts and the Condition of the Agricultural Population in Germany." By M. le Vicomte Rorric de Beaucaire (Journal of the Statistical Society, vol. xlix, p. 450).

Austria.

The census of 1880 showed that when the populations of the Bezirks-Hauptmannschaften were compared with the figures of the census of 1869, twenty-seven of them showed a decrease, which however amounted to upwards of 4.0 per cent. in three cases only (4.1, 6.0, and 6.8 per cent.) also two small towns exhibited a trifling decrease. The large towns as a rule increased by between 20 and 30 per cent., Vienna by 118,591, or 19.5 per cent., but Prague was an exception, its growth being but 2.9 per cent.

At the census of 1890 no less than fifty-seven Bezirks-Haupt-mannschaften, as well as two small towns, showed a decrease, which reached 40 per cent. and upwards in fifteen cases, 78 being the highest figure. The principal towns did not grow so rapidly as in the previous period, but most of them increased by upwards of 100 per cent.—Prague by only 21 per cent.—but on the other hand, exclusive of suburbs, Vienna added another 113,869 citizens, or 157 per cent. Fifteen of the Bezirks-Hauptmannschaften decreased in both periods, while in many cases a decrease in one period was associated with a very small increase in the other.

For the earlier period a table in the Statistisches Jahrbuch (1881, p. 2, et seq.) enables us to compare the smaller subdivisions termed Gerichts-Bezirke; it then appears that portions of sixty-three further Bezirks-Hauptmannschaften decreased, although there was in these cases a balance of increase for the entire districts. This shows still more clearly that extensive rural depopulation occurred.

Hungary.

The case of Hungary presents some peculiarities, which are in great part due to the remarkably small increase of the total population in the period 1869-80. Thus we see:

Population of the Kingdom of Hungary.

A The passe	in Lord Int	Increase in Decade
Tellinein molen		Absolute. Per Cent.
1850	13,191,553 13,768,513 15,417,327 15,642,102 17,349,398	576,960 4'37 1,648,814 11'98 224,775 1'46 1,707,296 10'91

This is in great part explained by the frightful epidemic of cholera in 1873-74. In the latter of these years the deaths practically equalled the births, but in the former they actually exceeded them by no less than 307,263.

The census of 1880 showed that out of fourteen Landestheile no fewer than thirty-six decreased. In thirteen cases the decrease amounted to 5.0 per cent. and upwards, while in one case it reached 13.3 per cent. During the same eleven years, in spite of the small growth of Hungary as a whole, the twenty-eight municipalities all increased in population, and ten of them by 10 per cent. and upwards. Buda Pest, indeed, increased by 33.2 per cent., and Agram (Zagrab) by 43.0 per cent.

During the decade 1880-90 the growth of the whole country was considerable, yet we find that three Landestheile decreased by 1.0, 1.1, and 5.6 per cent. respectively, and in thirteen other Landestheile the increase was under 5.0 per cent. whereas all the municipalities except two increased, and in fourteen cases to the extent of upwards of 10.0 per cent. Agram (Zagrab) increased by 33.2, Buda Pest by 36.4, and Fiume by 40.6 per cent. In the two small municipalities which exhibited a decrease it amounted to but 0.2 and 2.1 per cent.

From this it may, I think, be safely inferred that rural depopulation and the agglomeration of people in the great towns are both familiar phenomena in Hungary. Even if we admit that an unusually heavy death-rate is a disturbing factor, we are confronted with the fact of towns growing while rural districts dwindle.

Canada.

Let us turn from the old world to the new. Here at any rate one would not expect to meet with depopulation in any form, least of all rural depopulation. Where land is in superfluous abundance, where rent and landlords are unknown, where every man is his own master, there should be the paradise of the peasant. It might be supposed that in such a place a sturdy yeomanry would go on increasing for many a long year, till the forest and the wilderness should be entirely subjugated—the country fully settled. However, the bulletins of the Canadian census of 1891 tell quite a different tale.

The province of New Brunswick consists of fourteen counties; one of these diminished slightly in the decade 1871-81, but no less than seven decreased in the decade 1881-91. New Brunswick contains but one considerable town, St. John, and that also decreased; if this be deducted, we get a total loss in ten years in the rural parts of the seven counties of 11,259, or 8.3 per cent.

The province of Nova Scotia, one of the oldest settled parts of the dominion, contains eighteen counties; these all increased more or less in the decade 1871-81, but at the last census no less than eight of them exhibited a loss of population; no decreasing county contained any considerable town; together they lost 7,794 inhabitants, or 4.7 per cent. The city of Halifax increased

by 6.8 per cent.

The dominion statistician, Mr. George Johnson, accounts for the slow rate of increase of the maritime provinces by (1) the decay of early marriages and increasing tendency to celibacy, resulting in a diminution in the average size of the family; (2) the natural movement westward; and (3) the increasing aversion to agricultural pursuits.

The province of Quebec contains sixty-one counties; in the decade 1871-81 a decrease was seen in ten of these, amounting together to 7,280, or 5'4 per cent. In the last decade one of these counties recovered most of its loss, but the rest all continued to decrease, and were joined by seventeen others, making in all twenty-six decreasing counties. They lost together 26,663, or 6'4 per cent. The small towns of Trois Rivières and Lévis are within the decreasing counties, and shared their declines; but Hull and Sherbrooke increased by 63'5 and 39'9 respectively; Quebec indeed gained only 1 per cent., but Montreal, with its suburb of Hochelaga, grew rapidly in both decades, viz., 44'8 and 29'8 per cent., in other words, it more than doubled itself in the twenty years.

New France, though offering a strange contrast to old France, so far as its birth-rate is concerned—for the families of the habitans of Quebec have the reputation of being the largest in the world—resembles it in exhibiting, side by side, rapidly growing cities and decreasing rural districts. As is well known, French Canadians supply a large proportion of the mill hands of New England.

So far for French Canada; but how about English Canada, or rather, having regard to the large Scottish element, British Canada?

The province of ONTARIO is divided into forty-eight counties. In the decade 1871-81 only five of these, containing 132,381 persons, decreased in all by 2,423, or 1.8 per cent., but in the decade 1881-91 no less than twenty counties, containing 802,040 inhabitants in 1881, decreased in all by 42,867, or 5.3 per cent. Three counties decreased in both decades.

While large portions of the province were thus declining in population, the chief towns were growing rapidly; thus at the three last censuses we find the following populations:—

Growth of Population in Twenty Years of Five Chief Municipalities in Ontario.

the Steering, mounts, for	1871.	1881.	1891.
Kingston	12,407	14,091	19,264
London	15,826	26,266	31,977
Ottawa	21,545	31,307	44,154
Hamilton	26,716	35,961	48,980
Toronto	56,092	96,196	181,220
Total	132,586	203,821	325,595
Increase, actual numbers	-	71,235	121,774
" per cent	-	53.7	59.7

Ontario, though a new country, sends out many emigrants to Manitoba, to the North West, as well as to the United States.

The Dominion statistician gives several reasons for the decrease of many of the counties:—

(1.) A well intentioned endeavour to minimise the inherent defect of the de jure system of enumeration, i.e., its tendency to count persons twice over.

(2.) The movement on the one hand to the cities, on the other further west in search of cheaper land.

(3.) The introduction of labour-saving machinery in agriculture.

(4.) The departure of the lumbermen after the forests have been cut down.

(5.) The attraction of the mining regions of Algoma and Nipissing.

(6.) The decrease in the average size of the family from 5.54 in 1871, to 5.24 in 1881, and to 5.1 in 1891. Mr. Johnson says: "Had the average family of 1891 been as large as that of 1871, "there would have been over 180,000 more of a population in the "province than there is."

United States.

From Canada one naturally passes southwards to the UNITED STATES, where a not dissimilar spectacle meets our view.

The first thing to strike us is the vast growth of the cities north and south, east and west; the next thing the rapid spread of the people westwards.

The census of 1890 showed an absolute and not inconsiderable decline in one State, Nevada, which lost 16,505 persons, or more than one-fourth of its population, in the ten years. This case is exactly parallel to that of Cornwall, and the direct consequence of the "running out" of the great Comstock lode, and the failure of other mines.

Side by side with the torrential stream of progress, the comparative stagnation presented by the New England States, Vermont, Maine, and New Hampshire, is very clearly shown in Table XXVII. In the bad years of the war period, Maine and New Hampshire actually declined in population, and in several other decades the growth has been actually trifling, in most very small when measured by American standards.

It is however necessary to look a little below the surface. If we take the total increase of population in these three States during the last decade, and from this deduct the increase of all towns which in 1890 had upwards of 8,000 inhabitants, and add for comparison the States of New York, Massachusetts, and Ohio, we get the startling results given in Table XXVIII. The rural population has declined not only in the small States of Vermont and Maine, but in the Empire State itself. Moreover in New Hampshire and Ohio the new town populations have trebled the additions to the rural community, and in the case of Massachusetts have octupled them.

The compendium to the Eleventh Census, Table 2, gives the means of comparing the populations at each enumeration of the numerous counties into which the States and territories are divided. The labour of summing up the populations of the decreasing counties would have been too heavy for me, but I have in Table XXIX given for a great many of the States the number of counties which have declined in population during each of the last four decennia, and have also indicated the number of counties which have decreased more than once.

I believe that I have in every case made allowance for changes of boundaries.

The populations of the counties vary enormously; those which I have noted as decreasing range from 1,000 to 77,000, but these are exceptional numbers; there are few under 5,000 or over 40,000, the greater number lie between the limits of 10,000 and 30,000. To our old fashioned notions it seems strange that a county should disappear entirely, yet more strange that an official footnote should say in an apparently unconcerned manner, "no records by which "to account for its disappearance!" And yet this remark occurs some half-a-dozen times, the defaulting counties having during their existence numbered several thousands of inhabitants. Again we find difficulty in realising that a county may be vox et preterea nihil, but this is not far from true of such as return but seven, four, or even three inhabitants. The fact is that in a new country many settlements never get beyond the experimental stage, particularly in mining districts.

¹⁰ Using the figures given in "Bulletin" No. 52, pp. 6-9.

But lest you should think Table XXIX undeserving of your respect, I have excluded both the phantom counties and the uninhabited counties from its scope.

We see that the twenty-seven States dealt with in the table comprised in all 1,933 counties, of which 368 declined in 1880-90, 84 in 1870-80, 359 in 1860-70, and 188 in 1850-60. The great decline in the period during which the civil war occurred will be noted, but in the Southern States the large number of decreasing counties recorded at the census of 1870, was to a considerable extent due to the admitted shortcomings of that enumeration. It will be noted that 218 counties have decreased in two periods or more, 43 in three periods or more, and 7 in all four periods.

