

means an easy one, since the amount of work accomplished at each sitting and the smoothness of the proceedings varied considerably. The room was densely packed, and contained a great variety of characteristic physiognomical peculiarities, and a still greater variety of peculiarities in style of dress. The few military uniforms were lost among the number of lounge suits, frock coats, with and without evening dress waistcoats, and evening dress suits (which in Germany are official suits) pure and simple. The Hebrew race is very largely represented among the Berlin physicians, and this partly accounts for the staunch way in which Berlin combines together, often to the exclusion of all "intruders," and is ready to support any stray sheep of the flock, no matter how insecure the ground of his argument may be. The meetings were very long and not always interesting; at least one may judge that this was the case from the observation made on many occasions that members were comfortably sleeping at 3 in the afternoon, while some of their *confères* were holding forth on the stereo-isomeric arabinoses or on the building up of fat in various organs. The festivities included a "welcoming" at the Central Hotel and a banquet at the Large Hall of the Zoological Gardens. The number of members attending exceeded 400.

### THE CENSUS RETURNS FOR COUNTY AND METROPOLITAN BOROUGHS.

The prompt publication of the census returns for the county boroughs, including the County of London, and for the metropolitan boroughs, enables us to publish the analyses of these published returns, which are embodied in Tables I to IV.

The first table deals with the 33 great towns included in the Registrar-General's weekly returns, giving the recently enumerated population of each town, the increase or decrease since the enumeration in 1891, the increase or decrease per cent. upon the population at the preceding census, and the corresponding increase during the preceding decennium 1881-91. The facts of Table I are set forth graphically in the following diagram, from which it can be seen at a glance what

TABLE I.—The Thirty-three Great Towns.

	Population, 1901.	Increase or Decrease since 1891.	Percentage Increase or Decrease, 1891-1901.	Corresponding Percentage Increase or Decrease, 1881-91.
London ... ..	4,536,034	307,717	+ 6.8	+10.4
West Ham ... ..	267,308	62,405	+23.4	+58.9
Croydon ... ..	133,885	31,190	+30.3	+30.3
Brighton ... ..	123,478	7,605	+ 6.6	+ 7.7
Portsmouth ... ..	189,160	29,882	+18.8	+24.4
Plymouth ... ..	107,509	18,583	+20.9	+14.1
Bristol ... ..	328,836	39,566	+13.7	+ 7.1
Cardiff ... ..	164,315	35,400	+27.5	+55.8
Swansea ... ..	94,505	4,156	+ 4.2	+18.2
Wolverhampton ... ..	94,179	11,517	+13.9	+ 9.1
Birmingham ... ..	522,182	44,069	+ 9.2	+ 9.4
Norwich ... ..	111,728	10,758	+10.7	+14.9
Leicester ... ..	211,574	36,950	+21.1	+27.8
Nottingham ... ..	239,753	25,876	+12.1	+14.6
Derby ... ..	105,785	11,639	+12.4	+16.0
Birkenhead ... ..	110,906	11,049	+11.1	+18.9
Liverpool ... ..	685,276	56,728	+ 9.0	- 6.2
Bolton ... ..	168,205	21,718	+15.0	+ 9.1
Manchester ... ..	543,930	38,562	+ 7.6	+ 9.3
Salford ... ..	221,015	22,876	+11.6	+12.4
Oldham ... ..	137,238	5,775	+ 4.4	+18.1
Burnley ... ..	97,044	10,028	+11.5	+37.4
Blackburn ... ..	127,527	7,463	+ 6.2	+15.4
Preston ... ..	112,910	5,337	+ 4.9	+11.4
Huddersfield ... ..	95,008	4,112	- 0.4	+10.3
Halifax ... ..	104,937	7,223	+ 6.9	+10.7
Bradford ... ..	279,809	14,081	+ 5.3	+11.2
Leeds ... ..	428,953	61,448	+16.7	+18.9
Sheffield ... ..	380,717	56,474	+17.4	+14.0
Hull ... ..	237,786	37,314	+18.6	+20.7
Sunderland ... ..	146,828	15,142	+11.5	+12.4
Gateshead ... ..	109,891	24,199	+28.2	+30.2
Newcastle-upon-Tyne ... ..	214,998	28,698	+15.4	+28.2

Decreases are printed in italics.

