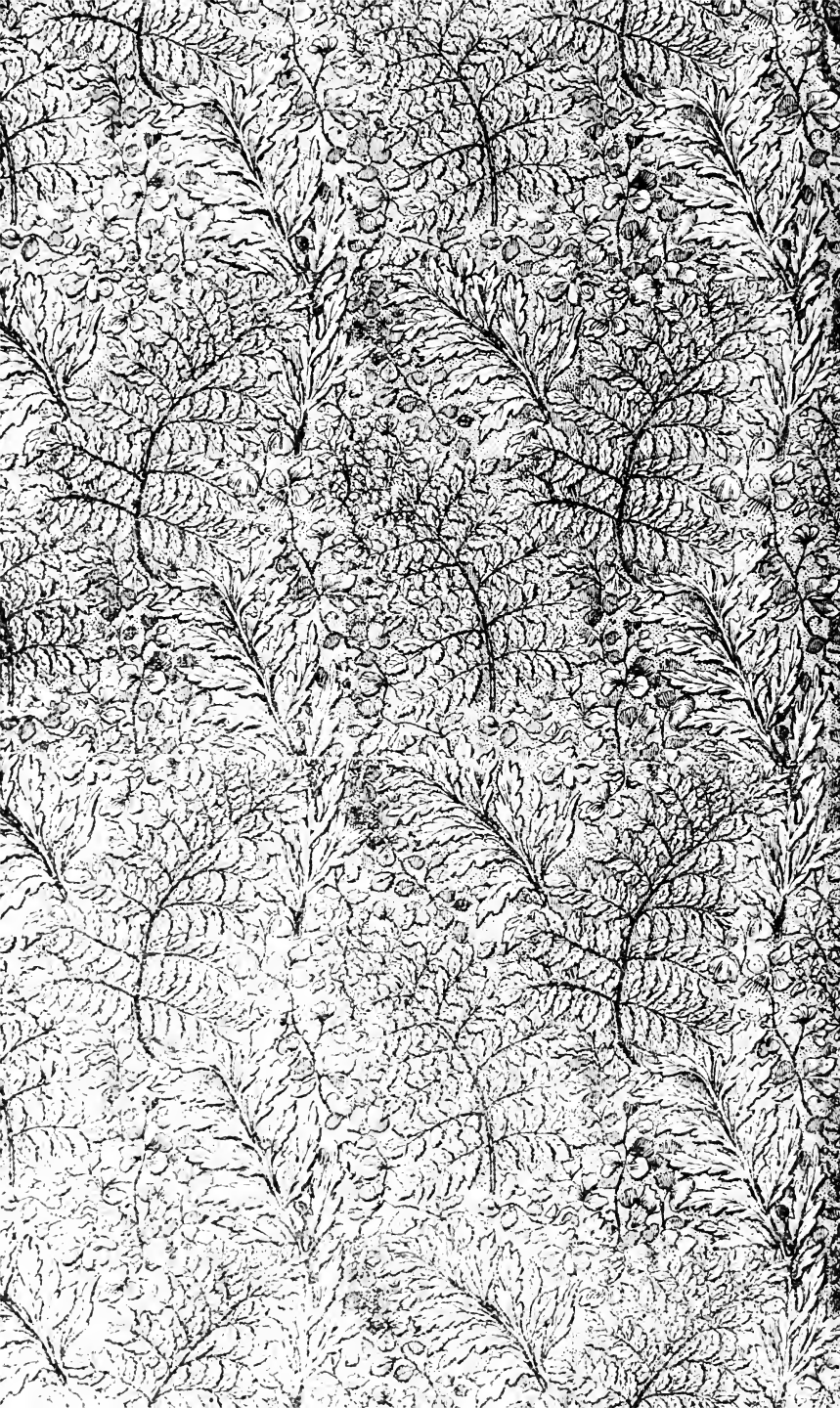
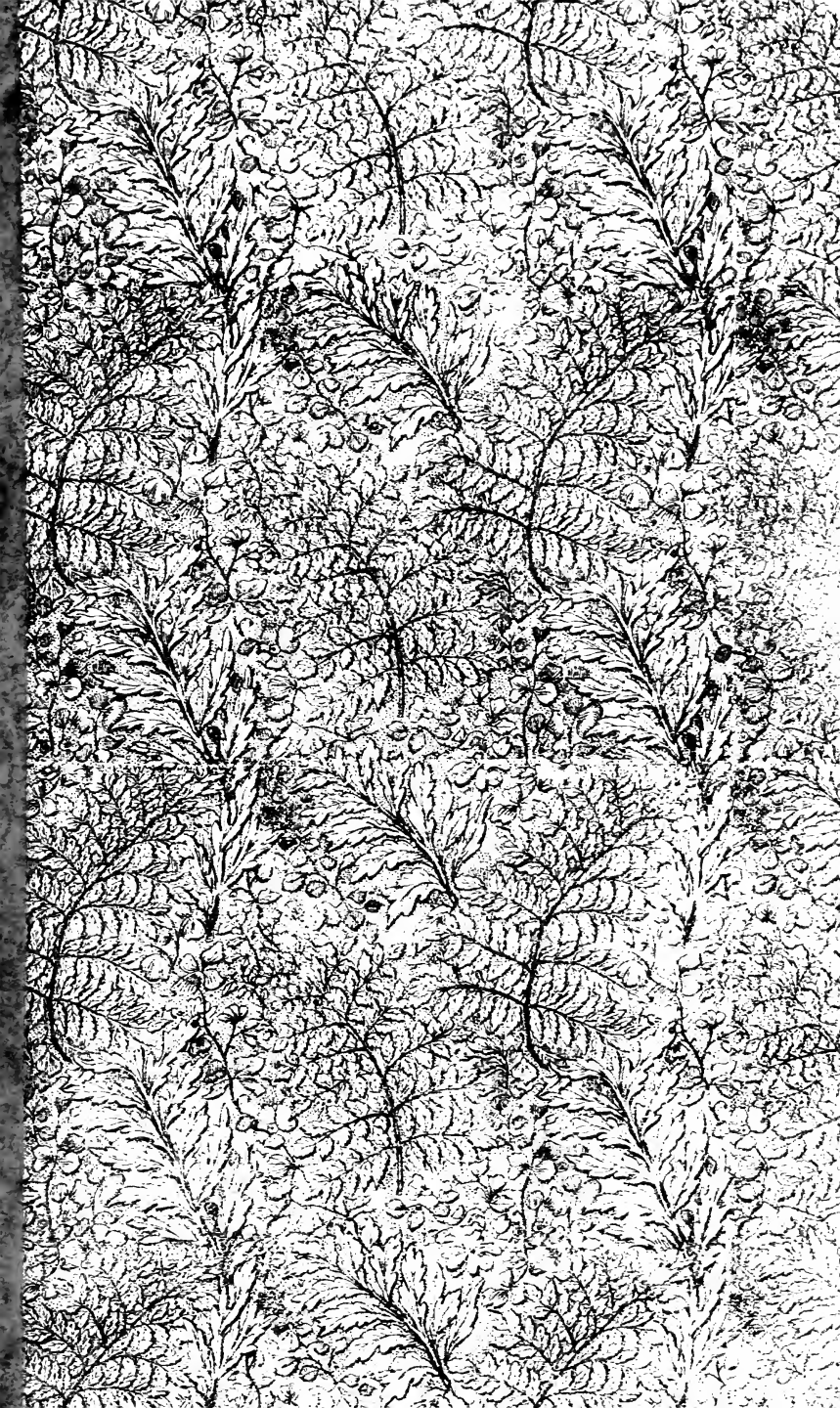


THE
CO-OPERATIVE
WHOLESALE SOCIETIES,
LIMITED.



ANNUAL
-1896-





1895 27

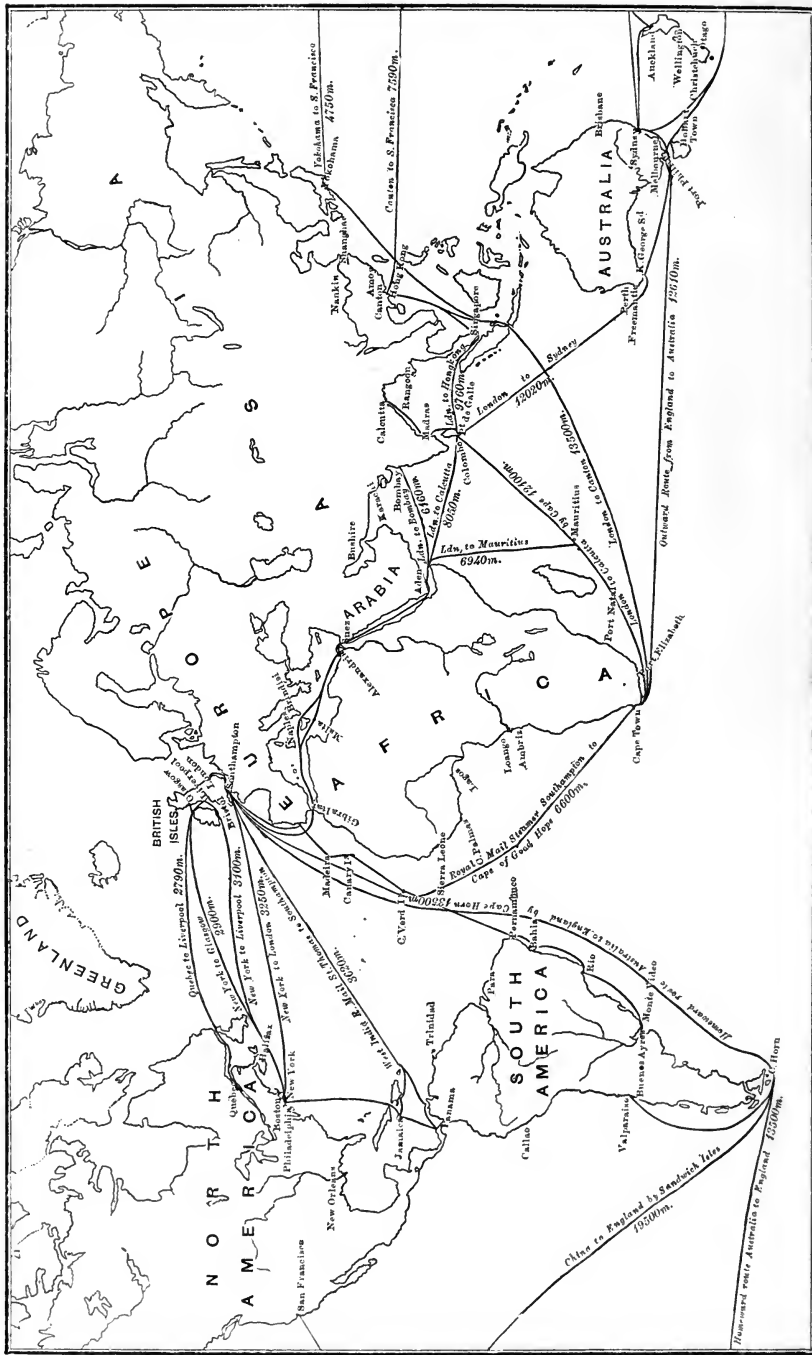
1901 2 5 6 7. 16

Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

<http://www.archive.org/details/annual1896coopuoft>

Map of the World.

SHOWING ROUTES TO BRITISH POSSESSIONS FROM GREAT BRITAIN.

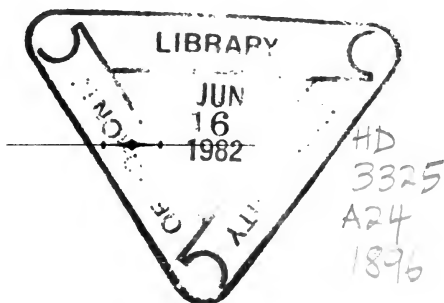


THE CO-OPERATIVE
WHOLESALE SOCIETIES

LIMITED.

ENGLAND AND SCOTLAND.

ANNUAL FOR 1896.



PUBLISHED BY

THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED,

1, BALLOON STREET, MANCHESTER;

AND

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED,

119, PAISLEY ROAD, GLASGOW.

MANCHESTER :
PRINTED AND BOUND BY
THE CO-OPERATIVE PRINTING SOCIETY,
AT THEIR WORKS,
NEW MOUNT STREET, ANGEL STREET.

PREFACE.

WE are hopeful that the present issue will rank at least as high as previous ones in the estimation of our members, and will serve the important purpose of conveying precise and useful information on topics of value and interest to the industrial classes.

We have made a special point in submitting the articles relative to the Wholesale Societies and their members and the duty of the individual member to the Store, and in our opinion it is very necessary, even at this stage, that these matters of principle should be better understood and more widely accepted.

It should never be forgotten by individual Co-operators that the Wholesale Societies are the natural complement to the Stores, and just as it is the duty of the member to be true to his Store, so it is equally the duty of the Stores to act loyally to the Wholesale Societies, which are their institutions. In the matter of the goods produced at their own Wholesale Works there is much room for increased demand, and certainly it is not too much to request that they should ask for and use the goods made by and for themselves.

It is our sad duty to chronicle the death of our late Chairman, Mr. J. T. W. Mitchell, which took place on March 16th, 1895. It may be truly said that his life was devoted to the development and work of this Society, and his loss will be keenly felt for many years to come. His love and zeal for his fellow-men were recognised on all hands, and he has left a splendid example of self-sacrifice and co-operative faith for us to emulate.

We have also to record with sorrow that we have lost by death during the year two other members of the Wholesale Committee, Messrs. Emanuel Hibbert and James Lownds, who were both active and energetic Co-operators, and worked with praiseworthy and successful effect for the furtherance of the Co-operative Movement.

THE COMMITTEE.

DECEMBER 11, 1895.

11
and
the
the
the
the
the

LIST OF
MAPS, DIAGRAMS, CITY PLANS, PREMISES, &c.



CO-OPERATIVE WHOLESALE SOCIETY.

Map of the World.	Limerick Branch.
Diagram—Thirty-two Years' Progress of Co-operation.	Tralee "
" Thirty-one Years' Progress of the Co-operative Wholesale Society Limited.	Armagh "
Balloon Street, Manchester—Registered Offices and Boot and Shoe Warehouse.	Copenhagen "
Garden Street, Manchester—Grocery Warehouse.	Hamburg "
Dantzic Street, Manchester—Drapery Warehouse.	Aarhus Branch Office.
City Plan of Manchester.	" " Butter Cellar.
Newcastle Branch Grocery, &c., Warehouse.	Gothenburg Branch.
Newcastle Drapery, Furnishing, and Provision Warehouse.	Crumpsall Biscuit Works.
City Plan of Newcastle.	Leicester Boot and Shoe Works, Knighton Fields.
London Branch General Office, &c.	Leicester Boot and Shoe Works, Duns Lane.
" Tea Department Premises.	City Plan of Leicester.
" Cocoa and Chocolate Works.	Heckmondwike Boot and Shoe Works.
" Bacon Stoves.	Irlam Soap Works.
" Tea Warehouse.	Durham Soap Works.
Map of London.	Batley Woollen Cloth Works.
Leeds Depôt.	Dunston Corn Mill.
City Plan of Leeds.	Longton Crockery Depôt.
Bristol Depôt.	" " Show Room.
City Plan of Bristol.	Furniture and Ready-mades Factory, Broughton, near Manchester.
Liverpool Office and Warehouse.	Goole Offices.
Liverpool Branch do., Green Fruit Warehouse.	Goole Warehouse.
New York Produce Exchange.	Garston and Rouen Offices.
Cork Branch.	Calais Offices.
	S.S. "Liberty."
	S.S. "Equity."
	S.S. "Federation."
	S.S. "Pioneer."
	S.S. "Unity."
	S.S. "Progress."

SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY.

Following Page 144 :

Paisley Road Premises, Glasgow.	Trades Lane Premises, Dundee.
Dundas Street Premises, Glasgow.	Grange Place Premises, Kilmarnock.
New Central Offices, Morrison Street, Glasgow.	Crookston Street Premises, Glasgow.
Clarence Street Premises, Glasgow.	Enniskillen Premises.
Clarence Street Interior of Hall, Glasgow.	Productive Works, Shieldhall, Govan, near Glasgow.
Links Place Premises, Leith.	Chancelot Roller Flour Mills, Edinbro'.
	Twenty-seven Years' Wholesale Distribution in Scotland.

LIST OF CONTENTS.

	PAGES.
Co-operative Wholesale Society Limited.....	1 to 87
General Advertisements	88 ,, 99
Scottish Co-operative Wholesale Society Limited.....	100 ,, 146
The Food of the People: A Retrospect and Prospect.—By Thomas Oliver, M.A., M.D., F.R.C.P.	147 ,, 179
Factory Legislation in the United States.—By Edward Porritt	180 ,, 198
Retail Co-operation and the Relations between the Individual and the Store.—By B. J., L. B.....	199 ,, 208
The Co-operative Wholesale Societies and their Relations to the Retail Co-operative Societies.—By B. J., L. B.	209 ,, 231
Taxation: How Raised and how Expended.—By George Howell, F.S.S.	232 ,, 252
Electricity: Past, Present, Future.—By Victor V. Bran- ford, M.A. (See Diagrams following pages 253, 272, and 276)	253 ,, 235
Some Facts and Considerations about Municipal Socialism. By Sidney Webb, LL.B. (See Plates following pages 296 and 298)	286 ,, 322
The Scottish Co-operative Wholesale Society Limited and its Productive Departments.—By David Campbell.....	323 ,, 350
The Problem of the Unemployed.—By John A. Hobson....	351 ,, 373
Sanitation, Health, and Long Life.—By Henry Pitman....	374 ,, 387
Irlam Soap Works. (See Illustrations following page 390)..	388 ,, 391
The late J. T. W. Mitchell, J.P.—By William Maxwell, J.P. (See Photo. following page 392)	392 ,, 414
The late James Lownds. (See Photo. following page 414) ..	415
The late Emanuel Hibbert. (See Photo. following page 416)..	416
Miscellaneous	417 ,, 551

ALPHABETICAL INDEX.

	PAGE.		
	English.	Scottish.	General.
ACTS of Parliament Passed during the Session of 1894-1895 .. .. .	..	..	433
Acts of Parliament restraining exportation of Tools, &c., used in Cotton, Linen, Woollen, and Silk Manufacture .. .. .	..	..	502
Accidents, Railway. Proportion of Passengers Killed from Causes beyond their own Control.....	..	..	442
Addresses, Telegraphic, List of	48	..	..
Administrations in Present Century .. .. .	..	..	452
Advantages of Membership of Wholesale Societies.....	8	110	..
Annual Value of Property and Income Assessed, 1875-1894 .. .. .	..	..	505
Average Minimum Rate per Cent of Discount Charged by Bank of England .. .. .	..	..	439
Average Price of Consolidated Stock.....	..	..	438
Average Retail Price of Articles of Domestic Consumption .. .. .	..	..	526
BANK Holidays .. .. .	..	..	501
Bank Department, Wholesale Society	13	..	..
„ Union of Scotland, List of Branches .. .. .	..	111	..
Barometer Instructions .. .. .	..	..	506
Batley Woollen Mill	39, 80	..	..
Births, Marriages, and Deaths, Registers of.....	..	..	501
Biscuits and Sweets Works (Wholesale Society).....	30, 70	..	..
Bonus to Labour.....	..	145	..
Boot and Shoe Department	59, 85	..	123
Boot and Shoe Factory.....	..	132	..
Branford, Victor V., M.A.—Electricity: Past, Present, Future .. .. .	..	..	253
Broughton Cabinet Factory	81	..	..
Brush Factory.....	..	137	..
CABINET , The.....	..	..	453
Cabinet Workshop .. .. .	..	134	..
Calais and Goole Line of Steamers	43	..	..
Calendar for ascertaining any Day of the Week for any given time within the Present Century.....	..	..	528
Calendar for 1896 .. .. .	..	..	532
Campbell, David.—The Scottish Co-operative Wholesale Society Limited and its Productive Departments .. .. .	..	..	323
Cash Arrangements	12	111	..
Census, The Indian .. .. .	..	..	490
Century, Administrations in the Present .. .. .	..	..	452
Chronology of the Wholesale Society.....	46	..	..
Civil Service Supply Stores, Sales of .. .. .	..	..	432
Coming Events in connection with the Wholesale Society in 1896	53	..	..
Committees, &c., List of	3	105	..

ALPHABETICAL INDEX.

	PAGE.		
	English.	Scottish.	General.
Committees, Past Members of	49	..	..
Committee, Members of, who have Died during Office ..	51	..	..
Confectionery Works .....	..	140	..
Congresses, Co-operative .....	..	..	52
Consolidated Stock, Average Price of .....	..	..	438
Contributions which have appeared in "The Co-operative Wholesale Societies' Annual" from 1885 to 1896 ..	..	..	545
Co-operative Wholesale Societies and their Relations to the Retail Co-operative Societies, The.—By B. J., L. B.	..	..	209
Co-operative Congresses .....	..	..	52
" Insurance Company .....	..	..	92
" News, The.....	..	..	91
" Productive Societies for which the Wholesale Society are Agents	40	..	..
" Productive Society (Lancashire & Yorkshire)	..	..	96
" Progress, 1862 to 1893 (United Kingdom)..	..	..	417
" Societies, each with Trade over £200,000 per year .....	..	..	427
" Societies, each with Trade over £100,000 per year .....	..	..	427
" Union: Its Principles and Constitution....	..	..	88
CO-OPERATIVE WHOLESALE SOCIETIES:—			
Advantages of Membership	8	..	110
Bank Department	13	..	..
Biscuits, Sweets, &c., Works, Crumpsall.....	30, 70	..	..
Bonus to Labour.....	..	..	145
Boot and Shoe Department	59, 85	..	122
" " Factory.....	..	..	132
Brush Factory .....	..	..	137
Business Notices.....	9	..	107
Cabinet Workshop.....	81	..	134
Chancelot Flour Mills .....	..	..	142
Chronology	46	..	..
Coming Events in connection with the Wholesale Society in 1896	53	..	..
Committees, Past Members of.....	49	..	..
Committee, Members of, who have Died during Office	51	..	..
Confectionery Works.....	..	..	140
Crockery Department, Longton	29, 82	..	..
Drapery Department.....	22, 57, 85	..	120
Grey "	26	..	..
Hosiery "	23	..	..
Manchester "	25	..	..
Mantle "	24	..	..
Woollen "	27, 58, 85	..	..
Dunston Corn Mill.....	77	..	..
Furniture Department.....	..	..	124
Furnishing "	28, 60, 85	..	..
Grocery Department	14, 56, 84	..	114-119
Hosiery Factory .....	..	..	136
Leeds Clothing Department.....	69	..	..

ALPHABETICAL INDEX.

CO-OPERATIVE WHOLESALE SOCIETIES:—	PAGE.		
	English.	Scottish.	General.
List of Committees, Auditors, and Scrutineers....	3 ..		105 ..
„ Officers and Departments	4 ..		106 ..
London Branch	65-68, 87 ..		..
Mantle Factory			131 ..
Newcastle Branch	61-64, 86 ..		..
Number of Employés in Departments	6 ..		143 ..
Offices and Departments	1 ..		103 ..
Preserve Works			139 ..
Printing Workshop			138 ..
Productive Societies for which the Wholesale Society are Agents	40 ..		..
Progress of the Wholesale Societies	54 ..	112 ..	..
Shipping Department—Garston and Rouen	42 ..		..
„ „ Goole and Calais	43 ..		..
„ „ Goole and Hamburg	44 ..		..
„ „ Manchester and Rouen	45 ..		..
Shirt Factory			128 ..
Shoe Works, Leicester	33, 72 ..		..
„ Heckmondwike	37, 74 ..		..
Slop Factory			130 ..
Soap Works, Irlam and Durham	38, 78 ..		..
Tailoring Factory			126 ..
Tea, Coffee, and Cocoa Department	17 ..		..
Telegraphic Addresses	48 ..		..
Telephone Numbers	48 ..		..
Tobacco Factory			141 ..
Trade Terms, Conditions of Membership, &c.	7 ..		109 ..
Woollen Mills, Batley.....	39, 80 ..		..
Corn Mill, Dunston	77 ..		..
Crockery Department	29, 83 ..		..
Crumpsall Biscuit Works	30, 70 ..		..
DEALINGS with Land			440 ..
Death Duties, The			443 ..
Departments and Offices of the Wholesale Society	1 ..	103 ..	..
„ Officers of	4 ..	106 ..	..
„ No. of Employés in each	6 ..	143 ..	..
„ of the Wholesale—Progress of.....	54 ..	112 ..	..
„ Shipping	42 ..		..
Discount, Average Minimum Rate per Cent of			439 ..
Drapery Department	22, 57, 85 ..	120 ..	..
Dunston Corn Mill.....	77 ..		..
Durham Soap Works	38, 78 ..		..
Duties, Import, in the United Kingdom			435 ..
„ Stamp, Taxes, Excise			494 ..
ECLIPSES			501 ..
Electricity: Past, Present, Future.—By Victor V. Branford, M.A.			253 ..
Employés, Number of	6 ..	143 ..	..
English Mile compared with other European Measures..			524 ..
English Money, Table Showing Sums Payable in— Money Orders Issued in Foreign Countries, &c.			504 ..
Expectation of Life			449 ..

ALPHABETICAL INDEX.

	PAGE.		
	English.	Scottish.	General.
FACTORY Legislation in the United States.—E. Porritt.	..	..	180
Flour Mill.....	77	142	..
Food of the People, The.—By Thomas Oliver, M.A., M.D., F.R.C.P. ....	..	..	147
Foreign Currencies, Table Showing Sums Payable in— on Money Orders in the United Kingdom.....	..	..	508
Foreign Moneys and their English Equivalents.....	..	..	488
Furnishing Department of Wholesale Society	28, 60, 85	..	..
Furniture Department of Wholesale Society .....	..	124	..
GARSTON and Rouen Line of Steamers	42	..	..
General Election, 1892, Expenses of .....	..	..	486
Goole and Calais Line of Steamers	43	..	..
„ and Hamburg „ „	44	..	..
„ Tide Table .....	..	..	520
Government Stock Investments .....	..	..	500
Grocery Departments, Wholesale Society	14, 56, 84	114-119	..
HAMBURG and Goole Line of Steamers.....	44	..	..
Heckmondwike Shoe Works	37, 74	..	..
Hibbert, Emanuel, The late.....	..	..	416
Hobson, John A.—The Problem of the Unemployed....	..	..	351
Holidays, Bank .....	..	..	501
Hosiery Factory .....	..	136	..
House Duty.....	..	..	496
House of Commons—List of Members .....	..	..	455
„ „ Professions of Members .....	..	..	484
Howell, George, F.S.S.—Taxation: How Raised and how Expended .....	..	..	232
Import Duties in the United Kingdom.....	..	..	435
Income Tax Rates from its First Imposition .....	..	..	437
„ and Expenditure of the United Kingdom, year ending March 31st, 1895 .....	..	..	434
Indian Census, The.....	..	..	490
Inhabited House Duty .....	..	..	496
Inland Book Post .....	..	..	497
„ Parcel Post, posting of parcels .....	..	..	498
„ Pattern and Sample Post .....	..	..	500
„ Registered Newspapers, Postage on .....	..	..	499
„ Parcels, Compensation for Loss and Damage of .....	..	..	500
Instructions, Barometer .....	..	..	506
Insurance Company, Co-operative .....	..	..	92
Introductory	v.	101	..
Irlam Soap Works .....	..	..	388
LANCASHIRE and Yorkshire Productive Society ....	..	..	96
Land, Dealings with .....	..	..	440
Law Relating to Societies, Summary of the .....	..	..	89
Law Sittings .....	..	..	501
Leeds Clothing Department.....	69	..	..
Leicester Co-operative Shoe Works	33, 72	..	..
Life, Expectation of .....	..	..	449

ALPHABETICAL INDEX.