Confining our attention mainly to the last decade, we observe that the movement was most marked as regards the North-Eastern States in Vermont, Maine, New Hampshire, and New York; as regards the Central States in Ohio, Illinois, Indiana, and Iowa; as regards the Southern States in Virginia, Kentucky, and Tennessee; as regards the Western States in Nevada.

The absolute amount of the loss of inhabitants is in many cases small, but a priori we should scarcely have expected to find any.

"The State returns show that large numbers of New England farms have been abandoned, either because the soil was naturally poor, or exhausted by an improvident system of tillage, or because the farms were inconveniently situated far away among the hills. Thus it happens that much of the soil of New England has passed out of cultivation, the former cultivators having either gone into the great cities or migrated to the fertile soils of the western prairies."

A map published in the first "Extra Census Bulletin" shows very clearly what a wide area of the United States has been affected by depopulation.

Australia.

I will ask you now to take another long journey, and see what is going on in our Southern Colonies. The census of 1881 showed that of the sixteen counties into which Victoria was then divided, six had lost population to the extent of 45,174, or 16.6 per cent. The census of 1891 showed that five counties (three of which had also declined during 1871-81) had together lost 12,164, or 5.3 per cent. It is pretty well known that during the same ten years the city of Melbourne with its suburbs has reached the enormous figure of 488,999 inhabitants, having grown by 72.6 per cent., so that it now comprises within its ten-mile radius no less than two-fifths of the whole population of the colony!

[&]quot; Dictionary of Political Economy," article Depopulation, p. 558.

It is therefore pretty evident that something of the same kind of movement has commenced even in such a young country as Victoria.

If there be no direct evidence of rural depopulation in New South Wales, we should note that its capital, Sydney, is growing half as rapidly again as the whole colony.

Conclusion.

Now to what point has our survey brought us? There is one proposition to which I think everyone will assent, viz.: For the last forty years in every country throughout the world, new and old alike, the towns, and especially the large towns, have increased in population more rapidly than the rest of the country.

I have set before you evidence which proves this conclusively as regards the several parts of the United Kingdom; also that on the continent of Europe it is true of France, Germany, Norway, Austria, Hungary, Switzerland, Italy, and Spain—I might easily have added Belgium, Holland and Sweden. I have also shown that it is equally true of Canada, the United States, Victoria, and New South Wales. Without quoting the figures, I may add that it holds good of Argentina and Uruguay.

Additional evidence, if required, can be found in the valuable papers on the "Laws of Migration," by our colleague, Mr. Ravenstein, and in my "Studies in Statistics" (p. 156), but it will probably be accepted as a general proposition.

Further than this, I have shown that the movement of the people from the peaceful farmstead or the sleepy village to the busy go-head town, which is implied in this rapid growth of the towns, has in many cases gone much further. Not only has the increase of the rural population been drafted off to recruit the armies of urban industry, but the peasantry has been further drawn upon so as to result in an actual diminution of its numbers. when the population counted at a recent census is compared with that of ten, twenty, or thirty years previously. Such diminution, or depopulation, has been in the case of Ireland general, but a depopulation like in kind, if very different in degree, has occurred in France, in Scotland, in Wales; to a somewhat less degree in England. It is a fact to be reckoned with in Norway, in Italy, in Switzerland, in Spain, in Austria, and in Hungary. It is much less obvious, but yet existent, in Germany. So much for Europe; but it is not confined to Europe. Rural depopulation is obvious enough in Canada, and in the northern and older settled States of the American Union, and there are traces of it in Australia.

¹² Journal of the Royal Statistical Society, vol. xlviii, p. 167, and vol. lii, 1889, p. 241.

But if rural depopulation be very general in its extent, the figures that I have quoted show that its intensity has been greatly exaggerated; in the few spots where it is at its worst, it only amounts to a thinning of the people such as should be viewed with reasonable equanimity. Dr. Ogle's valuable paper¹³ makes this very clear, and throws much light on many phases of the problem.

Now comes the great question: What is the cause of this wide-spread phenomenon?

Is it a faulty system of government? If it be, then it is not peculiar to any one system, since it is more prevalent under republican institutions than under military absolutism, and is as bad under the constitutional monarchy of this country.

Is it a bad system of land tenure? This query may be met by another: Does the land system of England resemble that of France? Does the system prevalent in the United States, in Canada, in Australia, resemble any of the systems prevalent in Europe? I would not venture to affirm that systems of land tenure are without influence in the matter, that is inconceivable, but I do affirm, and that most strongly, that it cannot be the main, the dominant cause of rural depopulation.

Is it free trade? In a sense, yes; but yet it is compatible with most rigid protection.

Bear in mind that the causes, whatever they may be, affect alike Celt and Anglo-Saxon, Teuton, Latin, and Magyar. That their operation has the same result upon Frenchmen on the Loire and on the St. Lawrence; upon Prussians in Ohio and in Pomerania; upon Cornishmen in Cornwall and in Nevada. From the North Cape to the Apennines, from the bogs of Galway to the waving cornfields of Hungary the causes are at work; they are equally at work from the heights of Quebec to the Gulf of Mexico, and from Chesapeake Bay to Sacramento—a message comes from the Antipodes to say that even young Victoria is beginning to enter upon like experiences.

Self-governing colonies, republics in both hemispheres, as well as monarchies, new and old, constitutional and despotic, all tell the same tale.

Freeholds and leaseholds are alike affected, large holdings and small; the peasant proprietor of France on his much treasured scraps of land feels the impulse, whatever it may be, no less strongly than the yeoman of Ontario, of New England, of Illinois, or of Victoria. The Irishman crying out for land crosses the Atlantic, and is to be found, where? In the backwoods? On the

^{13 &}quot;The Alleged Depopulation of the Rural Districts of England," Journal of the Royal Statistical Society, vol. lii, p. 205.

prairies? No; far more often in the crowded cities of the eastern States.

The cause, or causes, whatever they may be, must then fit in with these seemingly incongruous facts, unless indeed we are to take up a somewhat impotent position, and say that each case must be dealt with separately, and without regard to its bearing on others.

What then is the cause? For my own part I have little hesitation in replying.

In primis there can be no doubt that many causes contribute their quota, and it may well be that in each locality some one of these contributory causes, which is usually quite subordinate in importance, may, owing to the special circumstances of the country or district, become so important as even to be predominant. Further, I freely admit that the many contributing causes act and re-act upon one another, so as to produce a nexus, which is in many instances far from easy to unravel.

With these reservations I shall state boldly that I believe the main causes to be two, of which the one may be termed sentimental, the other economic.

(1.) Whatever poets may have said of the pleasures of the country, whatever country squires may say in praise of turf or turnips, burn or moor, with whatever glee the jaded merchant or banker may rush off to the woods of Surrey or the dales of Cumberland, there can I think be no manner of doubt about the feelings of the great mass of the population. To them the country does not suggest pleasure, but the lack of it. The dream of the countryman is to get away from the country, just as it is the dream of many townsmen to get away from the town. Change naturally enough is attractive to us all, but whereas it is almost the rule for the rustic to wish to go to a town, it is comparatively exceptional for the townsman to wish to leave one.

An excellent account of the many circumstances which have contributed to create this restless spirit in our country villages, will be found in Mr. Anderson Graham's book, a work which is characterised by a singularly fair and sympathetic treatment throughout.¹⁴

I believe this, which I have called the sentimental cause, to lie at the very root of the matter, but it is, all said and done, of the nature of what medical men term *predisposing causes*; we have now to consider the *exciting cause*.

(2.) This, which I believe will be found in some form or another to underlie those various contributory causes—which, in

^{14 &}quot;The Rural Exodus." By P. Anderson Graham. Methuen and Co., 1892.

one case and another, may be so much more en évidence as to seem at first sight to be the chief cause—has many forms, and acts in many ways. It may be summed up in the phrase improved communications.

See what this implies. In the first place, the man who wants to go finds the means of transit. In the last century locomotion was slow, inconvenient, and expensive. It is now rapid, handy, and cheap. Improved communications include cheap postage and cheap telegraphs, which render possible a cheap press. These in their turn have had much to do with the spread of education. The press and the post put the village in communication with the town, the factory, the mine, the colonies. Men learn where there is a demand for labour, and are directed to it. Improved communications lead to the centralisation of industry; this in its turn lessens the demand for artisans in the country, while it increases the demand for them in the towns. Many things formerly made in the village, agricultural implements, waggons, gates, and fencing, even such small things as tools and hinges, are now more often bought in the market town than made in the village smithy; but even the market town does not make these things, but gets them in turn from the manufacturers in larger towns. If the village carpenter and smith have less to do, it is the same with the keeper of the village shop. Mr. Anderson Graham has called attention to the extinction of the village tailor consequent upon the wholesale manufacture of made up clothing. Northampton and other towns have exterminated the village cobbler in like manner. These are by comparison minor matters. The great improvement in agricultural implements, and the enormous saving of labour by their general adoption, is intimately connected with improved communications, and could hardly have originated under the old régime. Mr. Daniel Pidgeon, in a most interesting paper contributed to the Royal Agricultural Society,15 entitled the "Development of Agricultural Machinery," tells us how much is owing to the mere bringing together of agriculturists and mechanicians at the meetings of the Society, i.e., to improved communications making such meetings possible. This improvement began about 1841, and by 1861 (taking the census years as being familiar landmarks) the reaper was taking its place as a practical machine, and many improvements in turnipcutters, threshing-machines, &c., were made before and since, till now the flail and the reaping hook must be acquiring a value among bric-à-brac dealers as relics of a bygone age.

Mr. Pidgeon has called my attention to the great influence on the rural population of the suppression of the hand loom by the

^{15 &}quot;Journal of the Royal Agricultural Society of England," 1890, p. 257.

power loom, which occurred about the period 1830-42. In days gone-by spinning and weaving were important village industries.

But even this is not the most important influence which the changed conditions of locomotion have brought about. Time was when it was necessary that every country should produce its food within its borders; if there were not enough good land suitable for growing crops, well, bad and unsuitable land must be broken up, that was the long and short of it, beggars could not be choosers. That is the point; now we are no longer beggars, and we can choose; what is more we do choose. Whatever our fathers and grandfathers did, why should we be restrained? If more corn is wanted we can buy it in Egypt, or Russia, or Hungary. But why should we buy? We will not; nothing prevents us from going to Ohio, to Indiana, to Illinois; let us go then. But why stop there? If the land be better, let us go on to Minnesota by all means, or even to Dakota. It is but a little further, and we shall have the advantage, even if it be but a sentimental one (though I do not admit it) of remaining under the old flag-let us go further and sail to Manitoba, to the great Canadian North West. Our pastures are deficient, there are boundless sheep runs among the gum-trees of New South Wales, and cattle ranches in Alberta among the beautiful foot-hills of the Rocky Mountains. Freight is now practically of no account. Distance is reduced to its lowest terms, and we have made great inroads upon old Father Time himself.

