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STATISTICS of POPULATION and PAUPERISM in ENGLAND and WALES, 1861-1901. *By* C. S. LOCH, D.C.L.

[Read before the Royal Statistical Society, March 20th, 1906.
Major P. G. CRAIGIE, C.B., Hon. Vice-President, in the Chair.]

AT meetings of the Royal Statistical Society many papers on pauperism have been read in recent years. In 1888 Major Craigie submitted a statistical sketch of pauperism in England and Wales, with an analysis of the classes of applicants relieved by out-door relief, and comparative statements of the cost of relief, and the geographical distribution of the charge. The year before Mr. Charles Booth wrote on the occupations of East London and Hackney, and compiled a classification of the poverty of the district. In 1899 Mr. Udny Yule submitted an investigation into the causes of changes in pauperism in England, chiefly during the two previous intercensal periods; and in 1903 Sir William Chance read a paper on a decade of London pauperism. All these papers are of great value, and touch the problem from different sides. My object is to raise two questions only: first, the utility of the adoption of a continuous age count of pauperism, and of a statistical return which will permit of a comparison of the number of paupers up to 16 years of age, between 16 and 60, and after 60, with the population of those age periods, at least at each decade; and next, the relation between pauperism and the movement of population in the period 1861 and 1901.

Pauperism as a Test of Wellbeing.

I take it for granted that, generally speaking, pauperism is evidence of social demoralisation. It is a form of dependence on the public funds of the community, which implies not only want of resources, but usually, on the moral or physical side, the want of some of the qualities that are essential to sustain life in a civilised community. Disease with feebleness of mind, susceptibility to illness with want of energy and purpose, poverty of physique with

criminal tendencies—all these, besides the effects of physical and mental stress, due in some degree to economic causes only, find their place in that destitution or want of resources which eventually is expressed in pauperism.

On this broad general hypothesis, which might be worked out in detail, I wish to submit statistics which may indicate the upward or downward movement of the social fitness of the nation. And I want to ascertain how far movements of population are signs of social health and recovery, how far simply transferences from one spot to another, not of a population only, but of pauperism also. Does a population, I would ask, like a stream purify itself, socially speaking, in movement? Does the movement which rises out of economic demand end in the main in economic satisfaction, or does it fail of its purpose, so that there is no real resurrection from the economic want and the pauperism; or does the population, though it move, carry with it the same amount of want and dependence as burthened it before its migration? And again, does the town or district from which the population has moved benefit by the change?

The Measure of Pauperism by Comparison with Population.

It is not, perhaps, necessary to print here any statements of pauperism in their more general form with the annual percentages of paupers on population; they are to be found in the reports of the Local Government Board, both as regards England and Wales and the Metropolis.

But the following percentages of pauperism on population on the 1st January may be noted as a contrast to the percentages on age groups to which I next refer:—

Years, 1st January,*	England and Wales.	London.	Years, 1st January,	England and Wales.	London.
1861	4·2	3·5	1891	2·4	2·2
'71	4·5	4·8	1901	2·1	2·2
'81	2·8	2·3	'05	2·4	2·6

* The figures before 1872 do not give complete totals for England and Wales, as certain places not incorporated in unions at that time made no returns of pauperism, but the omission of these unions is not really material.

Measure of Pauperism by Comparison of Groups of Age Populations.

In accordance with a method I adopted in 1894, we may try to deal with the composition of the pauperism in a series of years more closely by population groups. We have no continuous age returns of pauperism. We can, however, I think, divide the part of the population returned as paupers approximately into age groups. Thus we can group the children as being all under 16 years of

age; and of the "not able-bodied" we can ascertain approximately the number of those who are 60 years and upwards; and those falling within neither of these categories may be considered able-bodied and of the age 16 to 60.

The following tables have been calculated on this method, using the best material available. Subject to the reservations just mentioned, they show the population by age groups and (exclusive of lunatics and vagrants) the pauperism by age groups in England and Wales at the close of each decade since 1861.

TABLE A.—*Population and Pauperism by Age Groups.*
England and Wales.

1	2	3	4	5	6	7
Years.	Population Under 16.*	Paupers Under 16.	Population 16—59.	Paupers 16—59.	Population 60 and Upwards.	Paupers 60 and Upwards.
1861....	7,536,552	322,612	11,041,625	220,713	1,488,047	322,612
'71....	8,638,123	392,245	12,376,715	272,521	1,697,428	369,128
'81....	9,978,037	271,937	14,080,136	176,545	1,916,266	291,867
'91....	10,762,408	235,478	16,094,636	163,626	2,122,386	298,356
1901....	11,201,625	208,941	18,917,792	150,968	2,408,426	333,616
'05 ...	11,614,621	222,690	19,650,318	192,675	2,498,494	368,483

* Except for 1901 estimated.

Note 1.—From Mr. Burt's first "Return" (No. 36), December 9th, 1890, it appears that the number of persons above the age of 60 who were in receipt of poor law relief on August 1st, 1890, was 286,867. On July 1st, 1890, the nearest date on which there was a day count ("B" Return) of paupers, there were 350,882 "not able-bodied" persons in receipt of poor law relief. Paupers over 60 are by usage returned as "not able-bodied." After 60 they have been considered entitled to extras in the way of food. Comparing the above figures therefore it may be concluded that of the "not able-bodied" 81·7 were over 60. In the above columns 5 and 7 (1891) the difference, 18·3, has been deducted from the number of persons returned as "not able-bodied," so as to give approximately the number of persons over 60 in receipt of poor law relief, 1891; and a similar deduction has been made for the earlier decades.

2. For September 1st, 1903, a second return was made on the motion of Mr. Burt ("Return: Boards of Guardians, persons in receipt of relief," No. 113, 1904). In regard to this a similar calculation has been made. On September 1st it appears that the number of persons above the age of 60 who were in receipt of poor law relief was 338,634. On July 1st, 1903, the nearest date on which there was a day count of paupers, there were 393,806 "not able-bodied" persons in receipt of poor law relief. From this it appears that of the total entered on July 1st as "not able-bodied," about 14·0 per cent. may be considered less than 60 years of age. In the above columns 5 and 7 (1901) this difference has been made applicable to the figures for 1901; it has been deducted from the number of persons returned as "not able-bodied," so as to give approximately the number of persons over 60 in receipt of poor law relief in 1901, and it has been added to the number of paupers between 16 and 60.

3. The figures of paupers in the above table are the January 1st figures, and the proportions of the paupers over 60, ascertained as above explained in regard to August and September and July returns, are in the table applied to returns of January 1st. In support of this, it may be stated that the number of old age paupers probably falls less than that of any other class between winter (January 1st) and summer (July 1st, August 1st, and September 1st).

The following table gives the percentage of paupers at three different age groups upon the population of those groups, calculated on the basis of the above table :—

TABLE B.—*Percentages of Pauperism of Age Groups on Population of Age Groups. England and Wales.*

1 Year.	2 Percentage of Paupers Under 16 on Population Under 16.	3 Percentage of Paupers 16—59 on Population 16—59.	4 Percentage of Paupers 60 and Upwards on Population 60 and Upwards.
1861.....	4·2	2·0	21·6
'71.....	4·5	2·2	21·7
'81.....	2·7	1·3	15·2
'91.....	2·2	1·0	14·0
1901.....	1·9	0·80	13·8
'05.....	1·9	0·98	14·7

Some deductions may be drawn from these tables.

I. The importance of an age count of paupers to set against an age count of the population is manifest. A return of paupers considered as a test of social wellbeing, which does not show how far dependence is increasing or decreasing in childhood, in middle or able-bodied life, and in infirm or old age, must be at best a very rough criterion.