	PAGE.		
	English.	Scottish.	General.
Prime Ministers since 1834 .....	..	..	454
Principal Articles of the Calendar for the Year 1896....	..	..	531
" Events in connection with the Wholesale Society	46	..	..
Principles and Constitution of the Co-operative Union..	..	..	88
Printing Workshop .....	..	138	..
Productive Departments of the Scottish Co-operative Wholesale Society Limited.—By David Campbell ..	..	..	323
Productive Society, Lancashire and Yorkshire .....	..	..	96
" Societies for which the Wholesale Society are Agents	40	..	..
Professions of Members of the House of Commons.....	..	..	484
Progress of the Wholesale Societies	54	112	..
Progress of Co-operation (United Kingdom) .....	..	..	417
Property and Income—Total Annual Assessed Value....	..	..	505
Public Acts of Parliament Passed during the Session of 1894-5 .....	..	..	433
Public Income and Expenditure of the United Kingdom for the Year ending March 31st, 1895 .....	..	..	434
QUEEN and Royal Family, The .....	..	..	451
RAILWAY Accidents, Proportion of Passengers Killed, &c. ....	..	..	442
Ready Reckoner and Wages Table.....	..	..	530
Registration .....	..	..	500
Registers of Births, Marriages, and Deaths .....	..	..	501
Remarks on the Weather .....	..	..	513
Retail Co-operation and the Relations between the Individual and the Store.—By B. J., L. B. ....	..	..	199
Rouen and Garston Line of Steamers	42	..	..
Rouen and Manchester "	45	..	..
Royal Family, The Queen and .....	..	..	451
Rules by which the Personal Estates of Persons Dying Intestate are Distributed .....	..	..	446
Rules of Division according to the Law of Scotland of the Movable Estate of a Person who has Died Intestate .....	..	..	447
SALES of Civil Service Supply Stores .....	..	..	432
Salisbury Ministry, The.....	..	..	453
Sanitation, Health, and Long Life.—By Henry Pitman. .....	..	..	374
Savings Banks, Notices, &c.....	..	..	500
Scottish Wholesale Society .....	..	100-146	..
Shirt Factory .....	..	128	..
Shoe Works, Leicester.....	33, 72	..	..
" Heckmondwike	37, 74	..	..
Slop Factory .....	..	130	..
Soap Works, Irlam and Durlham	38, 78, 388	..	..
Societies—Co-operative, each with Trade over £200,000 per year.....	..	..	427
Societies—Co-operative, each with Trade over £100,000 per year.....	..	..	427

ALPHABETICAL INDEX.

	PAGE.		
	English.	Scottish.	General.
Societies — Co-operative Productive, for which the "Wholesale" are Agents	40	..	..
Stamp, &c., Duties.....	..	..	494
Statistics of Co-operative Wholesale Society	54-87	.. 112-144	..
Steamship Lines (Co-operative)—Garston and Rouen ..	42	..	..
" " " Goole and Calais.....	43	..	..
" " " Goole and Hamburg ..	44	..	..
" " " Manchester & Rouen..	45	..	..
Summary of Law Relating to Societies.....	..	..	89
Sweets Works, Crumpsall	30, 70	..	..
T ABLE Showing Sums Payable in Foreign Currencies on Money Orders Issued in United Kingdom .....	..	..	503
Table Showing Sums Payable in English Money on Money Orders Issued in Foreign Countries, &c.....	..	..	504
Table Showing the Number of Days between any Two Dates .....	..	..	522
Table Showing Number of Days from any Day of one Month to same Day of any other Month .....	..	..	525
Tailoring Factory .....	..	126	..
Taxation: How Raised and how Expended.—By George Howell, F.S.S.....	..	..	232
Tea and Coffee Department of Wholesale Society	17	..	..
Telegrams .....	..	..	499
Telegraphic Addresses	48	..	..
Telephone Numbers	48	..	..
Terms and Abbreviations Commonly Used in Business..	..	..	527
Terms and Conditions of Membership of Wholesale Society "The Co-operative Wholesale Societies' Annual," Contri- butions to, from 1885 to 1896	7	.. 109	..
Tide Table, Liverpool.....	..	..	545
" Goole .....	..	..	518
" " .....	..	..	520
Time all over the World .....	..	..	505
Tobacco Factory.....	..	141	..
Transfers .....	..	..	495
U NEMPLOYED, The Problem of the.—By John A. Hobson .....	..	..	351
Union Bank of Scotland, List of Branches .....	..	111	..
" Co-operative, its Principles and an Account of ..	..	..	88
United Kingdom, the Public Income and Expenditure, 1895	..	..	434
" " Co-operative Progress in the years 1862-93	..	..	417
" " Import Duties in the .....	..	..	435
" " Money Orders for the .....	..	..	499
" " Parliaments of the .....	..	..	452
" States, Presidents of.....	..	..	485
W AGES Table and Ready Reckoner .....	..	..	530
Weather, Remarks on the.....	..	..	513
Webb, Sidney, LL.B. Some Facts and Considerations about Municipal Socialism .....	..	..	286
Weights and Measures .....	..	..	529
Wholesale Society	1-87	.. 101-146	..
Woollen Cloth Department.....	27, 58, 85	..	..
" Mill, Batley	39-80	..	..

CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

LIST OF COMMITTEES IN THE ORDER THEY APPEAR,
WITH DATES OF ELECTION.

GENERAL COMMITTEE.	ELECTED.
Mr. J. SHILLITO, <i>Chairman</i>	Nov., 1870, to Aug., 1871— Dec.. 1883
„ R. HOLT	June..... 1895
„ T. E. MOORHOUSE	December
„ A. SCOTTON	June..... 1890
„ T. BLAND, <i>Vice-Chairman</i>	December
„ J. FAIRCLOUGH	September
„ W. LANDER	June..... 1894
„ J. LORD	December
„ W. BATES	August..... 1873
„ T. HIND	June..... 1877
„ A. NORTH	December
„ T. SWANN, <i>Secretary</i>	September
„ E. GRINDROD	December
„ T. KILLON.....	March
„ J. STANSFIELD.....	December
NEWCASTLE BRANCH COMMITTEE.	
„ T. TWEDDELL, <i>Chairman</i>	December
„ T. SHOTTON, <i>Vice-Chairman</i>	March
„ R. GIBSON, <i>Secretary</i>	September
„ G. BINNEY	December
„ W. D. GRAHAM	December
„ R. IRVING	June..... 1892
„ T. RULE	June..... 1893
„ W. STOKER.....	September
LONDON BRANCH COMMITTEE.	
„ G. HAWKINS, <i>Chairman</i>	June..... 1885
„ G. SUTHERLAND, <i>Vice-Chairman</i>	December
„ H. PUMPHREY, <i>Secretary</i>	December
„ J. CLAY	December
„ H. ELSEY	December
„ J. F. GOODEY	Mar., 1878, to Mar., 1885— Mar.. 1889
„ G. HINES	December
„ T. E. WEBB	December
SCRUTINEERS.	
„ J. J. BARSTOW.....	September
„ F. HARDERN	September
AUDITORS.	
„ T. J. BAYLIS.....	December
„ I. HAIGH	September
„ J. E. LORD	December
„ T. WOOD.....	June..... 1885

FINANCE COMMITTEE.



Mr. J. SHILLITO;
(Chairman),
GENERAL COMMITTEE.



Mr. R. HOLT.



Mr. T. E. MOORHOUSE.



Mr. A. SCOTTON.



GROCERY COMMITTEE.



Mr. T. BLAND
(*Vice-chairman*),
GENERAL COMMITTEE.



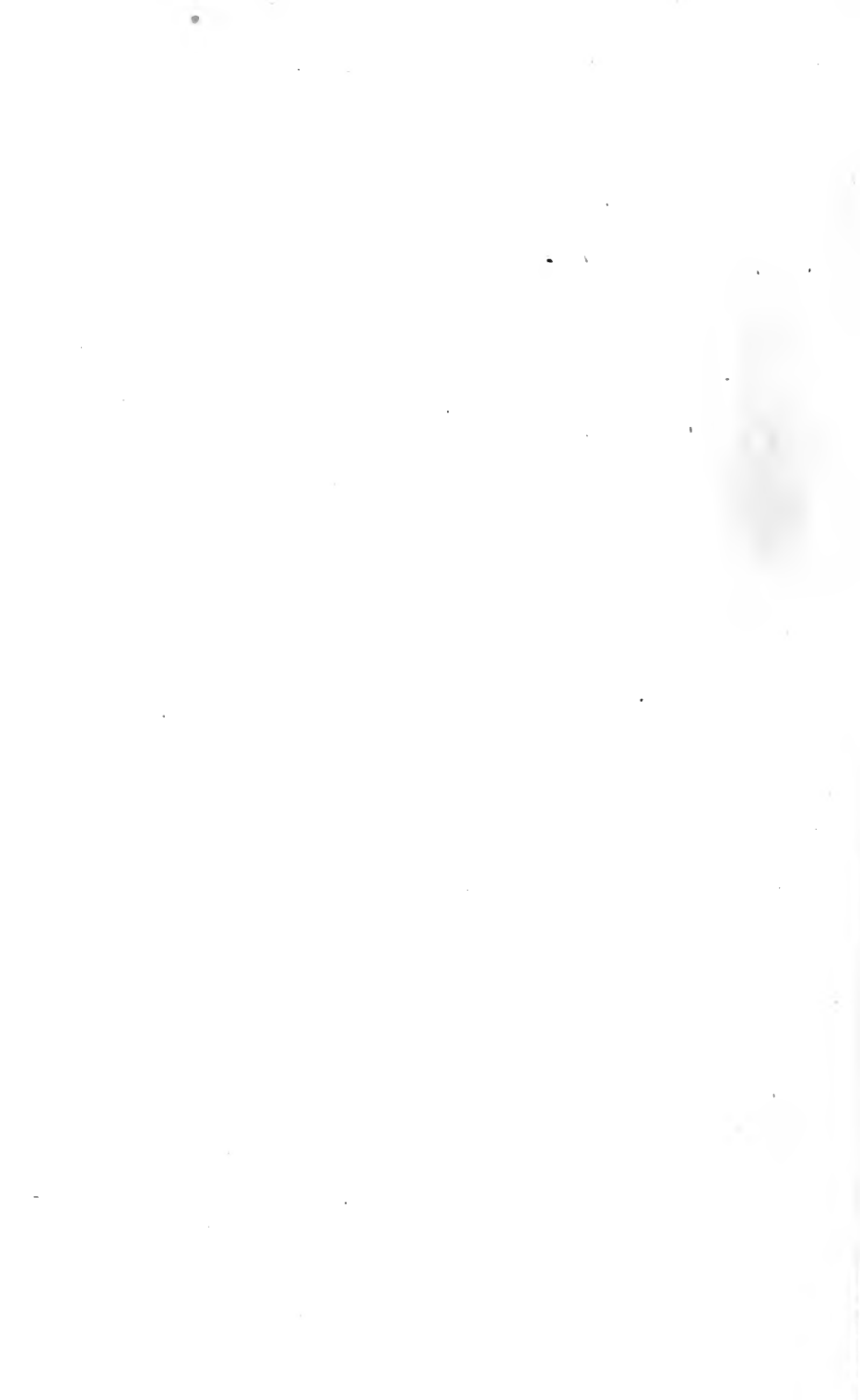
Mr. J. FAIRCLOUGH.



Mr. W. LANDER.



Mr. J. LORD.



DRAPERY COMMITTEE.



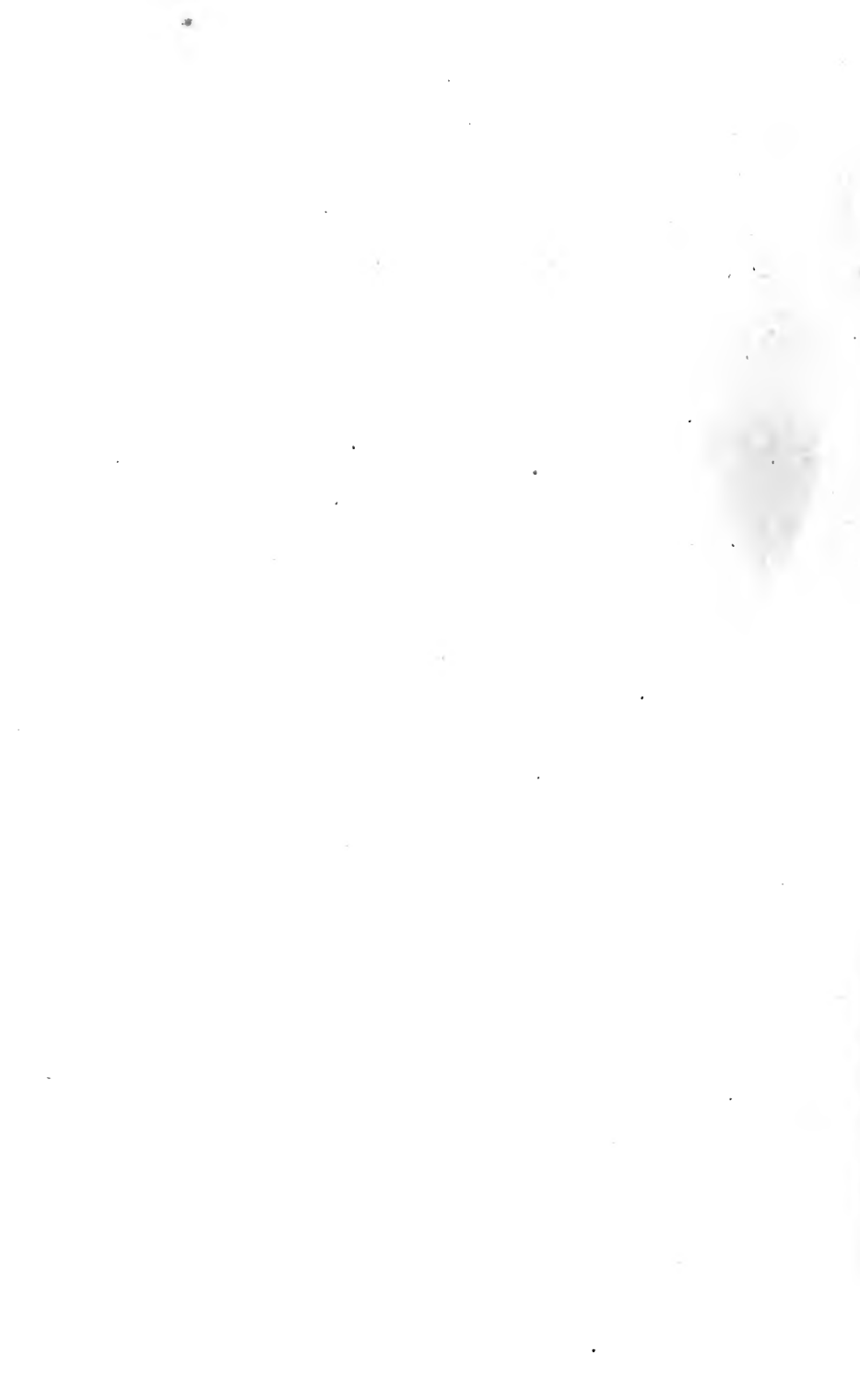
Mr. W. BATES.



Mr. T. HIND.



Mr. A. NORTH.



SHIPPING COMMITTEE.



Mr. T. SWANN
(Secretary),
GENERAL COMMITTEE.



Mr. E. GRINDROD.



Mr. T. KILLON.



Mr. J. STANSFIELD.



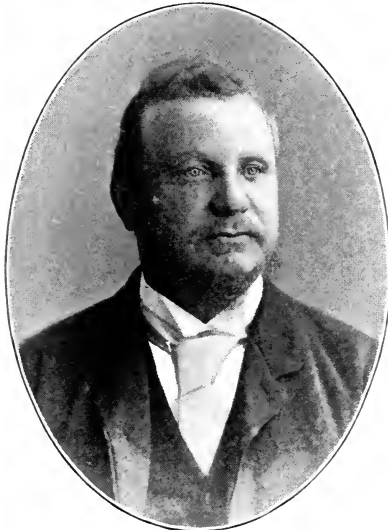
NEWCASTLE BRANCH COMMITTEE.



Mr. T. TWEDDELL
(Chairman).



Mr. T. SHOTTON
(Vice-chairman).



Mr. R. GIBSON
(Secretary).



Mr. G. BINNEY.

NEWCASTLE BRANCH COMMITTEE—Con.



Mr. W. D. GRAHAM.



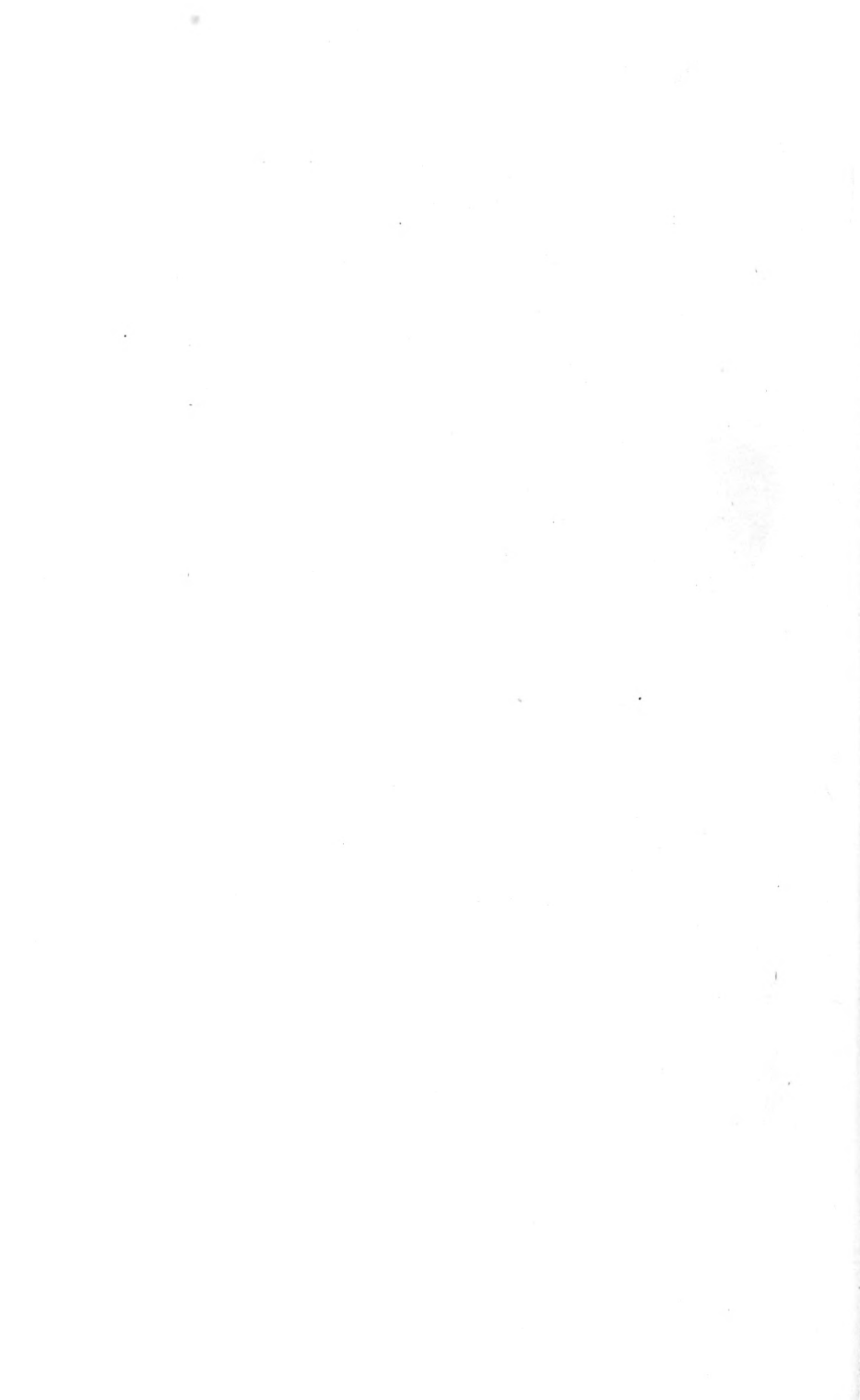
Mr. R. IRVING.



Mr. T. RULE.



Mr. W. STOKER.



LONDON BRANCH COMMITTEE.



Mr. G. HAWKINS
(Chairman).



Mr. G. SUTHERLAND
(Vice-chairman).



Mr. H. PUMPHREY
(Secretary).

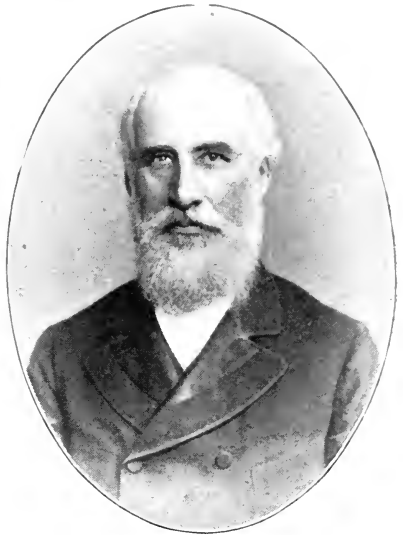


Mr. J. CLAY.

LONDON BRANCH COMMITTEE—Con.



Mr. H. ELSEY.



Mr. J. F. GOODEY.



Mr. G. HINES.



Mr. T. E. WEBB.



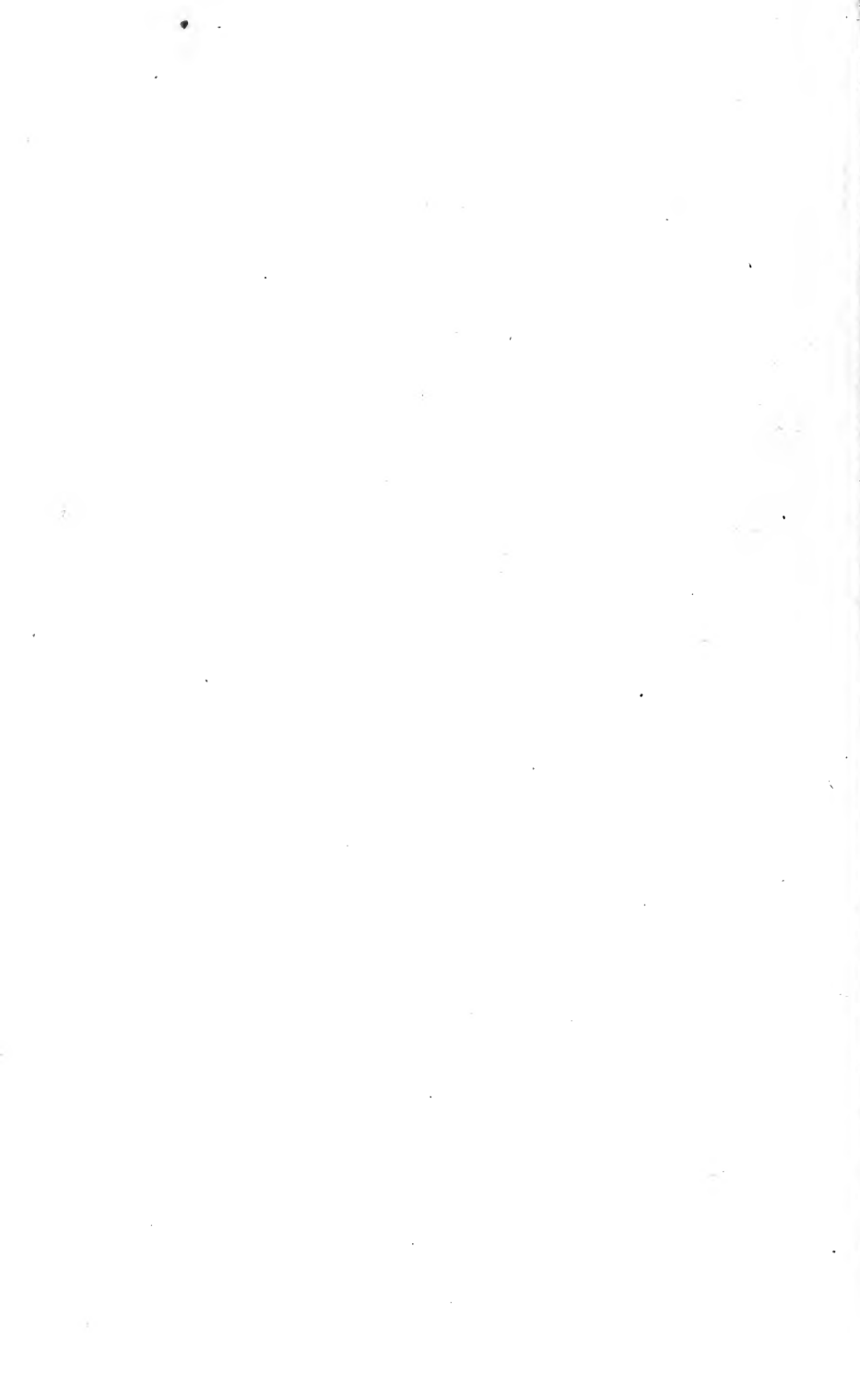
SCRUTINEERS.



Mr. J. J. BARSTOW.



Mr. F. HARDERN.



AUDITORS.



Mr. T. J. BAYLIS.



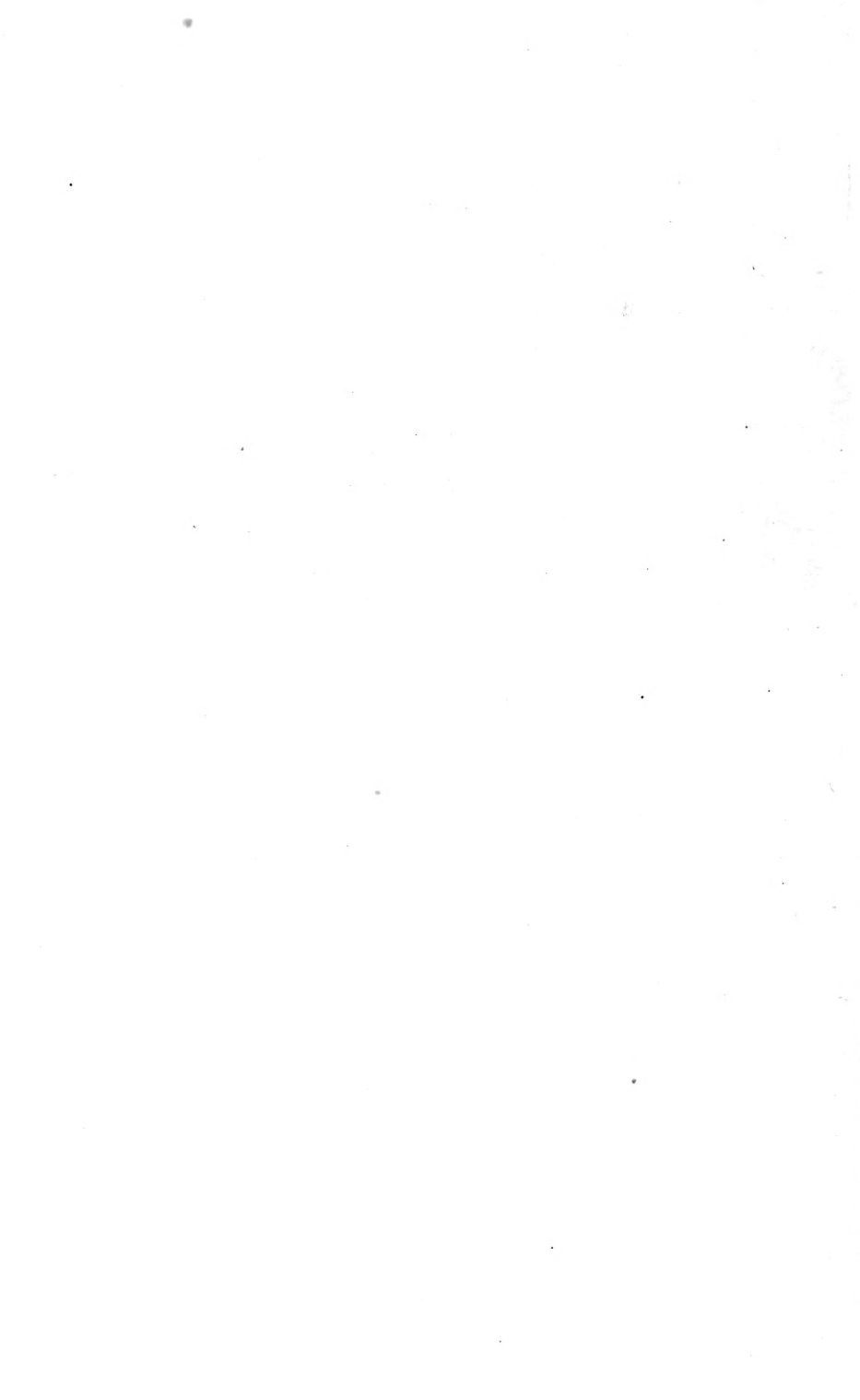
Mr. I. HAIGH.