Reduced to a sentence, what does this mean? It means that the dream of the free-trader is being fast realised. That we are more and more learning to do in each place that for which each place is most advantageously circumstanced. Improved means of communication, communication of persons, of things, of information—the locomotive and the steamship, the telegraph and the penny post make this practicable. Other mechanical improvements enable the greatest quantity of stuff to be produced by the smallest possible amount of labour. This is applicable to agriculture as to other things. Given that the growing sentiment of the mass of civilised mankind-by civilised I mean according to western ideas—is averse to agriculture as a pursuit, and it follows as a necessary consequence that no more men and women will remain attached to the soil than are absolutely required in each place for its cultivation in the way found to be most remunerative for that place.

Is this migration from country to town a thing to be rejoiced over, or the reverse? I have never heard but one answer. All are more or less conscious that the country life is more natural, and hence more desirable than the town life. We all have some poetry

in our constitutions, though it often fails to come to the surface. Apart however from all sentimental considerations, there are others of such a practical character as to admit of measurement, which may hence be termed scientific. That the town life is not as healthy as the country life is a proposition that cannot be contradicted. The great advances of preventive medicine in the last fifty years have indeed done so much to remove the grosser evils of the towns, and have had such obvious results in the lowering of the death-rate, that many persons are led to draw the inference that further progress may tend to make the urban standard of health nearly as high as the rural. Length of life is however not everything, the quality of life must be considered as well as its quantity. The narrow chest, the pale face, the weak eyes and bad teeth of the town-bred child are but too often apparent. It is easy to take an exaggerated view either way, but the broad facts are evident enough, long life in towns is accompanied by more or less degeneration of race. The great military powers of the continent know this well enough, and it may be surmised that with them agricultural protection is but a device to keep up the supply of country-bred recruits.

My object in writing this paper was to set out facts, not to propound theories, so that I shall say no more on this point, but must add a few words as to remedies. No remedy that I have ever read of, and no combination of them that I can conceive, will have, in my humble opinion, any appreciable effect. If my explanation of the facts be at all a close approximation to the truth, it is not a question of remedies, but rather of readjustment. If we are destined to be for the most part a people dwelling in cities, we must accept the fact, and we must make the best of it.

The general lines on which the readjustment must be made are now becoming fairly clear. The special necessities of which the townsman is apt to get less than his due share are fresh air and bodily exercise. The special evils to which he is now subjected are want of space in and about his dwelling, and too long confinement in ill ventilated schools, workshops, or even places of amusement. The public is so fully alive now to the importance of the water question and the drainage question, that the fear is rather that these should force other questions into the background. One of the very best signs of true progress in recent times has been the sudden outburst of enthusiasm for open spaces; I trust that it will receive no check, but that the demand will become, like the necessity, more and more imperative. Associated with this we must foster the love of athleticism; but such abundant facilities must be afforded, that the form it takes should be that of the general public itself partaking in sports and pastimes, rather than

the unhealthy form of professional athleticism with its concomitant evils of betting and gambling. Much greater attention should be paid to the question of ventilation in buildings of all sorts.

Wherever the necessities of a trade compel the crowding together of operatives in an atmosphere more or less vitiated, the hours of labour should be shortened, or frequent "breaks" in the working time be allowed. The out-door labourer will not suffer seriously from long hours; it is, on the contrary, the clerk, the compositor, the tailor, the sempstress, who need protection in this matter.

One of the greatest defects in our municipal government, at any rate here in London, is that we allow houses to be crowded together in a way that is incompatible with the health of their inmates; and the danger increases as the practice of erecting buildings to a greater and ever greater height is becoming so prevalent. I have great hopes that a Bill to amend the building laws of the metropolis, which is now being prepared, and will be introduced into Parliament in the next session, will effect much in this direction.

In somewhat summarily dismissing a number of remedies that have been suggested to cure the widely prevalent evil of rural depopulation, I must not be understood to condemn all such proposals; many of them may perhaps be worth trying on their merits, but what I do wish to lay stress upon is this, that those well meaning persons who pin their faith upon these reforms as likely to stop the progress of rural depopulation, are not likely to meet with anything but disappointment. A movement in the reverse direction may come in time, but it will be as the result of the operation of the law of supply and demand, and its time will not be until the supply of unoccupied land approaches to exhaustion. Mr. Giffen has told us that this time is not very far off; but be that as it may, when that state of affairs is reached, a further readjustment will be inevitable; much additional labour will have to be applied to the land with a view to making the soil produce its utmost.

APPENDIX.16

Table I.—Loss of Population recorded at each successive Census in certain English and Welsh Counties.

-	23.0	geron ana	·· coore O	otereuteu.		
	1851.	1861.	1871.	1881.	1891.	Gross Total Loss.
Wiltshire	2,059	4,910	_	_	- "	6,969
Cambridge	_	9,372	_	1,312	-	10,684
Norfolk	_	7,916	_	-	-	7,916
Rutland	_	1,222	_	639	775	2,536
Suffolk	_	145	-	_	_	145
Cornwall	_	-	7,047	31,657	8,097	46,801
Huntingdon	_	_	542	4,217	1,719	6,478
Dorset	-	-	-	4,746	-	4,746
Hereford	-	-	_	4,308	5,263	9,571
Shropshire	_	-	-	97	11,698	11,795
Westmorland	-	_	_	819	-	819
England	2,059	23,465	7,589	47,795	27,552	108,460
Merioneth	489	_	_	_	2,763	3,252
Montgomery	2,272	416	-	1,905	7,707	12,300
Radnor	742	_	-	1,902	1,737	4,381
Anglesey	-	2,718	3,569	_	1,337	7,624
Brecknock	-	_	1,726	2,155	715	4,596
Pembroke	_	_	4,280	174	2,699	7,153
Cardigan	_	_	_	3,171	7,674	10,845
Carnarvon	-	_	_	_	1,124	1,124
Flint	_	-	_	-	3,252	3,252
Wales	3,503	3,134	9,575	9,307	29,008	54,527

Note.—During the last half century the population of England has increased by 12,479,661, that of Wales by 607,209.

¹⁶ Although I have in a few cases availed myself of the "Statesman's Year "Book," by far the greater part of my data are derived directly from official reports of the several countries.

Table II.—Loss of Population per Cent. recorded at each successive Census in certain English and Welsh Counties.

N.B.—The percentage is in each case calculated upon the population as enumerated at the census last before the decrease set in. — denotes decrease; + denotes increase.

	1851.	1861.	1871.	1881.	1891.			
Wiltshire	-0.8	- 1.9	+ 3.1	+ 0.7	+ 2.3	+ 3.4	since	1841
Cambridge		- 5.1	+ 5.9	- 0.7	+ 1.7	+ 1.9	"	'51
Norfolk		- 1.8	+ 0.9	+ 1.4	+ 2.7	+ 3.1	,,	"
Rutland		- 4.9	+ 0.9	- 2.8	- 3.4	- 10.1	"	27
Suffolk		-0.04	+ 3.5	+ 2.4	+ 3.7	+ 9.5	,,	"
Cornwall			- 1.9	- 86	- 2.2	- 10.1	"	1861
Huntingdon			- 0.8	- 6.6	- 2.7	-12.7	,,	,,
Dorset				- 2.4	+ 1.8	- 0.7	"	1871
Hereford				- 3.4	- 4.2	- 7.5	"	"
Shropshire				- 0.04	- 4.7	- 4.8	22	33
Westmorland				- 1.3	+ 2.9	+ 1.7	33	"
Merioneth	-1.2	+ 0.3	+19.2	+13.8	- 7.0	+ 25.1	,,	1841
Montgomery	-3.3	- 0.6	+ 1.0	- 2.7	-11.1	-16.7	,,	"
Radnor	-2.9	+2.6	+ 0.1	- 7.5	- 6.8	- 14.4	"	22
Anglesey		- 4.7	- 6.2	+ 0.7	- 2.3	-12.6		1851
Brecknock			- 2.8	- 3.5	- 1.2	- 7.5	"	'61
Pembroke			- 4.4	- 0.2	- 2.8	- 7.4	"	**
Cardigan				- 4.3	-10.4	- 14.8		1871
Carnaryon					- 0.9	- 0.9	"	'81
Flint					- 4.0	- 4.0	"	"

Table III.—England and Wales, Registration Divisions. Decrease of certain Rural Districts in the Two Decades 1871-81 and 1881-91.

	Population,	Decrease, 1	871-81.	Population,	Decrease, 188	
	1871.	Absolute.	Per Cent.	1881.	Absolute.	Per Cent.
II. South Eastern	312,279	- 6,369	- 2.0	305,387	- 3,546	- 1:5
III. South Midland		-29,294	-4.4	639,825	- 8,731	-1.4
IV. Eastern	666,026	-24,422	- 3.7	644,641	- 10,995	- 1.
v. South Western	1,173,111	-77,007	- 6.6	1,096,884	-28,007	-2.0
VI. West Midland	598,135	-15,803	- 2.6	581,623	-16,975	-2.8
VII. North Midland	345,028	- 9,212	- 2.7	335,948	- 17,861	- 5:
VIII. North Western	91,070	+ 3,112	+ 3.4	94,162	- 2,198	-2:
IX. York	321,726	- 4,757	- 1.5	316,956	- 18,724	- 5:
x. Northern	185,756	- 6,813	- 3.7	178,577	- 10,895	- 6
xı. Welsh	671,138	+ 8,853	+ 1.3	679,923	- 42,213	-6.
ENGLAND AND WALES	5,033,022	-161,712	- 3.2	4,873,926	- 160,145	- 3

TABLE IV.—England and Wales, Registration Counties. Decrease of certain Rural Districts in the Two Decades 1871-81 and 1881-91.