II. On the other hand, in my opinion the age count in the two Burt Returns (1890 and 1903) may be open to criticism. We know the process of rounding that is common in the taking of a census. There is no reason for thinking that a similar rounding does not take place in these age returns. The ages 57, 58, and 59 may very aptly be rounded into 60. Only, whereas the rounding in the census can be allowed for and checked, in these Poor Law returns the means of adjusting them is wanting, unless a special inquiry were made in typical unions to test them by reference to certificates and other data. Though difficult now, as time goes on, the appeal to registration will be comparatively easy, at least in many areas.

III. The general movement is satisfactory; the numerical increase in paupers between 16 and 59 years of age between 1901 and 1905 (Table A, column 5) is significant; during the Anglo-Boer War there was ample employment for unskilled labour.

IV. We find (Table A, column 3) a constant decrease in child pauperism till 1905. If there is an increase in the pauperism of middle life (16 to 59) this is likely to follow.

V. Old age pauperism shows a considerable rise (Table A, column 7).

VI. It is a matter of interest that in the last few years the provision made for the shelter and accommodation of roving, homeless, and unemployed men has very greatly increased, together with the supply of food, free, or sold at a nominal price. These probably are having their effect in producing pauperism, in the metropolis especially.

TABLE C.—*Pauperism and Population by Age Groups. The Metropolis.*

1 Years, 1st January,	2 Population Under 16.	3 Paupers Under 16.	4 Population 16—59.	5 Paupers 16—59.	6 Population 60 and Upwards.	7 Paupers 60 and Upwards.
1861....	978,735	41,949	1,653,037	27,730	172,217	28,341*
'71....	1,143,388	67,148	1,908,519	34,333	202,353	40,027*
'81....	1,356,621	31,546	2,220,087	21,983	239,775	36,367*
'91....	1,455,571	30,752	2,486,365	24,481	269,808	40,100*
1901....	1,442,360	30,560	2,790,642	22,624	303,539	47,358†
'05....	1,478,366	37,747	2,859,105	30,586	311,479	54,158†

* 8½ per cent. of the "not able-bodied."

† 85·7 " "

TABLE D.—*Percentages of Age Groups on Population of Age Groups. The Metropolis.*

1 Year.	2 Percentage of Paupers Under 16 on Population Under 16.	3 Percentage of Paupers 16—59 on Population 16—59.	4 Percentage of Paupers 60 and Upwards on Population 60 and Upwards.
1861.....	4·28	1·67	16·46
'71.....	5·87	1·79	19·78
'81.....	2·32	0·99	15·17
'91.....	2·11	0·98	14·86
1901.....	2·12	0·81	15·60
'05.....	2·55	1·07	17·39

Pauperism and the Movement of Population.

I have stated above the next problem that I have to submit: what is the relation of the movement of population on pauperism?

Mr. Pell's return states, for the undermentioned years, the number of paupers in receipt of relief in each union in England on January 1st in each year respectively, together with the cost of total relief to the poor, showing particulars according to the subjoined form; also a general summary of the same particulars for the whole of England, in each of the specified years:—

1 Union Counties and Unions.	2 Year ending Lady-day,	3 Population according to Census for Year.	4 Paupers.			7 Ratio of Out-door to In-door.	8 Number of Paupers per 1,000 of Population.	9 Cost of Total Relief to the Poor.	10 Rate per Head of Cost of Total Relief on the Population.
			4 In-door.	5 Out-door.	6 Total.				
	1850	1851—							
	'60	'61—							
	'70	'71—							
	'74	'71—							

Column 7, "the ratio of out-door to in-door," is intended to indicate the policy of the Poor Law Guardians, according as they gave relief—out-door relief—to a larger or lesser number of persons at their own homes, or tended to limit relief to in-door relief, that is, relief given within poor law establishments. The underlying inference is, that on the former method paupers increase, on the latter they diminish.

The return gives the above particulars for 622 poor law unions or parishes, and for 53 union counties. Since 1861, the year which I have taken as a commencement, there have been changes in the boundaries of unions, and some additional unions have been formed, and as far as possible these have to be taken into account and adjusted. Some areas, too, were not even then formed into unions, and made no returns.

Mr. Pell's return I have had brought up to 1901, adding the figures at the close of each decade 1881, 1891, 1901.

I will, however, deal with the movement of population and pauperism between 1861 and 1901 only.

There are two forms of movement—one from the centre of a city to its circumference. This movement is due largely to changes in the economic demand for the use of the land. As land becomes more and more valuable for use in trade, the residents are pushed out and have to find their abodes in the outer circles of the city. In this process I am inclined to think that population carries with it most of its own pauperism. The movement is due generally to extension from the centre to the nearest staying point; it is not a spontaneous movement of people in search of economic advantage. With the recently introduced facilities for cheap travel, the "staying point" may be more distant than formerly; and in degree the problem may be changing. But, subject to a closer revision of the figures, this statement I believe represents the facts. It is not possible, however, to deal with the question here in sufficient detail.

The other movement is that from rural to urban districts.

The census shows that the population of England and Wales has become urban at the following rate:—

	1861.	1901.	Per Cent.	
			1861.	1901.
Urban	10,960,998	25,054,268	55·0	77·0
Rural.....	9,105,226	7,471,807	45·0	23·0
	20,066,224	32,526,075	100·0	100·0

Following Dr. Tatham, of the Registrar-General's Office, in his selection of urban and rural counties in relation to an inquiry respecting the prevalence of phthisis and other diseases, I have taken two groups of counties:—

I. Eleven counties in which the population is chiefly urban:—Glamorgan, Lancaster, London, Middlesex, Monmouth, Northumberland, Nottingham, Stafford, Warwick, East Riding, West Riding (Yorks.)

II. Sixteen counties, including North Wales and South Wales (less Glamorgan), in which the population is chiefly rural:—Buckingham, Cambridge, Cornwall, Hereford, Huntingdon, Lincoln, Norfolk, Oxford, Rutland, Salop, Somerset, South Wales (less Glamorgan), Suffolk, Westmoreland, Wilts.

III. There is a third group of counties, nineteen in number (with the North Riding of York)—partly urban and partly rural—not included in the above divisions:—Bedford, Berks, Chester, Cumberland, Derby, Devon, Dorset, Durham, Essex, Gloucester, Hants, Hertford, Kent, Leicester, Northampton, Surrey, Worcester, Sussex, North Riding (Yorks.).

Dealing first with groups I and II, we may say that the former represent chiefly recipient or attractive groups, drawing their population largely from outside; the latter expulsive groups, whose members yield to the economic attraction of the recipient groups.

There are four possible combinations of population and pauperism. There may be (1) increase of population coincident with increase of pauperism; or (2) both population and pauperism may fall together; or (3) one may increase while the other decreases; or (4) *vice versa*.

There may, of course, also be great variation (*e.g.*) in the relative increase of pauperism to population, &c. Generally speaking, we may say that where pauperism is decreasing as against population, social progress is being made. To apply this test, the unions have been classified by counties in three divisions according to the increase of population—(1) Decrease of population or increase up to 100 per cent.; (2) increase of 100 per cent. to 150 per cent. in the population; (3) increase of 150 per cent. upwards.

On consideration it seems to me that it would have been better to divide the first of these divisions into three subdivisions: (a) Unions with a decrease; (b) with an increase up to 50 per cent.; (c) with an increase up to 100 per cent.

I first take a "rural" county. Hereford will serve. The table stands thus:—

TABLE E.