TABLE II.—Other County Boroughs.

	Population 1901.	Increase or Decrease since 1891.	Percentage Increase or Decrease.
Barrow-in-Furness ... ..	57,589	5,877	+ 11.4
Bath ... ..	13,817	3,027	- 3.9
Bootle ... ..	58,481	9,264	+ 18.8
Bournemouth ... ..	47,003	9,218	+24.4
Burton-upon-Trent ... ..	50,386	4,339	+ 9.4
Bury ... ..	58,028	816	+ 1.4
Canterbury ... ..	24,401	1,339	+ 5.8
Chester ... ..	36,281	824	- 2.2
Coventry ... ..	69,877	11,374	+19.4
Devonport ... ..	69,674	13,693	+24.4
Dudley ... ..	48,809	3,085	+ 6.8
Exeter ... ..	47,180	1,592	+ 3.5
Gloucester ... ..	47,944	6,641	+16.1
Great Yarmouth ... ..	51,290	1,916	+ 3.9
Grimsby ... ..	63,119	11,185	+21.5
Hanley ... ..	61,510	6,573	+12.0
Hastings ... ..	65,528	2,456	+ 3.9
Ipswich ... ..	66,622	9,189	+16.0
Lincoln ... ..	48,783	7,292	+17.6
Middlesbrough ... ..	91,300	15,878	+21.0
Newport (Mon.) ... ..	67,279	12,572	+22.8
Northampton ... ..	87,021	12,946	+17.2
Oxford ... ..	49,413	3,671	+ 8.0
Reading ... ..	72,214	12,160	+20.2
Rochdale ... ..	83,112	6,951	+ 9.1
St. Helens ... ..	84,410	11,897	+16.4
Southampton ... ..	104,911	22,785	+27.7
South Shields ... ..	97,272	18,881	+24.1
Stockport ... ..	78,871	8,808	+12.6
Walsall ... ..	86,440	14,651	+20.4
Warrington ... ..	64,241	8,953	+16.2
West Bromwich ... ..	65,172	5,634	+ 9.5
Wigan ... ..	60,770	5,757	+10.5
Worcester ... ..	46,620	3,712	+ 8.6
York ... ..	77,790	10,041	+14.9

Decreases are printed in italics.