	Popula-	Decrease,	1871-81.	Popula-	Decrease,	1881-91.
	1871.	Absolute.	Per Cent.	1881.	Absolute.	Per Cent.
Kent Sussex		- 1,009 + 505	- 1.8 + 0.8	56,470 63,140	- 829 - 1,990	- 1.5 - 3.2
Hampshire		- 2,419	- 2.3	102,554	+ 1,073	+ 1.0
Berkshire	86,931	- 3,446	- 4.0	83,223	- 1,800	- 2.2
Hertford		- 1,683	- 1.9	88,479	- 1,052	- 1.2
Buckingham		- 3,843	- 4.2	87,774	+ 3,144	+ 3.6
Oxford	AND HOL	- 4,890	- 4.1	115,194	- 2,234	- 1.9
Northampton	99,444	- 2,983	- 3.0	96,426	- 4,930	- 5.1
Huntingdon	58,031	- 4,808	- 8.3	53,223	- 2,933	- 5.5
Bedford		- 3,782	- 5.0	71,852	- 2,162	- 3.0
Cambridge	134,007	- 7,305	- 5.5	126,877	+ 1,436	+ 1.1
Essex	180,811	- 9,371	- 5.2	171,437	- 1,647	- 1.0
Suffolk	221,578	- 11,143	- 5·0 - 1·5	210,119	- 4,130	- 2.0
Norfolk Witshire	263,637 184,277	- 3,908 - 9,453	- 5.1	263,085 174,945	- 5,218 - 5,909	- 2·0 - 3·4
Dorset	143,005	- 8,757	- 6.1	134,236	- 3,698	- 2.8
Devon	225,919	-15,229	- 6.7	210,451	- 7,203	- 3.4
Cornwall	358,356	- 31,981	- 8.9	326,511	- 7,910	- 2.4
Somerset	261,554	- 11,587	- 4.4	250,741	- 3,287	- 1.3
Gloucester	163,850	- 6,008	- 3.7	157,635	- 5,292	- 3.4
Hereford	121,985	- 3,838	- 3.2	117,988	- 4,597	- 3.9
Shropshire	157,527	- 2,978	- 1.9	154,676	- 5,833	- 3.8
Stafford	14,325	- 252	- 1.8	14,103	+ 513	+ 3.6
Worcester	77,277	- 1,233	- 1.6	75,544	+ 77	+ 0.1
Warwick	63,171	- 1,494	- 2.4	61,677	- 1,843	- 3.0
Leicester	14,257	- 901	- 6.3	13,370	- 980	- 7.3
Rutland	23,385	- 378	- 1.6	23,007	- 884	- 3.8
Lincoln	232,825	- 4,972	- 2.1	227,853	- 13,531	- 5.8
Nottingham	54,005 20,556	- 2,400 - 561	- 4·4 - 2·7	51,605 20,113	- 2,283 - 183	- 4·4 - 0·9
Derby	68,783	- 561 + 2,621	+ 3.8	71,404	- 183 - 1,090	- 1.5
Lancaster	22,287	+ 491	+ 2.2	22,758	- 1,108	- 4.9
W. York	93,042	- 1,582	- 1.7	91,447	- 4,351	- 4.8
E. ,,	68,349	- 981	- 1.4	67,368	- 3,391	- 5.0
N. ,,	160,335	- 2,194	- 1.4	158,141	-10,982	- 6.9
Durham	19,155	- 1,613	- 8.4	17,542	- 1,455	- 8.3
Northumberland	93,123	- 601	- 0.7	92,147	- 4,883	- 5.3
Cumberland	48,293	- 2,154	- 4.5	46,148	- 3,253	- 7.1
Westmorland	25,185	- 2,445	- 9.7	22,740	- 1,304	- 5.7
Monmouth	31,598	- 1,258	- 4.0	30,312	- 2,031	- 6.7
Glamorgan	9,290	+ 1,812	+19.5	11,102	- 76	- 0.8
Carmarthen	48,145	- 305	- 0.6	47,840	- 2,081	- 4.4
Pembroke	54,812	- 1,480	- 2.7	53,332	- 2,613	- 4.9
Cardigan	79,051	- 2,928	- 3.7	76,123	- 8,882	-11.7
Brecknock	56,932	- 2,792	- 4·9 - 6·2	54,140 18 523	-1,276 $-1,404$	- 2·4 - 7·6
Radnor	19,754 78,400	-1,231 $-2,204$	- 8.8	76,197	- 8,900	-11.7
Montgomery	43,517	+ 2,257	+ 5.2	45,774	- 3,209	- 7.0
Denbigh	56,327	+ 1,455	+ 2.6	57,782	- 2,889	- 5.0
Merioneth	61,507	+ 6,771	+11.0	68,237	- 3,512	- 5.2
Carnarvon	96,678	+ 8,742	+ 9.0	105,439	- 4,421	- 4.2
Anglesey	35,127	+ 14	****	35,122	- 912	- 2.6
		Automatical Control				

Table V.—England and Wales, Registration Counties. Decrease of certain Rural Districts in the Twenty Years 1871-91.

3 4 4 4 4 4	Decr	ease.		Decr	ease.
	Absolute.	Per Cent.		Absolute.	Per Cent
Durham	3,068	16.0	Warwick	3,337	5.3
Westmorland	3,749	14.9	Cambridge	5,869	4.2
Huntingdon	7,741	13.3	Norfolk	9,126	3.2
Leicester	1,867	13.1	Kent	1,838	3.2
Cumberland	5,308	11.2	Derby	626	3.1
Cornwall	39,891	11.1	Hertford	2,785	3.0
Monmouth	3,317	10.5	Lancaster	637	2.9
Devon	22,432	10.0	Sussex	1,485	2.3
Dorset	12,455	8.7	Worcester	656	2.1
Nottingham	4,683	8.7	Hampshire	1,346	1.5
Wiltshire	15,362	8.3	Buckingham	699	0.9
North York	13,176	8.2	Stafford*	+ 291	+ 2.0
Northampton	7,913	8.0	Chester*	+1,531	+ 2.2
Lincoln	18,503	7.9			
Bedford	5,944	7.8			
Suffolk	15,278	7.0	Cardigan	11,810	14.9
Gloucester	11,507	7.0	Montgomery	11,110	14.2
Hereford	8,594	7.0	Radnor	2,635	13.3
West York	5,946	6.4	Pembroke	4,093	7.5
East York	4,372	6.4	Brecknock	4,068	7.1
Northumberland	5,859	6.3	Carmarthen	2,386	5.0
Berkshire	5,246	6.3	Anglesey	917	2.6
Essex	11,018	6.1	Denbigh	1,434	2.5
Oxford	7,124	5.7	Flint	952	2.2
Shropshire	8,684	5.5	Carnarvon*	4,340	+ 4.4
Somerset	14,874	5.4	Merioneth*	3,218	+ 5.2
Rutland	1,262	5.4	Glamorgan*		+18.6

* Increase.

TABLE VI.—ENGLAND AND WALES, Registration Counties. Arranged in the order of Increase or Decrease since 1851; also in the order of their Density in 1851.

	Increase or Decrease per Cent., 1851-91.		Persons to Square Mile in 1851.
Radnor	- 22	Radnor	65
Huntingdon	-17	Merioneth	70
Anglesey		Westmorland	77
Montgomery	-13	Brecknock	85 .
Cardigan		Montgomery	87
Cornwall	-11	North York	97
Brecknock		Cardigan	105
Rutland	37.73	Carmarthen	122
Pembroke	- 3	Cumberland	125
Cambridge	+ 2	Rutland	144
Salop		Lincoln	147
Norfolk		Pembroke	148
Flint		Hereford	149
Wilts	4 6	Northumberland	156 163
	The state of the s	Denbigh	
Dorset		Salop Carnaryon	173 178
Oxon		Dorset	184
Devon	11	Huntingdon	188
Somerset	12	Wilts	198
Westmorland	13	Anglesey	199
Bucks	14	Norfolk	213
Lincoln	17	Devon	214
Denbigh		Cambridge	215
Hertford		Northampton	216
Carmarthen	25	East York	223
Merioneth	26	Essex	224
Bedford	28	Berks	226
Carnaryon	V7774	Oxon	227
Gloucester		Bucks	228
Berks		Sussex	229
Cumberland		Suffolk	231
Northampton	44	Hants	243
Metropolitan Middlesex	54	Glamorgan	253
Monmouth		Cornwall	259
East York	59	Hertford	260
Leicester	61	Monmouth	262
Sussex	63	Extra-met. Surrey	272
Worcester	63	Bedford	272
Extra-met. Kent	. 66	Leicester	283
Hants		Somerset	289
Derby	. 66	Flint	294
Warwick		Derby	299
Northumberland		Extra-met. Kent	306
Chester		Nottingham	314
Nottingham		Durham	349
Stafford		Gloucester	375
West York		Worcester	381
North ,,		Chester	391
Lancaster		Warwick	501
Essex		West York	508
Metropolitan Surrey		Stafford	534
Durham		Extra-met. Middlesex	546
Metropolitan Kent		Lancaster	1,003
Extra-met. Surrey	. 182	Metropolitan Kent	3,802
Glamorgan	189	,, Surrey	13,453
Extra-met. Middlesex		" Middlesex	
England and Wales	61.8	England and Wales	285

Table VII.—England. Loss of Population in certain Rural Districts of Three Eastern Corn-growing Counties in Forty Years.

	Popu	lation.	Decr	rease.
*	1851.	1891.	Absolute.	Per Cent.
Essex—				
Halstead	19,253	16,869	2,384	12.4
Braintree*	17,561	16,263	1,298	7.4
Dunmow	20,526	16,674	3,852	18.8
Saffron Walden	20,716	17,958	2,758	13.3
Suffolk-				
Cosford (Hadleigh)	18,125	15,583	2,542	14.0
Thingoe	19,027	15,743	3,284	17.3
Mildenhall	10,354	8,559	1,795	17:3
Hartismere	19,028	14,691	4,337	22.8
Hoxne	15,649	11,461	4,188	26.8
Bosmere	17,219	15,045	2,174	12.6
Blything	27,883	25,394	2,489	8.9
Norfolk—				
Tunstead (Smallburgh)*	15,614	13,956	1,658	10.6
Aylsham	20,007	17,452	2,555	12.8
Depwade	26,556	23,293	3,263	12.3
Guilteross	12,744	10,228	2,516	19.7
Wayland	12,141	10,505	1,636	13.5
Mitford	29,389	26,311	3,078	10.5
Walsingham*	22,178	19,600	2,578	11.6
Swaffham	14,320	12,393	1,927	13.5
Thetford	19,022	17,253	1,769	9.3
Total, twenty districts	377,312	325,231	52,081	13.8

^{*} In each of these cases adjustments have been made for changes in the area of the district.

Table VIII.—England. Loss of Population in certain Rural Districts of Four South-Western Grazing Counties, in Fifty Years.

	Popu	lations.	Decrease in Fifty Years.		
	1841.	1891.	Absolute.	Per Cent.	
Dorset—					
Beaminster Devon—	15,112	10,366	4,746	31.4	
Honiton	23,892	20,522	3,370	14'1	
Crediton	22,035	17,104	4,931	22'4	
South Molton*	20,982	15,140	5,842	27.8	
Torrington	18,187	13,643	4,544	25'0	
Holsworthy*	12,353	9,342	3,011	24'4	
Wilts-			,	77.7	
Westbury	13,400	10,166	3,234	24'1	
Warminster	17,109	13,032	4,077	23.8	
Shepton Mallet	17,645	15,560	2,085	11.8	
Total of nine districts	160,715	124,875	35,840	22.8	

Table IX. — England. Loss of Population in certain Rural Districts of Four South-Western Grazing Counties, in Forty Years.