1 Herefordshire Unions.	3 Population, 1861-1901.		5 Pauperism, 1861-1901.	
	2 Percentage of Increase.	Percentage of Decrease.	Percentage of Increase.	Percentage of Decrease.
Ledbury	0	— 7·9	0	— 25·4
Ross	0	— 1·1	0	— 40·5
Hereford	+ 16·4	0	0	— 25·2
Dore	0	— 23·0	0	— 20·4
Weobley	0	— 22·9	0	— 36·0
Bromyard	0	— 16·1	0	— 45·8
Leominster	0	— 13·8	0	— 47·9
Kington	0	— 11·8	0	— 34·9

Here the outward movement of the population has always been coincident with a relatively larger decrease in pauperism. In the case of the city of Hereford (as in many other instances) the increase in population had not led to any increase in pauperism.

Taking the county as a whole, the seven unions (*i.e.*, less Hereford) show a diminution of 11,062 in population, with a diminution of 2,026 in paupers. The city of Hereford shows an increase of 4,885, or 16·4 per cent., in population, with a diminution of 381, or 25·2 per cent. in paupers. The population has diminished at the rate of 12·4 per cent., pauperism at the rate of 36·9 per cent.

From the point of view of administration (column 7 of Mr. Pell's return) the ratio of out-door relief to in-door, or rather *total* relief (which is the form in which I have calculated it), there is not much difference between the unions. Almost all show a decrease in the proportion of out-door relief to total relief between 1861 and 1881, as though they were in some degree affected by the wave of reform. By 1891 the number of paupers had greatly decreased, and the proportion of out-door to total relief tends to increase. On the whole one may say that economic and social causes, and in a measurable degree administrative causes, have effected the reduction in pauperism.

As an example of the urban counties, we may take as sufficient a few unions of Lancashire as they stand on the list.

TABLE F.

Unions in "Urban" County.	Population, 1861-1901.		Pauperism, 1861-1901.	
	Percentage of Increase.	Percentage of Decrease.	Percentage of Increase.	Percentage of Decrease.
Liverpool	0	— 45·3	0	— 51·6
West Derby	+ 238·3	0	+ 143·4	0
Toxteth Park	+ 96·6	0	+ 22·5	0
Prescot	+ 110·1	0	+ 113·7	0
Ormskirk	+ 134·7	0	+ 125·5	0
Wigan	+ 102·3	0	+ 46·0	0
Warrington	+ 128·1	0	+ 43·5	0
Leigh	+ 128·7	0	+ 55·8	0
Bolton	+ 97·7	0	+ 30·7	0
Bury	+ 43·9	0	+ 11·9	0

Here in the case of Liverpool, West Derby, and Toxteth Park we have the problem of the movement of population in large towns—all these unions should be taken as parts of one geographical group. In the county as a whole, excluding the unions of Lunesdale and Barrow-in-Furness, for which figures for 1871 only are available, the increase of population in the period is 1,915,267, or 79 per cent.; the increase of paupers is 12,906, or 18·7 per cent.

Unions in Rural Counties and Unions in Urban Counties.

We now pass to a more general view of the data. The two tables that follow give the percentages of increase or decrease of population and of pauperism in three groups of unions in the several counties—(1) those in which the population has (*a*) decreased, or (*b*) increased 100 per cent. or less between 1861-1901; (2) those in which it has increased 100 to 150 per cent.; (3) and those in which it has increased 150 per cent. and upwards. Table G contains the groups of unions in the rural, and Table H those in the urban counties.

TABLE G.—*Rural Counties. Unions and Groups of Unions, 1861-1901.*

1	2	3	4	5	6	7	8	9	10
Countries.	Number of Unions.	Percentage of Increase or (a) of Decrease of Population in Unions, being Less than 100 per Cent.	Percentage of Increase or Decrease of Paupers in these Unions.	Number of Unions.	Percentage of Increase of Population in Unions where Population has Increased between 100 and 150 per Cent.	Percentage of Increase or Decrease of Paupers in these Unions.	Number of Unions.	Percentage of Increase of Population in Unions where Population has Increased Over 150 per Cent or More.	Percentage of Increase or Decrease of Paupers in these Unions.
Buckinghamshire ... (7 unions*)	2 5	- 23·3 + 25·0	- 61·2 - 39·0						
Cambridgeshire ... (9 unions)	4 5	- 12·2 + 21·3	- 53·1 - 52·0						
Cornwall .. (13 unions, less the Scilly Islands)	10 1 2	- 12·7 + 19·9 - 12·7	- 28·8 - 42·1 + 27·2						
Herefordshire .. (8 unions)	7 1	- 13·8 + 16·4	- 35·8 - 25·2						
Huntingdonshire (3 unions)	3	- 21·1	- 63·8						
Lincolnshire (14 unions)	3 7 3	+ 25·6 - 13·5 + 22·6	+ 40·3 - 41·7 - 22·2	...	...	...	1	+ 157·6	+ 14·0

* The number of unions is that given in Mr. Pell's return.

TABLE G.—*Rural Counties. Unions and Groups of Unions, 1861-1901—Contd.*

1	2	3	4	5	6	7	8	9	10
Counties.	Number of Unions.	Percentage (a) of Decrease or (b) of Increase in Unions, the Increase being Less than 100 per Cent.	Percentage of Increase or Decrease of Paupers in these Unions.	Number of Unions.	Percentage of Increase of Population in Unions where Population has Increased between 100 and 150 per Cent.	Percentage of Increase or Decrease of Paupers in these Unions.	Number of Unions.	Percentage of Increase of Population in Unions where Population has Increased Over 150 per Cent. or More.	Percentage of Increase or Decrease of Paupers in these Unions.
NORTH WALES—									
Montgomeryshire } (3 unions*)	3†	- 14.5	- 63.2						
Flintshire } (1 union)	1	- 2.5	- 48.6						
Denbighshire } (4 unions)	1 3	- 24.8 + 32.8	- 55.2 - 39.7						
Merionethshire ... } (4 unions)	1 3	- 9.7 + 21.8	- 60.4 - 36.7						
Carnarvonshire ... } (4 unions)	3	+ 14.2	- 47.8	1	+ 14.8	- 10.1			
Anglesey } (2 unions)	1 1	- 20.0 + 1.1	- 69.4 - 68.7						

* The number of unions in column 1 is that in Mr. Pell's return.

† There have been 4 unions since about 1874. But before that year there was no information about the Montgomery and Pool union, which is now the Forden union—population (1901), 14,844; pauperism, 385. Therefore only 3 unions are dealt with.

TABLE G.—*Rural Counties. Unions and Groups of Unions, 1861-1901—Contd.*

1	2	3	4	5	6	7	8	9	10
Counties.	Number of Unions.	Percentage (a) of Decrease or (b) of Increase of Population in Unions, the Increase being Less than 100 per Cent.	Percentage of Increase or Decrease of Paupers in these Unions.	Number of Unions.	Percentage of Increase of Population in Unions where Population has Increased between 100 and 150 per Cent.	Percentage of Increase or Decrease of Paupers in these Unions.	Number of Unions.	Percentage of Increase of Population in Unions where Population has Increased Over 150 per Cent. or More.	Percentage of Increase or Decrease of Paupers in these Unions.
Norfolk { (22 unions)	1 12 9	+ 67·1 — 11·3 + 18·1	+ 16·3 — 47·5 — 38·2						
Oxfordshire { (9 unions)	6 2	— 13·3 + 22·5	— 39·3 — 51·3	1	+ 124·6	— 17·1			
Rutlandshire { (2 unions)	2	— 10·9	— 43·0						
Salop* { (15 unions)	9 5	— 9·7 + 8·7	— 48·7 — 46·4						
Somersetshire† { (17 unions)	10 6	— 14·2 + 22·9	— 47·2 — 37·7						

* Atcham, about the year 1871, was united with Shrewsbury. There are no returns for Shrewsbury before that date. Therefore Atcham, including Shrewsbury—population (1901) 49,445—is omitted. There are now 15 unions in Salop; but only 14 are dealt with here.