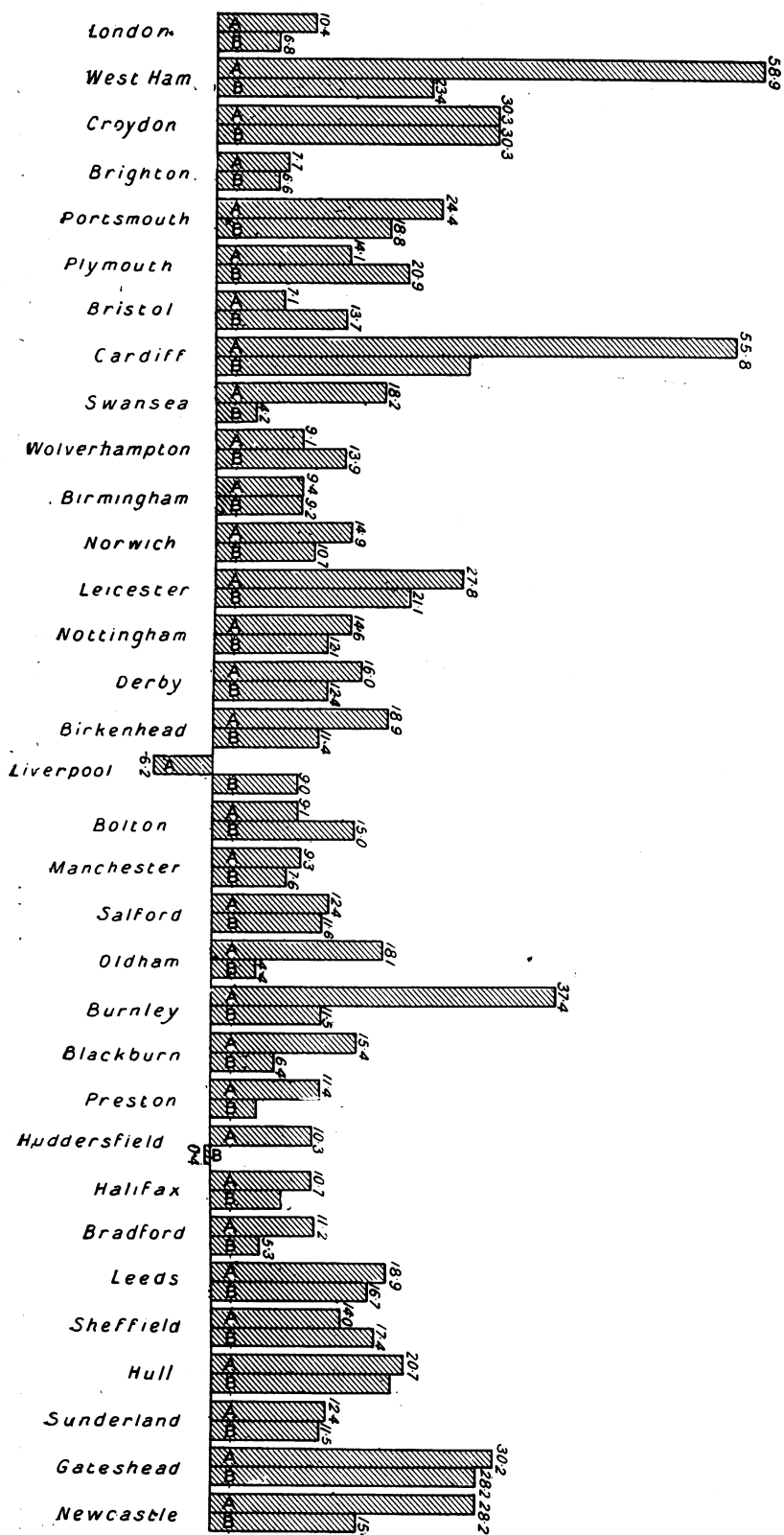
TABLE III.—Metropolitan Boroughs.

	Population 1901.	Increase or Decrease since 1891.	Percentage Increase or Decrease.
City of London ... ..	26,908	10,798	- 28.6
Battersea ... ..	168,896	18,730	+12.5
Bermondsey ... ..	180,486	5,528	- 4.1
Bethnal Green ... ..	129,681	752	+ 0.6
Camberwell ... ..	259,258	25,552	+10.9
Chelsea ... ..	73,856	922	+ 1.2
Deptford ... ..	119,513	8,764	+ 8.6
Finsbury ... ..	101,476	8,505	- 7.7
Fulham ... ..	137,289	45,499	+49.5
Greenwich ... ..	95,757	17,243	+22.0
Hackney ... ..	219,288	19,682	+ 9.8
Hammersmith ... ..	112,245	15,007	+15.4
Hampstead ... ..	81,908	13,776	+20.2
Holborn ... ..	59,390	7,388	+11.1
Islington ... ..	334,928	15,773	+ 4.9
Kensington ... ..	176,623	6,552	+ 3.8
Lambeth ... ..	301,873	23,480	+ 8.5
Lewisham ... ..	127,460	38,527	+43.3
Paddington ... ..	143,954	7,999	+ 5.9
Poplar ... ..	168,838	1,958	+ 1.2
St. Marylebone ... ..	153,829	10,754	- 7.5
St. Pancras ... ..	235,284	535	- 0.2
Shoreditch ... ..	118,705	6,022	- 4.8
Southwark ... ..	206,128	3,649	+ 1.8
Stepney ... ..	298,548	13,432	+ 4.7
Stoke Newington ... ..	51,247	3,259	+ 6.8
Wandsworth ... ..	232,030	76,506	+40.3
City of Westminster ... ..	182,977	18,992	- 9.4
Woolwich ... ..	117,165	18,171	+18.4

Decreases are printed in italics.

has been the relative rate of increase in each town, and how for each town the rate of increase in 1891-1901 compares with that in 1881-91. The trend of population can thus be easily seen, and with it the course of the wave of prosperity for each town alone and as compared with other towns. One serious difficulty presents itself in accepting Table I, and the diagram graphically stating its facts as a certain indication of the progress and prosperity of each community there represented. This is the fact that municipal boundaries are artificial devices. Population cannot be confined within them; in actual fact it is rapidly outstepping these boundaries in a large proportion of the 33 great towns.

