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- 1) An Industrial Survey of Merseyside
made for the Board of Trade by the
University of Liverpool.

X9.316.N3t4 G2

- 2) An Industrial Survey of the North
East Coast Area. made for the
Board of Trade by Armstrong College,
Newcastle-upon-Tyne.

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BOARD OF TRADE

AN

INDUSTRIAL SURVEY

OF

MERSEYSIDE

MADE FOR THE BOARD OF TRADE
BY THE
UNIVERSITY OF LIVERPOOL



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AN INDUSTRIAL SURVEY OF MERSEYSIDE.

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University of Liverpool,
19, Abercromby Square,
Liverpool.

December 31st, 1931.

*To the Rt. Hon. Walter Runciman, M.P.
President of the Board of Trade.*

SIR,

By a letter from the Board of Trade dated the 25th March, 1931, the University of Liverpool was invited to conduct an industrial survey of the Merseyside area. At the same time, it was intimated that our enquiries should be directed towards the production of a report which should include :—

- (a) a survey of the present industrial position of the area;
- (b) the prospects of early expansion and new development, having regard particularly to new industrial developments within recent years, and
- (c) so far as practicable, an assessment of the prospective employment capacity of the various industries in the area as a basis for an estimate of the volume of labour likely to be surplus to the requirements of individual industries within the next few years.

We now have the honour to submit the accompanying Report on the above matters.

We have the honour to be,

Sir,

Your obedient Servants,

D. CARADOG JONES,
Director of Survey.

J. R. BELLERBY,
Professor of Economics.
University of Liverpool.

PREFACE.

The Report has been divided into two parts. Part I defines the boundaries and describes the character of the area surveyed. The main results of the Survey are then summarised. Part II contains the material upon which the conclusions in Part I are based. The method of enquiry is explained and a detailed study follows of industries which are of some importance on Merseyside. Special attention is devoted to the subject of employment with a view to estimating the surplus of labour in the area.

In presenting our Report we desire to acknowledge the courtesy of Central and Local Government Departments, official bodies and private individuals, who have put at our disposal information relevant to our enquiries. Valuable assistance has been given in collecting or analysing material by Mr. H. J. H. Parker, Mr. C. T. Saunders, Mr. E. O. Humphreys, and Mr. G. Tatham. We are particularly grateful to Mr. David Rodgers, who has been almost entirely responsible for the section on Shipping, and to Miss D. E. Coleman, who as Secretary has given ungrudging service throughout.

In a period of rapidly changing influences it is important to bear in mind that the conclusions reached by the authors, and submitted with all diffidence, relate to the conditions ruling at the end of the year 1931.

APPENDIX.—STATISTICAL TABLES.

TABLE I.—Changes in numbers of Insured Persons (aged 16-64) in Great Britain and on the North East Coast.

Industry Group.	Year.	Insured Workers in Great Britain.		Insured Workers on North East Coast.		Proportion of Insured Workers on N.E. Coast			
		Number.	Index Number.	Number.	Index Number.	Per cent.	Index Number.	Per cent.	Index Number.
0. All industries	1923	10,903,000	98·5	681,120	100·0	6·2	100·0	—	—
	1924	11,061,000	100·0	682,000	100·0	6·2	100·0	—	—
	1927	11,626,000	104·0	682,820	100·0	5·9	96·0	—	—
	1929	11,834,000	107·0	689,630	101·0	5·8	94·5	—	—
	1930	12,138,000	110·0	701,800	103·0	5·8	94·0	—	—
	1931	12,500,000	113·0	712,090	104·5	5·7	92·5	—	—
1. Coal and Coke	1923	1,221,740	99·0	237,940	99·5	19·5	101·0	35·0	100·0
	1924	1,235,800	100·0	239,040	100·0	19·8	100·0	35·0	100·0
	1927	1,175,480	95·0	223,180	94·0	19·8	98·0	32·5	93·0
	1929	1,086,630	88·0	212,150	89·0	19·5	101·0	31·0	88·0
	1930	1,081,191	87·5	211,580	88·5	19·6	101·0	30·0	88·0
	1931	1,058,300	85·5	205,190	86·0	19·4	100·0	29·0	84·0
2. Iron Ore Mining and Iron and Steel Manufacture	1923	249,370	102·0	47,560	103·5	19·1	100·0	7·0	103·0
	1924	244,280	100·0	46,020	100·0	18·8	100·0	6·8	100·0
	1927	225,570	92·5	42,040	91·5	18·6	99·0	6·2	91·0
	1929	215,870	88·5	39,610	86·0	18·4	97·5	5·7	85·0
	1930	217,380	89·0	38,920	84·5	17·9	95·0	5·6	82·0
	1931	201,700	82·5	35,800	78·0	17·7	93·5	5·0	74·0