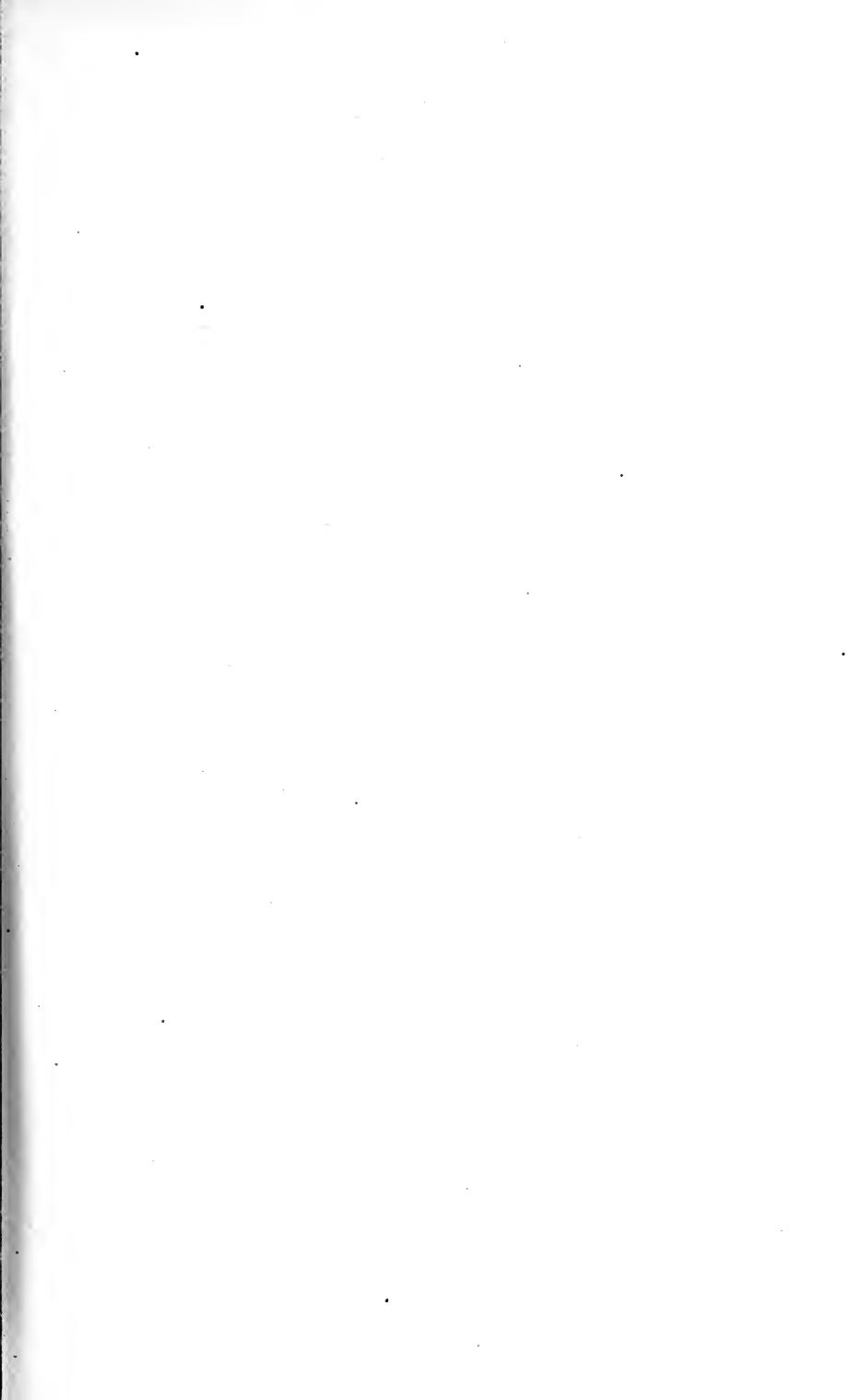


Mr. J. E. LORD.



Mr. T. WOOD





THIRTY-TWO YEARS' PROGRESS OF Co-operative Societies in the United Kingdom.

YEARS.	SALES. £	YEARS.	SALES. £
1862	2,333,523	1878	21,402,219
1863	2,673,778	1879	20,382,772
1864	2,836,606	1880	23,248,314
1865	3,373,847	1881	24,945,063
1866	4,462,676	1882	27,541,212
1867	6,001,153	1883	29,336,028
1868	7,122,360	1884	30,424,101
1869	7,353,363	1885	31,305,910
1870	8,201,685	1886	32,730,745
1871	9,463,771	1887	34,483,771
1872	13,012,120	1888	37,793,903
1873	15,639,714	1889	40,674,673
1874	16,374,053	1890	43,731,669
1875	18,499,901	1891	49,024,171
1876	19,921,054	1892	51,060,854
1877	21,390,447	1893	51,803,836

TOTAL SALES IN THE THIRTY-TWO YEARS, } **£708,549,292.**
1862 TO 1893.

TOTAL PROFITS IN THE THIRTY-TWO YEARS, } **61,757,659.**
1862 TO 1893.

STATISTICAL POSITION OF CO-OPERATIVE SOCIETIES IN THE UNITED KINGDOM,

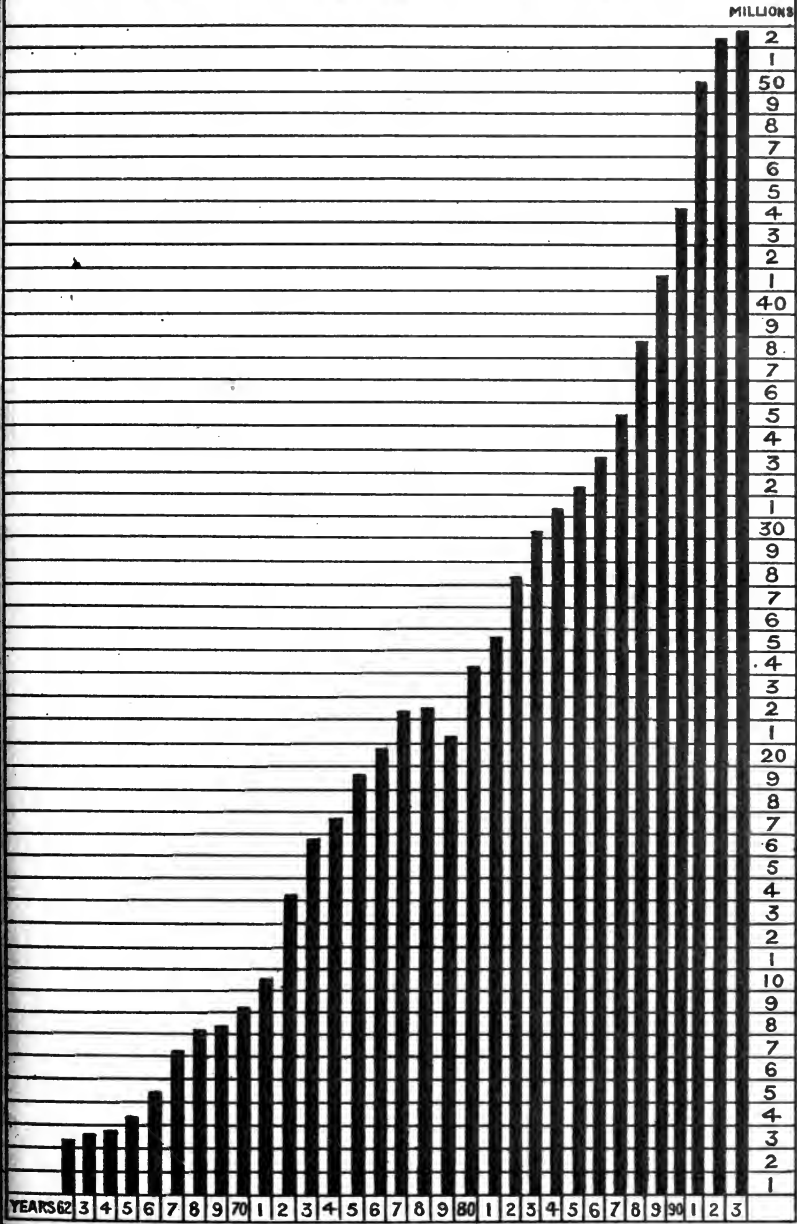
DECEMBER 31ST, 1893.

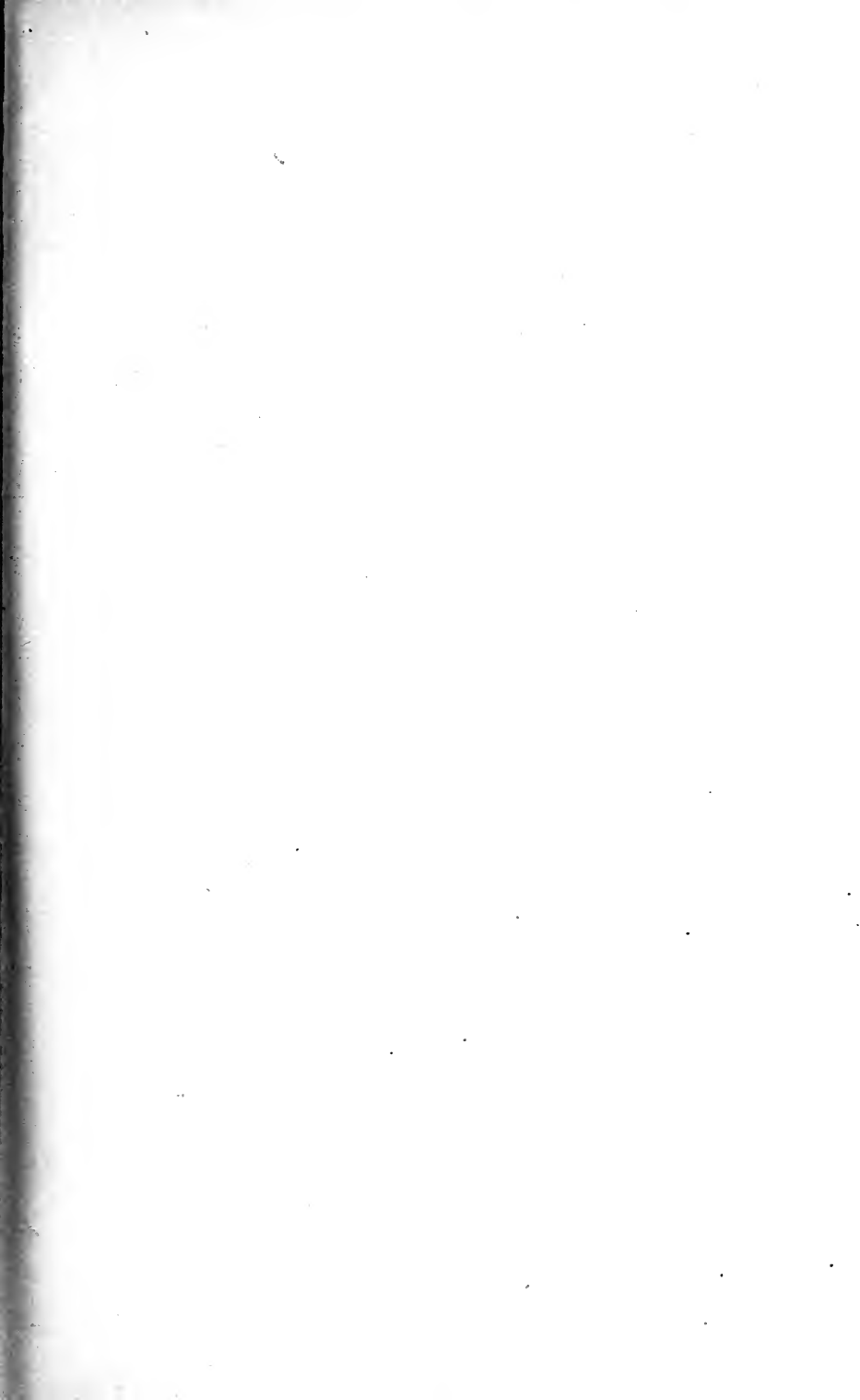
*Compiled from the Returns made by Societies to the Registrar and
Co-operative Union.*

Number of Members	...1,340,318	£
Share Capital		15,318,665
Loan Capital		3,874,954
Sales for 1893		51,803,836
Net Profits for 1893		4,610,657
Devoted to Education, 1893		32,677

THIRTY-TWO YEARS' PROGRESS

OF CO-OPERATIVE SOCIETIES IN THE UNITED KINGDOM.





THIRTY-ONE YEARS' PROGRESS

OF THE

Co-operative Wholesale Society Limited.

YEARS.	SALES. £	YEARS.	SALES. £
1864 (⁸⁰ Weeks)	51,857	1880	3,339,681
1865	120,754	1881	3,574,095
1866	175,489	1882	4,038,238
1867 (⁶⁵ Weeks)	331,744	1883	4,546,889
1868	412,240	1884 (⁵⁸ Weeks)	4,675,371
1869	507,217	1885	4,793,151
1870 (⁵⁸ Weeks)	677,734	1886	5,223,179
1871	758,764	1887	5,713,235
1872	1,153,132	1888	6,200,074
1873	1,636,950	1889 (⁵⁸ Weeks)	7,028,944
1874	1,964,829	1890	7,429,073
1875	2,247,395	1891	8,766,430
1876 (⁵⁸ Weeks)	2,697,366	1892	9,300,904
1877	2,827,052	1893	9,526,167
1878	2,705,625	1894	9,443,938
1879 (⁵⁰ Weeks)	2,645,331		

TOTAL SALES IN THE THIRTY YEARS, } ... **£114,512,848.**
1864 TO 1894.

TOTAL PROFITS IN THE THIRTY YEARS, } ... **1,472,537.**
1864 TO 1894.

STATISTICAL POSITION OF THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED,

DECEMBER 22ND, 1894.

Number of Societies holding Shares... ..	1,017
Number of Members belonging to Shareholders	910,104
Share Capital	£ 598,496
Loans and Deposits	972,586
Reserve Fund—Trade and Bank	37,556
Insurance Fund	259,976
Sales for Year 1894	9,443,938
Net Profits for Year 1894	126,192

THIRTY-ONE YEARS' PROGRESS

OF THE GO-OPERATIVE WHOLESALE SOCIETY LIMITED.

MILLIONS

10

9

8

7

6

5

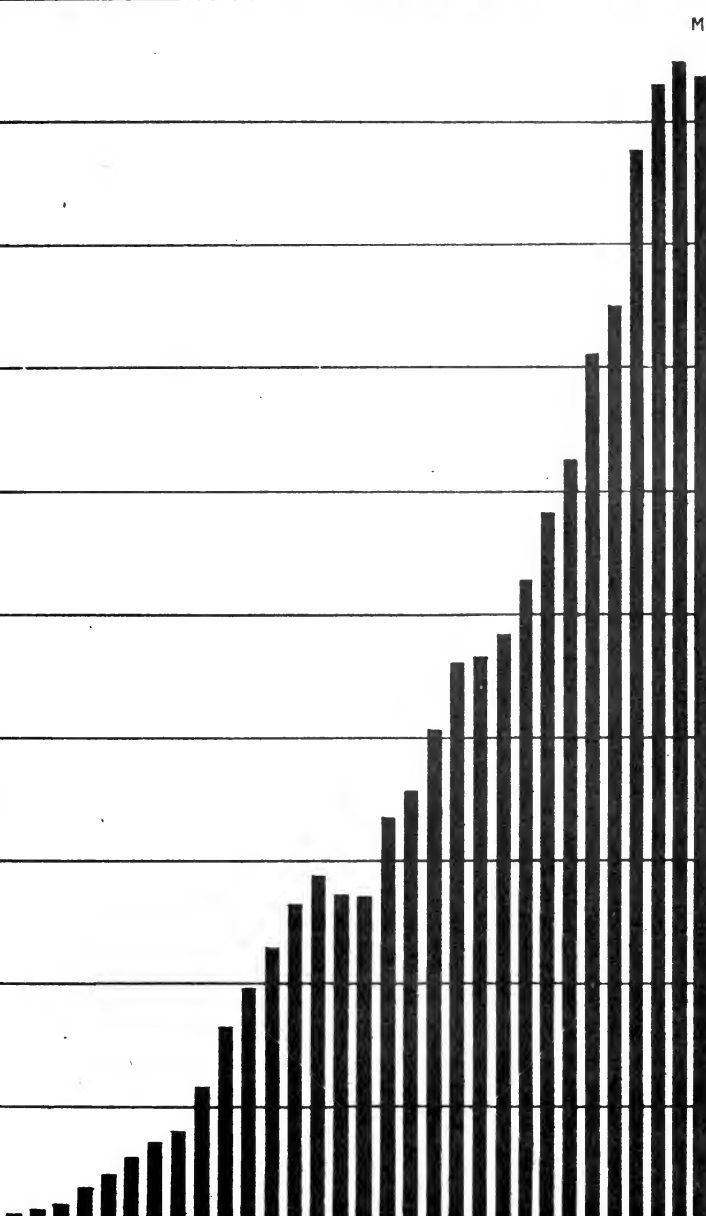
4

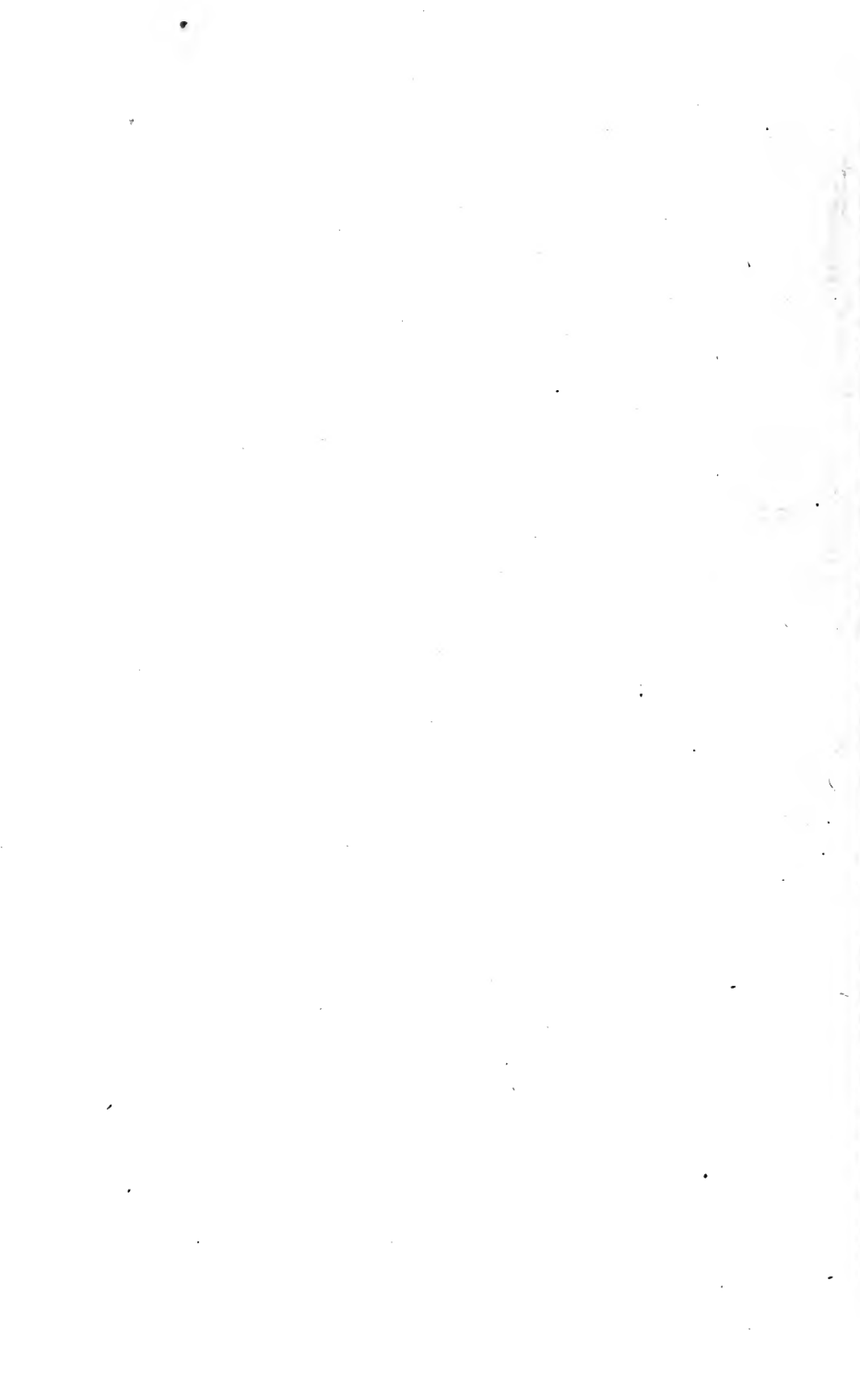
3

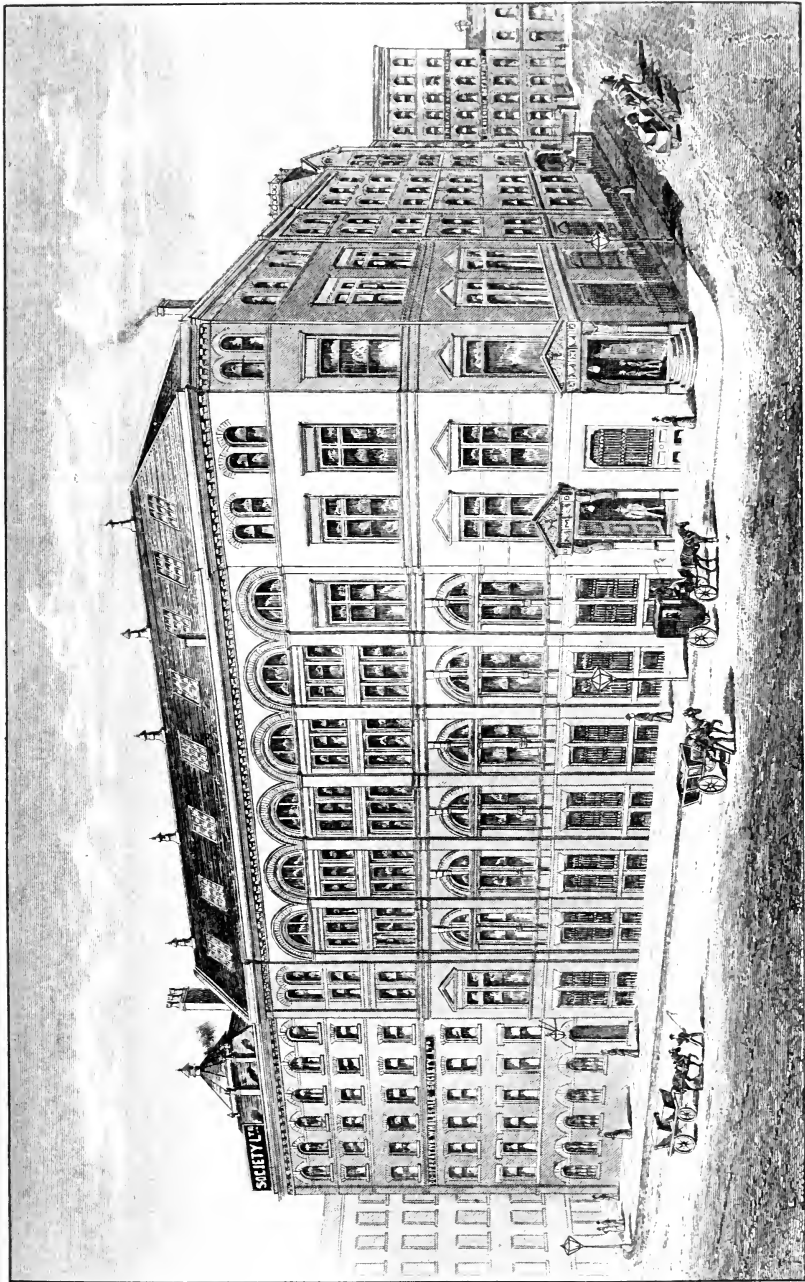
2

1

YEARS 64 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 1 2 3 4

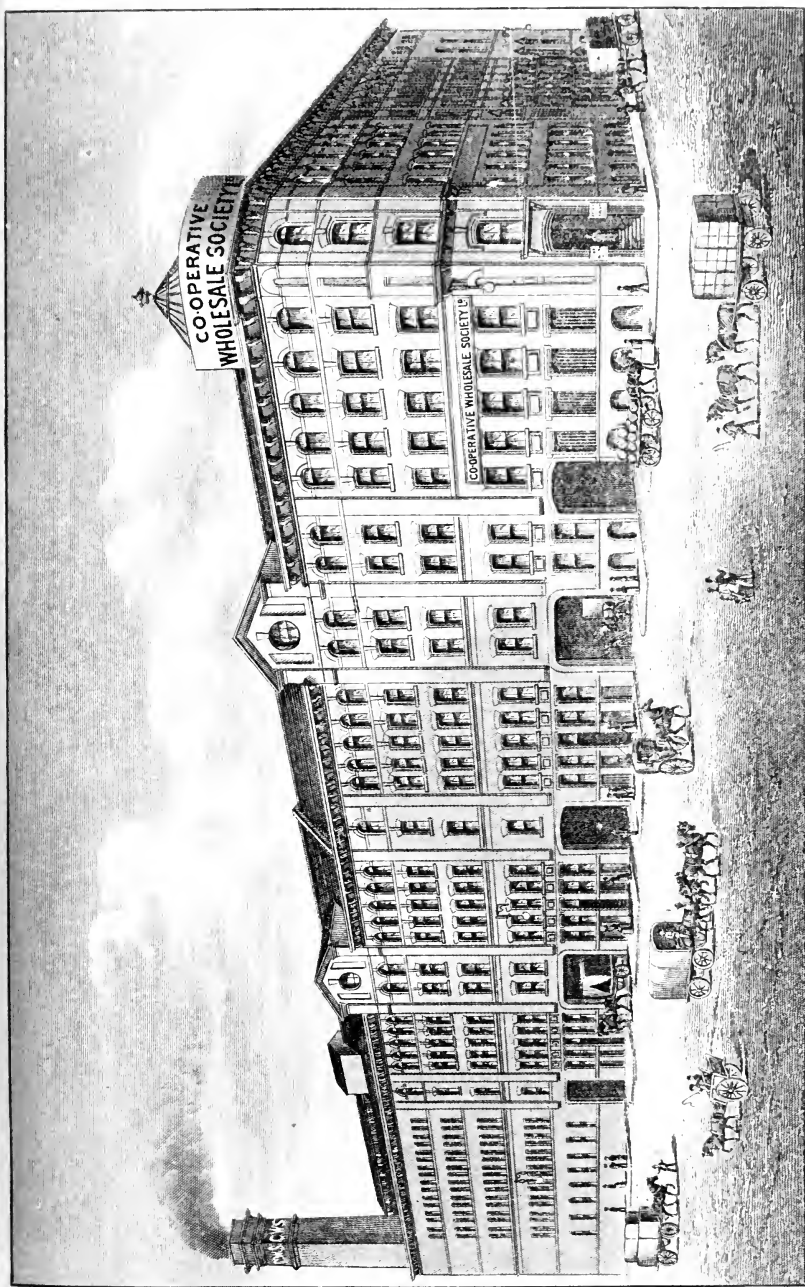






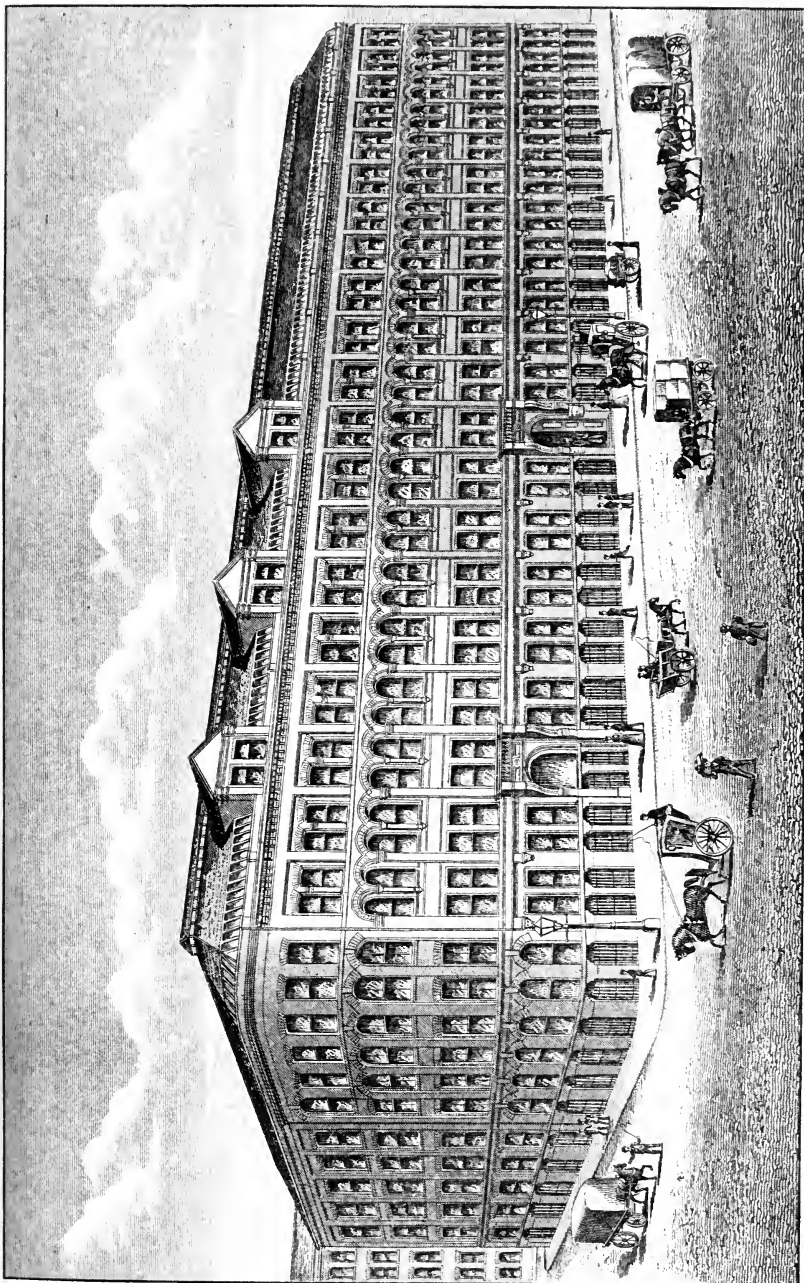
MANCHESTER.
REGISTERED OFFICES, BANK, CENTRAL GROCERY AND PROVISION, BOOT AND SHOE, AND FURNISHING WAREHOUSES,
BALLOON STREET AND HOLGATE STREET. (See pages 23, 28, 59, 60, and 85.)