	Popu	lations.	Decrease in Forty Years.		
	1851.	1891.	Absolute.	Per Cent.	
Dorset—					
Blandford	14,837	13,359	1,478	10,0	
Bridport	16,866	14,038	2,828	16.8	
Devon-		The state of the s			
Tiverton*	33,540	28,938	4,602	13.7	
Wilts-	00,01		1	-3,	
Devizes	22,236	19.744	2,492	11'2	
Pewsey*	12,503	10,488	2,015	16.1	
Amesbury	8,250	6,888	1,362	16'5	
Somerset—	, , ,	,	-,		
Layport	18,567	14,478	4,089	22'0	
Total of seven districts	126,799	107,933	18,866	14.9	

^{*} In each of these cases adjustments have been made for changes in the area of the district.

Table X.- Scotland. Numbers and Proportions of People in Towns, Villages, and Rural Districts at last Three Censuses.

	Absolute Numbers.				Percentages	
	1871.	1881.	1891.	1871.	1881.	1891.
Towns Villages	1,951,704 386,993	2,306,852 447,884	2,631,298 465,836	58·1 11·5	61·7 12·0	65·4 11·6
Rural districts Scotland	3,360,018	980,837 3,735,573	928,513	30.4	26.3	23.0

Table XI.—Scotland. Increase or Decrease of Population in last Two Decennia.

	Absolute.		Per Cent.	
	1871-81.	1881-91.	1871-81.	1881-91.
Towns	+355,148 + 60,891 - 40 , 484	+ 324,446 + 17,952 - 52,324	+18·2 +15·7 - 4 ·0	+ 14.1 + 4.0 - 2.3
Scotland	+ 375,555	+ 290,074	+11.2	+ 7.8

Table XII.—Decrease of Population in certain Counties of Scotland. Populations at the Time of Maximum compared with those of 1891.

County.	Year of Maximum	ximum		Decrease from Maximum.		Nine Principal Towns	
1	Population.	Maximum.	1891.	Absolute.	Per Cent.	of Scotland.	
Shetland	1861	31,670	28,711	2,959	9'3		
Orkney	'61	32,395	30,453	1,942	6.0		
Caithness	'61	41,111	37,177	3,934	9.6		
Sutherland	'51	25,793	21,896	3,897	15'1		
Ross and Cromarty	'51	82,707	77,810	4,897	5.9		
Inverness	'41	97,799	89,317	8,482	8.7		
Naira	'81	10,455	10,019	436	4.3		
Elgin	'81	43,788	43,453	335	c.8		
Banff	1891	64,190	64,190	_			
Aberdeen	,91	281,332	281,332	_	_	Aberdeen	
Kincardine	91	35,647	35,647	_		Aberdeen	
Forfar	91	277,773	277,773			Dundee	
Perth	1831	142,166	126,199	15,967	11'2	Perth	
Fife	1891	187,346		10,867	112	rerth	
Kinross	1831	9,072	187,346	2,792			
Clackmannan	1891	28,432	6,280	2,192	30.8		
Stirling	1091	125,608	28,432				
Dumbarton	91		125,608				
Argyll	1831	94,495	94,495	05 050	_		
	1891	100,973	75,003	25,970	25'7		
	91	18,404	18,404	-	-		
Renfrew	,91	290,798	290,798	_	-	Greenock, Paisley	
Ayr Lanark		226,283	226,283	_	-	Kilmarnock	
	'91	1,046,040	1,046,040	_	-	Glasgow	
Linlithgow	'91	52,808	52,808	-	-		
Edinburgh	'91	434,159	434,159	_	-	Edinburgh, Leith	
Haddington	1881	38,502	37,485	1,017	2.6		
Berwick	'61	36,613	32,406	4,207	11.2		
Peebles	1891	14,761	14,761	-	-		
Selkirk	'91	27,353	27,353	-	-		
Roxburgh	1861	54,119	53,741	378	0.2		
Dumfries	'51	78,123	74,221	3,902	5.0		
Kirkeudbright	'51	43,121	39,985	3,136	7'3		
Wigtown	'51	43,389	36,062	7,327	16.9		
Total of decreas- ing counties}	-	911,796	820,218	91,578	10.0		

Table XIII.—Scotland. Deer Forests and Lands exclusively devoted to Sport.

County.	Acreage Existing prior to 1883.	Acreage Formed since 1882.	Total Acreage.
Aberdeen	174,260	_	174,260
Argyll	193,145	22,153	215,298
Banff	65,000	_	65,000
Bute	3,300 ? *	P **	3,300
Caithness	38,500	_	38,500
Forfar	61,660	-	61,660
Inverness	755,535 ? *	146,246?*	901,781
Perth	82,357		82,357
Ross and Cromarty	751,588	60,731	812,319
Sutherland	166,808	45,850	212,658
SCOTLAND	2,292,153	274,980	2,567,133

^{*} The forest in Bute and five of those in Inverness have been added to subsequently to 1883, but the precise amounts so added are not given in the return.

Table XIV.—Scotland. Deer Forests and Sporting Lands in which the present Sporting Rent is less than the former Agricultural Rent.

Acreage.	Old Rent.	Sporting Rent.	Diminution per Cent
	£	£	
10,153		448	34
15,000	675 276	200	34 28
32,460	942	700	26
12,000	749	600	20
45,000	435	350	20
22,500	900	750	17
10,800	336	300	II
16,000	600	550	8
35,050	835	800	4
Total 198,963	5,748	4,698	18

Table XV.—Scotland. Deer Forests and Lands devoted exclusively to Sport. Rents per Acre before Afforestation, and approximate Acreage at each Rental.

Rent per Acre, in Pence.	Approximate Acreage.
Nil	80,000
$\frac{1}{2}d.$ — $1\frac{1}{2}d.$	150,000
$2d 2\frac{1}{2}d.$	125,000
$3d 4\frac{1}{2}d.$	218,000
$5d 7\frac{1}{2}d.$	397,000
9d. —11d	190,000
1 2 <i>d</i> . —20 <i>d</i> , ,	88,000
Total	1,240,000

Table XVI.—Scotland. Persons to the Square Mile, and Females to 100 Males.

			100 Maes.	
	1851.	1891.	Remarks.	Females to 100 Males.
Sutherland		11	Decreasing since 1851	111
	13	22	144	107
Ross and Cromarty	24	25	751	111
	27	23	'31	104
Argyll	40	1	Decreased 1831-41; has in-	
Peebles	30	42	creased since	114
Selkirk	38	106	-	115
Kircudbright	48	45	Decreasing since 1851	112
Nairn	51	51	Has fluctuated; now decreasing	114
Perth	55	50	Decreasing since 1831	111
Shetland	56	52	,, '61	136
Caithness	56	54	,, '61	113
Dumfries	74	70	,, '51	113
Bute	76	84	Has fluctuated; now increasing	124
Roxburgh	78	81	Decreasing since 1861	115
Berwick	79	70	,, '61	110
Elgin	82	91	Has fluctuated; now decreasing	113
Orkney	84	81	Decreasing since 1861	113
Banff	85	100		109
Wigtown	89	74	Decreasing since 1851	112
Kincardine	90	93	Has fluctuated; now increasing	102
SCOTLAND	97	135	- 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	107
Aberdeen	108	144	_	110
Kinross	123	86	Decreasing since 1831	112
Haddington	134	138	Has fluctuated; now decreasing	106
Ayr	168	201	_	104
Dumbarton	187	383	- 11 44	101
Stirling	193	281		99
Forfar	219	317	-	122
Linlithgow	251	440		89
Fife	312	381	HERALI - LANGE CONTRACTOR	110
Clackmannan	482	605	Has fluctuated; now increasing	108
Lanark	601	1,186	_	100
Renfrew	658	1,187	THE COUNTY OF THE CONTRACT OF THE COUNTY OF	110
Edinburgh	716	1,199		111
2 11				

Table XVII.—Population of Ireland at each Census since 1821.

Census,	Population.		Density			
Conono	ropulation.		Absolute.	Per Cent.	Square Mile.	
1821	6,801,827			****	215	
'31	7,767,401*	+	965,574*	+ 14.2*	246*	
'41	8,175,124	+	407,723	+ 53	259	
'51	6,552,385	-1	1,622,739	-19.9	208	
'61	5,798,967	-	753,418	- 11.5	184	
'71	5,412,377	-	386,590	- 6.7	171	
'81	5,174,836	-	237,541	- 4.4	164	
'91	4,704,750	-	470,086	- 9.1	149	

^{*} There is reason to believe that the census of 1831 gave too large numbers, it was a long time in the taking, and payment was by results.

Table XVIII.—Ireland. Increase or Decrease of the Population in each County in Fifty Years; also Persons to the Square Mile.

	Popu	lation.	Increase or I	Density per Square Mile.		
	1841.	1891.	Absolute.	Per Cent.	1841.	1891.
Antrim	354,178	428,128	+ 73,950	+ 20'9	319	386
Down		267,059	- 101,084	- 27.5	387	280
Londonderry	222,174	152,009	- 70,165	- 31.6	277	190
Donegal	296,448	185,635	- 110,813	- 37.4	162	101
Armagh	232,393	143,289	- 89,104	- 38.3	478	295
Tyrone		171,401	- 141,555	- 45.2	258	142
Fermanagh		74,170	- 82,311	- 52.6	244	116
Cavan	243,158	111,917	- 131,241	- 54.0	341	157
Monaghan		86,206	- 114,236	- 57.0	408	176
Ulster	2,386,373	1,619,814	- 766,559	- 32·I	290	197
Dublin	372,773	419,216	+ 46,443	+ 12'5	1,053	1,184
Kildare	114,488	70,206	- 44,282	- 38.7	176	108
Louth	128,240	71,038	- 57,202	- 44.6	407	226
Wexford	202,033	111,778	- 90,255	- 44.7	226	125
Wicklow	126,143	62,136	- 64,007	- 50.7	162	80
Carlow	86,228	40,936	- 45,292	- 52.5	250	119
Westmeath	141,300	65,109	- 76,191	- 53.9	210	97
Longford	115,491	52,647	- 62,844	- 54.4	288	131
King's Co	146,857	65,563	- 81,294	- 55.4	191	85
Kilkenny	202,420	87,261	- 115,159	- 56.9	256	110
Queen's Co	153,930	64,883	- 89,047	- 57.8	232	98
Meath	183,828	76,987	- 106,841	- 58.1	204	85
Leinster	1,973,731	1,187,760	- 785,971	- 39.8	261	157
Mayo	388,887	219,034	- 169,853	- 43.7	191	108
Sligo	180,886	98,013	- 82,873	- 45.8	257	139
Leitrim	155,297	78,618	- 76,679	-49.4	269	136
Galway	440,198	214,712	- 225,486	- 51.2	190	93
Roscommon	253,591	114,397	- 139,194	- 54.9	281	127
Connaught	1,418,859	724,774	- 694,085	- 48.9	217	111
Kerry	293,880	179,136	- 114,744	- 39.0	163	99
Cork	854,118	438,432	- 415,686	- 48.7	298	153
Waterford	196,187	98,251	- 97,936	- 49.9	276	138
Limerick	330,029	158,912	- 171,117	- 52.0	319	154
Clare	286,394	124,483	- 161,911	- 56.5	241	105
Tipperary	435,553	173,188	- 262,365	- 60.2	266	106
Munster	2,396,161	1,172,402	-1,223,759	- 51.1	259	127
IRELAND	8,175,124	4,704,750	-3,470,374	- 42.5	259	149

Table XIX.—Ireland. Population of Principal Towns in 1891, compared with 1841.