TABLE I.—*Changes in numbers of Insured Persons (aged 16-64) in Great Britain and on the North East Coast—cont.*

Industry Group.	Year.	Insured Workers in Great Britain.		Insured Workers on North East Coast.		Proportion of Insured Workers on N.E. Coast			
		Number.	Index Number.	Number.	Index Number.	to Insured in the Industries in Great Britain.	Index Number.	to total Insured Population on N.E. Coast.	Index Number.
3. Engineering...	1923	776,180	103·5	69,410	108·5	8·9	105·0	10·2	108·5
	1924	749,560	100·0	63,920	100·0	8·5	100·0	9·4	100·0
	1927	726,570	97·0	60,690	95·0	8·4	98·0	8·9	95·0
	1929	744,970	99·5	60,660	95·0	8·1	95·5	8·8	94·0
	1930	756,440	101·0	62,170	97·5	8·2	96·5	8·9	95·0
	1931	741,070	99·0	59,560	93·0	8·0	94·0	8·4	89·0
4. Shipbuilding and Ship-repairing	1923	198,140	82·0	59,810	100·5	30·2	122·0	8·8	100·0
	1924	241,270	100·0	59,590	100·0	24·7	100·0	8·7	100·0
	1927	195,990	81·0	51,890	87·0	26·5	107·5	7·6	87·0
	1929	192,480	80·0	54,350	91·0	28·2	114·5	7·9	90·0
	1930	192,310	80·0	54,710	92·0	28·4	115·0	7·8	89·5
	1931	183,790	76·0	51,100	86·0	27·8	113·0	7·2	82·0
5. Chemicals ...	1923	100,190	106·0	5,910	104·5	5·9	99·0	0·9	104·5
	1924	94,710	100·0	5,660	100·0	6·0	100·0	0·8	100·0
	1927	92,050	97·0	7,860	139·0	8·5	143·0	1·1	139·0
	1929	105,340	111·0	16,460	291·0	15·6	261·5	2·4	289·0
	1930	102,930	108·5	15,950	282·0	15·5	259·5	2·3	268·0
	1931	98,300	104·0	11,770	208·0	12·0	200·0	1·7	199·5