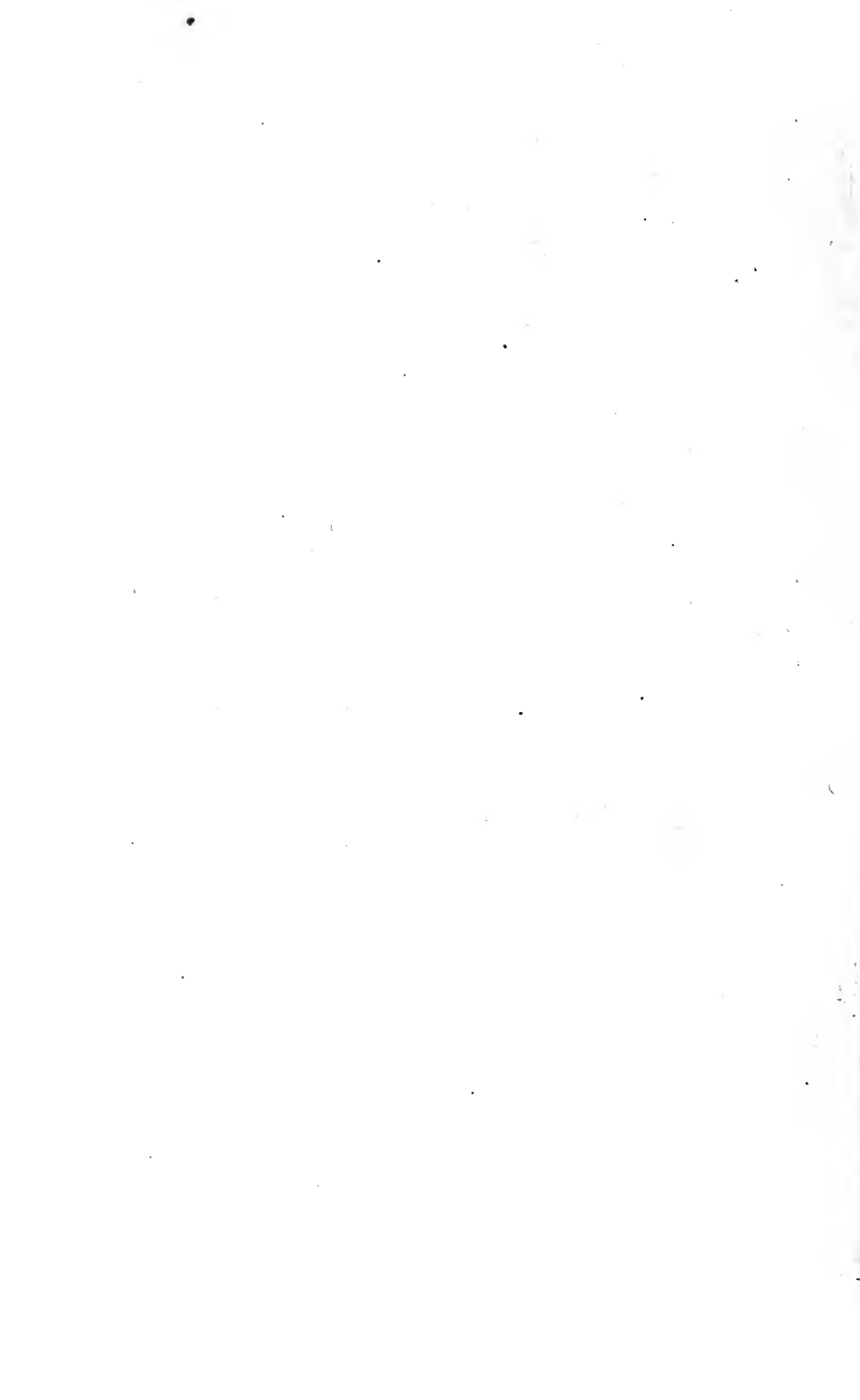


MANCHESTER.
CENTRAL GROCERY AND PROVISION AND BOOT AND SHOE WAREHOUSES, BALLOON STREET AND GARDEN STREET.
(See pages 14 to 16, 56, and 84.)



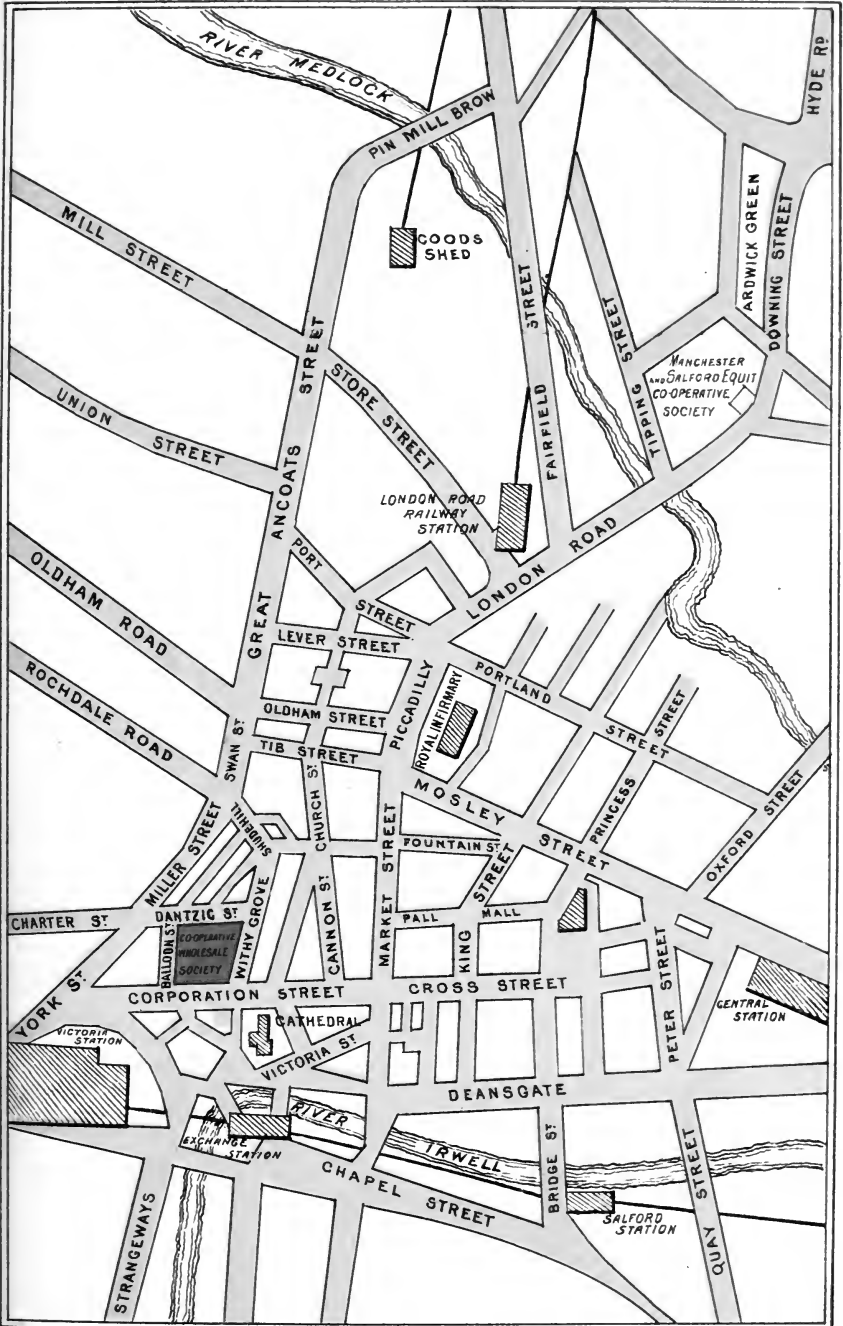


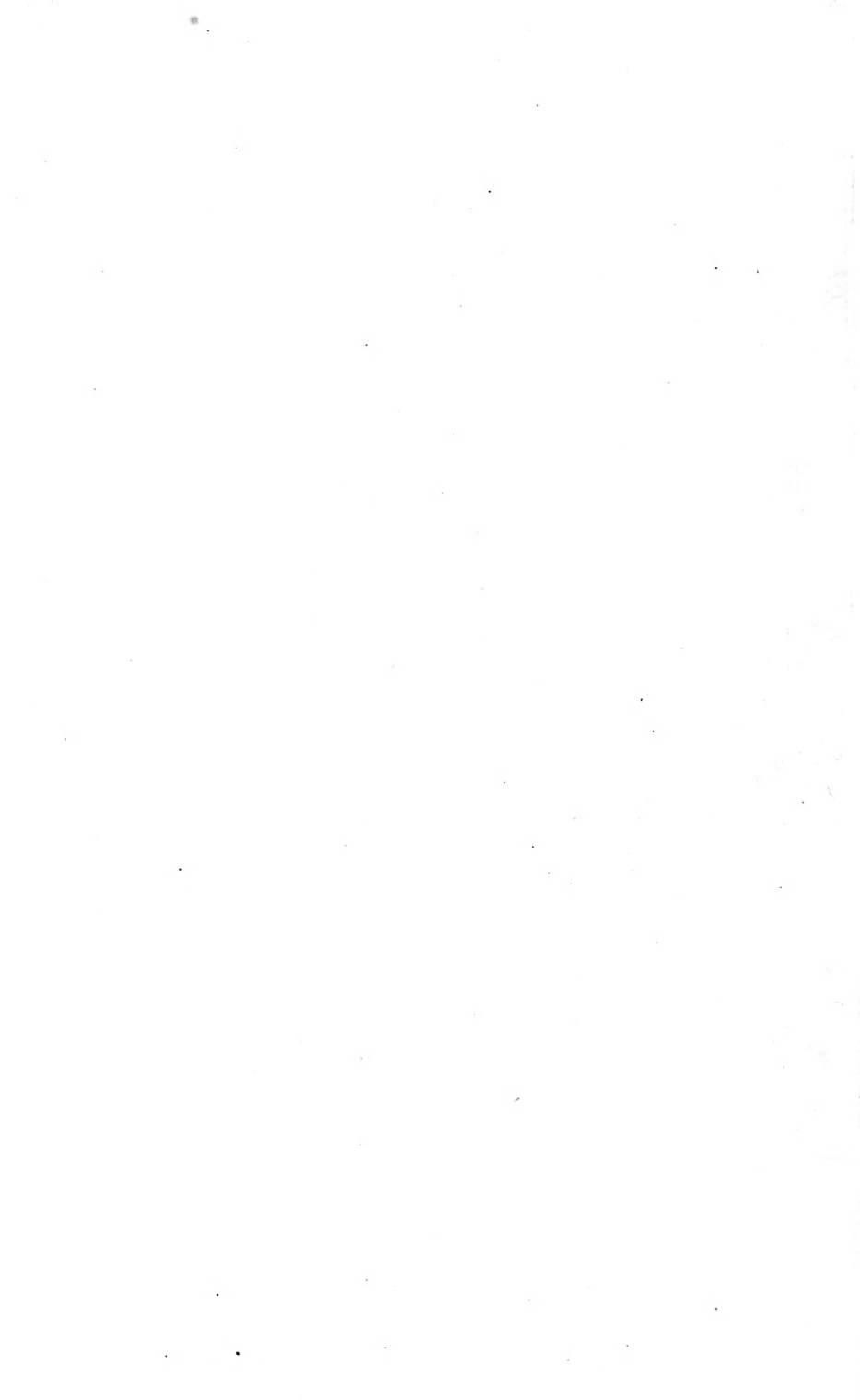
MANCHESTER DRAPERY, WOOLLEN CLOTH, AND READY-MADES WAREHOUSES, DANTZIC STREET.
(See pages 22 to 27, 57, 58, and 86.)

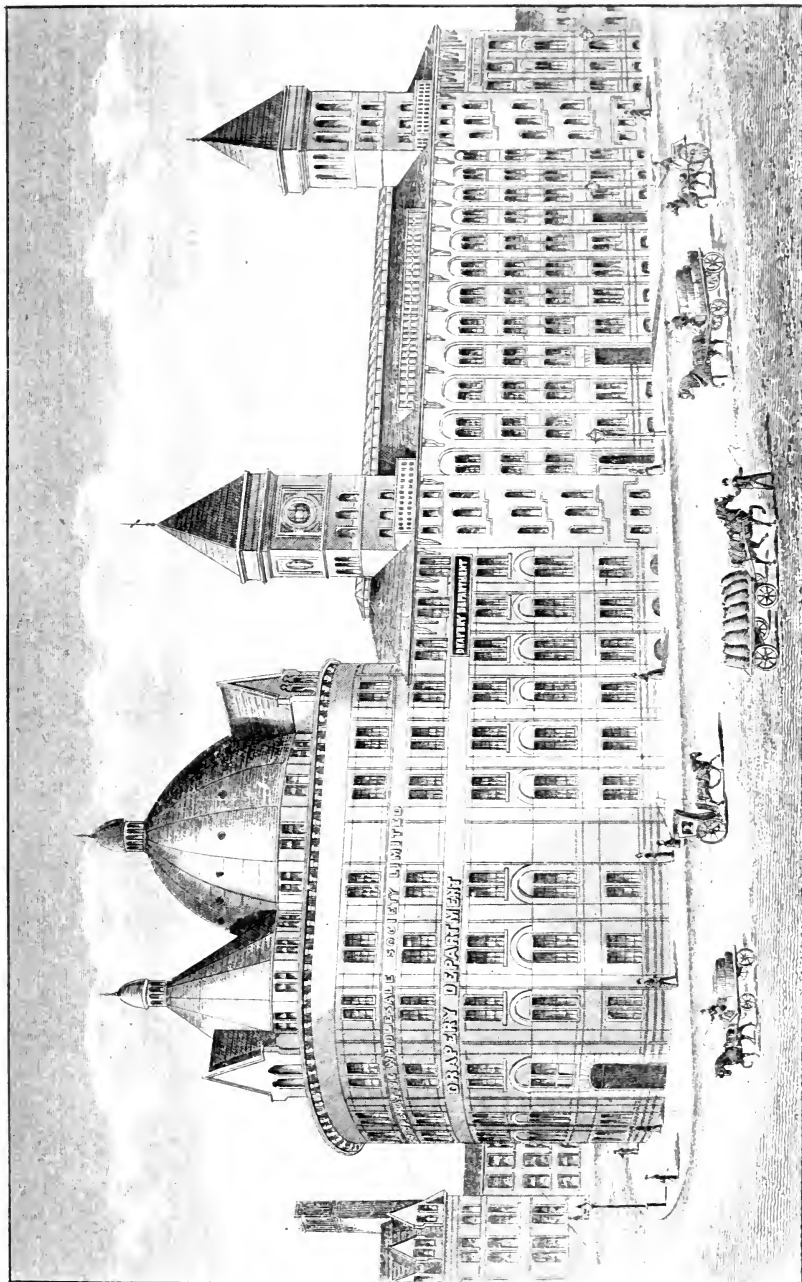


PLAN OF MANCHESTER.

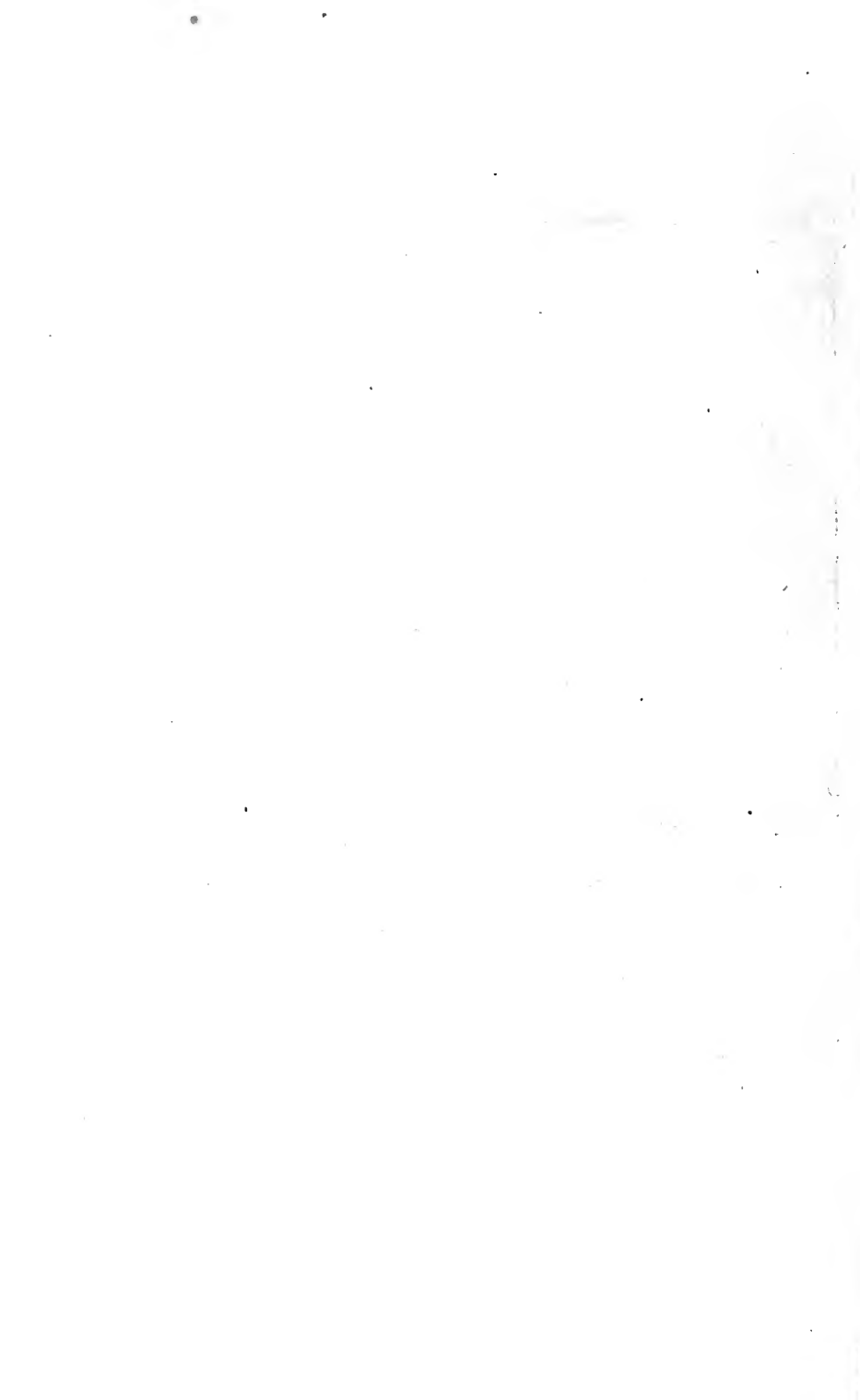
SHOWING THE MOST DIRECT ROUTE TO THE CO-OPERATIVE WHOLESALE SOCIETY'S CENTRAL OFFICES AND WAREHOUSES, FROM THE RAILWAY STATIONS AND PRINCIPAL PLACES.

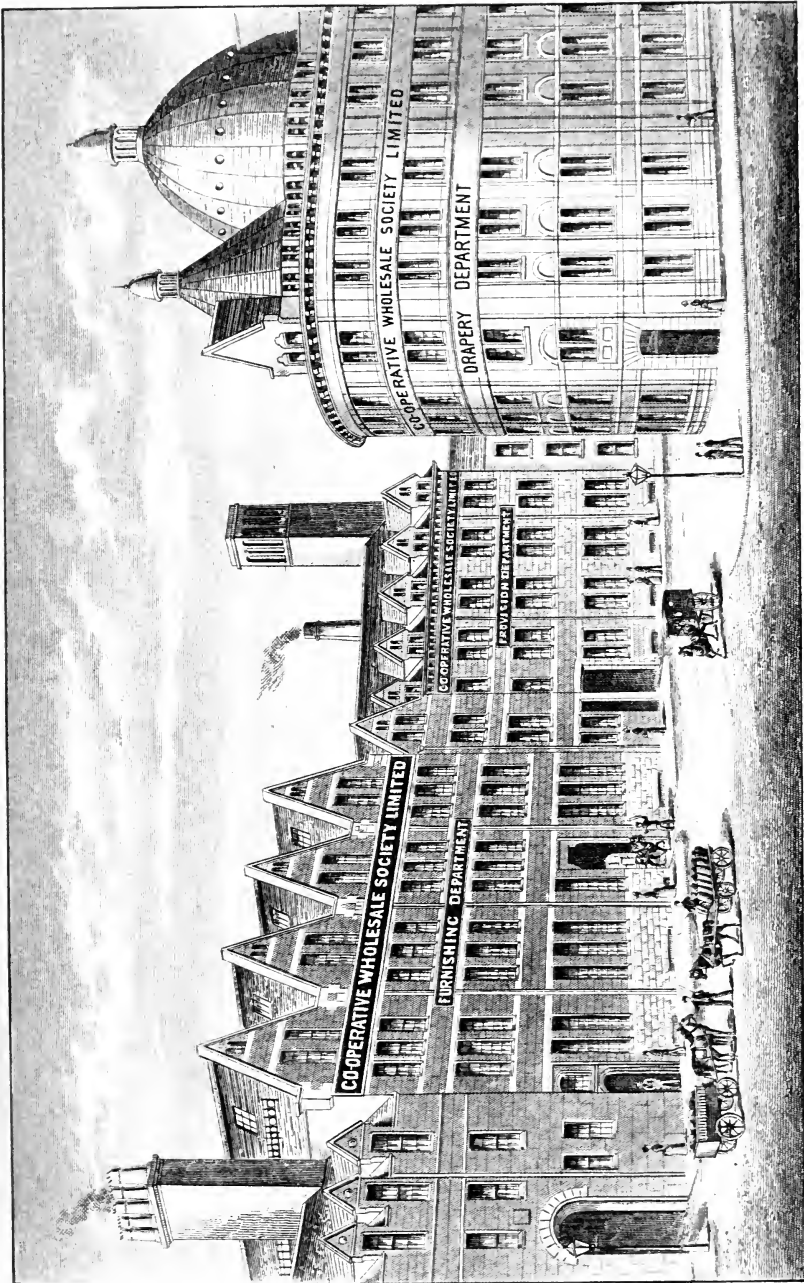




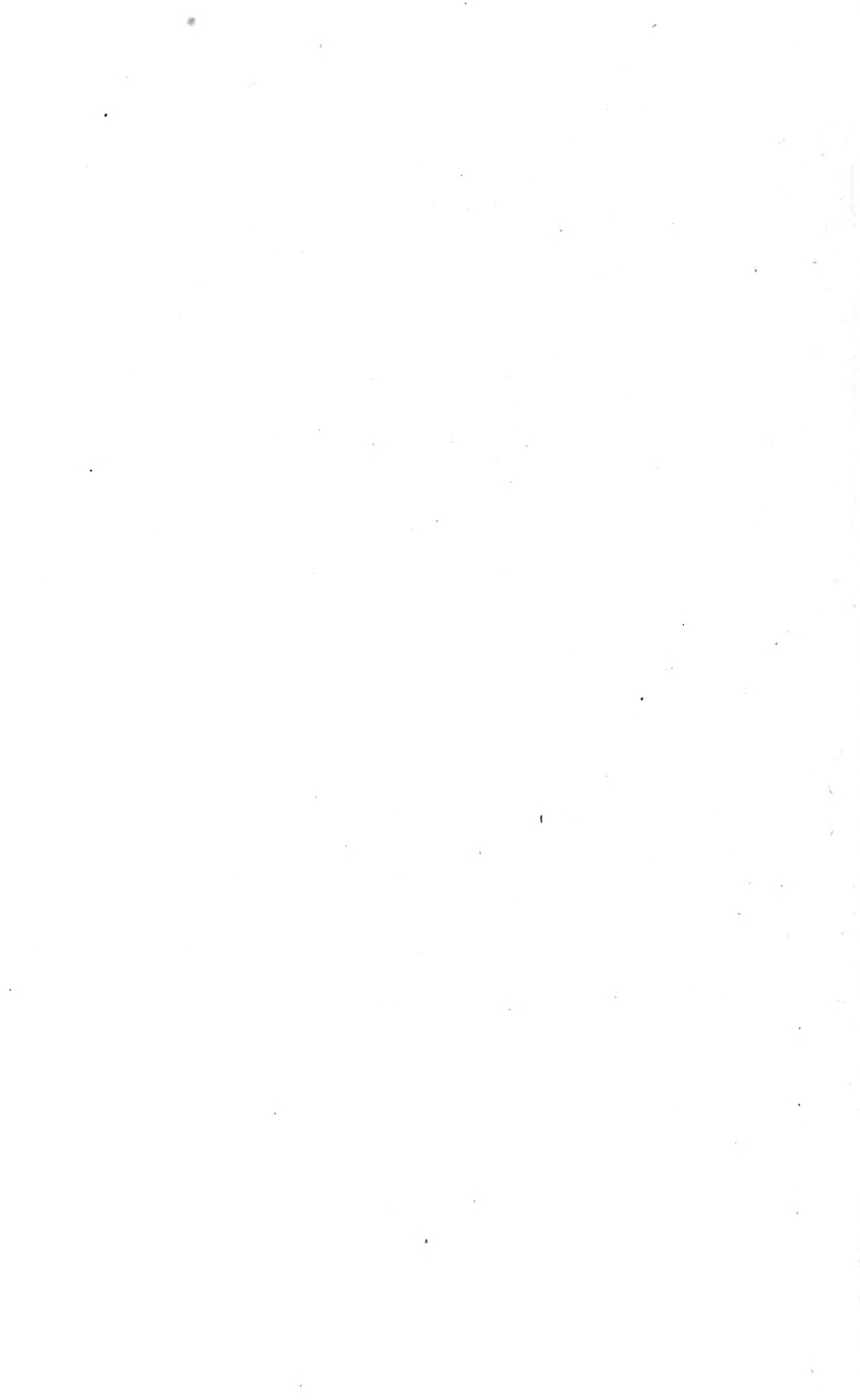


NEWCASTLE BRANCH.
GROCERY, DRAPERY, AND BOOT AND SHOE WAREHOUSES, WATERLOO STREET.
(See pages 61 to 63, and 86.)