	Popu	Population. Increase or Decrease.		Remarks.			
	1841.	1891.	Per	Cent.	A	Absolute.	Action to
Carlow	10,409	5,591	_	46	_	4,818	Continuous decline.
Kilkenny	19,071	11,048	_	45	-	8,023	Maximum, 1851.
Clonmel	13,505	8,427	_	38	_	5,078	Continuous decline.
Drogheda	17,300	11,873	_	31	_	5,427	,,
Limerick	48,391	37,155	_	23	_	11,236	Maximum, 1851.
Galway	17,275	13,800	-	20	-	3,475	,,
Tralee	11,363	9,318	-	18	-	2,045	
Sligo	12,272	10,274	-	16	-	1,998	and the second
Waterford	23,216	20,852	-	10	-	2,364	Maximum, 1851.
Cork	80,720	75,345	-	7	-	5,375	,,
Armagh	10,245	10,070*	-	2	-	175	
Wexford	11,252	11,545	+	2	+	293	Maximum, 1851.
Dublin City	232,726	245,001	+	5	+	12,275	,,
Newry	11,972	12,961	+	8	+	989	
Dundalk	10,782	12,449	+	15	+	1,767	Minimum, 1851.
Lisburn	6,284	12,250	+	95	+	5,966	
Lurgan	4,677	11,429	+ 1	144	+	6,752	
Dublin suburbs	33,683+	97,381	+ 1	189	+	63,698	
Derry	15,196	33,200	+	118	+	18,004	Continuous growth.
Belfast	75,308	255,950	+2	240	+1	80,642	"

^{* 1881.} Boundaries altered since.

Table XX.—France. The Twenty most Densely Populated Departments.

TABLE AA	FRAN	CE. The Twenty most	Densety .	Fopulaiea Departments	•
At Census of 1801.	Persons to a Square Kilometer.	At Census of 1846.	Persons to a Square Kilometer.	At Census of 1886.	Persons to a Square Kilometer.
1. Seine	1,321	1. Seine	2,847	1. SEINE	6,185
2. NORD	135	2. Nord	199	2. Nord	
3. Rhône	107	3. Rhône	199	3. Rhône	
4. Seine-Inférieure.		4. Seine-Inférieure	126	4. Seine-Inférieure	138
5. Manche		5. PAS-DE-CALAIS	106	5. PAS-DE-CALAIS	129
6. Calvados		6. Manche		6. Loire	127
7. PAS-DE-CALAIS		7. Loire	94	7. Bouches-du-Rhône	119
8. Seine-et-Oise	75	8. Somme	92	8. Seine-et-Oise	110
9. Somme		9. Côtes-du-Nord	91	9. Finistère	105
10. Côtes-du-Nord	78	10. Finistère	91	10. Loire-Inférieure	94
11. Ille-et-Vilaine		11. Calvados	90	11. Ille-et-Vilaine	93
12. Eure	67	12. Seine-et-Oise	85	12. Côtes-du-Nord	92
13. FINISTÈRE	65	13. Ille-et-Vilaine	83	13. Somme	
14. Orne	65	14. BOUCHES-du-RHÔNE	81	14. Manche	88
15. Puy-de-Dôme	64	15. Haute-Garonne	79	15. Meurthe-et-Moselle	83
16. Sarthe	63	16. Aisne	76	16. Calvados	
17. Loire	61	17. Sarthe	76	17. Morbihan	79
18. Tarn-et-Garonne	61	18. Loire-Inférieure	76	18. Haute-Garonne	77
19. Lot-et-Garonne.	60	19. Puy-de-Dôme	75	19. Aisne	76
20. Oise	60	20. Vaucluse	74	20. Maine-et-Loire	74
France	bir	France	66	France	72

Note.—The departments which are noted for INCREASE are printed in CAPITALS.

,, decrease ,, italies.

[†] This is an estimate, perhaps excessive.

Table XXI.—France. The Twenty most Sparsely Populated Departments.

At Census of 1801.	Persons to a Square Kilometer.	At Census of 1846.	Persons to a Square Kilometer.	At Census of 1886.	Persons to a Square Kilometer.
1. Corse	19	1. Basses-Alpes	23	1. Basses-Alpes	19
2. Basses-Alpes	19	2. Hautes-Alpes	24	2. Hautes-Alpes	
3. Hautes-Alpes	20	3. Corse	26	3. Lozère	27
4. Landes	24	4. Lozère		4. Corse	
5. Lozère	25	5. Landes		5. Landes	
6. Pyrénées-Orientales	27	6. Indre		6. Haute-Marne	
7. Cher	30	7. Loir-et-Cher	40	7. Cantal	
8. Indre	30	8. Cher	41	8. Aube	
9. Loir-et-Cher	33	9. Haute-Marne	42	9. Côte-d'Or	44
10. ALLIER	34	10. Aube	43	10. Indre	44
11. Nièvre	34	11. Pyrénées-Orientales	44	11. Gers	44
12. Vienne	35	12. Vienne	44	12. Loir-et-Cher	44
13. Indre	36	13. MARNE		13. Meuse	
14. Var	36	14. Aveyron		14. Var	
15. Drôme	36	15. Cantal		15. Aveyron	
16. Vendée		16. Côte-d'Or	46	16. Yonne	48
17. Haute-Marne	37	17. Aude	46	17. Drôme	
18. MARNE	37	18. ALLIER	46	18. Eure-et-Loir	
19. Aveyron	37	19. Nièvre	47	19. Ariège	
20. Cantal	38	20. Loiret	47	20. Vienne	
France	51	France	66	France	72

Note.—The departments which are noted for INCREASE are printed in CAPITALS, decrease , italics.

Table XXII.—France.—Twelve Departments in which the Mean Number of Children to a Family was exceptionally low, compared with the like Number of Departments in which the Decrease of Population was excessive.

Departments with Small Families.	Mean Number of Children to a Family.	Decreasing Departments.	Decrease, 1846-86.		
1. Orne	1'31 1'44 1'55 1'60 1'61 1'65 1'65 1'71 1'71 1'71	Basses-Alpes Orne Eure Manche Gers Lot-et-Garonne Ariège Tarn-et-Garonne Calvados Jura Sarthe Vaucluse	Almost continuous		

Note.—Names common to both lists are printed in italics.

Departments marked * have decreased since 1846, but not continuously.

Table XXIII.—France.—Increase of Foreigners, and Proportion of such Increase to Total Increase.

		lation.	Incr	Increase.		
Census.	Total.	Foreign.	Total.	Foreign.	per Cent. on Total Increase.	
1861	35,834,902	497,091	_	_	_	
'66	36,485,489	635,495	650,587	138,404	21'3	
'76	36,905,788	801,754	420,299	166,259	39.6	
'81	37,672,048	1,001,090	766,260	199,336	26.0	
'86	38,218,903	1,126,531	546,855	125,441	22'9	
25 Yrs.	_	_	2,384,001	629,440	26.4	

Table XXIV.—Norway.—Prefectures showing Decrease.

	Population.			Increase o	Increase or Decrease	
	1865.	1875.	1891.	1865-75.	1875-91.	nev Cent
Nordre Bergenhus Hedemarken Nordre Trondjem Kristians	86,803 120,442 82,489 124,980	86,108 119,449 81,421 115,522	87,552 119,129 81,236 108,076	- 696 - 993 -1,068 -9,458	+1,444 - 320 - 185 -7,446	+ 0.9 - 1.1 - 1.5 - 13.5

Table XXV.—Norway.—Rural and Urban Population.

Census.	Popul	lation.	Incr	ease.	Increase per Cent.		
Ocusus.	Rural. Urban.		Rural.	Urban.	Rural.	Urban.	
801	789,469	93,569	_		_	_	
'15	791,741	94,633	2,272	1,064	0.3	1.1	
'25	932,219	119,099	140,478	24,466	17.7	25.9	
'35	1,060,282	134,543	128,063	15,444	13.7	13.0	
'45	1,164,745	163,726	104,463	29,183	9.9	21.7	
'55	1,286,782	203,265	122,037	39,539	10.5	24:1	
'65	1,435,464	266,292	148,682	63,027	11.6	31.0	
'75	1,481,026	332,398	45,562	66,106	3.2	248	
'91	1,526,788	474,129	45,762	141,731	3.1	42.6	
801-91	_	_	737,319	380,560	93.4	406.7	

Table XXVI.—Germany. Urban and Rural Population.

		1871.			Increase		
	Number.	Population.	Per Cent. of Total Population.	Number.	Population,	Per Cent. of Total Population.	in Nine Years
Large towns (over 100,000)	8	1,968,537	4.8	14	3,273,144	7.2	Per Cent.
Average towns (20,000—100,000)	75	3,147,272	7.7	102	4,027,085	8.9	28
Small towns [5,000—20,000]	529	4,588,364	11.2	641	5,671,325	12.5	24
Large villages (2,000—5,000)	1,716	5,086,625	12.4	1,950	5,778,976	12.7	14
Rural districts		26,219,352	63.9	-	26,513,531	58.7	1
	-	41,010,150	100.0	-	45,264,061	100.0	10

Table XXVII.—United States. Growth of Vermont, Maine, and New Hampshire in One Hundred Years.

Census	Vermont.		Maine.		New Hampshire.		United States.	
Interval.	Absolute.	Per Cent.	Absolute.	Per Cent.	Absolute.	Per Cent.	Per Cent	
1890-80	136	0.04	12,150	1.9	29,539	8.5	24.9	
'80-70	1,735	0.5	22,021	3.5	28,691	9.0	30.1	
'70-60	15,453	4.9	-1,364	- 0.2	-7,773	- 2.4	22.6	
'60-50	978	0.3	45,110	7.7	8,097	2.6	35.6	
350-40	22,172	7.6	81,376	16.2	33,402	11.7	35.9	
'40-30	11,296	4.0	102,338	25.6	15,246	5.7	32.7	
'30-20	46,686	18.9	101,186	33.9	25,306	10.4	33.6	
'20-10	18,071	8.3	69,564	30.4	29,562	13.8	33.1	
'10-00	63,430	41.1	76,986	50.7	30,602	16.6	36.4	
1800-1790	69,040	80.8	55,179	57.2	41,973	29.6	35.1	

Table XXVIII.—United States. Urban and Rural Increase of certain States during Decade 1880-90 compared.