6. Shipping and Canals, Docks, Harbours, etc.	1923	300,050	99·0	22,460	96·5	7·5	97·5	3·3	97·0
	1924	302,940	100·0	23,230	100·0	7·7	100·0	3·4	100·0
	1927	304,340	100·5	25,940	111·5	8·5	111·0	3·8	111·5
	1929	305,770	101·0	28,110	121·0	9·2	120·0	4·1	119·5
	1930	307,210	101·5	26,920	116·0	8·8	114·5	3·8	112·5
	1931	327,300	108·0	28,720	124·0	8·8	114·5	4·0	118·5
7. Building and Public Contracting	1923	786,920	98·0	33,050	103·0	4·2	105·0	4·9	103·0
	1924	804,470	100·0	32,160	100·0	4·0	100·0	4·7	100·0
	1927	951,300	118·5	39,770	123·5	4·2	104·5	5·8	123·0
	1929	969,050	120·5	36,550	113·5	3·8	94·5	5·3	112·5
	1930	995,890	124·0	38,080	118·5	3·8	95·5	5·5	115·0
	1931	1,103,850	137·0	52,780	164·0	4·8	120·0	7·4	157·0
8. Sawmilling, Furniture and Woodwork	1923	171,130	93·0	5,540	100·5	3·2	108·0	0·8	101·0
	1924	183,810	100·0	5,500	100·0	3·0	100·0	0·8	100·0
	1927	199,920	109·0	6,260	114·0	3·1	104·5	0·9	114·0
	1929	211,840	115·5	6,670	121·5	3·1	105·5	1·0	119·0
	1930	215,680	117·5	7,060	128·5	3·3	109·5	1·0	125·0
	1931	222,850	121·5	7,390	134·5	3·3	111·0	1·0	129·0
9. Printing and Paper Trades	1923	335,230	96·5	7,430	97·5	2·2	101·0	1·1	98·0
	1924	348,008	100·0	7,620	100·0	2·2	100·0	1·1	100·0
	1927	365,390	105·0	7,560	99·0	2·1	94·5	1·1	99·0
	1929	381,550	109·5	9,030	118·5	2·4	108·0	1·3	117·5
	1930	394,140	113·5	9,840	130·0	2·5	114·0	1·4	125·5
	1931	405,830	116·5	9,540	125·0	2·4	107·5	1·3	120·0
10. Food, Drink, and Tobacco	1923	477,770	98·0	12,890	99·5	2·7	102·0	1·9	95·5
	1924	488,710	100·0	12,960	100·0	2·6	100·0	1·9	100·0
	1927	500,500	102·5	14,650	113·0	2·9	110·5	2·1	113·0
	1929	501,200	102·5	14,820	114·5	3·0	111·5	2·1	113·0
	1930	513,800	105·0	14,760	114·0	2·9	108·5	2·1	111·0
	1931	522,780	107·0	15,120	116·5	2·9	109·0	2·1	112·0

TABLE I.—*Changes in numbers of Insured Persons (Aged 16–64) in Great Britain and on the North East Coast—cont.*

Industry Group.	Year.	Insured Workers in Great Britain.		Insured Workers on North East Coast.		Proportion of Insured Workers on N.E. Coast			
		Number.	Index Number.	Number.	Index Number.	to Insured in the Industries in Great Britain.	Index Number.	to total Insured Population on N.E. Coast.	Index Number.
11. Distributive Trades	1923	1,212,520	92·5	58,810	89·5	4·8	96·5	8·6	89·5
	1924	1,308,200	100·0	65,830	100·0	5·0	100·0	9·6	100·0
	1927	1,522,950	116·5	75,230	114·5	4·9	98·0	11·0	114·0
	1929	1,646,070	126·0	80,570	122·5	4·9	97·0	11·7	121·0
	1930	1,729,720	132·0	83,610	127·0	4·8	96·0	11·9	123·5
	1931	1,836,680	140·5	89,650	136·0	4·9	97·0	12·6	130·5
12. Hotel, Public House, Restaurant, Boarding House, Club, etc., Service	1923	251,440	92·5	10,270	95·5	4·1	103·0	1·5	95·5
	1924	271,420	100·0	10,770	100·0	4·0	100·0	1·6	100·0
	1927	302,750	111·5	12,120	112·5	4·0	101·0	1·8	112·5
	1929	329,260	121·5	13,460	125·0	4·1	103·0	2·0	123·5
	1930	345,980	127·5	15,120	140·5	4·4	110·0	2·1	136·5
	1931	378,840	139·5	16,360	152·0	4·3	108·5	2·3	145·0
13. Tramway, Omnibus and Other Road Transport	1923	245,340	95·5	8,180	77·5	3·3	81·5	1·2	78·0
	1924	257,410	100·0	10,530	100·0	4·1	100·0	1·5	100·0
	1927	293,470	114·0	13,090	124·5	4·5	109·0	1·9	124·0
	1929	330,790	128·5	15,920	151·0	4·8	117·5	2·3	149·5
	1930	345,310	134·0	16,960	161·0	4·9	120·0	2·4	156·5
	1931	373,200	145·0	18,250	173·5	4·9	119·5	2·6	166·0
14. All other Industries and Services	1923	4,576,980	101·0	101,860	102·5	2·2	101·5	15·0	102·5
	1924	4,530,350	100·0	99,170	100·0	2·2	100·0	14·5	100·0
	1927	4,677,850	103·5	102,540	103·5	2·2	100·0	15·0	103·0
	1929	4,713,380	104·0	101,270	102·0	2·1	98·0	14·7	101·0
	1930	4,940,120	109·0	105,620	106·5	2·1	98·5	15·2	104·5
	1931	5,045,510	111·5	110,860	112·0	2·2	101·0	15·6	108·0

TABLE II.—Changes in numbers of Insured Persons (Aged 16-64) employed in Great Britain and on the North East Coast.