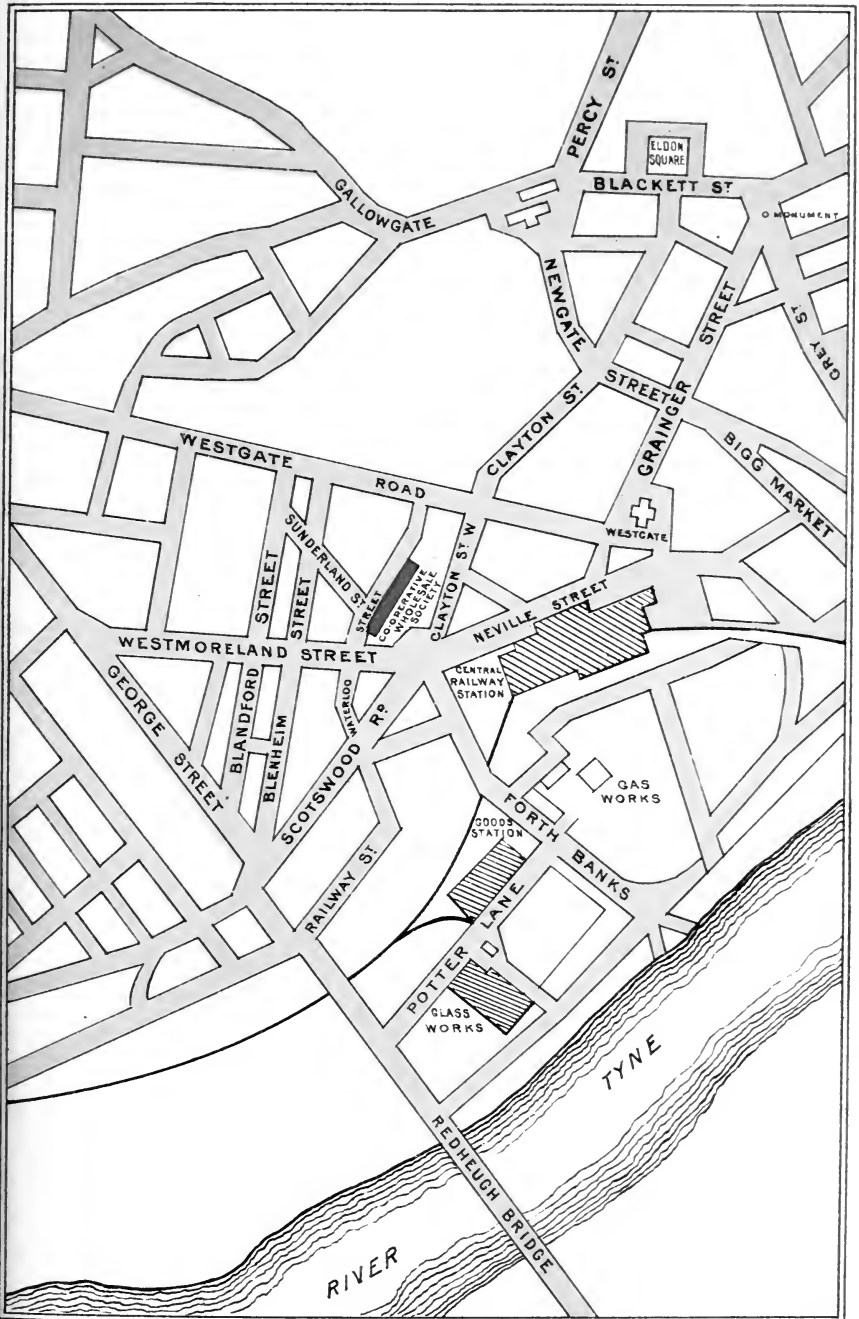


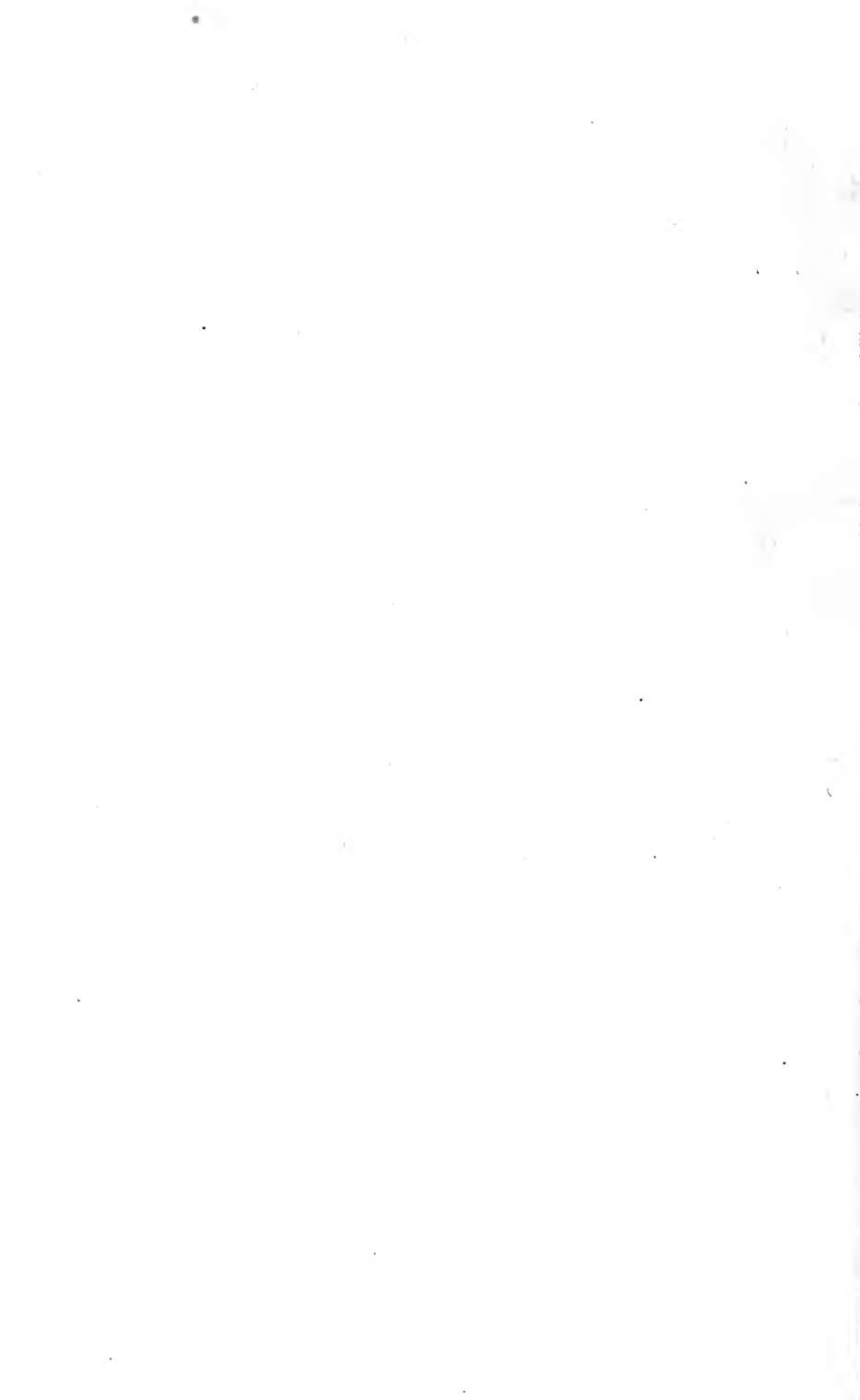
NEWCASTLE DRAPERY, FURNISHING AND PROVISION WAREHOUSES, THORNTON STREET.
(See pages 61, 62, 64, 86, and 87.)

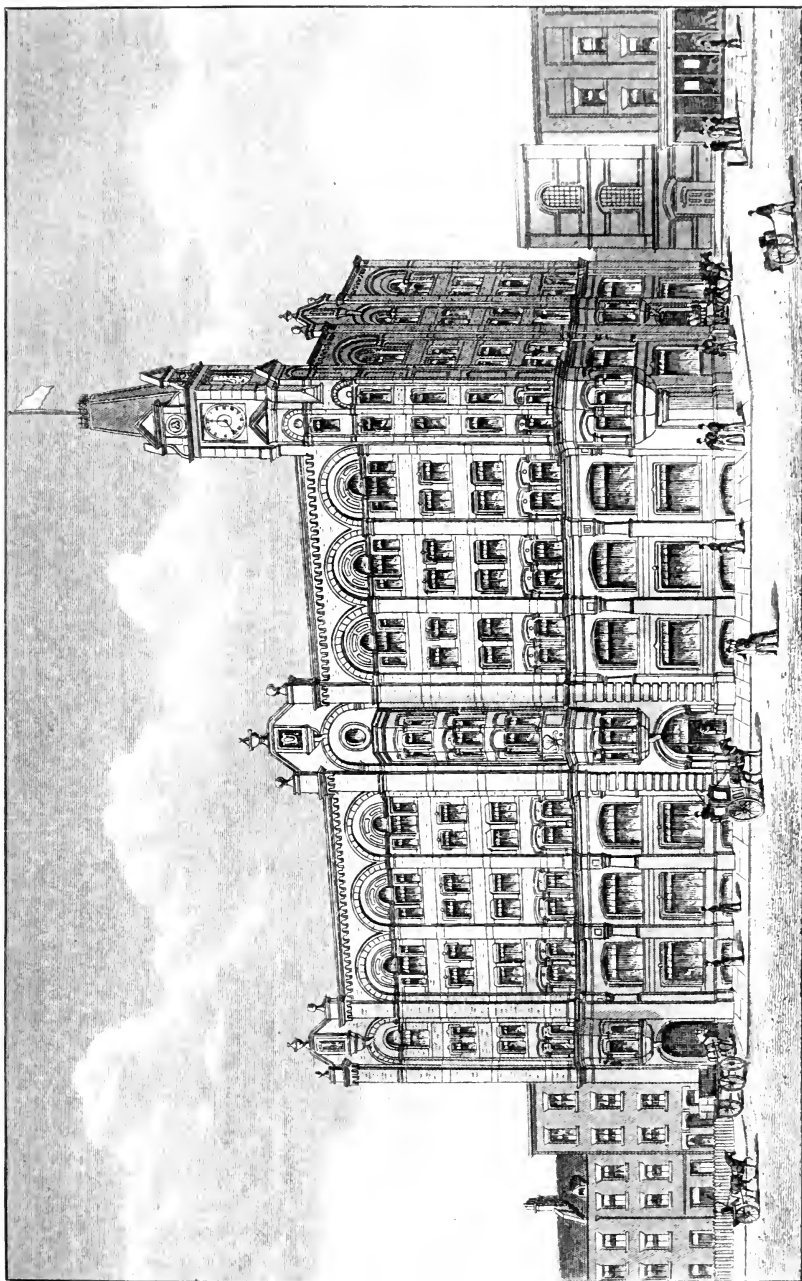


PLAN OF NEWCASTLE.

SHOWING THE MOST DIRECT ROUTE TO THE CO-OPERATIVE WHOLESALE SOCIETY'S NEWCASTLE BRANCH PREMISES, FROM THE RAILWAY STATIONS AND PRINCIPAL PLACES.

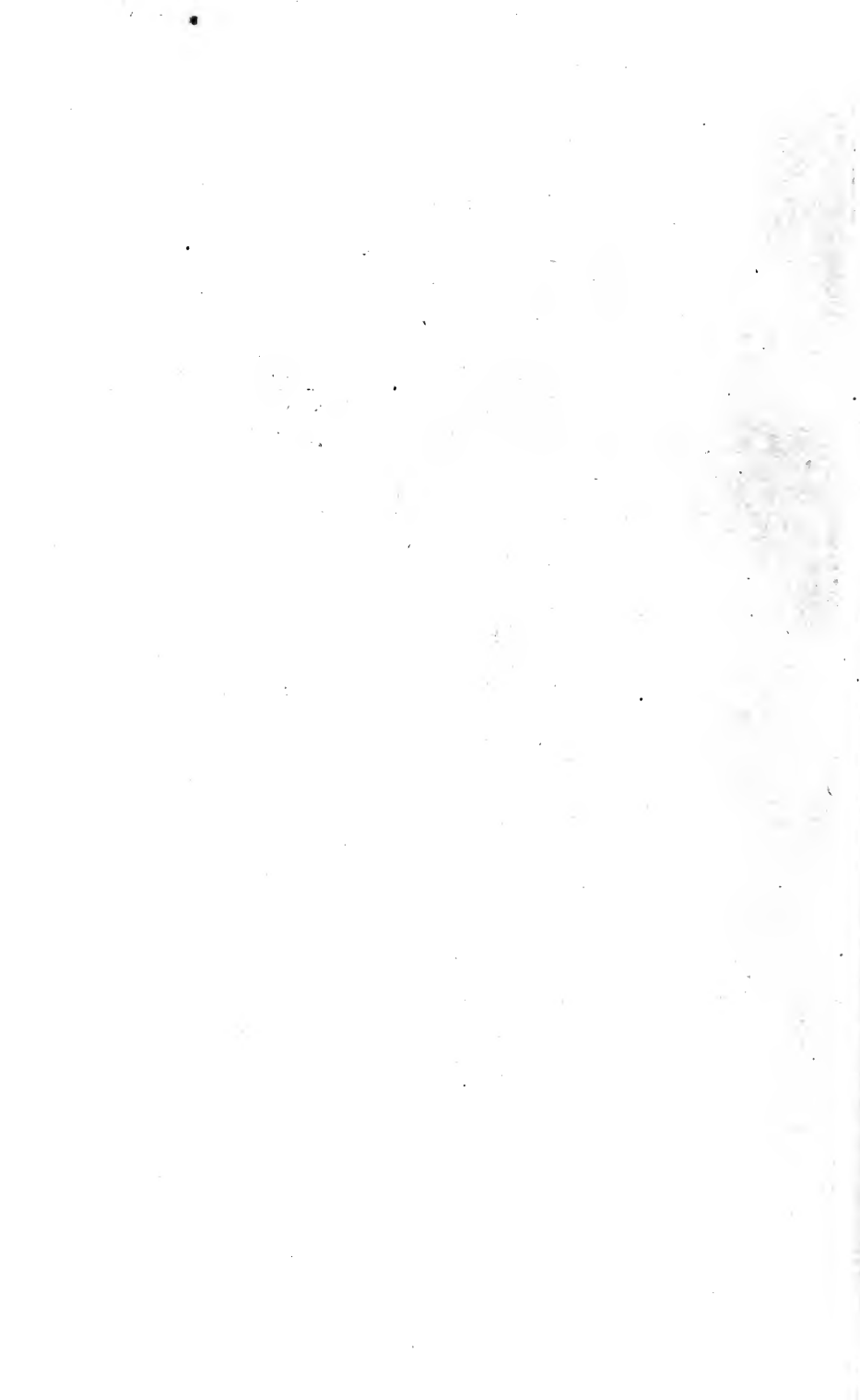




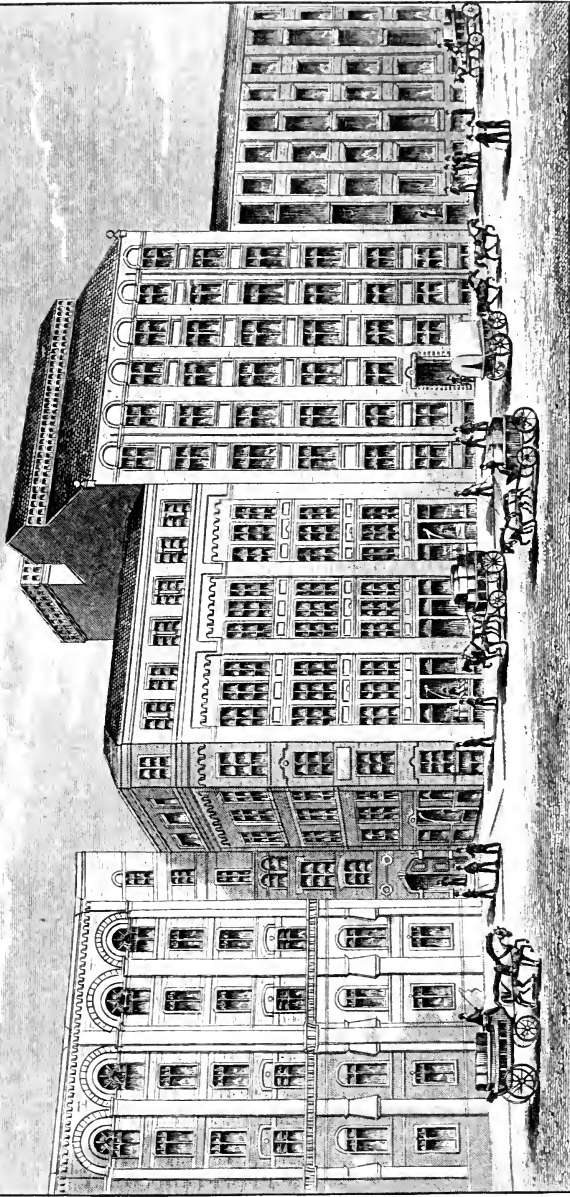


LONDON BRANCH.

GENERAL OFFICES, GROCERY, DRAPERY, BOOT AND SHOE AND FURNISHING DEPARTMENTS, AND CO-OPERATIVE HALL, LEMAN STREET, E.
(See pages 65 to 68, and 87.)



LONDON TEA DEPARTMENT.



N^o1.

OFFICES.

N^o2.

TASTING ROOMS
& DELIVERY DEPARTMENT.

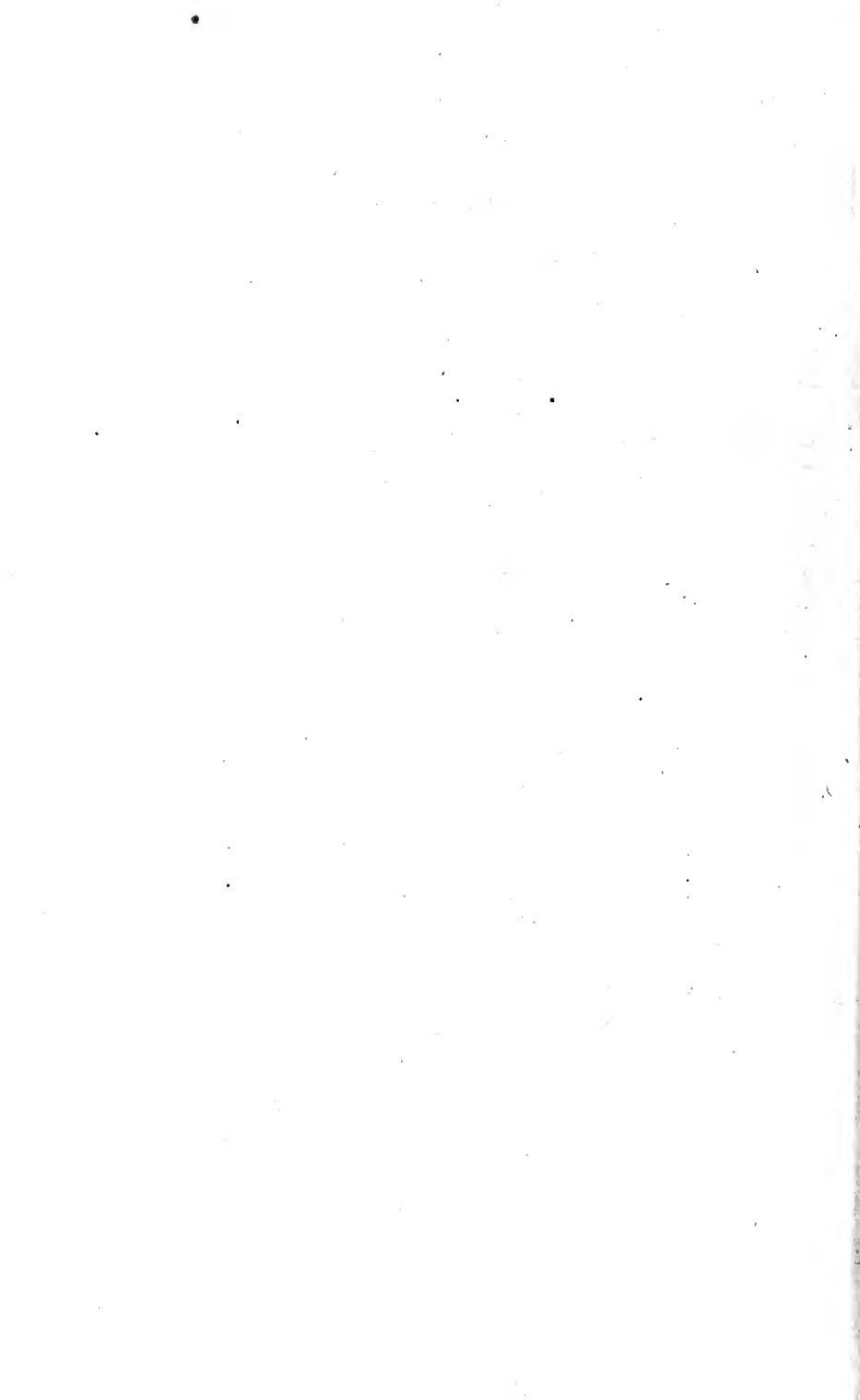
N^o3

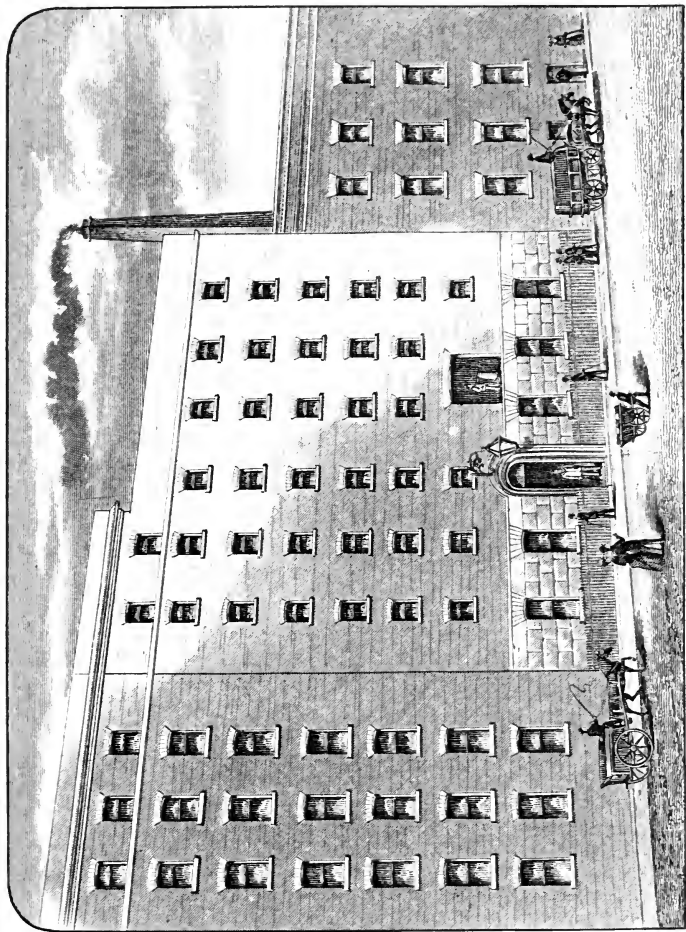
TEA BLENDING
& PACKING
DEPARTMENT.

N^o4

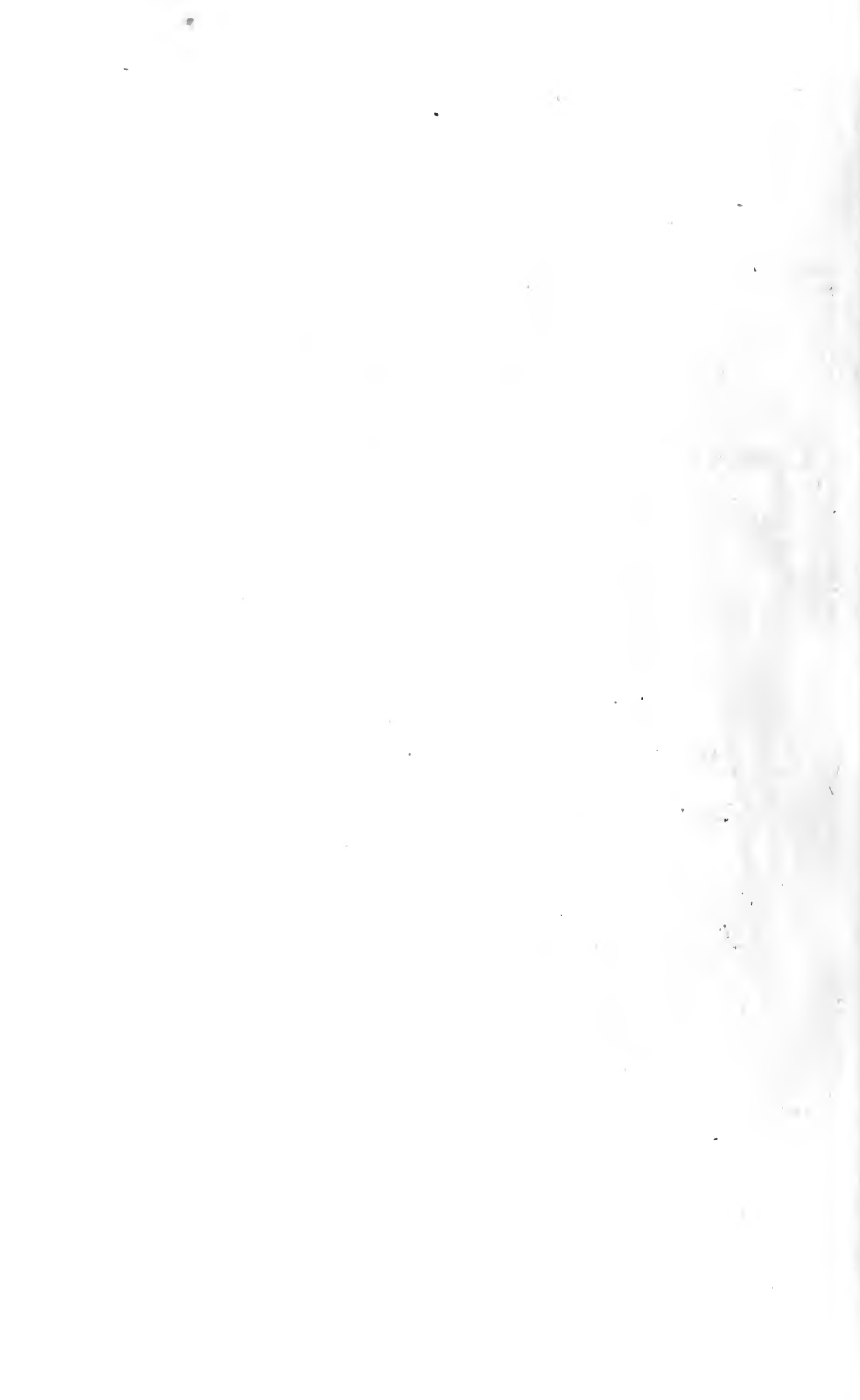
ORIGINAL IMPORTED
TEA & RECEIVING
DEPARTMENT.