PERCENTAGE-RATE OF INCREASE OF POPULATION.



A = years 1881-1891; B = years 1891-1900.

Percentage figures for CARDIFF, PRESTON, HALIFAX, and HULL (omitted in the diagram) will be found on p. 1156.

Consequently towns with a lower rate of increase may possibly outside their proper boundaries have increased more than others which show a higher apparent rate of increase, because the available building ground within the municipal area has not yet been exhausted. This is a source of error which only local knowledge can enable one to avoid. The great towns with the lowest density of population on acreage are Croydon, Bolton, Huddersfield, Halifax, and Norwich.

They have therefore most scope for increase within their municipal areas. Their rate of increase in the last decade was + 30.3, + 15.0, - 0.4, + 6.9, and + 10.7 per cent. respectively. The decrease of Huddersfield evidently indicates industrial conditions rather than that the population has overstepped the boundaries of the borough. The towns with the greatest density of population are London, West Ham, Brighton, Liverpool, Sunderland, Plymouth. Their rate of increase in the last decade was 6.8, 23.4, 6.6, 9.0, 11.5, and 20.9 per cent. respectively. The problem of London requires separate consideration. The rate of increase of West Ham is slackening, Brighton is growing chiefly outside its narrow municipal limits, Sunderland continues to grow at a fairly uniform rate, while Plymouth and Liverpool have both, we believe, secured an increased rate of increase by enlarging their municipal borders. Liverpool by this means has converted a decrease into an increase, and become the third largest city in the British Empire. Only Sheffield and Leeds among Yorkshire towns show a notable rate of increase, while Bradford, notwithstanding its wide area, has only increased 5.3 per cent. in the last ten years. Further comments may be postponed until Tables II and III have received consideration.

Table II deals with the smaller county boroughs. Among these Bath and Chester show a small decline, while others show more or less increase. The greatest rates of increase are found in Southampton (27.7 per cent.), Bournemouth and Devonport (each 24.4 per cent.), South Shields (24.1 per cent.), Grimsby (21.5 per cent.), Middlesbrough (21.0 per cent.), and Reading (20.2 per cent.), while in Bury the increase is only 1.4 per cent., and in Exeter only 3.5 per cent.

Table III deals with the metropolitan boroughs. It will be noted that 22 show an increasing and 7 a decreasing residential population. Of these the City of London comes first with a decline of 28.6 per cent., Holborn next with a decline of 11.1 per cent., and the City of Westminster follows with a decline of 9.4 per cent. These declines are what might have been anticipated. They represent chiefly, in the cases of the City of London and Holborn, the substitution of business for residential premises. For Westminster doubtless the same factor to a large extent explains the decline; but in addition the enormous removal of blocks of rookeries and the substitution of high-class residential property, particularly in flats, must have operated in the same direction. The decline of 7.5 per cent. in Marylebone is probably explicable on the same grounds as in Westminster. House property has increased in value, and the poor have necessarily been driven further towards the outskirts of London. The decline of 4.1 per cent. in Bermondsey and of 4.8 per cent. in Shoreditch is less easy of explanation. Probably, however, here also the substitution of business premises for dwelling-houses largely explains the decrease. Whatever be the relative share

of the different factors mentioned above, it is a matter for congratulation that the population in these districts is declining. It is an earnest of the operation of the centrifugal forces, which it may be hoped will steadily increase in power.

In Chelsea (increase 1.2 per cent.), Bethnal Green (increase 0.6 per cent.), Poplar (increase 1.2 per cent.), St. Pancras (increase 0.2 per cent.), and in Southwark (increase 1.8 per cent.) the population has remained almost stationary, and a decline in the next decennium may be hopefully anticipated.