† Bedminster union, 1888, was merged partly in the Bristol union and partly in Long Ashton union as it is now called. Dulverton, a union transferred from Devonshire to Somerset—population (1901) 4,609—is omitted.

TABLE G.—*Rural Counties. Unions and Groups of Unions, 1861-1901—Contd.*

1 Counties.	2 Number of Unions.	3 Percentage of Decrease or (a) of Increase in Population, the Increase being Less than 100 per Cent.	4 Percentage of Increase or Decrease of Paupers in these Unions.	5 Number of Unions.	6 Percentage of Increase of Population where Population has Increased between 100 and 150 per Cent.	7 Percentage of Increase or Decrease of Paupers in these Unions.	8 Number of Unions.	9 Percentage of Increase of Population where Population has Increased Over 150 per Cent. or More.	10 Percentage of Increase or Decrease of Paupers in these Unions.
SOUTH WALES—									
Carmarthenshire (4 unions)	...	...	...	1	+ 108·3	+ 80·2			
	2	- 22·5 + 37·5	- 51·6 - 26·0						
Pembrokeshire ... (3 unions)	2	- 29·9 + 10·1	- 47·9 - 37·5						
Cardiganshire..... (6 unions)	6	- 15·5	- 62·8						
Brecknockshire ... (4 unions)	3	- 11·3	- 51·0						
	1	+ 8·0	- 60·2						
Radnorshire (2 unions)	2	+ 21·0	- 54·6						
Suffolk..... (17 unions)	12	- 13·2	- 46·1						
	5	+ 39·1	- 32·4						
Westmoreland (3 unions)	2	- 9·3	- 44·7						
	1	+ 16·0	- 45·7						
Wiltshire (17 unions)	12	- 14·0	- 63·3	...	...	...	1	+ 208·1	+ 52·8
	4	+ 7·5	- 45·7						

TABLE H.—Urban Counties. *Unions and Groups of Unions, 1861-1901.*

1	2	3	4	5	6	7	8	9	10
Counties.	Number of Unions.	Percentage of Increase or (a) of Decrease of Population in Unions, being Less than 100 per Cent.	Percentage of Increase or Decrease of Paupers in these Unions.	Number of Unions.	Percentage of Increase of Population in Unions where has Increased between 100 and 150 per Cent.	Percentage of Increase or Decrease of Paupers in these Unions.	Number of Unions.	Percentage of Increase of Population in Unions where has Increased Over 150 per Cent or More.	Percentage of Increase or Decrease of Paupers in these Unions.
Glamorganshire* ... (7 unions)	2 1	+ 71·9 + 41·0	+ 45·0 — 7·1	...	...	...	1	+ 643·7 + 154·8	+ 244·1 — 6·8
Lancashire (28 unions)	9 3 5	+ 52·8 — 26·1 + 35·5	+ 45·6 — 50·9 — 37·2	7 ...	+ 117·7 ...	+ 86·5 ...	3 1	+ 196·6 + 264·8	+ 132·8 — 6·2
Middlesex† (6 unions)	1 1	+ 85·2 + 25·2	+ 47·5 — 9·9	...	...	...	3	+ 479·3	+ 148·3
Monmouthshire (6 unions)	2 1 2	+ 54·4 — 6·6 + 28·5	+ 51·6 — 133·4 — 32·7	1	+ 124·5	+ 23·7			
Northumberland ... (12 unions)	...	...	...	1	+ 132·2	+ 18·0			
	5 3	— 17·6 + 16·4	— 69·8 — 44·2	3	+ 114·5	— 26·5			
Nottinghamshire ... (8 unions)	1 2 3	+ 89·5 — 16·9 + 38·4	+ 72·0 — 43·4 — 23·4	...	...	...	2	+ 191·5	+ 40·8

* There are 7 unions in Mr. Pell's return. Since 1861 the unions of Pontardawe and Pontypridd have been created. The unit in Glamorganshire (columns 8, 9, 10) contains the area of the Cardiff and Pontypridd unions treated as a whole. Similarly, Neath, Swansea, and Pontardawe have been treated as a whole.

† There are now 30 unions in Lancashire. The figures include the areas now covered by the two new unions.

‡ Willemsen now forms a seventh union in Middlesex.

TABLE H.—*Urban Counties. Unions and Groups of Unions, 1861-1901—Contd.*

1	2	3	4	5	6	7	8	9	10
Countries.	Number of Unions.	Percentage (a) of Decrease or (b) of Increase of Population in Unions, being Less than 100 per Cent.	Percentage of Increase or Decrease of Paupers in these Unions.	Number of Unions.	Percentage of Increase of Population in Unions where Population has increased between 100 and 150 per Cent.	Percentage of Increase or Decrease of Paupers in these Unions.	Number of Unions.	Percentage of Increase of Population in Unions where Population has increased Over 150 per Cent. or More.	Percentage of Increase or Decrease of Paupers in these Unions.
Staffordshire	11	+ 55.9	+ 49.4	2	+ 121.9	+ 101.5	1	+ 155.2	+ 90.2
(17 unions) {	2	+ 10.6	- 14.6	...	...	...	2	+ 289.0	+ 264.3
Warwickshire	1	- 10.4	+ 1.7	...	...	...	1	+ 283.5	+ 246.2
(14 unions) {	4	+ 68.7	+ 85.1	1	+ 115.4	- 35.8	3	+ 177.7	+ 35.3
East Riding	3	- 12.6	- 27.0	...	...	...	5	+ 285.0	+ 213.7
(10 unions) {	5	+ 25.2	- 20.6	...	...	...	1	+ 522.9	- 13.9
West Riding*	4	+ 46.2	+ 37.3	5	+ 119.8	+ 43.3	3	+ 177.7	+ 35.3
(28 unions) {	6	- 10.0	- 25.2	1	+ 135.8	- 24.7	5	+ 285.0	+ 213.7
London†	10	+ 60.4	+ 14.8	2	+ 114.3	+ 209.7	1	+ 522.9	- 13.9
{	7	- 9.1	- 45.5	...	...	...	...	...	...
{	2	+ 44.3	- 39.8	...	...	...	...	...	...
{	2	- 20.3	+ 17.3	...	...	...	...	...	...

* Besides these unions, in 1869-70 the following were established in the West Riding: Bramley, Holbeck, Hunslet, Pontefract, Tadcaster, Wetherby, Wharfedale. Their population (1901) was 368,873; their pauperism 7,435. They are not included in the table.

† The returns for London are given in 29 unions or groups of unions. Since 1861 the present arrangement of London unions has been introduced.

Considered as actual numbers of population and paupers, unions in rural counties stand thus :—

Unions and Groups of Unions.	1861-1901. Population in Groups of Unions. Increase or Decrease.	Percentage of Increase or Decrease.	1861-1901. Number of Paupers in Groups of Unions. Increase or Decrease.	Percentage of Increase or Decrease.
7	+ 181,028	85·40	+ 4,075	45·76
118	— 292,107	13·45	— 69,179	48·74
64	+ 372,698	25·53	— 37,691	4·15
2	— 14,331	12·83	+ 654	21·17

Thus the unions in the rural counties show that at 191 centres taken together there has been an increase of 247,288 in the population, with a decrease of 102,141 in the number of paupers.

The corresponding figures in unions in urban counties are as follows :—

Unions and Groups of Unions.	1861-1901. Population in Groups of Unions. Increase or Decrease.	Percentage of Increase or Decrease.	1861-1901. Number of Paupers in Groups of Unions. Increase or Decrease.	Percentage of Increase or Decrease.
83	+ 6,923,415	120·70	+ 116,050	75·69
33	— 412,651	28·47	— 27,641	43·40
44	+ 1,123,933	56·71	— 22,081	27·64
3	— 68,260	19·76	+ 1,729	18·15

Thus the statement of the unions in the urban counties show that at 163 centres taken together there has been an increase of 7,566,437 in the population, with a decrease of 68,057 in the number of paupers.