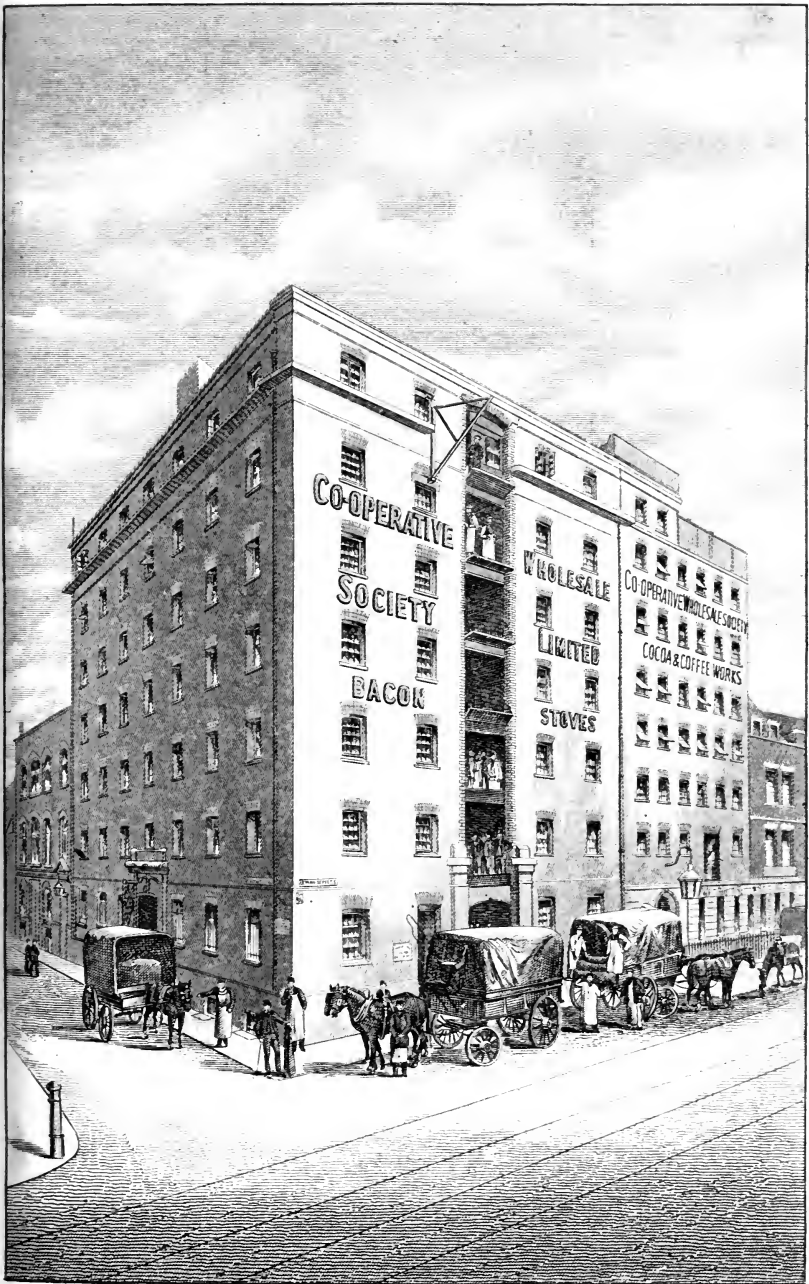
(See page 17)



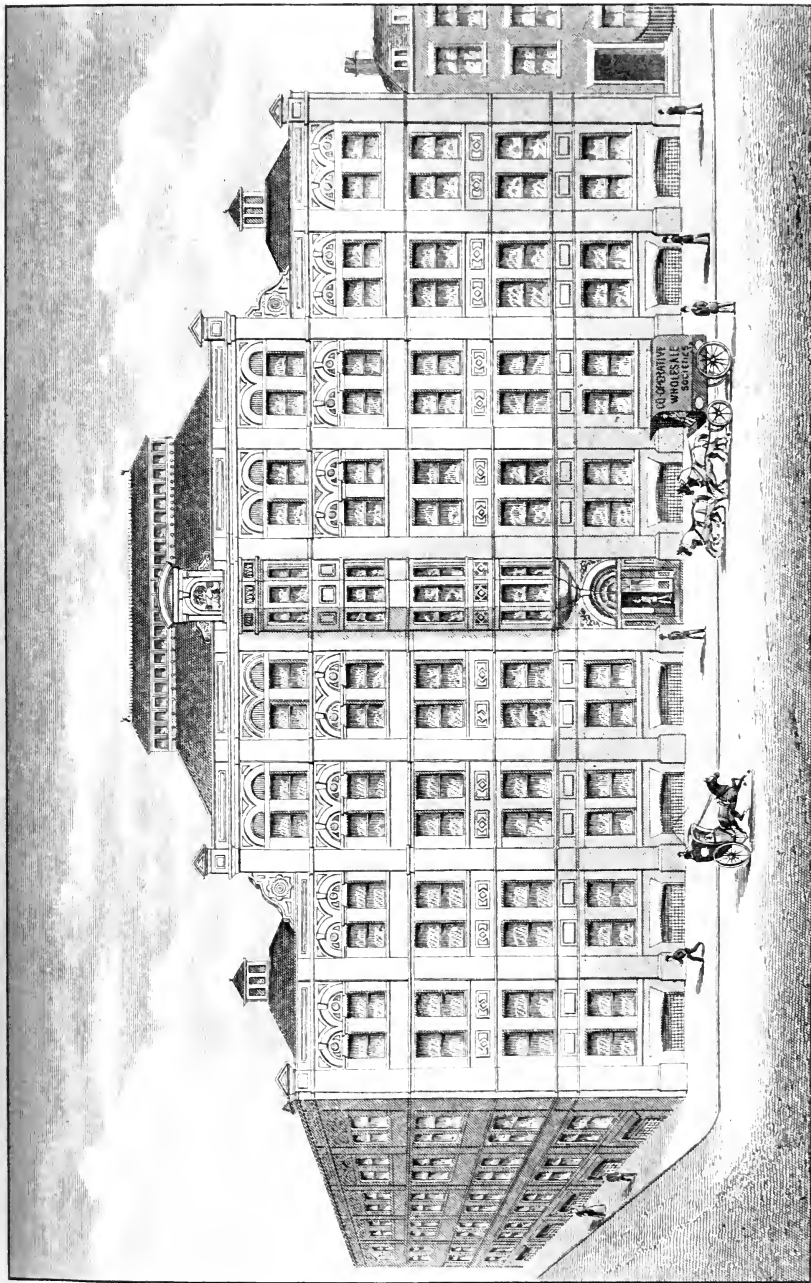


LONDON COCOA AND CHOCOLATE WORKS,
116, LEMAN STREET. (See page 17.)





LONDON BACON STOVES.
118, LEMAN STREET.

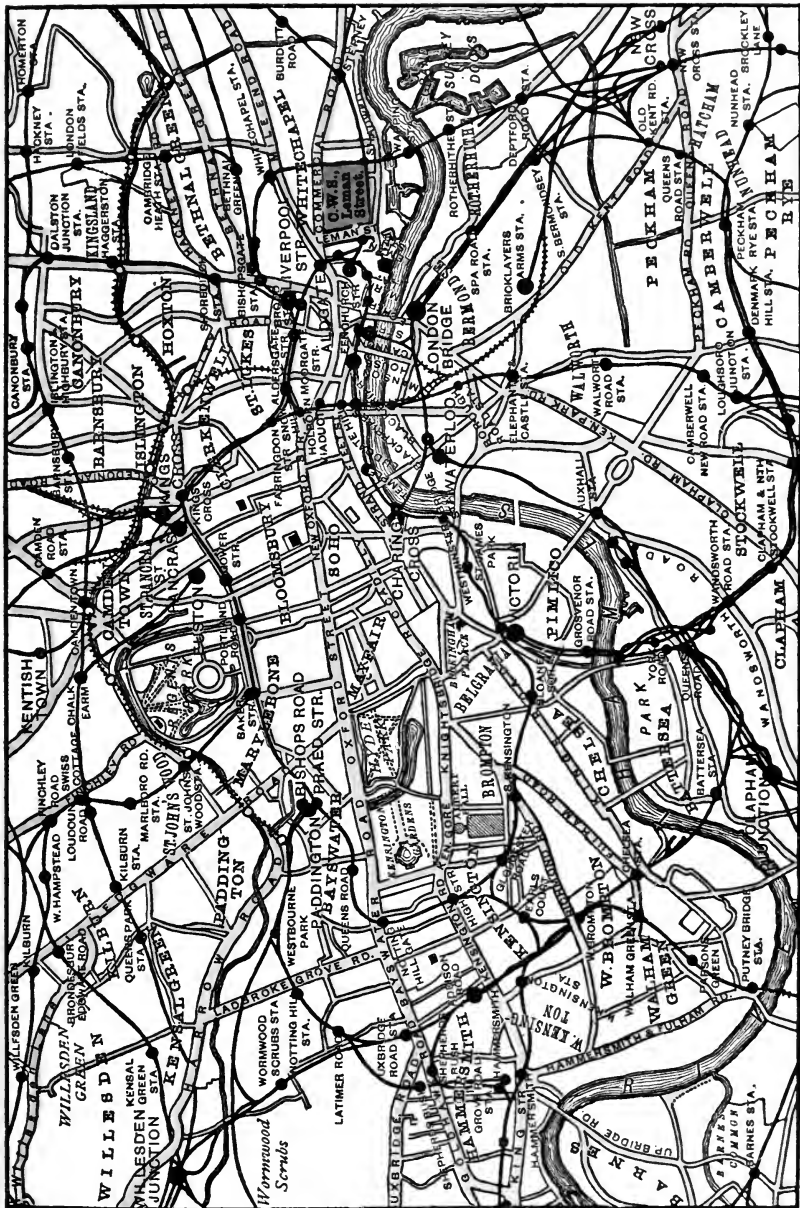


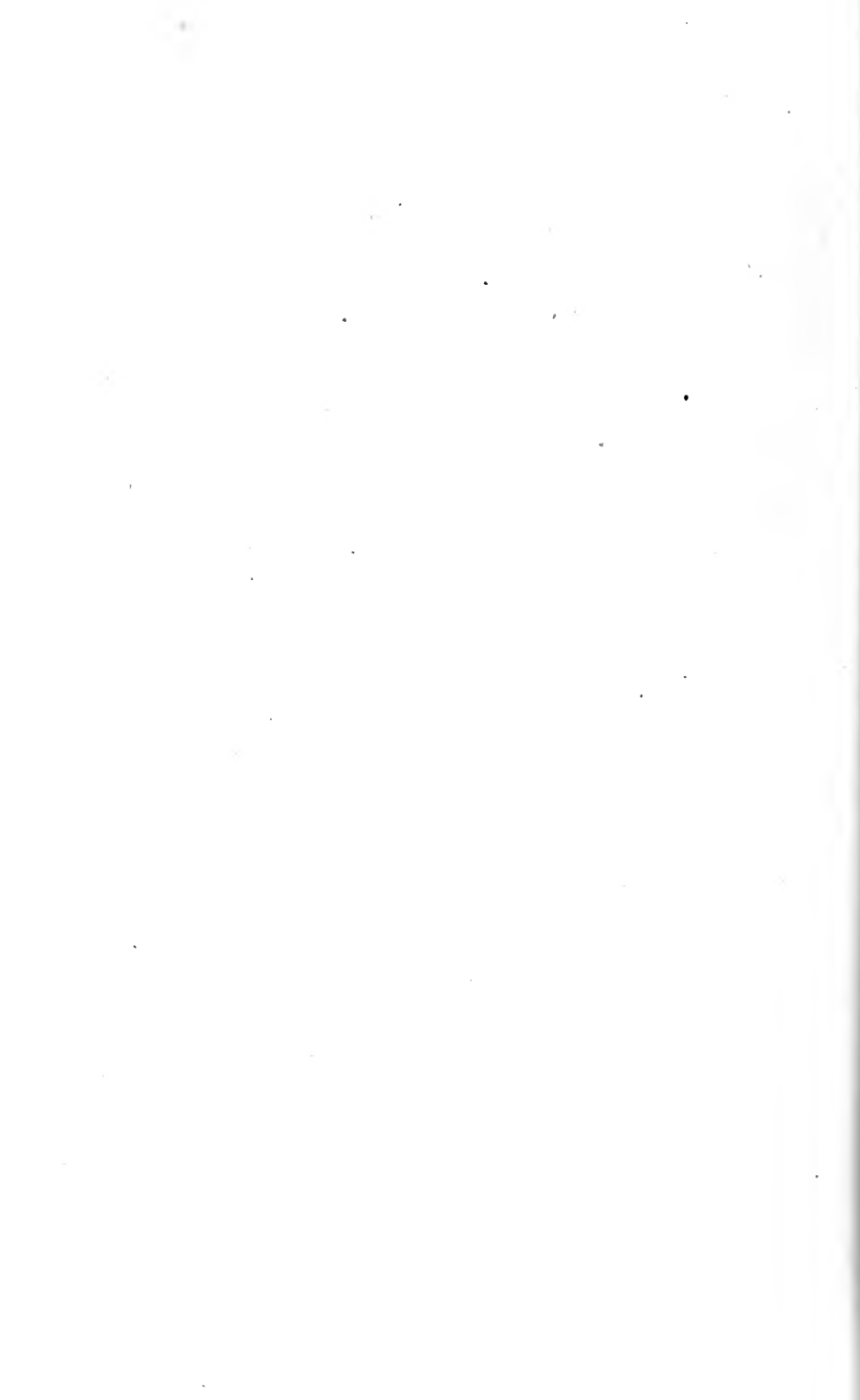
LONDON TEA WAREHOUSE, LEMAN STREET.--(See page 17.)

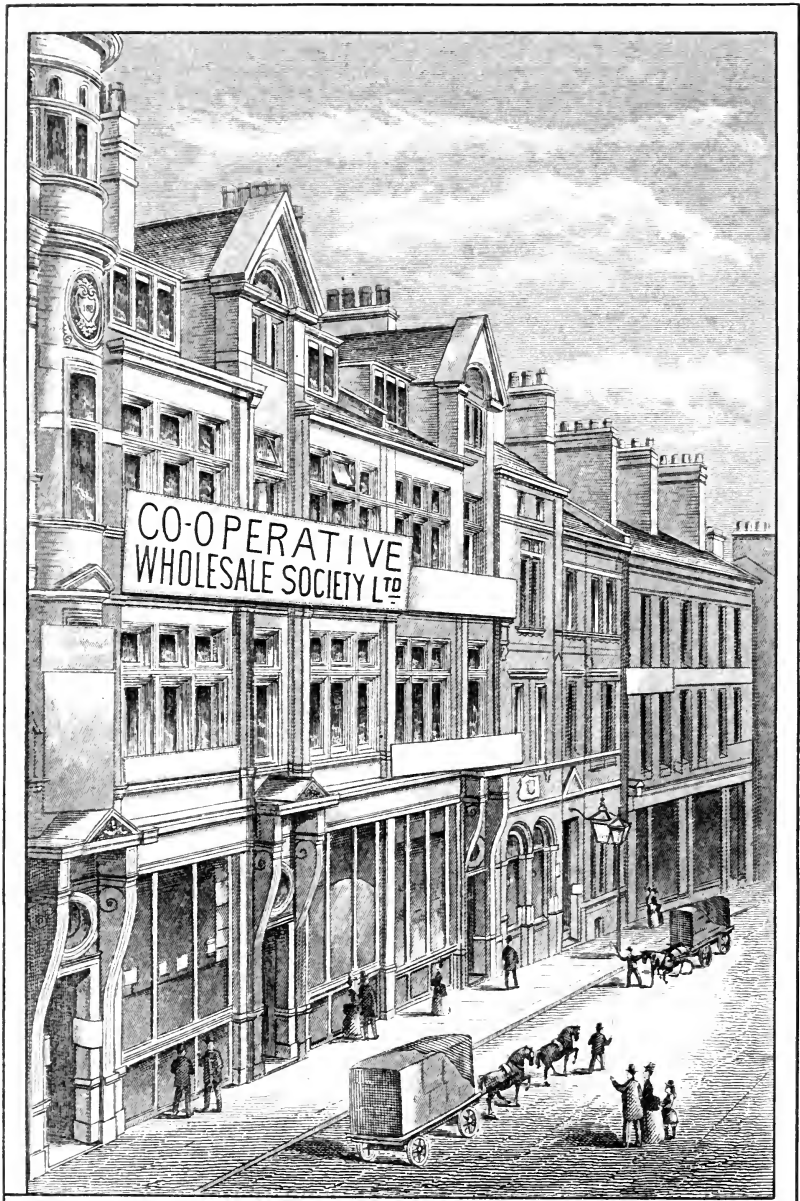


MAP OF LONDON.

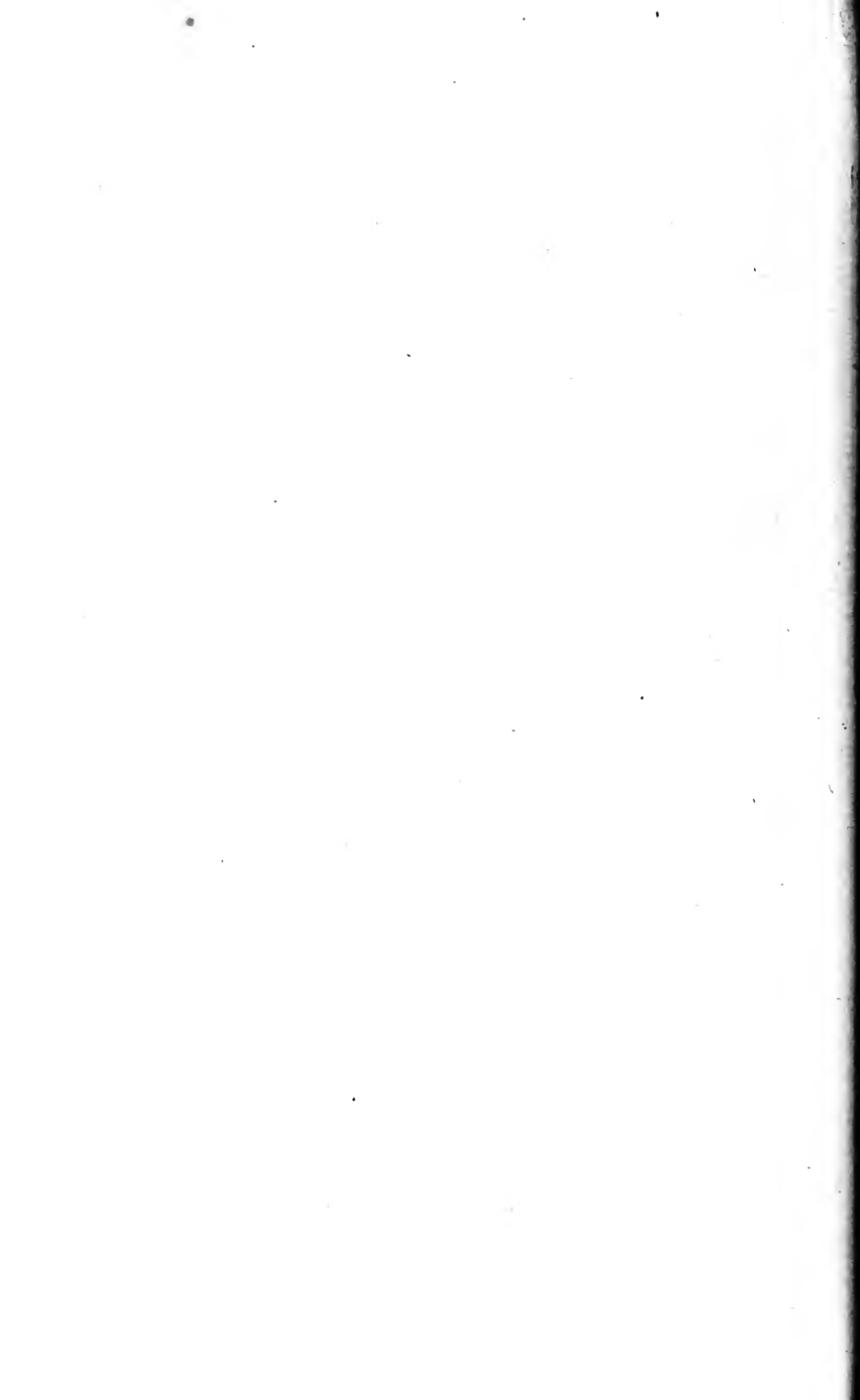
SHOWING THE LONDON BRANCH, LEMAN STREET, E., AND THE PRINCIPAL RAILWAY STATIONS.





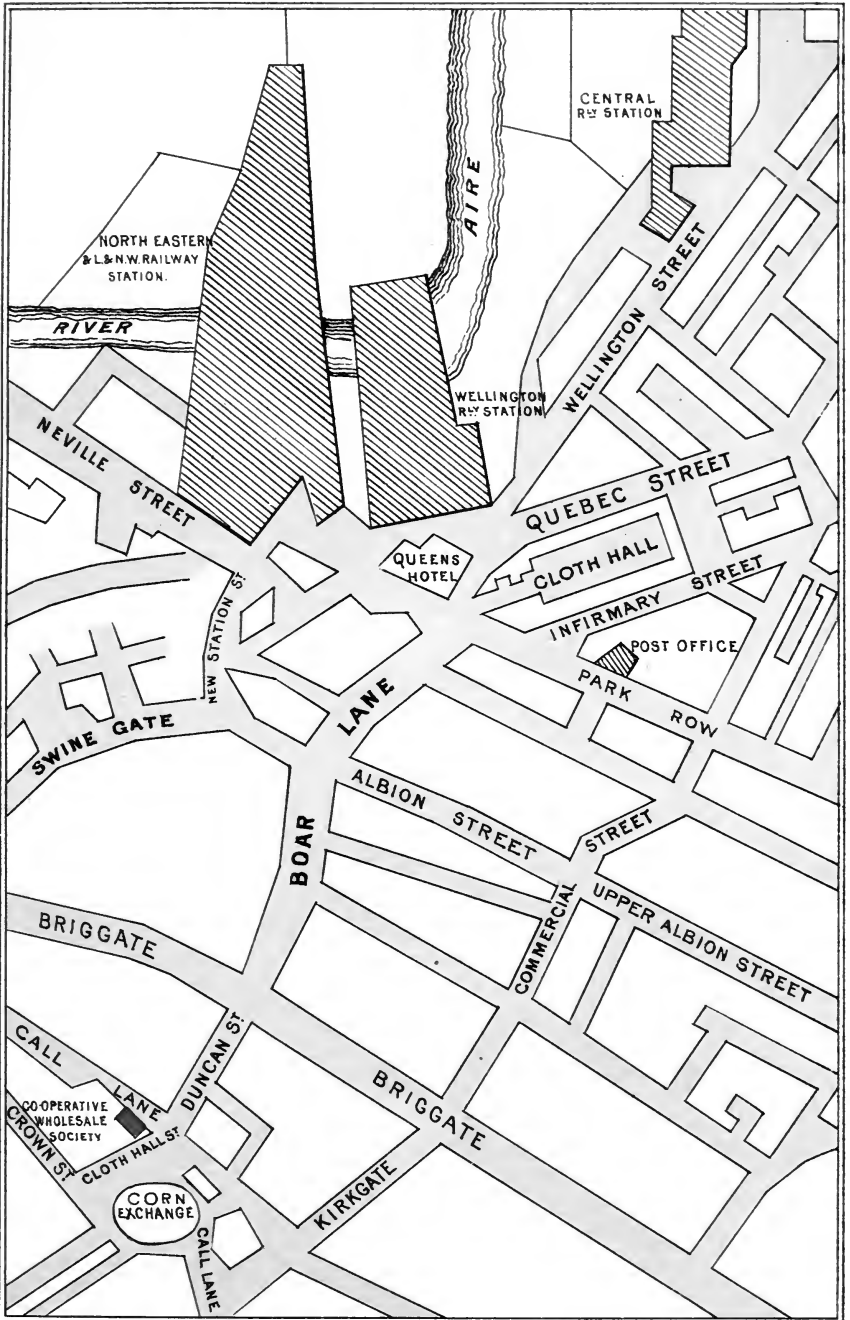


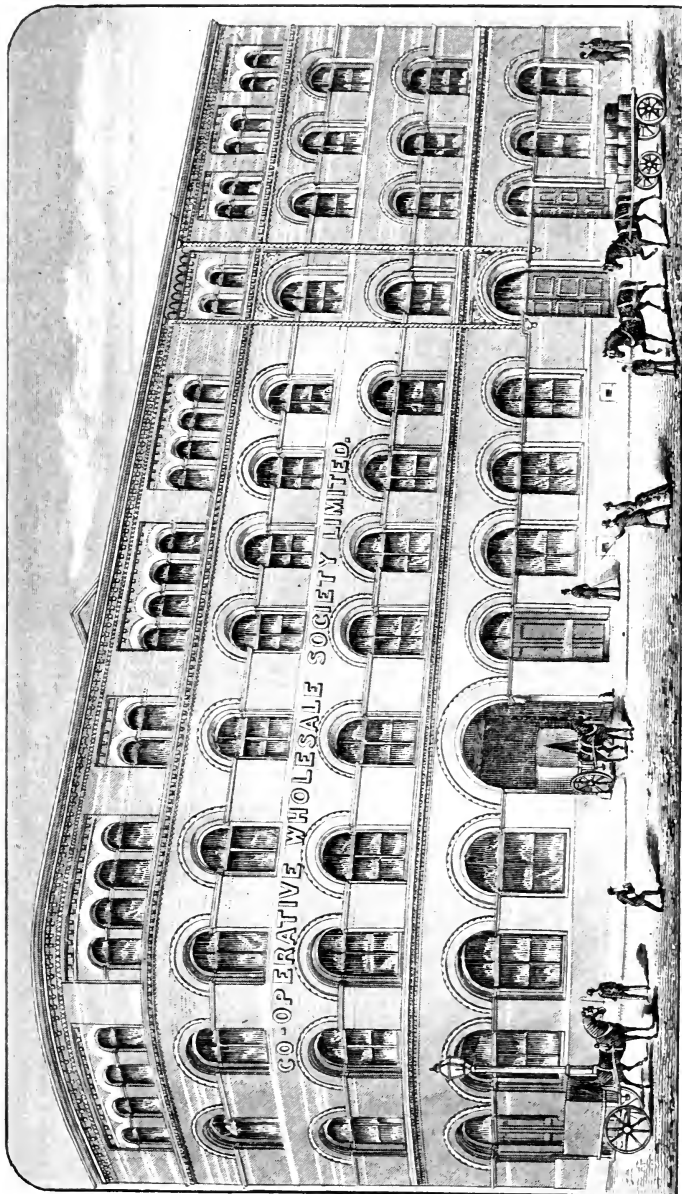
LEEDS, 33, CALL LANE.



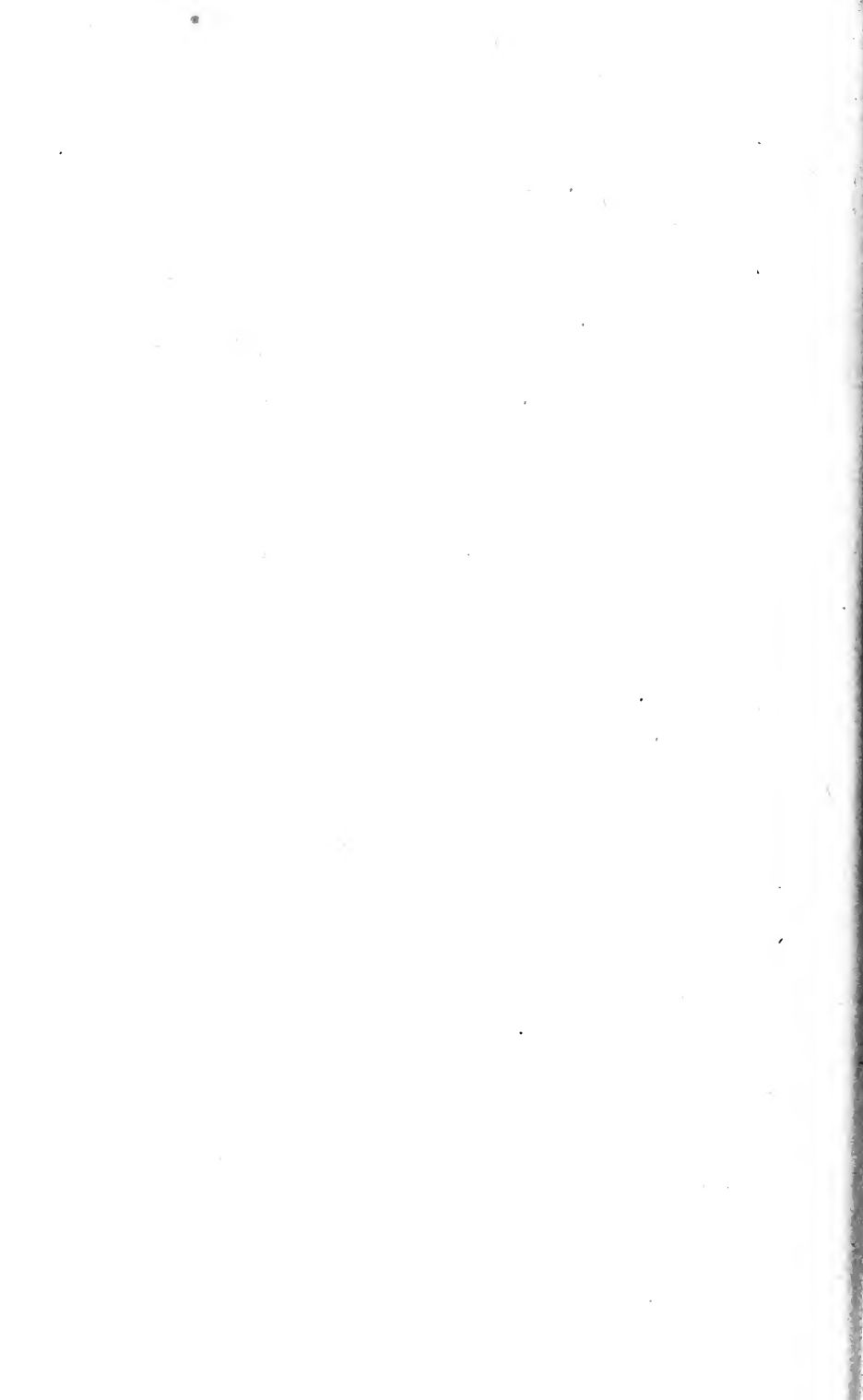
PLAN OF LEEDS.