	Total Increase.	Urban.	Rural.
Vermont	136	2,836	- 2,700
Maine	12,150	14,253	- 2,103
New Hampshire	29,539	21,811	+ 7,728
New York	914,982	917,294	- 2,312
Massachusetts	455,858	402,951	+ 52,907
Ohio	474,250	365,704	+108,550

Table XXIX.—United States. Number of Counties in certain States which have Decreased in Population.

	Total Number	Number which Decreased in				Number which Decreased at least		
State.	of Counties.	1890-80.	1880-70.	1870-60.	1860-50.	Twice.	Three Times.	Four Times.
Alabama	66	5	2	41	6	8	2	_
California	54	12	3	15	2	9	3	_
Colorado	58	8	3		1 100	_	_	_
Florida	47	5	1	7	2	_	-	-
Georgia	137	19	6	33	48	24	4	_
Illinois	102	30	9	1	-	8		_
Indiana	87	24	4	3	2	8	_	_
Iowa	99	27	4			3	_	_
Kentucky	119	25	1	26	19	18	2	
Maine	16	7	7	11	5	8	5	3
Maryland	24	9	1	8	I I	4	_	_
Massachusetts	14	2	2	4	2	3	2	1
Michigan	84	12	ī	3	I	3	_	_
Mississippi	76	11	8	32	6	9	2	_
Missouri	115	10	I	5	2	1		_
Nevada	14	12	2			2		-
New Hampshire	10	3	I	7	3	4	2	1
New Jersey	21	3	_	1		1	_	-
New York	60	23	6 .	20	10	17	5	-
North Carolina	96	9	2	26	12	7	1	_
Ohio	88	28	2	19	18	18	3	1
Pennsylvania	67	12	1	2	2	-	_	-
Tennessee	96	16	7	21	22	16	2	-
Texas	243	10	6	14	_	2	-	-
Utah	25	4	2	_	_	1	_	_
Vermont	14	8	4	6	7	9	5	1
Virginia	101	34	I	54	18	35	5	-
Total of these \ 27 States }	1,933	368	84	359	188	218	43	7

DISCUSSION ON DR. LONGSTAFF'S PAPER.

Mr. C. M. Kennedy, C.B., said that the facts were complex, but the results, generally speaking, were uniform. All the world over the people were flocking into the towns, though to a variable degree. Taking the case of the United Kingdom, two influences appeared to affect rural districts: the first, external—namely, that of the large towns, which led to an increase of population in their immediate neighbourhood; and the other, that of circumstances arising within rural districts, which led to a decrease of popula-The former had been sufficiently treated in the paper, but as regarded the latter, it might be said that in general, in parishes with less than two thousand inhabitants, and outside the direct influence of the towns, the decrease was often in inverse ratio to the population. It was, however, not so much the villages as the outlying hamlets and houses, which were not conveniently situated for the social advantages of village life, that became untenanted or fell into decay. Such houses had been built in order that the labourer might be nearer his work, but at present female influence was adverse to them; the women liked to be in the village, and even more than the men preferred town life. Many occupations, such as the army and police, and various employments on railways, were mainly supplied from the rural districts, because countrymen were better fitted for them than townsmen. The long peace enjoyed in this century had also encouraged the rise of seaside towns. Generally the larger the town the greater was its tendency to draw people to it and to its immediate neighbourhood.

The same rule held good in Australia and New Zealand, where the population crowded into the larger towns, and the country districts became mere working localities where various farm industries are carried on, not localities of a resident population. In Germany it appeared that the rural population, according to the last census, was rather increasing, and that local industries were being developed. In Russia also both urban and rural population were increasing, the peculiarity in the case of Russia being that the rural districts still continued to be the home of the people resident there; they might go into the towns for some months, according to the trades they were engaged in, but they returned as soon as their particular work was done to their permanent homes. This had an important social and political bearing in

Germany and Russia.

The conclusion seemed to be that at this period of the world's history there was in almost all countries an influx into the towns, to a variable extent, but to an extent which did in fact diminish the rural population. The conditions of life, and improved facilities of communication which enabled people to move about as they pleased; the convenience, freedom, and enjoyments of town life were preferred to the health and rest of the country. This result

was not brought about by the action of government, nor did it follow wholly from economic causes, but it was rather the effect of the circumstances of the times. Some of the forces now at work, such as the more recent indifferences to country life, were likely to become less effective during the next decade, but the influence of large towns on their immediate neighbourhood was likely to increase rather than to diminish.

Mr. NOEL A. HUMPHREYS said that Dr. Ogle, in his paper read four years ago, showed how the aggregation of the country population to towns arose mainly from two distinct sets of causes. In the first place it was of course due to the reduced demand for farm labour, which could fairly be attributed to agricultural depression; but in the second place it was also largely due to the extensive substitution of factory and machine made goods for the product of village handicrafts. Dr. Ogle had also pointed out that long experience in all ages had proved it to be impossible for any rural population, except in new and unsettled countries, to absorb the whole of its natural increase, or the excess of births over deaths. So long as we were able to employ the surplus rural population in the towns, so long would the population of England be maintained. The most striking feature in the census returns for 1891 was, however, the decreasing rate of aggregation to large towns. In the twenty counties of England which contained over 60 per cent. of urban population, the aggregate rate of increase showed a remarkable decline in the ten years 1881-91. The whole population of England and Wales had increased by 12 per cent., as against 14 per cent. in the previous decade; but the rate of increase in these urban counties had decreased from 19 to 12 per cent. It was also clearly shown that there had been a greater increase in the fifteen counties having the largest proportion of persons engaged in agriculture in the last ten years than in the preceding decennium. Dr. Longstaff had referred to this, although he had adopted a different method which gave somewhat different results. These fifteen counties indeed retained in the ten years 1881-90 a larger proportion of their excess of births over deaths than was the case in the preceding ten years. Not only, therefore, was the aggregation to towns lower, but the so-called depopulation in the rural districts was less. The exclusively rural registration districts, selected from the southern, eastern, and central counties, had in 1891 an aggregate population of nearly a million. He found that in these rural districts there had been a decrease of population of not more than 6 per cent. in the forty years 1851-91, and that the decrease in the last ten years was absolutely smaller than that in the preceding decade. It seemed, therefore, that the tide of rural exodus had turned, and while he believed that this decreased aggregation to towns was partly due to general commercial depression, the permanent decline of our towns could by no means be regarded as a sign of national prosperity.

Mr. John Walter thought that anything which threw light upon the alleged depopulation of rural districts was of the greates

importance. The modern system of allotments-which people in his neighbourhood did not seem to care much about-and the various other schemes for bringing back the people to the soil, were, in his opinion, quack remedies for an evil which did not really exist, except in a few cases; in Essex, for instance, where the land had been thrown out of cultivation owing to the ruin of the farmers. In Berkshire he had not heard of any depopulation; he had always been able to obtain labourers when he required them. What surprised him was that labourers should be willing to leave a good cottage and garden, with 12 or 14 shillings a week, in order to live in a town for a pound or 21s. a week, out of which they would have to pay some 6s. for very inferior lodgings. They would be able to get people to stay in the country if they could make it worth their while, and for this purpose they must find the means of raising some produce which would pay for cultivation. He himself attributed the depopulation, so far as it existed, to the elementary schools. Depopulation had set in when people began to be better educated. Boys got to think that broadcloth was better than fustian, and the girls thought that a little finery suited them best. He was afraid also that popular education tended rather to discourage hard manual labour. This was also the case in America, where, as well as in England, the boys were all anxious to be clerks. In the same way the girls wanted to go into the factories, where they could get more amusements and society. This question of amusements was really the root of the matter. A labourer's life was certainly to some extent a dull one; still, he was better off in the country with a cottage and garden than he would be in the town with a third more wages. The condition of the dock labourers was miserable in comparison with that of an ordinary English labourer. Nevertheless, there was no complaint among farmers as to any difficulty in getting labourers suited to their purpose; there was especially a good demand for gardeners, who were better paid now than formerly.

At the beginning of the century, during the war, there had been a great movement in favour of increasing the population, and the system of paying labourers according to the number in the family had been introduced, the additional wages being made up out of the rates. After the war the object became rather to diminish the population, and a squire who built a cottage was abused for bringing more people into the parish. That was owing to the law of settlement, which had had more to do with the so-called abuses of the poor law system than anything else. Now the people could migrate as much as they liked. It seemed a remarkable fact that there should be so much emigration from Norway, a country which appeared to be eminently adapted for the labourer. Some years ago, when visiting the lunatic asylum at Madison (Wisconsin), he had found that Norway and Sweden sent a larger proportion of lunatics to this institution than did other countries, the reason being that they had come over to the United States without money and in great distress, and, after working like slaves, had become lunatics through misery and despair. Their children, however, generally turned out well.

There were therefore two sides to the emigration question. Wherever the white man could live he would make a home, and the inferior races would gradually disappear. It was a law of nature, and consequently, as Dr. Johnson said in "Rasselas," he did not trouble himself as to how the world was to be peopled, either in town or country; it would take very good care of itself.

Mr. CLARE SEWELL READ was glad to find that his own views coincided with those of Dr. Longstaff. He quite agreed that increased education was the main cause of depopulation. more a man was civilised the greater was his tendency to become more "club-able" and gregarious. It simply meant that the man preferred the conveniences, and especially the pleasures, of the town to the dulness and solitude of the country: it seemed to be the course of nature. The only means of checking this migration would be a revival of agriculture. Dr. Longstaff had mentioned the diminution of the rural population in Wales, he (Mr. Read) considered this to be in great measure due to the replacement of arable by pasture lands. Fifty years ago, in a district with which he was well acquainted, three-fourths of the land was arable, now it was all pasture. One farm of fifty acres in particular was managed entirely by a widow, her daughter, and one boy. Land under pasture or dairying, which required one, or at most two, labourers, would if under crops require four or five. This diminution of the arable land was therefore an important factor in rural depopulation in the greater portion of Wales, and also in East Anglia. Ever since 1874 they had had to contend with adverse seasons and low prices; and now that they were suffering from a drought unexampled, he believed, in the present century, he should expect to find that a still larger proportion of land in East Anglia would be allowed to fall down to grass, and that there would be a larger number of the rural population seeking employment in the great towns.