These figures include London, which, taken as a county, show in the forty years an increase of 61·8 per cent. in population, and in pauperism an increase of 30·2 per cent.

The next table is that of the unions in mixed urban and rural counties.

TABLE I.—*Mixed Urban and Rural Counties. Unions, and Groups of Unions, 1861-1901.*

1 Counties.	2 Number of Unions.	3 Percentage (a) of Decrease or (b) of Increase of Population in Unions, the Increase being Less than 100 per Cent.	4 Percentage of Increase or Decrease of Paupers in these Unions.	5 Number of Unions.	6 Percentage of Increase of Population in Unions where Population has Increased between 100 and 150 per Cent.	7 Percentage of Increase or Decrease of Paupers in these Unions.	8 Number of Unions.	9 Percentage of Increase of Population in Unions where Population has Increased Over 150 per Cent. or More.	10 Percentage of Increase or Decrease of Paupers in these Unions.
Worcestershire	3	+ 40·8	+ 32·1	...	...	...	1	+ 295·1	+ 176·7
(11 unions)	4	- 9·5	- 31·1						
Surrey	3	+ 30·0	- 32·9						
(11 unions)	...	...	...						
Kent	2	+ 47·8	- 31·9	1	+ 103·3	+ 16·4	5	+ 225·1	+ 33·6
(26 unions)	3	+ 67·3	+ 62·0	3	+ 113·0	- 22·7			
	3	- 10·3	- 63·6	1	+ 114·8	+ 11·7	2	+ 254·1	+ 112·8
	16	+ 40·35	- 40·1	1	+ 111·0	- 1·34			
Sussex*	3	+ 29·1	+ 6·2	1	+ 146·1	+ 64·3	2	+ 300·0	+ 72·7
(24 unions)	4	- 11·1	- 53·1						
	9	+ 36·7	- 47·6	1	+ 116·4	- 26·3			
Southampton	3	+ 37·2	+ 9·2	...	...	...	2	+ 389·9	+ 111·15
(26 unions)	5	- 6·2	- 43·1						
	16	+ 30·6	- 33·6						

* There are 24 unions in Mr. Pell's return. Of these, 2, East Preston and Arundel (population (1901) 38,926), there is no information as to pauperism in 1861. Further, 3 unions, Chailey, Lewes, and West Firle, are now united in a single union, Lewes, and are counted throughout as 1 in this table.

TABLE I.—*Mixed Urban and Rural Counties. Unions and Groups of Unions, 1861-1901—Contd.*

1 Counties.	2 Number of Unions.	3 Percentage (a) of Increase or (b) of Decrease of Population in Unions, the Increase being Less than 100 per Cent.	4 Percentage of Increase or Decrease of Paupers in these Unions.	5 Number of Unions.	6 Percentage of Increase of Population in Unions where Population has Increased between 100 and 150 per Cent.	7 Percentage of Increase or Decrease of Paupers in these Unions.	8 Number of Unions.	9 Percentage of Increase of Population in Unions where Population has Increased Over 150 per Cent. or More.	10 Percentage of Increase or Decrease of Paupers in these Unions.
Berkshire (12 unions)	1	+ 80·7	+ 24·9	...	...	...	1	+ 179·0	+ 78·1
	5	- 14·3	- 53·3	1	+ 111·9	- 5·4			
	4	+ 22·7	- 51·6						
Hertford (12 unions)	1	+ 74·4	+ 11·9				1	+ 164·9	- 10·9
	2	- 17·6	- 48·5						
	8	+ 18·1	- 46·3	...		...			
Northamptonshire (12 unions)	...	...	...	1	+ 117·0	+ 117·6			
	5	- 21·9	- 59·1				2	+ 142·2	- 5·3
	4	+ 26·7	- 32·5	...		...			
Bedfordshire (5 unions)	1	+ 66·6	+ 27·5						
	1	- 25·6	- 46·5						
	3	+ 19·7	- 31·7						
Essex (16 unions)	...	...	...	...			4	+ 875·8	+ 142·0
	5	- 14·3	- 60·4						
	5†	+ 55·1	- 28·6						

† Braintree, Maldon, and Loxden in one.

TABLE I.—*Mixed Urban and Rural Counties. Unions and Groups of Unions, 1861-1901—Contd.*

1	2	3	4	5	6	7	8	9	10
Counties.	Number of Unions.	Percentage (a) of Decrease or (b) of Increase of Population in Unions, being Less than 100 per Cent.	Percentage of Increase or Decrease of Paupers in Unions.	Number of Unions.	Percentage of Increase of Population in Unions where Population has Increased between 100 and 150 per Cent.	Percentage of Increase or Decrease of Paupers in these Unions.	Number of Unions.	Percentage of Increase of Population in Unions where Population has Increased Over 150 per Cent. or More.	Percentage of Increase or Decrease of Paupers in these Unions.
Dorsetshire { (12 unions)	... 9 2	... - 13·7 + 32·7	... - 40·9 - 28·7	1	+ 135·3	+ 26·9			
Gloucestershire { (17 unions)	2 10 4	+ 6·9 - 23·17 + 23·6	+ 7·45 - 50·9 - 28·2	...	...	...	1	+ 398·8	+ 115·7
Leicestershire { (11 unions)	... 2 8	... - 21·3 + 38·5	... - 52·8 - 23·1	...	...	...	1	+ 210·2	+ 171·0
Derbyshire { (9 unions)	4 2 1	+ 42·6 + 42·7 - 3·6	+ 71·8 - 12·7 + 3·0	2	+ 120·8	+ 291·5			
North Riding* { (16 unions)	1 11 1	+ 67·9 - 15·7 + 3·3	+ 46·9 - 45·8 - 16·4	...	...	...	1	+ 234·9	+ 197·3

* Out of the unions of Guisborough and Stokesley, in the North Riding, and of Stockton, in Durham (1861), the union of Middlesbrough was subsequently formed. In the table these areas have been treated as a whole throughout. Population (1861), 77,834; (1901), 260,737. Of Aysgarth, population (1901), 4,506, there was no information as to paupers in 1861. It is therefore omitted.

TABLE I.—Mixed Urban and Rural Counties. Unions and Groups of Unions, 1861-1901—Contd.

1 Counties.	2 Number of Unions.	3 Percentage (a) of Increase or (b) of Decrease of Population in Unions, the Increase being Less than 100 per Cent.	4 Percentage of Increase or Decrease of Paupers in these Unions.	5 Number of Unions.	6 Percentage of Increase of Population in Unions where Population has Increased between 100 and 150 per Cent.	7 Percentage of Increase or Decrease of Paupers in these Unions.	8 Number of Unions.	9 Percentage of Increase of Population in Unions where Population has Increased Over 150 per Cent. or More.	10 Percentage of Increase or Decrease of Paupers in these Unions.
Durham { (14 unions)	5 2	+ 85.9 - 3.0	+ 50.7 - 31.9	3	+ 111.1	+ 31.2	4	+ 222.2	+ 168.4
Devonshire { (20 unions)	4 10 6	+ 25.5 - 18.3 + 21.2	+ 4.6 - 47.8 - 17.3						
Cheshire* { (11 unions)	3 2 4	+ 76.5 - 4.4 + 50.1	+ 37.0 - 11.5 - 22.1	...	...	...	1†	+ 168.0	+ 92.6
Cumberland { (9 unions)	2 5 1	+ 53.9 - 22.2 + 40.2	+ 18.7 - 51.8 - 18.7	...	...	...	1	+ 167.3	+ 1.3

* In 1861, Birkenhead was in the Wirrall union. Subsequently it was made a separate union. In this table, Wirrall, *plus* Birkenhead, is taken throughout as 1 unit. Out of the union of Great Boughton (1861), in Mr. Pell's return, the Tarvin and Hawarden unions were formed. In this table they are accordingly treated as one.