SHOWING THE MOST DIRECT ROUTE TO THE CO-OPERATIVE WHOLESALE SOCIETY'S SALE AND SAMPLE ROOM, FROM THE RAILWAY STATIONS AND PRINCIPAL PLACES.



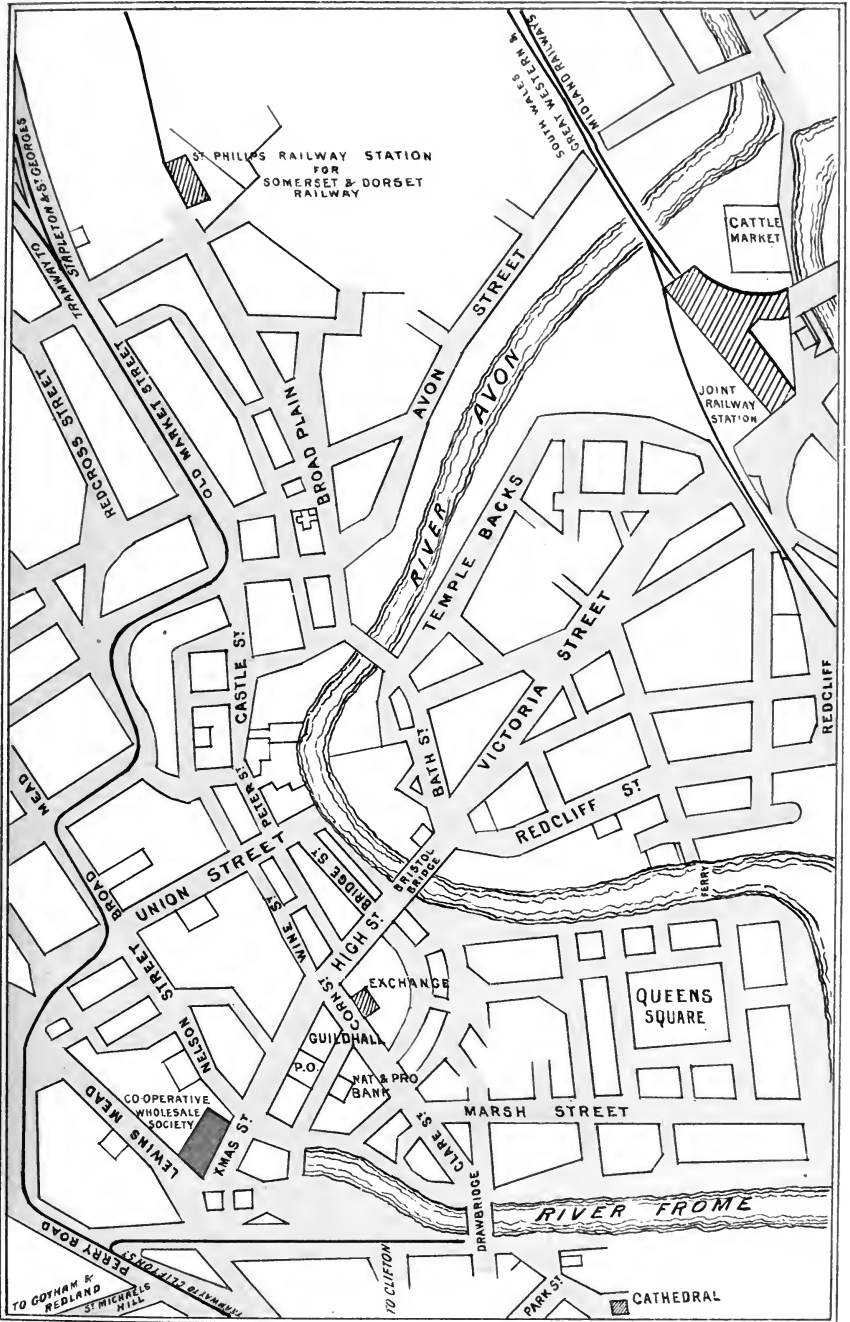


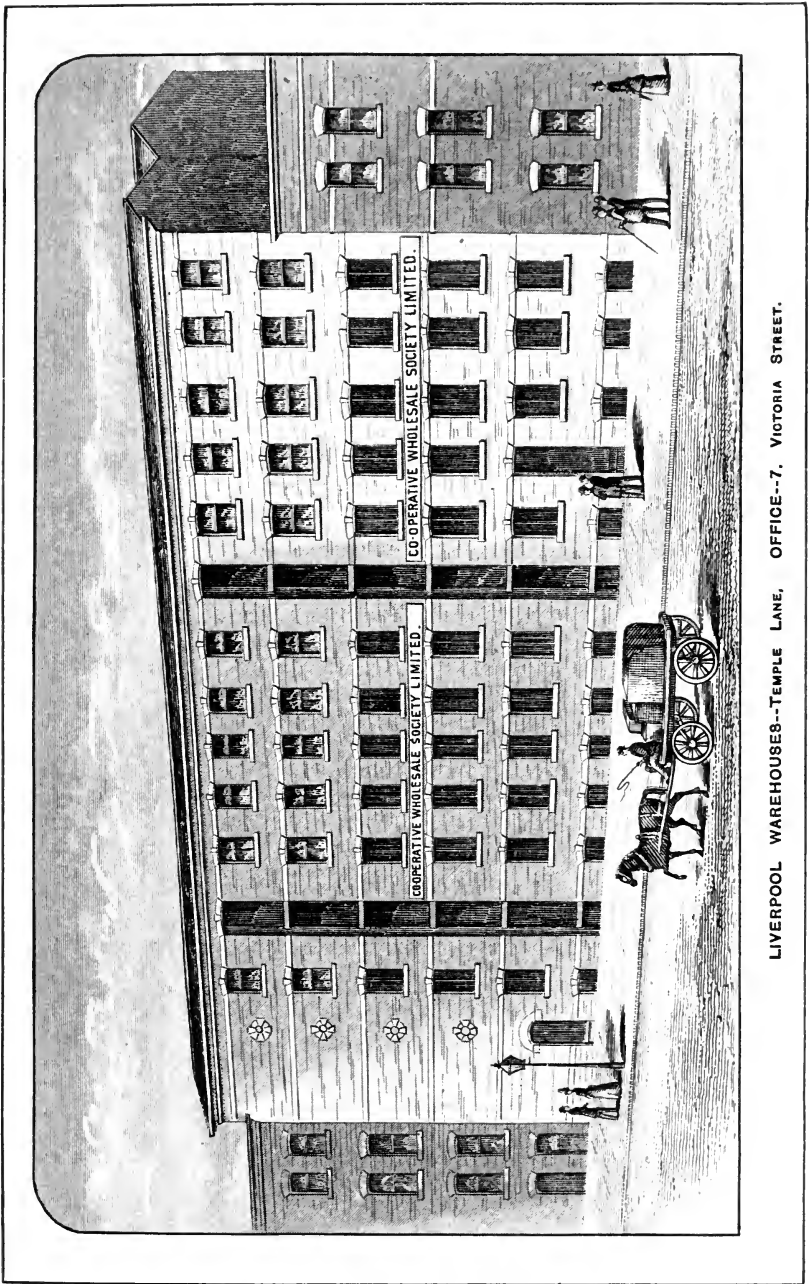
BRISTOL DEPOT, CHRISTMAS STREET.



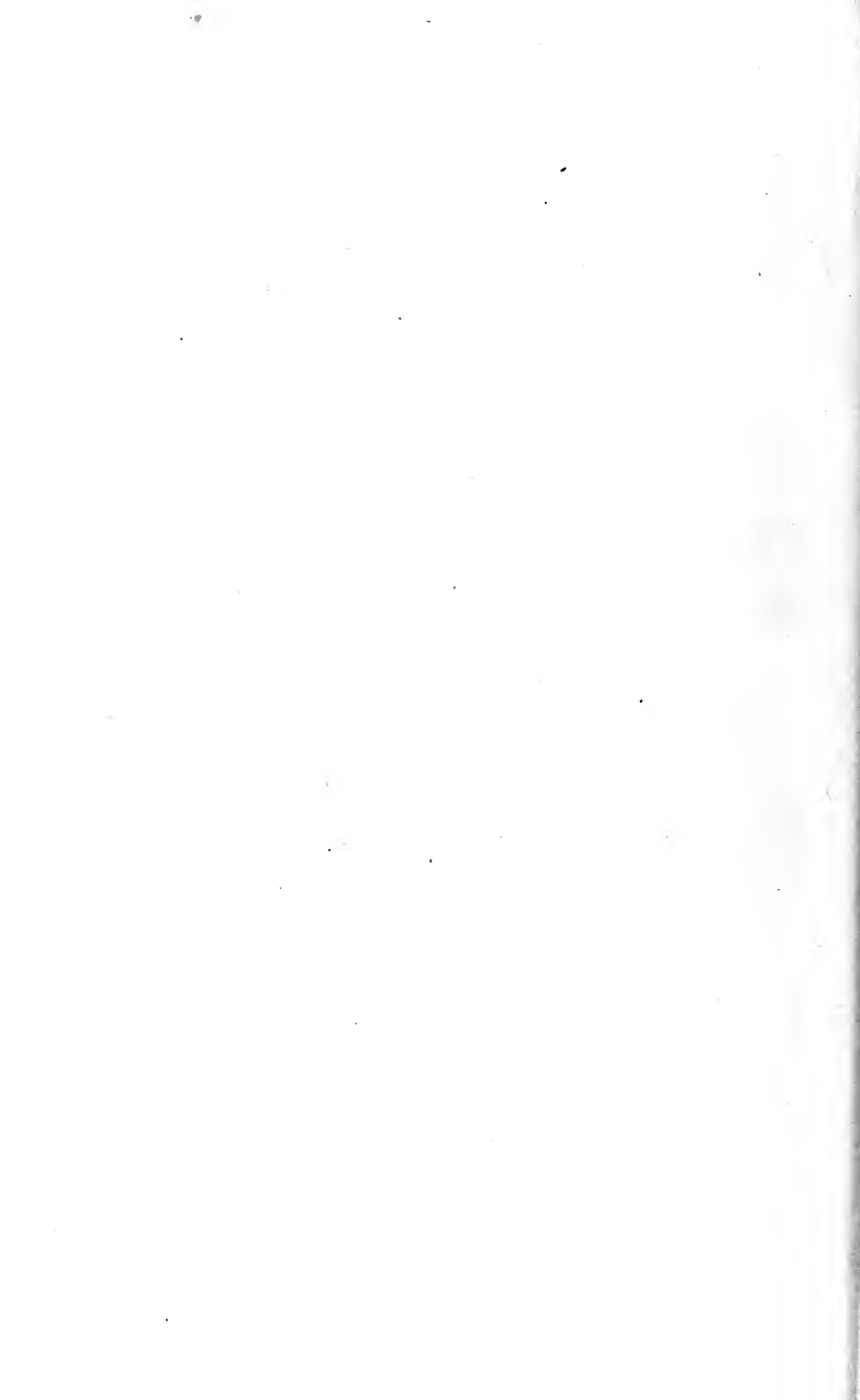
PLAN OF BRISTOL.

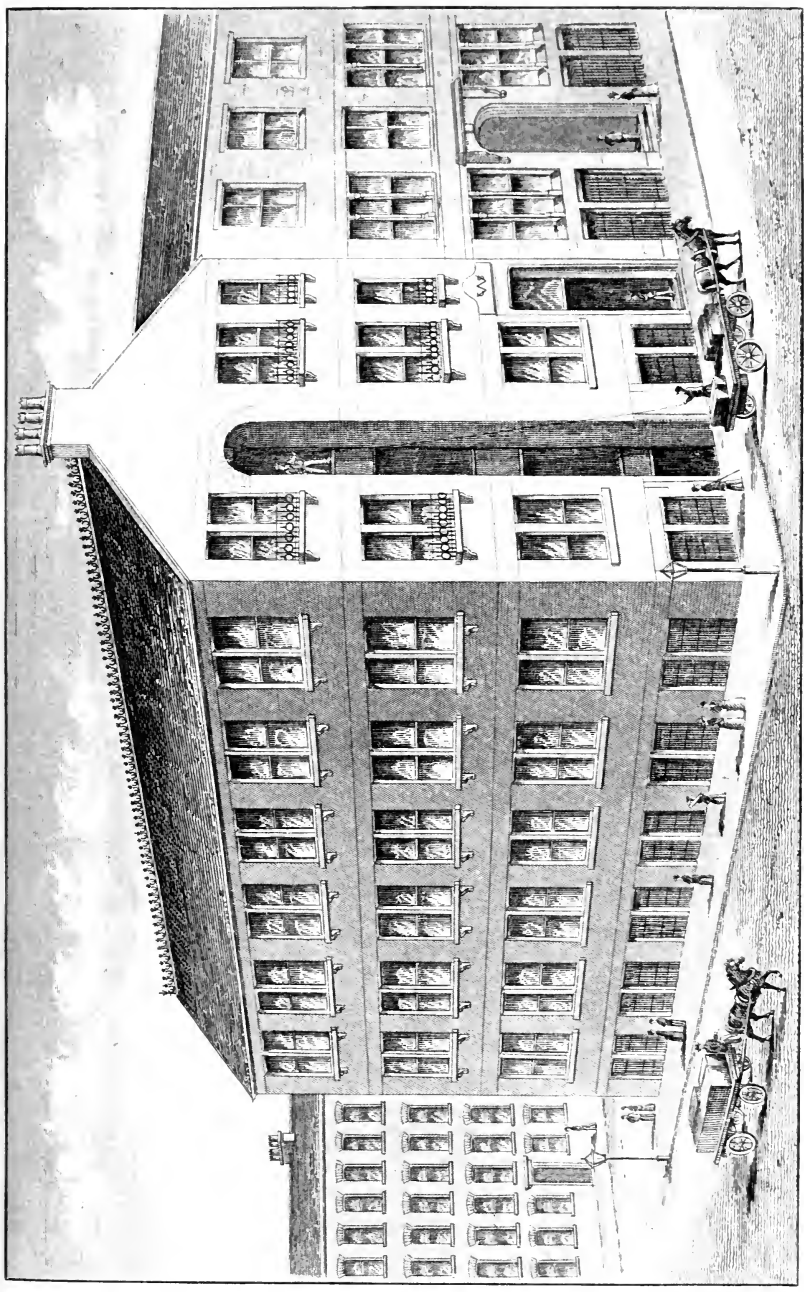
SHOWING THE MOST DIRECT ROUTE TO THE CO-OPERATIVE WHOLESALE SOCIETY'S BRISTOL DEPÔT, FROM THE RAILWAY STATIONS AND PRINCIPAL PLACES.





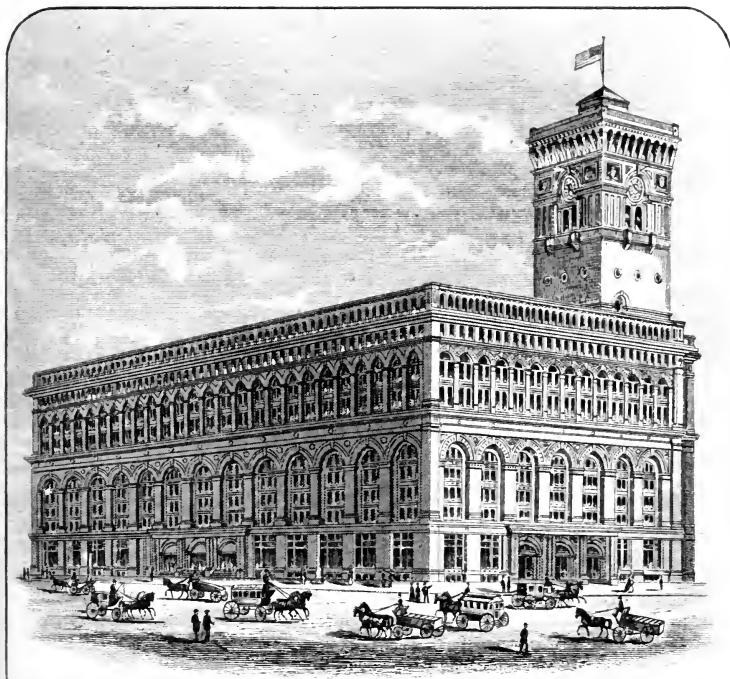
LIVERPOOL WAREHOUSES--TEMPLE LANE, OFFICE--7, VICTORIA STREET.



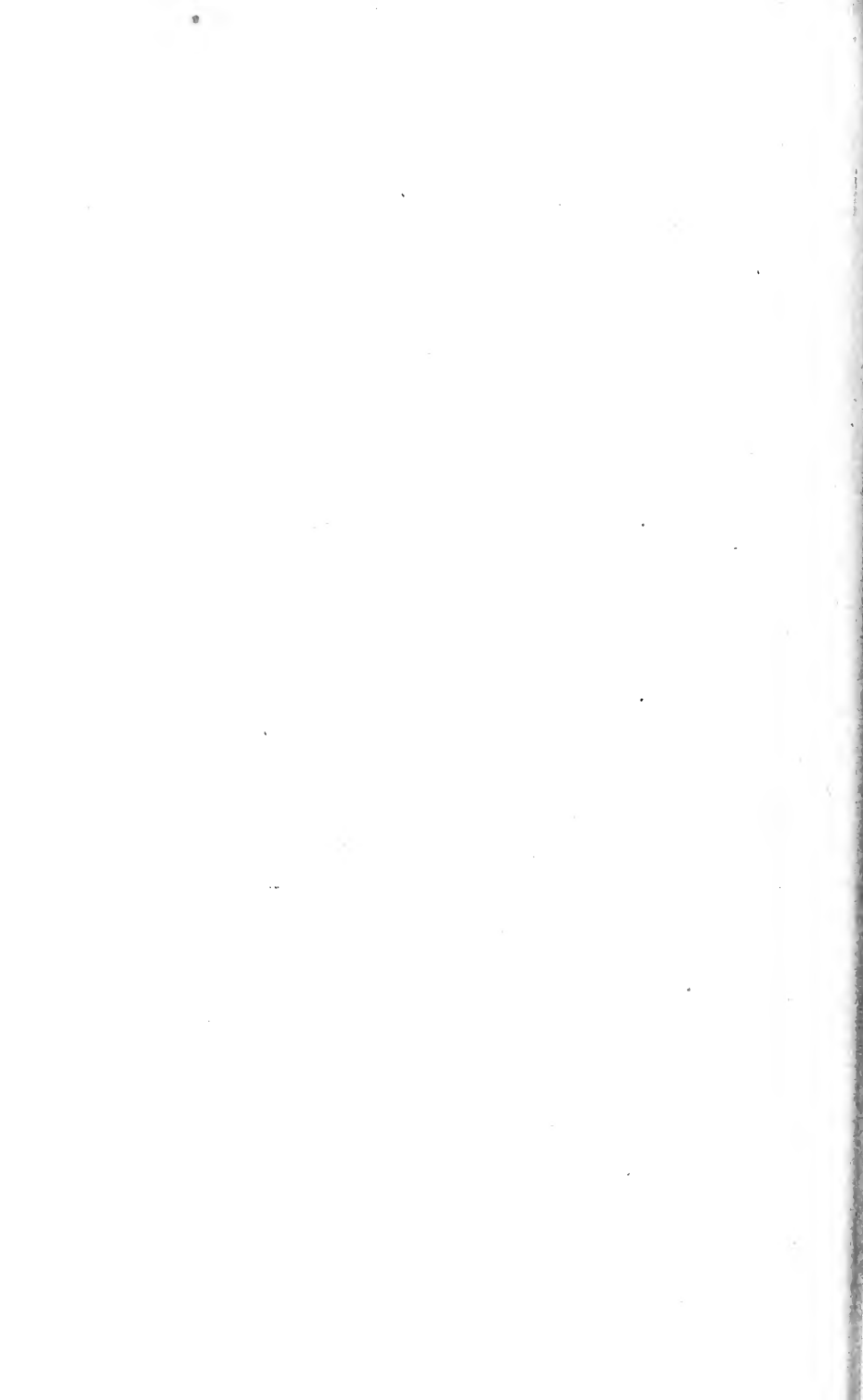


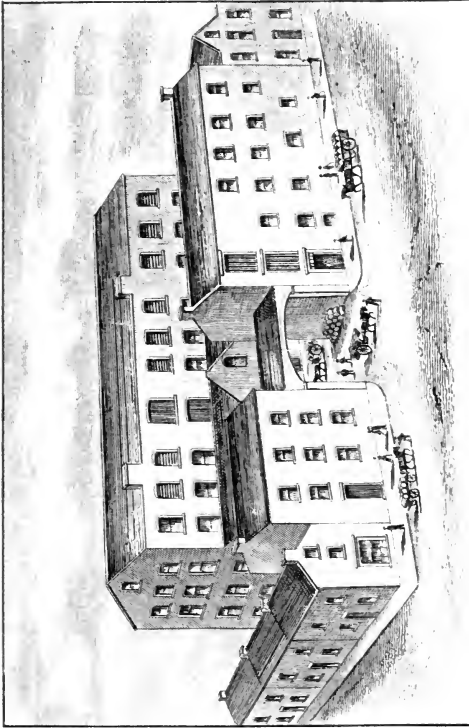
LIVERPOOL GREEN FRUIT WAREHOUSE, CUMBERLAND STREET.



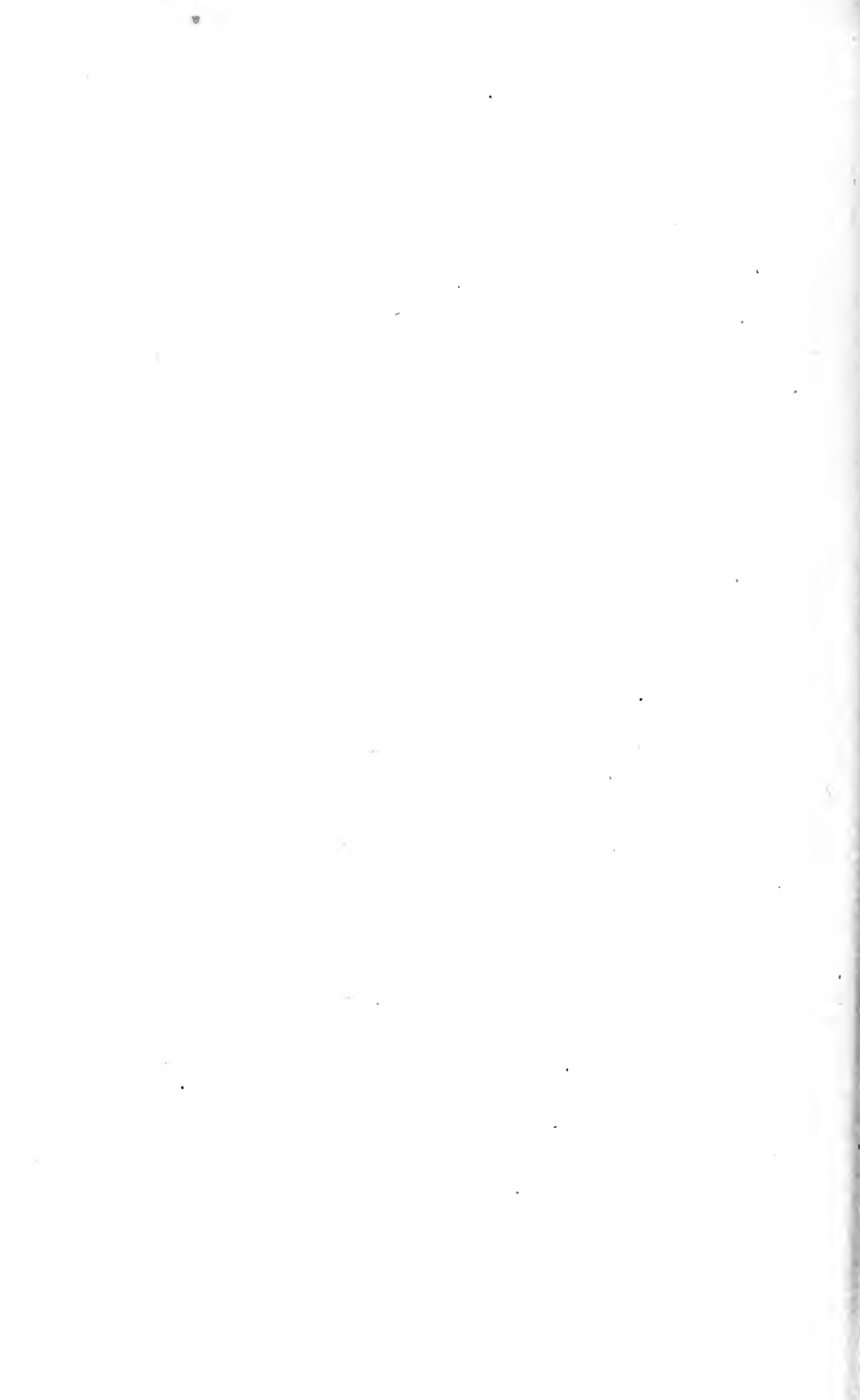


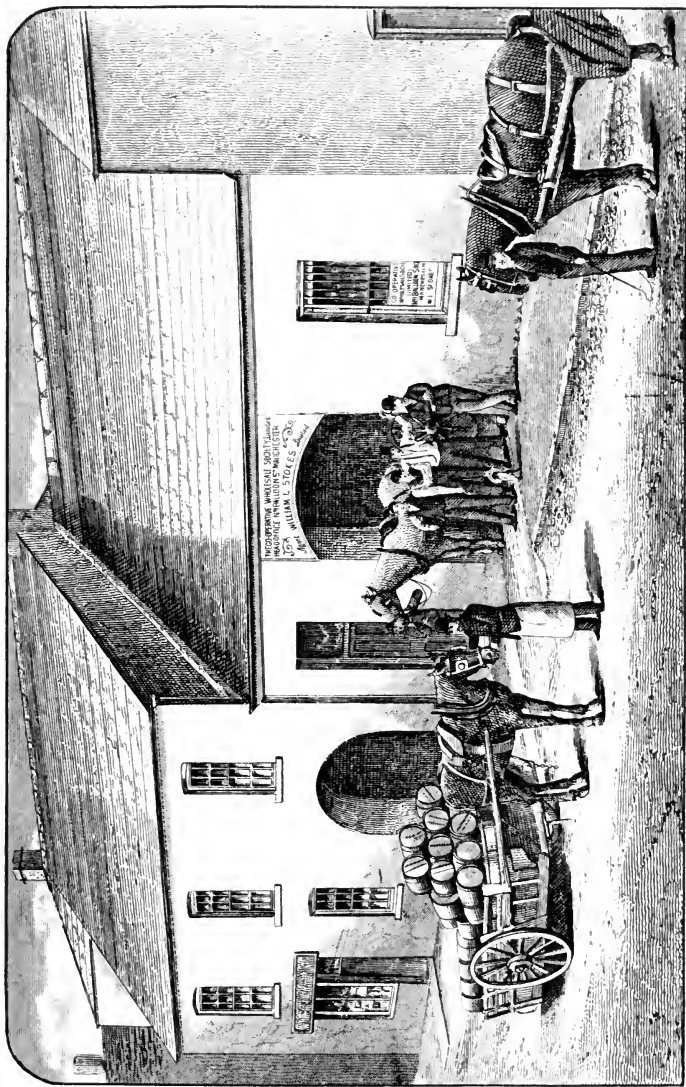
NEW YORK PRODUCE EXCHANGE, BROADWAY, NEW YORK,
IN WHICH THE SOCIETY'S OFFICES ARE SITUATE.





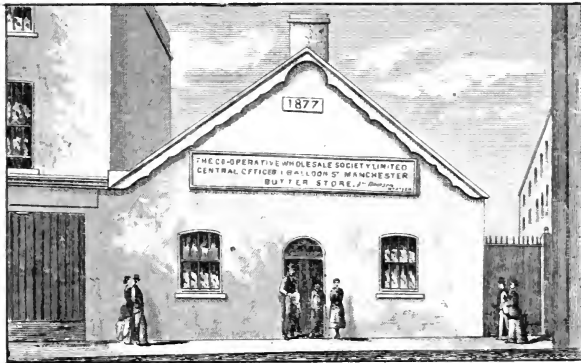
CORK BRANCH,
JOHN STREET, CORK, IRELAND.