Major P. G. CRAIGIE said that Dr. Longstaff had clearly demonstrated that what was popularly meant by depopulation had not actually occurred. That there had been a decrease in certain parts of the country was undoubtedly true, here as well as abroad. But there was nothing special in our English conditions in this respect: what had happened was very much what Mr. Kennedy had described, and the decline was largely due to the causes mentioned by Mr. Walter and Mr. Read. The point alluded to by Mr. Humphreys was of importance, viz., that in the fifteen agricultural counties selected by Dr. Ogle when he dealt so clearly with this subject in 1889, the population, excluding urban districts of 10,000 or more inhabitants, instead of showing a decrease of over 4 per cent., as in the decade ending 1881, in the later decade to 1891 showed a decrease of less than I per cent. Looking now at the losses of population in the past forty years as recorded in Table IV of the present paper, it must be borne in mind that nearly one-half of the total loss (46,000 out of 108,000) had occurred in the single county of Cornwall, and there it was due almost

entirely not to agricultural but to mining causes. Shropshire also showed more recently a large decrease, but here again certain mining questions had probably to be taken into consideration. Of peculiarly agricultural counties in this table other than those in Wales, Cambridge showed the greatest loss, but it would appear that the loss here shown had almost all taken place prior to 1861. No doubt there was now in process a general tendency to a diminution of agricultural employment, owing, as Mr. Read had said, to the changes in the agriculture of the country, which required less labour than when there had been more arable cultivation. But that evening's discussion showed there had been no recent extraordinary diminution of the population such as was often alluded to in exaggerated articles on this question.

Mr. Price-Williams said that in a paper he read before this Society in 1880, he had drawn attention to the fact that what was called depopulation of the rural districts was merely the result of

the influx of the population into the towns.

At the beginning of this century the rural population of England and Wales exceeded that of the population of the towns by 1,662,046, and the rate of increase reached its maximum of 14.74 per cent. in 1811; the town population, which increased more rapidly, amounted to the same as that of the rural districts about the middle of the decade of 1841 and 1851, and from that time, as the tables and diagrams in his paper showed, the rural population had continued rapidly to decline, while the town population had as rapidly increased, so that in 1871 it exceeded that of the rural districts by nearly $2\frac{1}{2}$ millions, as graphically shown in the diagram illustrating his paper.

The decrease in the population of Ireland to which the author had drawn attention, was very remarkable, and having regard to the fact that its population in 1841 exceeded 8 millions, or 263 persons per square mile, a greater density, as the author pointed out, than that of a great country like Austria, was a very significant fact, and showed that the rapid decrease which had since occurred could not but be regarded as a healthy indication when the very limited natural resources of the country were taken into

consideration.

As regarded the cause of the depletion of the rural districts in England, he was glad to learn from what had fallen from Mr. Noel Humphreys that this was not attributable to the agricultural depression. He concurred in thinking it was not alone the pursuit of pleasure which had led to this influx of the rural population into the towns, but somewhat mixed motives, amongst which not the least was the very natural desire to attain to a better social position.

Mr. C. S. Loch said that the fluctuations in the four typical south-western counties were very striking. The number of dis-

^{1 &}quot;On the Increase of Population in England and Wales, June, 1801 to 1871." Read June, 1880, and printed in the Journal, part 3, vol. xliii.

tricts showing a decrease were, in successive periods, twenty-four, forty-two, twenty-three, forty-seven, and thirty-nine. He would like to ask whether Dr. Longstaff could assign any reason for these remarkable variations. Reference had been made to Petty. Defoe, in his "Complete Tradesman," gave an instance of the effect of direct lines of trade. He took the case of a Wiltshire clothier, who supplied a Northamptonshire shopkeeper.

"The wearer or consumer's buying the cloth or stuff 6d. a yard, or a suit of clothes 2s. or 3s. the cheaper, is not equivalent to the public to the finding bread and subsistence, as it passes, for six or seven families who might otherwise gain their living by that manufacture if it went in the ordinary channel. For example:—

"Suppose the manufacture be a piece of broad cloth, and is made at Warminster, in Wiltshire. The clothier, when it is finished, sends it up by the carrier to London, to Mr. A., the Blackwell Hall factor, to be sold. Mr. A., the factor, sells it to Mr. B., the woollen draper. Mr. B., the woollen draper, sells it to Mr. C., shopkeeper at Northampton, and he cuts it out in his shop, and sells it to D. E., Esq., a country gentleman, and other gentlemen about him, to make them new suits of clothes; and so they are the last consumers. Also it is sent down by the carrier from London to Northampton.

"Now, between the Wiltshire clothier and the Northampton shopkeeper here are no less than four important families of tradesmen, who get their living, and perhaps in time grow rich by their

business in the negotiating, as I may call it, this cloth.

"1. The carrier from Warminster to London. His pay comes to perhaps 5s. per cloth, which is 2d. per yard upon the cloth at market.

"2. Mr. A., the Blackwell Hall factor, has his commission at 2½ per cent., which, if this cloth be sold for 158. a yard, amounts

to $4\frac{1}{2}d$. per yard.

"3. Mr. B., the woollen draper, selling it to Mr. C., the shop-keeper at Northampton, and giving him perhaps six to nine months' credit. He cannot afford to get less than 9d. or 1s. per yard by him.

"4. The Northampton carrier, for carriage, must have something. Suppose about $1\frac{1}{2}d$. per yard for carriage; all which

amounts to 18. 8d. per yard advance upon the cloth.

"But, now, here is Mr. F. G., another shopkeeper at Northampton, an overgrown tradesman, who, having more money than his neighbours, and wanting no credit, he finds out where these cloths are made, and away goes he to Warminster directly, settles a correspondence with the clothiers there, buys their goods, and has them brought directly by horse packs to Northampton; and perhaps paying ready money, tempts the clothier to sell it him id. per yard cheaper too, than his factor sold it at London to the woollen draper.

..... "And what is all the benefit which is made by this spoil upon trade? Only this: to make one covetous man rich, and that Squire D. E., of Northamptonshire, may buy his suits of clothes so much a yard cheaper, which is of no great concern to

him, nor does he value it; nor is it of any moment in proportion to the wound which trade receives by it, in all the particulars mentioned above.

"This is cutting off the circulation of trade; this is managing trade with a few hands; and if this practice, which is indeed evidently begun, was come to be universal, a million of people in England, that now live handsomely by trade, would be destitute

of employment, and their families, in time, want bread."

The lessened circulation of trade would thus inevitably tend to centralise population. But there was another side to the question. Facility of locomotion carried with it its own cure, in some measure. By it large urban centres of population were formed, but by it also these urban centres spread out far and became ruralised.

Mr. F. Hendriks desired to call attention to the fact that not our country alone, but the whole habitable parts of the globe, were interested in the gigantic problem and the questions arising out of it, illustrated by Dr. Longstaff's statistics. This tendency to migrate from the rural districts to the towns was to be found in countries where either free trade or protection existed, or which were or were not, afflicted with any agricultural distress. It seemed to be a common tendency to all mankind, and to be a kind of instinct, like that of the bee who flies to seek the flowers from which to gather honey, alike on the distant mountain as in the nearest and most fertile mead. It was surely a sound economic principle which led men to go where they would get the most profitable employment, and according as the ever increasing facilities in the means of locomotion enabled them to transfer their services to the best market.

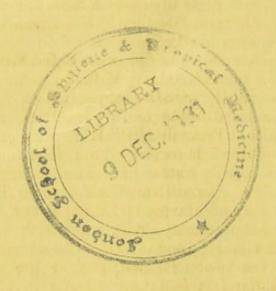
Mr. S. B. L. Druce said that not having given that attention to the 1891 census that he had given to the 1881, he had been surprised to hear that the decrease in the rural depopulation of this country had been less in the last decade than in the preceding one. The causes seemed to be that the great disturbance among the farm labourers first occurred during the decennium 1871-81, that strikes began among that class during that period, that agitators and others, no doubt with the intention of improving the farm labourers' position, caused them to be discontented, and above all, education then began to be general among them. It was also intensified by the fact that in the earlier part of the period trade was very good, while in the later part agricultural depression had set in and was annually getting worse. The poorer classes were then more anxious to escape it, whereas many of them were now more resigned. With regard to the large number of countries affected by the movement, it seemed to him, contrary to what others had said, that this very universality went to show that it was due to agricultural depression, since it was well known that agriculture had for some little time past been and was still in a depressed condition over nearly the whole world.

Sir Rawson W. Rawson agreed that the two chief elements of the change were facility of communication and the extension of education, with which must be taken into account also the effect of the spread of literature. This had encouraged young people to seek for an improvement in their position, and at the same time to seek to get more amusement than they could do in the country. But another factor, arising out of the above-mentioned causes, was the solution of those bonds of sympathy, or of obligation, which formerly existed between different classes in rural districts. Formerly the peasant rarely thought of breaking off his relations with his employer, and his family and surroundings, but now the opportunities and inducements to leave drew the rural population into the towns, where they could improve their position, and enjoy more amusement.

Mr. Baldwyn Fleming considered that the paper was eminently reassuring, since the causes which had been assigned were more than sufficient to account for the slight depopulation which had occurred, at all events, during the last ten years. Agriculture in England had undergone a great change during a considerable period; new wheat countries had been opened up, and great facilities had been afforded for importing food from abroad, so that agriculture appeared to have been subjected to much the same conditions as the manufacturing industry when machinery had been introduced. With such an alteration it was too much to expect that agriculture would find its level in a short time, but it was quite a mistake to imagine that the depression would continue indefinitely. The English farmer would accustom himself to the new condition of things, as he had done in the past in former times of depression. Agriculture had always been, and would continue to be, a staple industry of England, and he saw no reason why the farmers should not again meet with success when the present conditions had passed away. Considering the effects of the depopulation of the rural districts on the condition of the population of England, it had been alleged that they had caused much harm: that he doubted very much. It could not be advantageous to keep the superfluous labour in the rural districts. So long as there were hands enough to do the work, to keep superfluous labour in the country meant either that wages would be reduced or that some people would be kept out of work, and must come to the poor law for relief. Consequently it seemed to be a very desirable and reassuring result that, whilst the agricultural depression lasted, this extra population should be drawn into the towns and other great sources of employment.

Dr. Longstaff said that he was unable to answer Mr. Loch's question, and that the other speakers had so generally concurred in his own views that there was very little left for him to say. They had mostly dealt with what he called the subsidiary causes, but Mr. Hendriks had summed up the whole paper in a few words. What he had particularly wished to emphasise was that rural depopulation did not concern England only, but was of

world-wide, if not universal, extent. It was a phenomenon associated with the general development of this century, and was not due to any local causes or abuses, real or imagined. Such local causes might intensify the phenomenon, but this was far too widespread to be so explained. It was an inevitable concomitant of progress, and as such we should, on the whole, welcome it; but, like all progress, it contained a certain amount of retrogression, and we should therefore try to minimise the evils, and make the most of the good which resulted from it.



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