† Wirrall and Birkenhead unions merged in one.

Considered as actual numbers of population and of paupers, the unions in the mixed urban and rural counties stand thus:—

Unions.	1861-1901. Population in Groups of Unions. Increase or Decrease.	Percentage of Increase or Decrease.	1861-1901. Number of Paupers in Groups of Unions. Increase or Decrease.	Percentage of Increase or Decrease.
72	+ 3,717,896	138·05	+ 56,241	66·75
85	— 274,777	18·84	— 42,812	50·07
107	+ 1,011,200	45·41	— 38,594	31·04
1	— 754	3·65	+ 14	3·00

Thus the statement of unions in the mixed urban and rural counties shows that at 265 centres taken together there has been an increase of 4,453,565 in the population and a decrease of 25,151 in the pauperism.

The tables, indeed, tell their own tale. In the rural unions and groups of unions in rural counties, with but one exception, a decrease of population has caused a more than equivalent decrease in pauperism. Also, with few exceptions, in the case of those unions and groups of unions an increase of population has been accompanied with a decrease of pauperism, showing that movement to the smaller towns is usually entirely beneficial.

In the unions in urban counties, including London, in 34 groups in which there has been a decrease of population in a much larger degree, comparatively, pauperism has decreased; in 42, with a rising population, pauperism has decreased considerably. Among the cases of rising population and pauperism two unions in Warwickshire, grouped together, Aston and Solihull; one in the East Riding (Sculcoates); and some of the London unions seem to come out badly, viz., Chelsea, Hampstead, Bethnal Green, and St. Olave's. But all these unions are unions which, as suggested above, require special analysis as parts of a larger urban aggregation.

In the mixed rural and urban counties in the class of unions with a population which has increased less than 100 per cent. three grouped unions in Worcester, and three in Kent, and four in Derbyshire, give bad results. So in the second class (columns 6 and 7) do two Derbyshire unions. But in regard to the whole section it may be said again that decrease in population has entailed a relatively greater decrease in pauperism. So it has been in 85 centres. Also in 107 out of 265 centres increase in population has been accompanied by decrease in pauperism. Further, in centres where there has been an increase both of population and pauperism, the increase in the latter has usually

been considerably less. Again, the figures would seem to indicate that movement to the towns, especially the smaller towns, is beneficial, economically and socially.

We may conclude by considering the population and the pauperism in four Divisions, separately and together, and we may thus ascertain, if possible, what has become of the pauperism between the years 1861 and 1901—whether it has followed the movement of the population to the towns, or, in the process of movement, has for the most part disappeared.

Changing the order of the Groups or Divisions, we may set out a table thus:—

1	2	3	4	5	6	7	8	9	10
Divi- sions.	Unions or Groups of Unions.	Decrease of Popula- tion.	Per- centage of De- crease.	Decrease of Pau- perism.	Per- centage of De- crease.	Increase of Population.	Per- centage of In- crease.	Increase of Pau- perism.	Per- centage of In- crease.
I....	236	979,535	19·28	139,632	47·96	—	—	—	—
II....	215	—	—	98,366	33·35	2,507,831	44·24	—	—
III....	6	83,345	17·44	—	—	—	—	2,397	18·32
IV....	162	—	—	—	—	10,822,339	125·24	176,366	71·55

As the first division (Division I) we may take the unions, or groups of unions, which combine a decreasing population and a decreasing pauperism in the three groupings of counties dealt with in the tables.

Here in this Division I, at 236 unions, or groups of unions, we find a *decrease* of population—979,535, and a *decrease* of paupers, 139,632.

Next we may take as Division II, unions, or groups of unions, where an *increase* of population has been combined with a *decrease* of pauperism. Here, at 215 centres, we find the increase of population 2,507,831, and the decrease of paupers 98,366.

As Division III we may take the unions, or groups of unions, which combine a *decreasing* population with an *increasing* pauperism. It gives as results 6 centres, with, in population, a decrease of 83,345, and in pauperism an increase of 2,397.

It is clear that the decrease of paupers in Division I cannot reappear in Division II, for in Division II there has also been a decrease of paupers. Nor can it be thought to reappear in Division III, where, with a considerable decrease of population, the increase of pauperism is only 2,397.

It remains to find it in Division IV, that is, chiefly in the urban group, in which *population* and *pauperism* have *increased* alike.

This group gives the following results:—Centres 162, increase of population 10,822,339, and of paupers 176,366. Can we assume that the decrease in paupers elsewhere will reappear as an increase here?

In Division II, as we saw, there was a decrease of 98,366 paupers with an increased population of 2,507,831. Therefore, if the decrease of paupers in Division I (139,632) is to be looked for in the urban unions of Division IV, the decrease in Division II (98,366) must also be searched for as possibly reappearing there too.

But the decrease in pauperism in these two groups (Divisions I and II, $139,632 + 98,366 = 237,998$), after all deductions made, considerably exceeds 176,366, the total increase of pauperism in Division IV, *plus* 2,397 that in Division III—exceeds it, namely, by 59,235.

Nor of the increase of pauperism in the urban Division IV, taken by itself, is it possible to say that it is all due to immigration. On the contrary, on grounds of local observation and experience it is likely that of it a very great part, we cannot say how much, is due to an increase of local and not of migratory pauperism.

Therefore it would seem that there can be but one conclusion, that the movement of the people from the country districts to the towns has tended to produce economic conditions under which they have been able to maintain themselves better, and has led to a large reduction of pauperism.

DISCUSSION *on* DR. C. S. LOCH'S PAPER.

THE CHAIRMAN said they were much indebted to Dr. Loch for bringing forward this most important subject at the present time, for in the immediate future it would be more than ever necessary that there should be clear thinking, and a direct ascertainment of the facts with regard to the pauperism of the country. Investigations with regard to this matter were now in progress, and he was glad to know that Dr. Loch was taking part in the Royal Commission. Personally he felt especial interest in this paper for two reasons: first, because Dr. Loch undertook the dissection of the subject of pauperism statistics in these two particulars now before them somewhat at his instigation before the meeting of the International Statistical Institute last summer, where the pressure of other matters on the last day of that gathering was such that they could not debate the figures he put forward. The Institute, however, was asking its representatives in the various countries to look very carefully into the points of possible international comparison then brought forward. But it was here and at the present time when it was most important to see, first, whether we could improve our own statistical methods by requiring a closer age census of pauperism; and, secondly, whether we could arrive, on the general question, and with such materials as we possessed, at the exact relation of the movement of population to the increase or decrease of pauperism in England. In a paper which he (The Chairman) had read before the Society in 1888¹ he endeavoured to find out something of the movement which followed the reforms of the poor law practice dating from 1871, and a diagram he then presented suggested a curious arrest or stop in the curve of improvement about the year 1877, which had affected all subsequent statistics of pauperism. The figures of recorded pauperism under 16 years of age suggested in the present tables were very striking. It had been suggested that there might have been some alteration in the method of taking the figures, which might suggest a greater reduction than had really taken place in the country as a whole; but he noticed in the table for London that juvenile pauperism had in the later period shown an actual increase from 30,000 to 37,000. He suggested that that was a matter which might be usefully discussed. Again, with regard to the paupers at the greatest age, perhaps some of their actuarial friends could explain whether there was not some variation in the relative structure of the population in age-groups, and in particular if the proportion of persons over 60 was not, either generally, or at least in some places, greater, of late years, owing to the survival of

¹ See *Journal*, vol. li, p. 450. "The English Poor Rate: some recent Statistics of its Administration and Pressure," by Major P. G. Craigie.

invalids; this might have affected the figures. Turning to the movement of population, he did not know if the author had fully considered whether the question of the greater or less degree of growth of pauperism in the recipient areas had been corrected to show its greater or less co-ordination with the general reduction of paupers all over the kingdom. There appeared to be a reduction between 1861 and 1905 of from 4·2 per cent. to 2·4 per cent.; and although that general reduction might be presumed not to have taken place equally all over the country—a point on which his own paper of 1888 threw some doubt—yet they ought perhaps to differentiate between the decrease due to the common movement and that which Dr. Loch suggested might be due to the movement of population into areas where greater industrial facilities aided in reducing actual pauperism.