The greatest increase shown in any metropolitan borough has been in that of Fulham (49.5 per cent.), Wandsworth following close with an increase of 49.3 per cent., and Lewisham having an increase of 43.3 per cent. Greenwich (increase 22.0 per cent.), and Hampstead (increase 20.2 per cent.), conform to the same general law of growth at the periphery, partly at the expense of more central districts, partly to make room for independent increase of population.

#### GENERAL CONSIDERATIONS.

A study of the preceding tables, particularly of Table I and of the diagram, bring out the important fact that there is a declining rate of increase of population in nearly all the thirty-three great towns. Probably the same decreased rate of increase would be found to hold good for the majority of towns, with occasional exceptions caused by the rapid rise of new or extension of old industries. The causes of this change have been already partly indicated. They are:

1. The substitution of business premises for dwelling-houses in the more central parts of town.

2. The spread of urban populations outside municipal boundaries, caused by 1, and independently of 1, by improved and cheapened means of transit, and by the increasing desire of a large proportion of the population to live under such improved conditions as cannot be secured in the centre of a town.

3. The demolition of dwellings of the labouring classes by schemes under the Housing of the Working Classes Act, by improvement schemes, extensions of railways, etc.

4. The replacement in central districts of dwellings for the labouring classes by flats, hotels, etc., for the well-to-do. This has happened particularly in London.

5. The lowered birth-rate of the population. This factor, although stated last, will probably be found to have been the chief one in causing the declining rate of increase of the population of our great towns, and will probably be found to have caused a considerable decline in the rate of increase of the entire population of England and Wales, when the numbers are published. The discussion of this important problem would lead us too far afield.

#### DEGREE OF ACCURACY OF ESTIMATES OF POPULATION.

The statement of the population enumerated at the end of March enables us to compare with the census figures the population of each of the 33 great towns estimated to the middle of 1901. The latter estimate is made by the Registrar-General's method, which assumes that the same rate of increase holds good during each year of a decennium, as occurred in the preceding decennium. The difference caused by the three months between April and June may be ignored as being on a small scale. In the following table the two sets of figures are contrasted.

The differences are in some instances most striking. In the last column but one, the difference between the estimated and the enumerated population, 1901, are stated as a percentage amount, and in the last column the corresponding percentage difference between the estimated and the actual population in 1891 is given. We may note the agreements and the discrepancies. Of the former Birmingham, Bristol, and Croydon are the most striking, but Brighton, Bolton, Manchester, Salford, Halifax, Hull, and Sunderland differ less than 2 per cent. from the estimate. The following towns differ more than 10 per cent. from the estimate—Newcastle-upon-Tyne (*minus* 10.5 per cent.), Oldham and Swansea (*minus* 11.9 per cent.), Blackburn (*minus* 15.5 per cent.), West Ham (*minus* 18.9 per cent.), Cardiff (*minus* 18.8 per cent.), and Burnley (*minus* 19.5 per cent.). The remaining towns show differences varying from 2 to 10 per cent. It is interesting to note in how many towns the error of estimate is on the side of excess or of deficiency,

and to compare the error with the error for the same town in the preceding decade, as this throws valuable light on the question of the continued growth and prosperity of a town. In 5 towns the population was in excess of the estimate, but in the remaining 28 it was below the estimate. At the previous census 6 towns were underestimated and 23 towns overestimated.

TABLE IV.—*Estimated and Enumerated Populations of Thirty-three Great Towns, 1901.*