Industry Group.	Year.	Insured Workers employed in Great Britain.		Insured Workers employed on North East Coast.		Proportion of Insured Workers employed on North East Coast			
		Number.	Index Number.	Number.	Index Number.	to Employed in the Industries in Great Britain.	to total Insured employed population on North East Coast.		
0. All Industries	1923	9,675,000	96·5	570,720	98·0	5·9	99·5	—	—
	1924	10,039,000	100·0	594,540	100·0	5·9	100·0	—	—
	1927	10,509,000	105·0	557,260	94·0	5·3	89·5	—	—
	1929	10,706,000	107·0	589,310	99·0	5·5	93·0	—	—
	1930	10,287,000	102·5	548,850	92·5	5·3	90·0	—	—
	1931	9,867,000	98·5	469,330	79·0	4·8	80·0	—	—
1. Coal and Coke	1923	1,189,550	101·0	231,580	101·0	19·5	100·0	40·6	105·0
	1924	1,176,300	100·0	229,310	100·0	19·5	100·0	38·6	100·0
	1927	952,050	81·0	176,080	77·0	18·5	95·0	31·6	82·0
	1929	881,130	75·0	184,060	80·0	20·9	107·5	31·3	81·0
	1930	814,750	69·0	164,630	72·0	20·2	103·5	30·0	78·0
	1931	676,900	57·5	127,480	55·5	18·9	97·0	27·2	70·5
2. Iron-Ore Mining and Iron and Steel Manufacture	1923	202,510	102·0	36,590	103·5	18·1	102·0	6·4	108·0
	1924	198,690	100·0	35,300	100·0	17·8	100·0	5·9	100·0
	1927	199,380	100·5	35,100	99·5	17·6	99·0	6·3	106·0
	1929	177,760	89·5	33,990	96·3	19·1	107·5	5·8	98·0
	1930	157,410	79·0	28,830	81·5	18·3	103·0	5·3	88·5
	1931	107,000	54·0	20,900	59·2	19·5	109·5	4·7	79·0

TABLE II.—Changes in numbers of Insured Persons (Aged 16-64) employed in Great Britain and on the North East Coast—cont.

Industry Group.	Year.	Insured Workers employed in Great Britain.		Insured Workers employed on North East Coast.		Proportion of Insured Workers employed on North East Coast		
		Number.	Index Number.	Number.	Index Number.	to Employed in the Industries in Great Britain.	to total Insured employed population on North East Coast.	
3. Engineering...	1923	625,850	98·5	46,900	95·5	7·5	96·5	8·2
	1924	635,130	100·0	49,200	100·0	7·7	100·0	8·3
	1927	660,040	104·0	48,000	97·5	7·3	94·0	8·6
	1929	676,500	106·5	51,760	105·0	7·7	98·5	8·8
	1930	645,180	101·5	48,640	99·0	7·5	97·5	8·9
	1931	535,800	84·5	33,140	67·5	6·2	80·0	7·0
4. Shipbuilding and Ship-repairing	1923	110,760	63·0	23,300	59·5	21·0	94·0	4·1
	1924	175,160	100·0	39,150	100·0	22·4	100·0	6·6
	1927	150,900	86·0	36,000	92·0	23·9	107·0	6·4
	1929	149,170	85·0	39,840	102·0	26·7	119·5	6·8
	1930	133,270	76·0	34,850	89·0	26·1	117·0	6·3
	1931	80,200	46·0	15,040	38·5	18·8	84·0	3·2
5. Chemicals ...	1923	88,570	103·0	4,990	103·0	5·6	100·0	0·9
	1924	86,190	100·0	4,840	100·0	5·6	100·0	0·8
	1927	86,160	100·0	7,070	146·0	8·2	146·0	1·3
	1929	98,910	115·0	15,700	324·5	15·9	282·5	2·7
	1930	93,360	108·5	13,580	280·5	14·5	259·0	2·5
	1931	79,800	92·5	6,440	133·0	8·1	143·5	1·4