Sir WILLIAM CHANCE said it seemed to him that the returns were extremely satisfactory, once more proving the reduction of pauperism which they knew had gone on for many years. They also knew that unfortunately during the last few years there had been a considerable rise almost all over the country. At the same time, taking individual unions, they found the most extraordinary contrasts, not only between urban or semi-urban groups and rural groups, but extraordinary variations not accounted for by any conditions in these unions; so that they were really driven back to the foundation of the whole thing, the question of administration. They all knew what extraordinary varieties of administration there were in London, as was shown in the paper he read before the Society a few years ago. That still went on, and these extraordinary variations were quite incomprehensible except by differences of administration. He might instance the recent returns in the south-western counties, which used to be the most pauperised counties in the whole of England, and the present pauperism compared to the population was still very high; but, on the other hand, there had been, owing to reform in administration, a very remarkable reduction during the last ten years or so. That reduction had been largely owing, and the credit of it ought to be given, to the inspector who had control of that part of England, Mr. Preston Thomas. He was always preaching to the guardians, and insisting on their being careful in the administration of relief. That had taken effect, and the result was that while pauperism had been increasing all over England, in that particular part of the country there had been a decrease. That showed that the guardians had it entirely in their own hands. He thought there was an improvement going on in the country, although there had been slight lapses recently, and he could not help thinking that the improvement would continue. They ought not to be downhearted; people must learn by experience, and they were learning what the results of a particular policy must be. He did not think pauperism was being affected by the immigration from the country into the towns, and he could only repeat that its amount was entirely a question of administration.

Mr. E. A. H. JAY said he was hardly prepared to find that the influx of population from the country to the towns should lead to a decrease of pauperism, but it was exceedingly interesting if it was so. It occurred to him that there might be a difference between the modes of administration of urban unions and rural unions, which possibly might have some effect. Even in the metropolitan area there was a considerable difference in administration between different unions, and the class of people who were elected guardians were perhaps, in a large town, different from those in rural districts; and possibly in country districts there was more lax administration in consequence. One generally advised people against crowding into towns, because it was often very difficult for them to find work; there were not generally openings for them, and it did not appear to result in their being in a better economic condition than they would be in in the country. He should be sorry to have to come to the conclusion that one ought to advise people not to remain in the country; he could only think that there might be something in the suggestion that the poor law administration was more lax there than in the towns.

Mr. NOEL HUMPHREYS said he doubted whether they would ever get entirely satisfactory Government statistics until a central statistical bureau were created, as in most European States, where statistics would be uniformly co-ordinated, and thus made more generally useful. At the present time each Department issued its own statistics, some good and some indifferent, but they were often wanting in uniformity and adaptability. There was no doubt that on this point Dr. Loch had reasonable ground of complaint of the want of more definite statistics as to the number of paupers in the different age-groups. With regard to what the Chairman had said about the population, it must not be forgotten that the great decrease in the birth-rate had considerably altered the age constitution. The population now contained a much larger proportion of old people and a smaller proportion of children, which considerably affected pauperism statistics for a series of years. Whether it was a question of death-rates, of lunacy-rates, or of pauperism-rates, they were all affected by this difference in the age constitution of the population. During the forty years dealt with in this paper, the pauperism-rate had declined 50 per cent. in the whole of England and Wales, but only 30 per cent. in London. But when the rate of pauperism at different ages was considered, the decrease during those forty years was 55 per cent. amongst children, 60 per cent. amongst adults, and only 36 per cent. amongst those aged over 60 years. On turning to the census returns of indoor paupers at different ages, and comparing the figures for 1891 and 1901 in greater detail, a decrease of paupers was found at all the ages up to 65 (unfortunately the age 60 was not separately shown), and a large increase over 65. Passing on to the interesting problem of the effect on pauperism of the migration of population from agricultural districts, speaking generally the present rate of pauperism in rural counties appeared to be nearly double what it

was in urban counties, and the explanation of this difference appeared to him very obvious. From the rural districts large numbers of the fittest and most energetic young men and women went away, the remainder including the halt and maimed. Whether the migrants went as labourers, shop-assistants, or domestic servants, a majority of the most active and vigorous constantly left the rural districts for the towns. This migration undoubtedly reduced the death-rate and the lunacy-rate in towns; and similarly also reduced the rate of pauperism, as few of those young people become claimants of poor-law relief. Moreover, in many cases when these town residents fell ill, they drifted back to the country districts from whence they migrated. These considerations appeared to explain both the high rate of pauperism in the rural districts and the lower rate in town districts. The lower wages in agricultural districts might also make it more difficult for the rural population to provide for old age to the same extent as higher wages enable town dwellers to do. They were much indebted to Dr. Loch for this paper, but he ventured to make a suggestion with reference to the changes in the rate of pauperism in town and country during the last forty years, which he thought would add considerably to the value of the paper, and would enable the figures to be more fully utilised. In the table on the last page, and indeed throughout the paper, Dr. Loch gave the numerical increase or decrease of pauperism side by side with the numerical increase or decrease of population. He would suggest that he should add for each different division the *rate of pauperism* to the population in 1861 and 1901. It would then be possible to see what the relative rate of decrease of pauperism was in the rural and in the urban districts during the forty years.

Mr. S. ROSENBAUM said he intended to have made a similar suggestion, the importance of which might be seen by the fact that there was an enormous difference between the proportion of old people in the urban and rural districts. For example, in 1901 there were 97 per thousand over 55 in the urban districts, and 136 in the rural districts. If it were possible to localise these further, and divide the population of the country up according to their residence in truly urban districts, or in real districts—not the rural districts recognised in the census, which were largely suburban—those figures, would, no doubt, be still further exaggerated. Comparing the figures with 1891, the divergence between the proportions over 55 was shown to have gone on increasing, because, instead of 97 per thousand in 1901, there were only 93 per thousand in 1891; and instead of 136 in the rural districts at present, there were only 133 in 1891. There was still another movement which had an important bearing on the statistical value of this question: the proportion of the old females was increasing more rapidly than of the old males; and it was reasonable to suppose that old females were more likely to become paupers even than old men, and were therefore likely to swell the total pauperism in the rural districts to a greater extent than was seen

by taking the total figures. This explained the urgent necessity of having what Dr. Loch had asked for, a continuous age count—distinguishing the sexes—of paupers. And he should think it desirable also to draw a distinction between broad groups of classes of paupers indoor and outdoor. He had examined the question of age-grouping with respect to particular groups of counties, and he found, for example, that in what Dr. Loch called the urban counties, the proportion per thousand at different ages varied from 77 to 141, giving an unweighted average of 101. In the “rural” counties the proportion varied from 134 to 154 per thousand, with an average of 145. So that there was probably at least 50 per cent. more of old people over 55 in the rural counties than in the urban counties, allowing for differences in total population. These old people, producing a larger proportion of paupers, might possibly account for some of the general movements which were the subject of the problem under discussion; and therefore the conclusion reached in the last paragraph did not necessarily follow, that the causes which made people migrate from the country to the town were conditions which improved their average social condition. That could only be definitely stated when we knew exactly, and for a number of years, the ages, sexes, and classes of the paupers.