Towns.	Population Estimated by the Middle of 1901, on the Basis of the Rate of Increase, 1891-9.	Population Enumerated, 1901.	Difference from Estimated.	Percentage Difference from Estimate, 1901.*	Corresponding Percentage Difference from Estimate, 1891.†
London ...	4,651,113	4,536,034	- 115,079	- 2.5	- 6.0
West Ham ...	329,377	267,308	- 62,069	- 18.9	-
Croydon ...	134,795	134,885	+ 825	+ 0.6	-
Brighton ...	125,077	123,478	- 1,599	- 1.3	- 7.9
Portsmouth ...	199,262	189,160	- 10,102	- 5.1	+ 10.9
Plymouth ...	103,708	107,509	+ 3,801	+ 3.7	+ 6.5
Bristol ...	329,086	328,836	- 250	- 0.1	+ 5.8
Cardiff ...	203,050	164,315	- 38,206	- 18.8	+ 7.2
Swansea ...	107,251	94,595	- 12,746	- 11.9	-
Wolverhampton ...	90,382	94,179	+ 3,797	+ 4.2	- 1.8
Birmingham ...	524,397	522,182	- 2,215	- 0.4	- 8.4
Norwich ...	116,466	111,728	- 4,738	- 4.1	+ 5.3
Leicester ...	224,619	211,574	- 13,045	- 5.8	- 9.9
Nottingham ...	246,013	239,753	- 6,260	- 2.6	- 15.6
Derby ...	109,605	105,785	- 3,820	- 3.5	- 8.5
Birkenhead ...	119,213	110,906	- 8,307	- 7.0	- 7.4
Liverpool ...	635,348	685,276	+ 49,928	+ 7.9	- 16.6
Bolton ...	166,284	168,205	+ 1,921	+ 1.2	- 1.5
Manchester ...	553,677	543,930	- 9,747	- 1.8	<i>nil.</i>
Salford ...	223,418	221,015	- 2,403	- 1.1	- 20.9
Oldham ...	155,865	137,238	- 18,627	- 11.9	- 12.6
Burnley ...	120,497	97,044	- 23,453	- 19.5	- 4.2
Blackburn ...	139,089	127,527	- 11,562	- 8.3	-
Preston ...	120,196	112,910	- 7,286	- 6.1	+ 1.6
Huddersfield ...	105,514	95,008	- 10,506	- 9.9	- 5.3
Halifax ...	106,873	104,997	- 1,876	- 1.8	<i>nil.</i>
Bradford ...	294,472	279,809	- 14,663	- 5.0	- 11.0
Leeds ...	438,814	428,953	- 9,861	- 2.2	- 0.3
Sheffield ...	379,737	380,717	+ 9,980	+ 2.7	- 3.9
Hull ...	243,217	237,786	- 5,431	- 2.3	- 15.7
Sunderland ...	149,205	146,828	- 2,377	- 1.6	- 5.4
Gateshead ...	112,331	109,891	- 2,440	- 2.2	-
Newcastle ...	240,258	214,998	- 25,260	- 10.5	+ 13.6

\* No allowance is made for the estimated increase of population, April-June, 1901.

† In the calculation of this percentage difference from the estimate, allowance was made for the estimated increase, April-June, 1891.

The main importance of erroneous estimates of population consists in their vitiating effect on vital statistics. Taking the extreme case of Burnley, the deaths in this town during the year 1899 were 2,214, and the death-rate based on the estimated population for that year was 19.6 per 1,000; based on the census population it was 22.8 per 1,000, the real death-rate being somewhat higher than this! No more forcible argument could be adduced in favour of a more frequent enumeration of the population.

THE KING AND THE CORONERS.—Among the deputations which waited on the King on May 2nd was one from the Coroners of England, who were represented by Mr. Sidney Hacker, coroner for Devon, Dr. Danford Thomas, coroner for Central London, Mr. J. F. Robinson, one of the coroners for Lancashire, Dr. Wynn Westcott, coroner for North-East London, together with the Treasurer and Secretary of the Coroners' Association. We are glad to note that two medical coroners were selected to represent the Coroners' Society.

BEQUEST TO EDINBURGH ROYAL INFIRMARY.—At the weekly meeting of the managers on Monday, May 6th, intimation was made of a legacy of £10,000 left by the Rev. J. B. Atkinson, Rector of Larling, Norfolk, payable on the expiry of a life rent, and also the free residue of his estate, the amount of which has not yet been ascertained, but which was estimated to exceed considerably the bequests, which altogether would mean over £20,000. The only condition attached was that one-half of the residue was to be capitalised, and the other only used for general purposes.