6. Shipping and Canals, Docks, Harbours, etc.	1923	243,050	102.0	17,420	96.8	7.2	94.5	3.0	101.0
	1924	237,840	100.0	18,040	100.0	7.6	100.0	3.0	100.0
	1927	244,160	102.5	19,880	110.0	8.1	107.5	3.6	117.5
	1929	231,310	97.5	20,550	114.0	8.9	117.0	3.5	115.0
	1930	219,540	92.5	17,200	95.5	7.8	103.5	3.1	103.5
	1931	213,650	90.0	15,370	85.0	7.2	95.0	3.3	108.0
7. Building and Public Contracting	1923	681,500	93.5	26,840	96.5	3.9	103.0	4.7	100.0
	1924	729,140	100.0	27,870	100.0	3.8	100.0	4.7	100.0
	1927	873,730	120.0	33,000	118.5	3.8	99.0	6.0	126.0
	1929	871,470	119.5	28,860	103.5	3.3	87.0	4.9	104.5
	1930	852,680	117.0	27,970	100.5	3.3	86.0	5.1	109.0
	1931	898,000	123.0	38,570	138.5	4.3	112.5	8.2	175.0
8. Sawmilling, Furni- ture and Woodwork	1923	162,890	97.0	4,860	97.5	3.0	99.0	0.9	101.5
	1924	167,940	100.0	4,990	100.0	3.0	100.0	0.8	100.0
	1927	188,020	112.0	5,510	110.0	2.9	98.5	1.0.	118.0
	1929	196,240	117.0	5,930	119.0	3.0	102.0	1.0	120.0
	1930	191,390	114.0	6,030	121.0	3.2	106.0	1.0	131.0
	1931	182,900	109.0	5,860	117.5	3.2	108.0	1.25	149.0
9. Printing and Paper Trades	1923	314,390	96.0	6,740	98.5	2.2	102.5	1.2	102.5
	1924	327,230	100.0	6,840	100.0	2.1	100.0	1.2	100.0
	1927	347,770	106.5	6,980	102.0	2.0	98.0	1.3	109.0
	1929	367,700	112.5	8,600	125.5	2.3	112.0	1.5	127.0
	1930	377,500	115.5	8,820	129.0	2.3	112.0	1.6	140.0
	1931	361,900	110.5	8,110	118.5	2.2	107.0	1.8	150.0
10. Food, Drink, and Tobacco	1923	434,840	97.5	11,430	97.0	2.6	99.5	2.0	101.0
	1924	446,610	100.0	11,780	100.0	2.6	100.0	2.0	100.0
	1927	465,640	104.0	13,250	112.5	2.8	107.5	2.4	120.0
	1929	466,890	104.5	13,420	114.0	2.9	111.5	2.3	115.0
	1930	461,840	103.5	12,700	108.0	2.7	104.5	2.3	117.0
	1931	451,300	101.0	12,050	102.0	2.7	101.0	2.6	129.5

TABLE II.—*Changes in numbers of Insured Persons (Aged 16-64) employed in Great Britain and on the North East Coast—cont.*