Sir J. ATHELSTANE BAINES said that in a letter just received from Mr. Yule, who regretted he could not attend the meeting, the question was asked whether the age-periods adopted in the Burt returns commended themselves to Dr. Loch, or whether he considered that more suitable ones might not be selected? Mr. Yule also pointed out that in a paper on statistics of pauperism read by him before the Society in 1899, he had reached, by mathematical analysis, much the same general conclusions as to the course of the pauperism-rate as Dr. Loch had reached from a very different method of approach. It was satisfactory, he (the speaker) thought, from the statistical point of view, that two experts, handling the data on different lines, should so nearly agree in their results. Those who had any practical acquaintance with the poor law would agree with Sir W. Chance, that, generally speaking, a union can have as many paupers as it chose to pay for, and for some years past the variation in pauperism had been largely a matter of administration. The figures set forth in the paper, especially those for London, indicated the marked change which had set in since 1895. He had only two questions to put on his own account. First, he would ask Mr. Humphreys whether the time had not come for bringing the age-tables of the census into line with those of other civilised countries, by adopting tabulation by quinquennial periods? Everyone working on such tables recognised the inaccuracy of the original record at the ages denoted by even multiples of five, and would smooth it out for themselves if they had the actual figures, and would also be able to compare their tables with those of their neighbours in detail. Mathematical interpolation at the middle of a long interval, such as that of ten years, especially after 35 years

of age, often led to results a good deal better than the original warranted. He hoped, therefore, that the adoption of the periods ending with the even multiples in question would be facilitated by the advisability of taking 60 as the limit at which old age pauperism began. His second question related to the classification of areas into rural and urban. By general official convention the term urban was applied upon constitutional or historical grounds, not, as was there required, upon social or economic considerations. A unit with very small population and area was often included with the large cities, and a very large aggregate, truly urban in its features, was omitted, and thus threw out the statistics of a considerable surrounding tract. If, for the purpose of discriminating between rural and urban in relation to a question such as pauperism, for example, urban areas of not less than, say, 50,000 inhabitants were grouped under the latter title, the facts would probably be brought out more clearly than at present, when 77 per cent. of the population were classed as urban, a proportion largely in excess of the economic position. Suburban areas, with their rapid growth, were, he admitted, a difficulty, but not insurmountable. He agreed with a former speaker in thinking that the addition of the proportional figures in the last table in the paper would be an improvement.

Mr. NOEL HUMPHREYS said he felt bound to explain, with reference to the Registrar-General's statistics, that, on account of the inaccuracy of ages returned at census enumerations, Dr. William Farr, of the General Register Office, a former eminent President of that Society, found it necessary to adopt the decennial age-groups 45, 55, 65, &c., for the calculation of marriage-, birth-, and death-rates, in order to counteract the tendency in the census schedule to return the ages in round numbers, such as 40, 50, 60, &c. Census ages were now more correctly returned than formerly, but examination of the returns at the last English census showed sufficient error to make it undesirable to abandon the statistical system initiated by Dr. Farr.

Mr. A. H. BAILEY said, for insurance purposes they wanted to have the ages returned accurately, in order to get at the true law of mortality. They had been trying to get it for many years, and had not yet succeeded, partly owing to change of conditions; for example, the treatment of phthisis had had a marked effect on the rate of mortality in England. Their experience was that in short term insurance the rate of mortality was lower between the ages of 20 and 25 than between 30 and 35. That was due, in a minor degree, or was in years gone by, to the number of deaths from phthisis, but they wanted to have the information as to the facts in detail. With regard to the sexes, speaking generally, at the middle period of life the mortality of women was somewhat greater, say, between 20 and 45, than that of men, from 45 to 55 it was about the same, but above 55 the vitality of women was markedly greater than that of men; all these things ought to be taken into account.

The CHAIRMAN then proposed a hearty vote of thanks to Dr. Loch for his paper, which was accorded unanimously.

Dr. LOCH, in reply, said that with the suggestion made by Mr. Humphreys and others he entirely agreed, and he would do his best to incorporate it in his paper. With regard to Mr. Yule's question as to the ages, one had to take the ages as one found them. The age under 16 was so far good that it represented "young persons" up to the age at which they had to provide for themselves. The second period, from 16 up to 60, was regulated by poor law conditions. Roughly speaking, 60 was the age at which an inmate might have a different diet and greater comforts; and it was a more or less recognised age in poor law administration. The age 65 had no relation to poor law administration. There was also, he thought, a widespread idea, at any rate in certain classes, that one got old at 60. The Chairman had referred to the year 1877. Mr. Yule, he thought, in his paper had worked out in the most complete manner the question of the decrease of pauperism under the influence of the ideas of 1871 and the eventual diminution of that influence in the latter part of the eighties. About that time there was a gradual change which culminated perhaps about 1892 to 1894. Sir William Chance had referred to the administration of the poor law. He agreed with him in the main; but economic causes were also at work, of which good administration took advantage, and which unintelligent administration ignored. Population groups were being continually altered and modified, and these alterations and modifications in many instances favoured an administration that took cognisance of economic laws—in some measure gave such an administration its opportunities. In the rural unions economic changes had broken up population groups and at the same time groups of paupers. The younger generation had dispersed. No doubt the older generation remained; but of course in a long period such as he had taken much of the older pauperism had died out. But—and this had greatly interested him—as far as the investigation went, this older pauperism was not replaced anywhere by a new aged pauperism of equal or approximately equal numbers. The great change in the past had been decrease of able-bodied paupers. This had resulted from measures taken before 1870 and the years that immediately followed it, in accordance with a policy consistent with economic development; and the reduction of able-bodied pauperism implied a reduction of all pauperism—of the pauperism not of the able-bodied only but of their children and often of their elders and also of themselves as they in turn grew old. He agreed with what Mr. Rosenbaum and others had said as to sex and age. Such points should be worked out, but the difficulties in the way of doing this at present were very great. In the main no doubt it was true that the large number of aged people were in the rural districts; and it was evident that on that account the pauperism in those districts might be expected to be larger than in urban districts. On the other hand it must be remembered that rural pauperism had itself decreased considerably,

and that the pauperism of the aged generally had also largely decreased from 1871 to 1901. Then in the last five years came the increase to 14·7 per cent., a figure higher than 14·0, the figure of 1891. Thus, although in the population there was a larger number of old people now than formerly, the percentage of old paupers was not larger, or had not been until quite recently. Mr. Jay had raised an interesting question. He suggested that urban administration was more strict than rural administration, and that this, in part at least, accounted for the fact that, though there had been a migration to the towns, that migration had not produced a pauperism at all equivalent to that of the period before the migration. Thus men who might have been paupers if they had stayed in a country parish, coming into the towns found pauperism less accessible, and so were less tempted, and thus less pauperised. That was very likely to be true. If so, it showed that where the gate of pauperism was less widely opened, a man would make a greater effort to maintain himself. He had come to the town for an economic reason, such as the prospect of a higher wage; in the town he found no ready alternative to economise self-maintenance; thus the economic reason coincided with the administrative method, and as a result the man maintained himself. In the towns also no doubt the opportunities and openings for self-support were usually more numerous, and a man in these circumstances was inclined to take the best within his reach, and so was the more likely to prosper. There was a further urban question: the flow of population from the centre of the town or urban district outwards. The analysis of this movement had not been made. In some instances, such as in Tottenham and Edmonton, they found at present a lessened pauperism following in the wake of the population. Possibly, in so far as this population was extruded by large clearance schemes, coupled with a compulsory exodus, the pauperism would not decrease with the migration; but if the movement was a spontaneous economic movement, it should not be associated with an increase of pauperism, but the reverse

The following were elected Fellows of the Society :—

Brook, Herbert Edward John.		Craske, Harold.
Walker, William T.		