Industry Group.	Year.	Insured Workers employed in Great Britain.		Insured Workers employed on North East Coast.		Proportion of Insured Workers employed on North East Coast			
		Number.	Index Number.	Number.	Index Number.	to Employed in the Industries in Great Britain.	to total Insured employed population on North East Coast.		
11. Distributive Trades	1923	1,140,980	93·0	54,820	90·0	4·8	96·5	9·6	93·5
	1924	1,226,790	100·0	61,010	100·0	5·0	100·0	10·3	100·0
	1927	1,451,370	118·5	69,000	113·0	4·8	95·5	12·1	118·0
	1929	1,555,540	127·0	73,180	120·0	4·7	94·5	12·4	121·0
	1930	1,589,610	129·5	73,290	120·0	4·6	92·5	13·4	130·0
	1931	1,641,200	134·0	76,270	125·0	4·6	95·5	16·3	158·5
12. Hotel, Public House, Restaurant, Boarding House, Club, etc., Service	1923	226,550	92·0	9,060	95·0	4·0	98·5	1·6	99·0
	1924	245,640	100·0	9,530	100·0	3·9	100·0	1·6	100·0
	1927	290,890	118·5	10,850	114·0	3·7	96·0	2·0	121·5
	1929	307,860	125·5	11,930	125·0	3·9	100·0	2·0	126·5
	1930	306,340	124·5	11,920	125·0	3·9	100·5	2·2	135·5
	1931	321,000	130·5	12,260	128·5	3·8	95·5	2·6	163·0
13. Tramway, Omnibus, and Other Road Transport	1923	219,970	95·0	6,760	74·5	3·1	78·5	1·2	77·5
	1924	231,380	100·0	9,070	100·0	3·9	100·0	1·5	100·0
	1927	272,970	118·0	11,170	123·0	4·1	107·0	2·0	131·5
	1929	307,630	133·0	13,730	151·5	4·4	114·0	2·3	153·0
	1930	313,370	135·5	14,260	157·0	4·5	116·0	2·6	170·0
	1931	330,800	143·0	15,010	165·5	4·7	119·0	3·2	210·0
14. All other Industries and Services	1923	4,033,790	97·0	89,430	102·0	2·2	105·0	15·7	106·5
	1924	4,154,960	100·0	87,510	100·0	2·1	100·0	14·7	100·0
	1927	4,326,290	104·0	85,370	97·5	2·0	93·5	15·3	104·0
	1929	4,417,890	106·5	87,760	100·0	2·0	93·5	14·8	101·0
	1930	4,130,760	99·5	86,100	98·5	2·1	98·5	15·7	106·5
	1931	3,987,550	96·0	82,850	94·5	2·1	98·5	17·7	120·0

TABLE III.

Changes in the number of persons insured and employed, with percentages of unemployed in all industries on the North East Coast. 1923-1931.

Year (July).	Insured Persons (16-64).					Employed Persons.					Percentage Unemployed.				
	M.	B.	W.	G.	T.	M.	B.	W.	G.	T.	M.	B.	W.	G.	T.
1923 ...	564,670	40,070	64,960	11,420	681,120	462,250	38,210	59,520	10,740	570,720	18·1	4·6	8·4	6·0	16·2
1924 ...	561,120	41,340	67,260	12,280	682,000	480,980	39,760	62,120	11,700	594,540	14·3	3·8	7·6	4·7	12·8
1927 ...	559,410	39,460	70,630	13,320	682,820	441,490	36,980	66,070	12,720	557,280	21·1	6·3	6·4	4·5	18·4
1929 ...	561,260	39,920	73,670	14,780	689,630	468,200	38,510	68,560	14,040	589,310	16·6	3·5	6·9	5·0	14·5
1930 ...	567,840	39,640	78,160	15,660	701,300	430,250	36,500	67,470	14,620	548,840	24·2	7·9	13·7	6·6	21·7
1931 ...	574,930	38,320	82,810	16,030	712,090	354,480	31,940	68,540	14,370	469,330	38·3	16·6	17·2	10·4	34·1

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TABLE IIIA.—Index numbers from Table III. 1924=100.

	Insured Persons.					Employed Persons.				
	M.	B.	W.	G.	T.	M.	B.	W.	G.	T.
1923 ...	100·6	98·9	98·6	93·0	99·9	96·0	98·1	95·8	91·8	96·0
1924 ...	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0
1927 ...	99·7	95·5	105·0	108·5	100·1	91·8	93·0	108·4	108·7	93·6
1929 ...	100·0	96·6	109·5	120·4	101·1	97·8	96·9	110·4	120·0	99·1
1930 ...	101·2	95·9	116·2	127·5	102·8	89·5	91·8	108·6	125·0	92·3
1931 ...	102·5	92·7	123·1	130·5	104·4	73·7	80·3	110·8	122·8	78·9

TABLE IV.—*Mobility of Labour—Origin and Dispersion of Books—All Industries—Men—Lodged Books and Others.*

	Exchanges at which the Books were originally issued.													Totals.	
	I Newcastle, Heaton, Elswick, Walker...	II Gateshead...	III Middlesbrough...	IV Bishop Auckland...	V Consett...	VI Darlington...	VII South Shields...	VIII Stockton...	IX Sunderland, Pallion, Southwick...	X Ashington...	XI Blyth...	XII Wallsend...	XIII Others inside the Area...	XIV Outside the Area...	
I. Newcastle, Heaton, Elswick, Walker.	32,494	2,009	168	35	82	48	638	26	357	64	330	2,472	4,828	2,156	45,707*
II. Gateshead ...	1,383	8,720	9	8	24	4	73	6	55	7	15	232	2,025	425	12,986
III. Middlesbrough ...	131	12	16,101	10	14	69	17	515	32	3	3	10	1,727	974	19,618
IV. Bishop Auckland ...	17	8	7	4,304	12	16	2	5	7	—	—	1	1,781	103	6,263
V. Consett ...	95	26	5	117	7,038	14	12	8	18	1	1	4	3,499	171	11,009
VI. Darlington ...	84	30	66	57	1	10,777	25	68	18	2	3	3	464	714	12,312
VII. South Shields ...	186	44	31	5	6	35	13,476	5	171	8	30	59	1,152	954	16,162
VIII. Stockton ...	246	233	2,641	142	7	562	24	8,433	117	14	5	139	1,723	1,234	15,520
IX. Sunderland, Pallion, Southwick.	279	55	47	37	13	15	223	18	18,593	10	15	40	1,927	1,177	22,449
X. Ashington ...	65	85	1	4	—	—	10	1	10	8,281	48	12	1,224	371	10,062
XI. Blyth ...	62	6	8	—	—	1	32	—	12	582	4,287	9	742	268	6,009†
XII. Wallsend ...	635	112	13	11	10	2	95	1	19	14	7	4,602	1,300	377	7,198
Total ...	35,677	11,290	19,097	4,730	7,207	11,543	14,627	9,086	19,409	8,986	4,744	7,583	22,392	8,924	185,291

* Excludes 8,948 books dispatched before inclusion in this return.

TABLE V.—*Mobility of Labour.—Proportions of "Foreign" Books.—All Industries—Men.—Lodged Books and Others.*

Exchanges at which the Books were exchanged in July, 1931.	Total number of Books exchanged.	Number of "Local Foreign" Books exchanged.	Proportion of "Local Foreign" Books to the total exchanged.	Number of "Non-local Foreign" Books exchanged.	Proportion of "Non-local Foreign" Books to the total exchanged.	Number of "Foreign" Books exchanged (local and non-local).	Proportion of all "Foreign" Books (local and non-local) to the total exchanged.	
I. Newcastle, Heaton, Elswick, Walker.	45,707	11,057	24.2	13.0	2,156	4.7	13,213	28.9
II. Gateshead	12,986	3,841	29.6	16.6	425	3.3	4,266	32.9
III. Middlesbrough ...	19,618	2,543	13.0	10.3	974	5.0	3,517	17.9
IV. Bishop Auckland ...	6,263	1,856	29.6	29.4	103	1.6	1,959	31.3
V. Consett	11,009	3,800	34.5	33.5	171	1.5	3,971	31.0
VI. Darlington	12,308	817	6.6	6.6	714	5.8	1,531	12.4
VII. South Shields ...	16,162	1,732	10.7	8.9	954	5.9	2,686	16.6
VIII. Stockton	15,520	5,853	37.7	20.7	1,234	7.9	7,087	45.7
IX. Sunderland, Pallion, Southwick.	22,449	2,679	11.9	11.9	1,177	5.2	3,856	17.2
X. Ashington	10,062	1,410	14.0	13.5	371	3.7	1,781	17.7
XI. Blyth	6,009	1,454	24.2	14.5	268	4.5	1,722	28.7
XII. Wallsend	7,198	2,219	30.8	19.1	377	5.2	2,596	36.1
Totals	185,291	39,261	21.2	14.8	8,924	4.8	48,185	26.0
Tyneside	82,053	10,911	—	13.3	3,912	4.8	14,823	18.1
Tees-side	35,138	5,240	—	14.9	2,208	6.3	7,448	21.2

* Corrected figures (i.e., after correction for movement within the immediate vicinity).

TABLE VI.—*Mobility of Labour.—Origin and Dispersion of Books.—All Industries—Women.—Lodged Books and Others.*

	Exchanges at which the Books were originally issued.														Totals.
	Newcastle, Heaton, Elswick, Walker. I	Gateshead. II	Middlesbrough. III	Bishop Auckland. IV	Consett. V	Darlington. VI	South Shields. VII	Stockton. VIII	Sunderland, Pallion, Southwick. IX	Ashington. X	Blyth. XI	Wallsend. XII	Others inside the Area. XIII	Outside the Area. XIV	
I. Newcastle, Heaton, Elswick, Walker.	12,061	973	12	2	9	16	77	2	136	6	26	160	722	273	14,475*
II. Gateshead ...	437	2,865	—	1	2	1	7	—	—	1	7	16	170	82	3,594
III. Middlesbrough ...	60	5	3,474	2	1	39	2	134	—	—	—	2	280	188	4,192
IV. Bishop Auckland ...	20	1	—	184	—	4	1	1	—	1	—	—	54	15	282
V. Consett ...	11	—	—	485	8	—	1	—	—	—	1	1	20	6	527
VI. Darlington ...	41	5	6	14	2	1,841	9	7	—	—	1	1	45	76	1,858
VII. South Shields ...	80	5	1	1	4	—	2,363	1	39	18	2	2	131	70	2,700
VIII. Stockton ...	44	6	152	1	1	16	3	1,663	4	4,316	4	4	91	118	2,118
IX. Sunderland, Pallion, Southwick.	120	10	11	5	1	3	45	2	—	—	2	5	132	154	4,808
X. Ashington ...	6	2	—	—	—	—	1	1	350	4	2	15	5	385	
XI. Blyth ...	9	1	—	—	—	—	—	3	351	2	36	36	12	412†	
XII. Wallsend ...	105	12	1	1	—	—	1	1	1	1	499	58	17	700	
Total ...	12,994	3,885	3,657	213	510	1,720	2,505	1,815	4,532	361	395	694	1,754	1,016	36,051

* Excludes 3,132 Books dispatched before inclusion in this return.

TABLE VII.—*Mobility of Labour.—Proportions of "Foreign" Books.—All Industries—Women.—Lodged Books and Others.*

Exchanges at which the Books were exchanged in July, 1931.	Total number of Books exchanged.	Number of "Local Foreign" Books exchanged.	Proportion of "Local Foreign" Books to the total exchanged.	Number of "Non-local Foreign" Books exchanged.	Proportion of "Non-local Foreign" Books to the total exchanged.	Number of "Foreign" Books exchanged (local and non-local).	Proportion of all "Foreign" Books (local and non-local) to the total exchanged.		
I. Newcastle, Heaton, Elswick, Walker.	14,475	2,141	14·8	6·4	273	1·9	2,414	16·7	8·3
II. Gateshead ...	3,594	647	18·0	5·2	82	2·3	729	20·3	7·5
III. Middlebrough ...	4,192	530	12·6	9·4	188	4·5	718	17·1	13·9
IV. Bishop Auckland ...	282	83	29·4	29·4	15	5·3	98	34·7	34·7
V. Consett ...	527	36	6·8	6·4	6	1·1	42	8·0	7·6
VI. Darlington ...	1,858	141	7·6	7·6	76	4·1	217	11·7	11·7
VII. South Shields ...	2,700	267	9·9	6·7	70	2·6	337	12·5	9·3
VIII. Stockton ...	2,118	337	15·9	8·7	118	5·6	455	21·5	14·3
IX. Sunderland, Pallion, Southwick.	4,808	338	7·0	7·0	154	3·2	492	10·2	10·2
X. Ashington ...	385	30	7·8	6·8	5	1·3	35	9·1	8·1
XI. Blyth ...	412	49	11·9	11·9	12	2·9	61	14·8	14·8
XII. Wallsend ...	700	184	26·3	9·6	17	2·4	201	28·7	12·0
Totals ...	36,051	4,783	13·3	7·2	1,016	2·8	5,799	16·1	10·0
Tyne-side ...	21,469	1,365	—	6·4	442	2·0	1,807	—	8·4
Tees-side ...	6,310	581	—	9·2	306	4·9	887	—	14·1

* Corrected figures (i.e., corrected for contiguity).