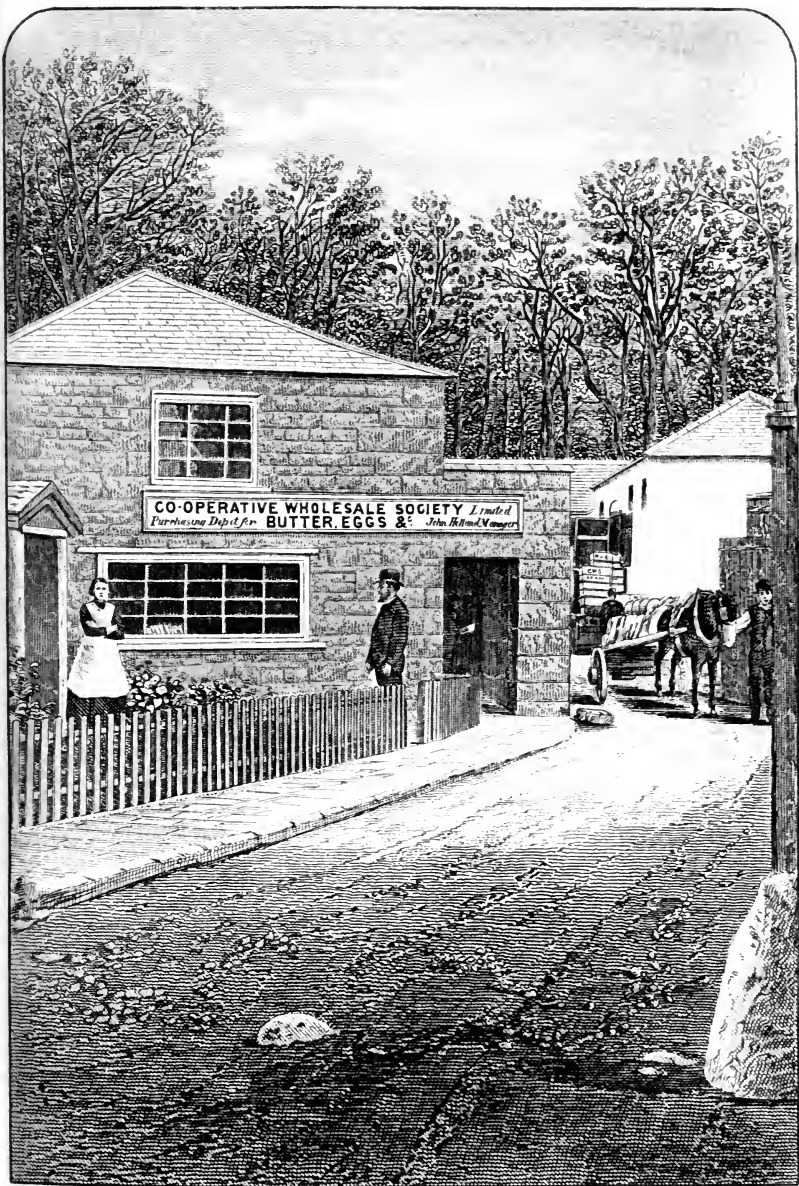


LIMERICK BRANCH,
MULGRAVE STREET, LIMERICK, IRELAND.





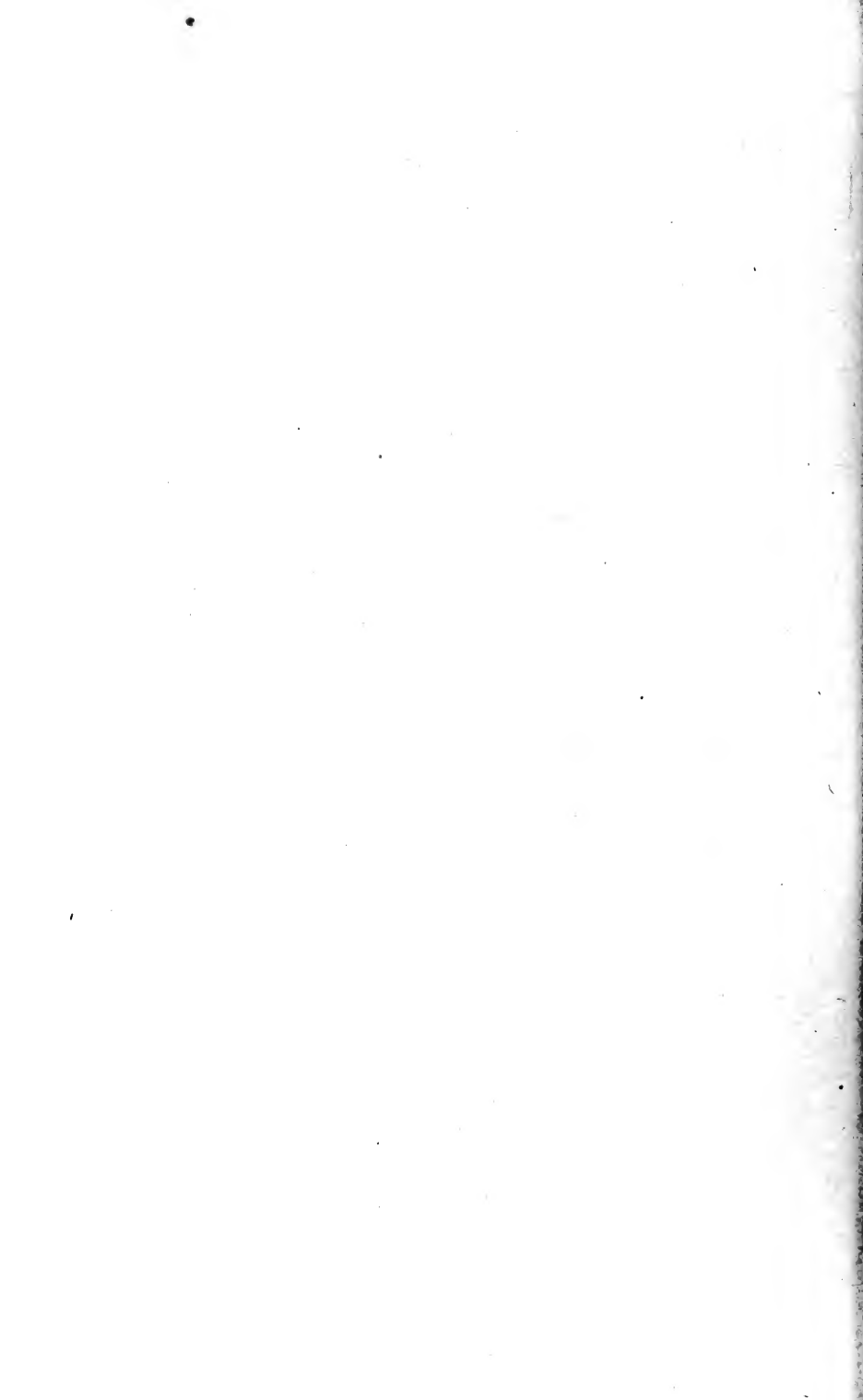
TRALEE BRANCH,
TRALEE, IRELAND.



ARMAGH BRANCH.



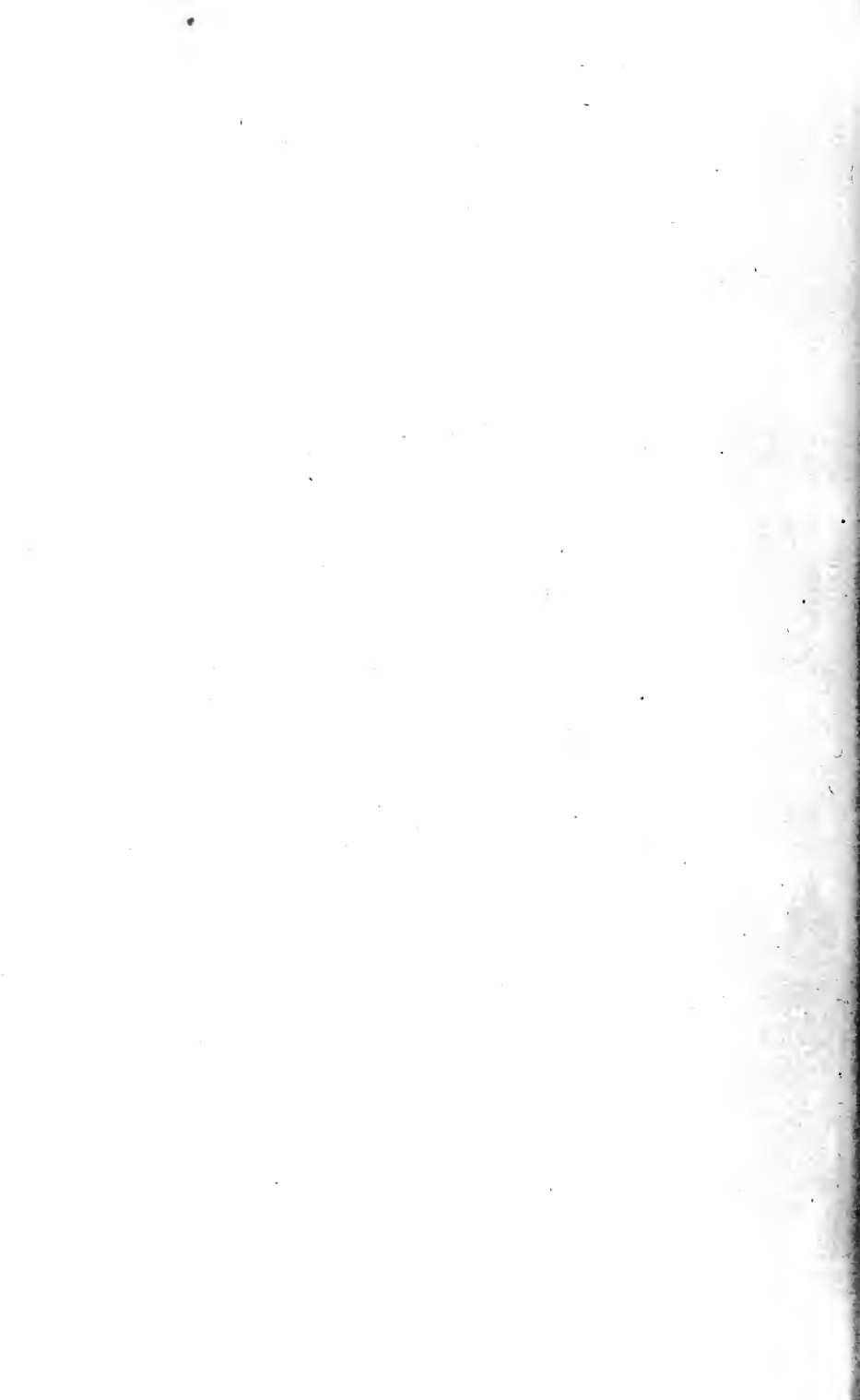
COPENHAGEN BRANCH,
HAYNEGADE, 41.

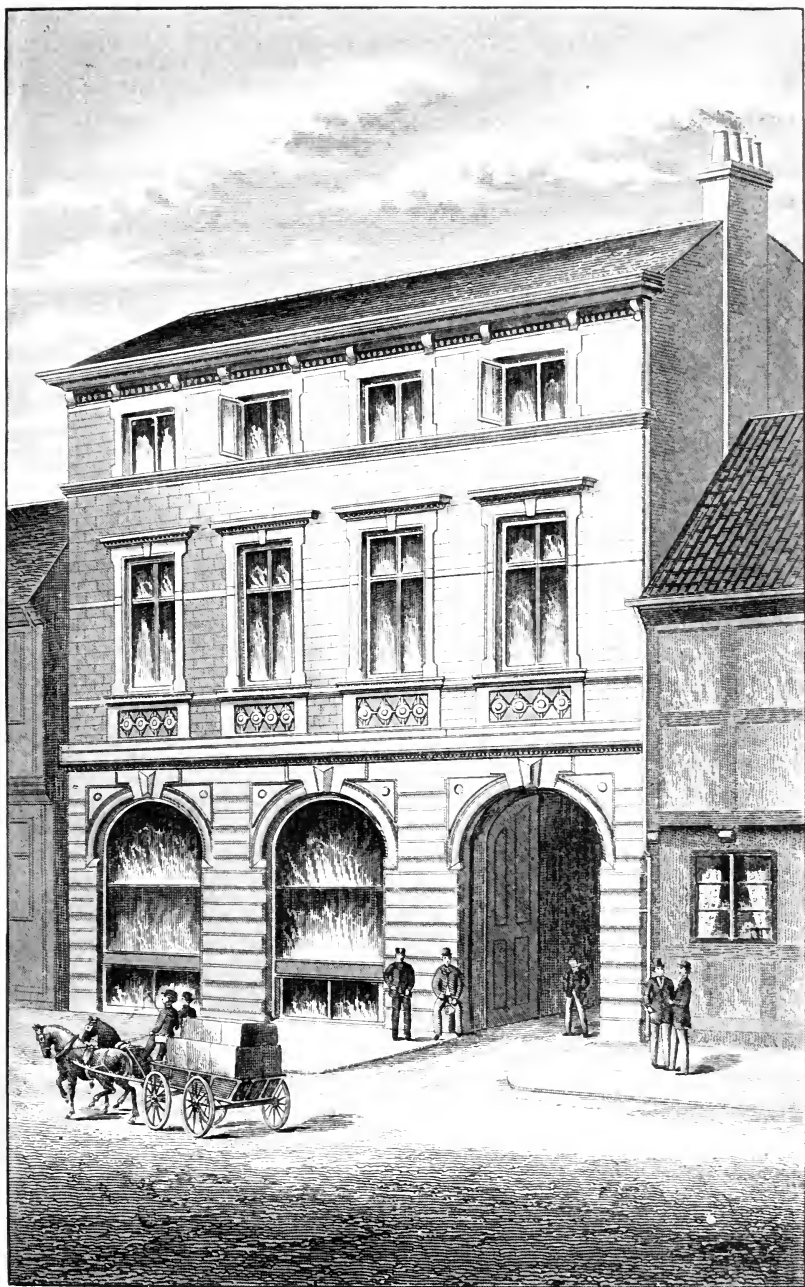




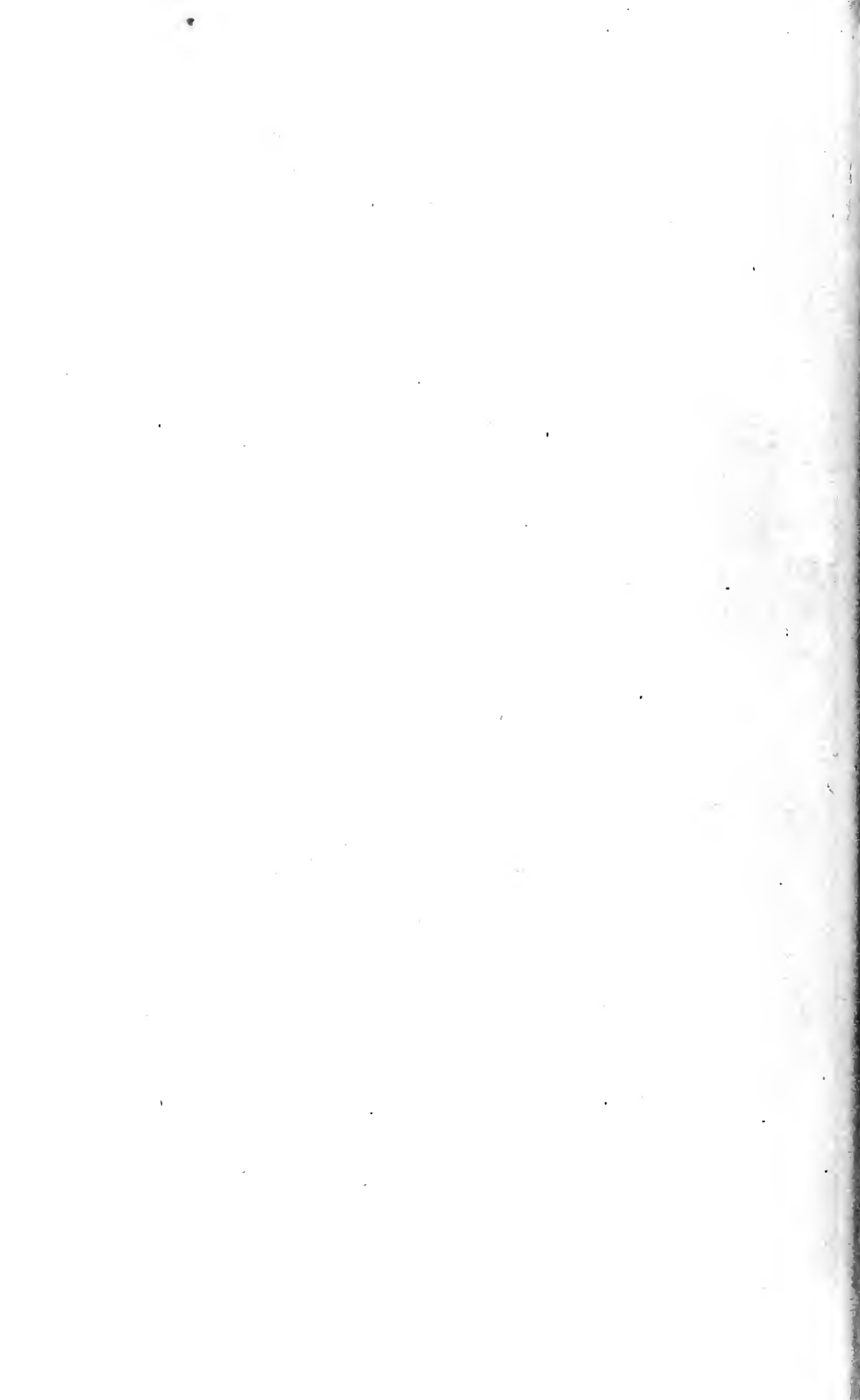
HAMBURG BRANCH.

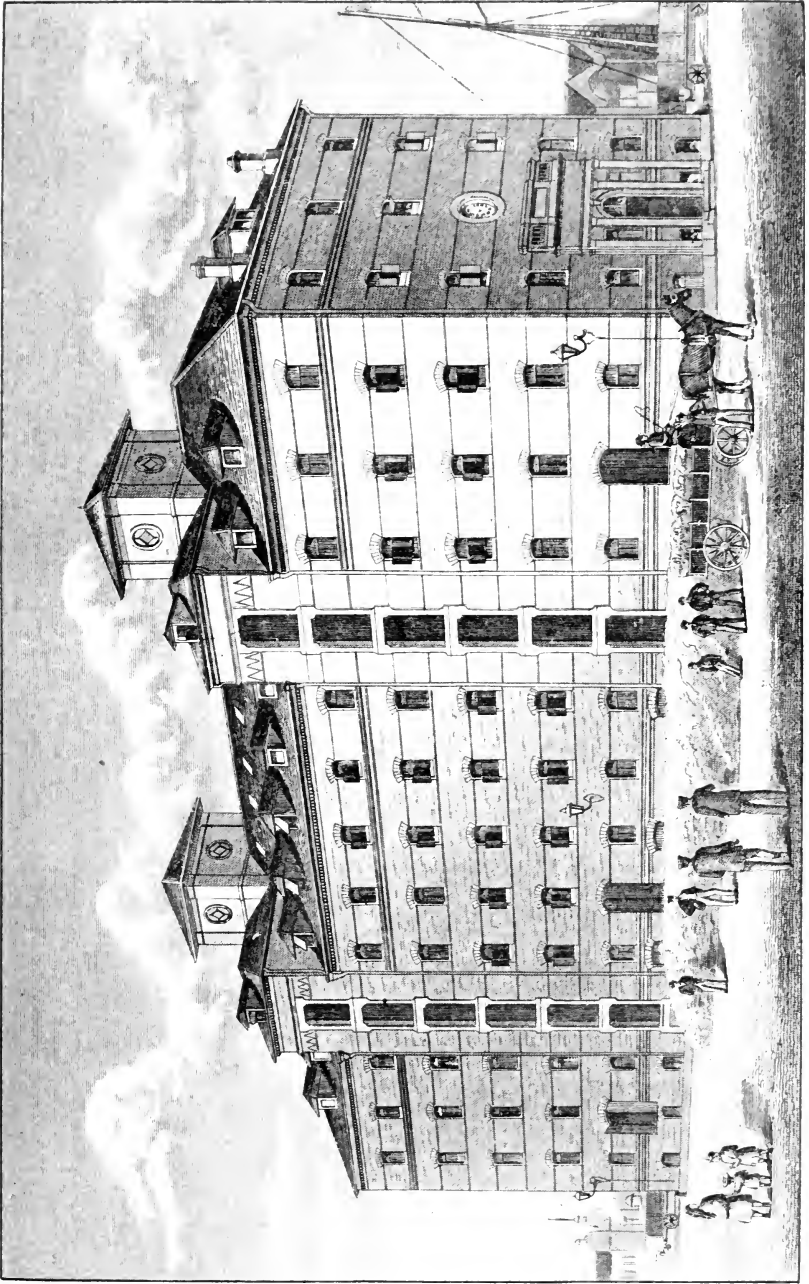
"LUISENHOF" NEUE GRONINGER STR., IN WHICH THE SOCIETY'S OFFICE IS SITUATE.



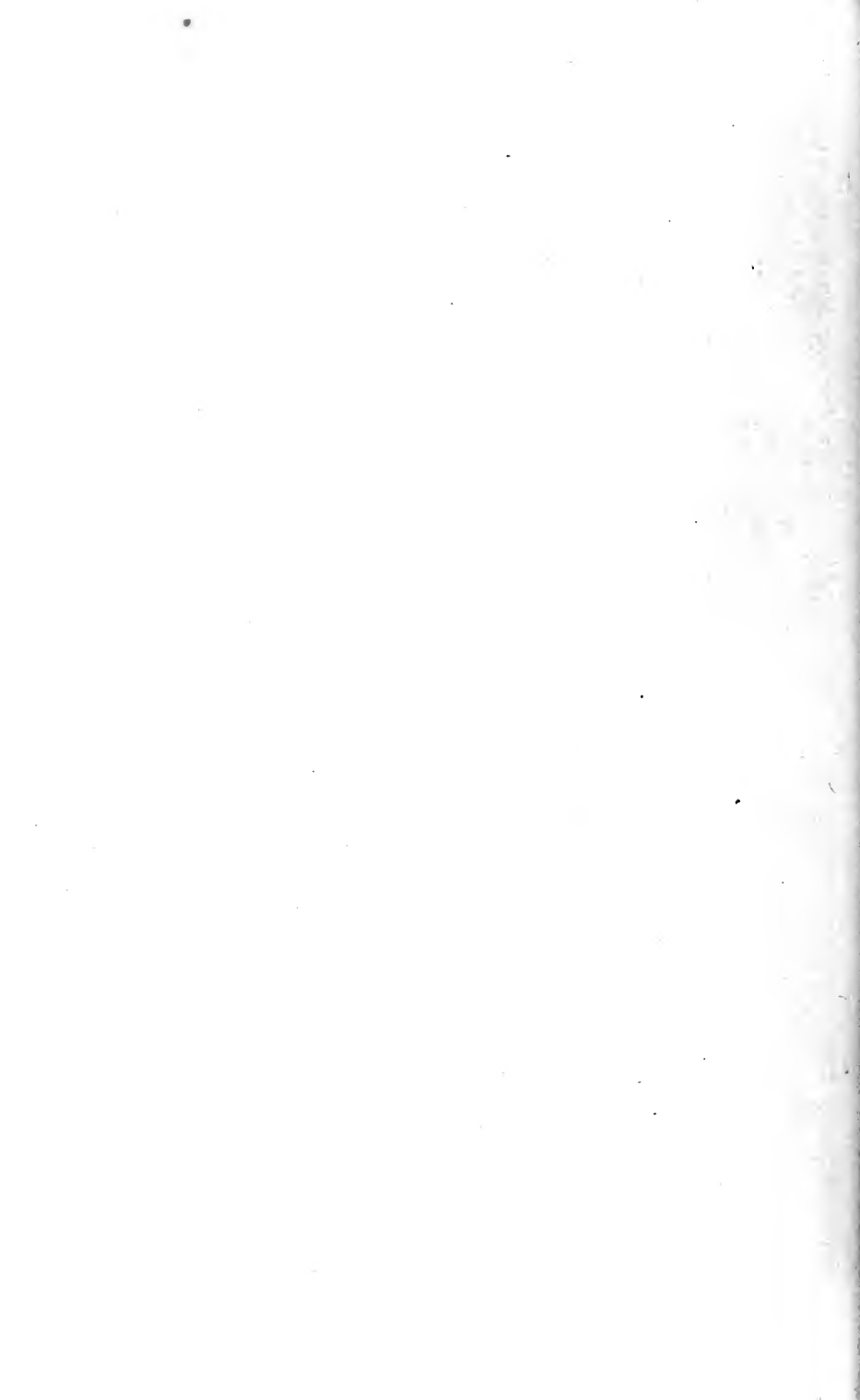


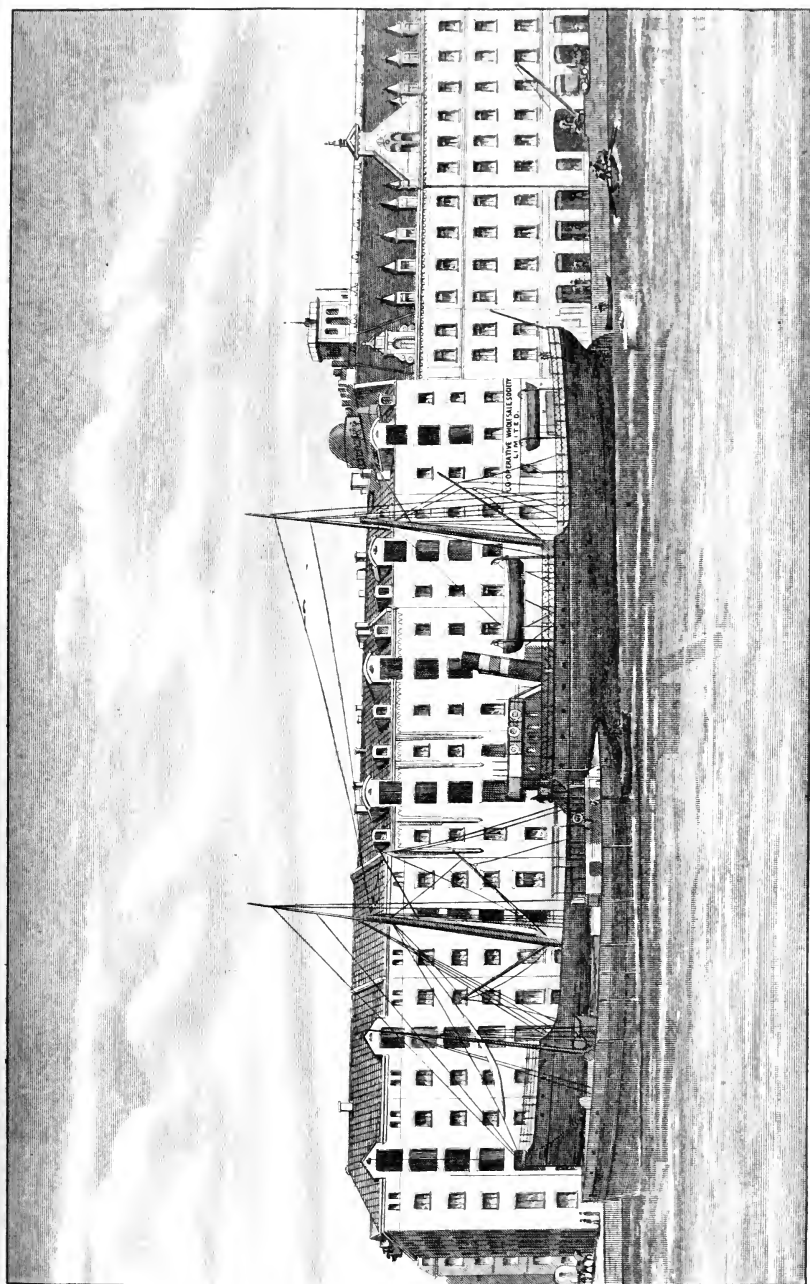
AARHUS BRANCH, DENMARK.



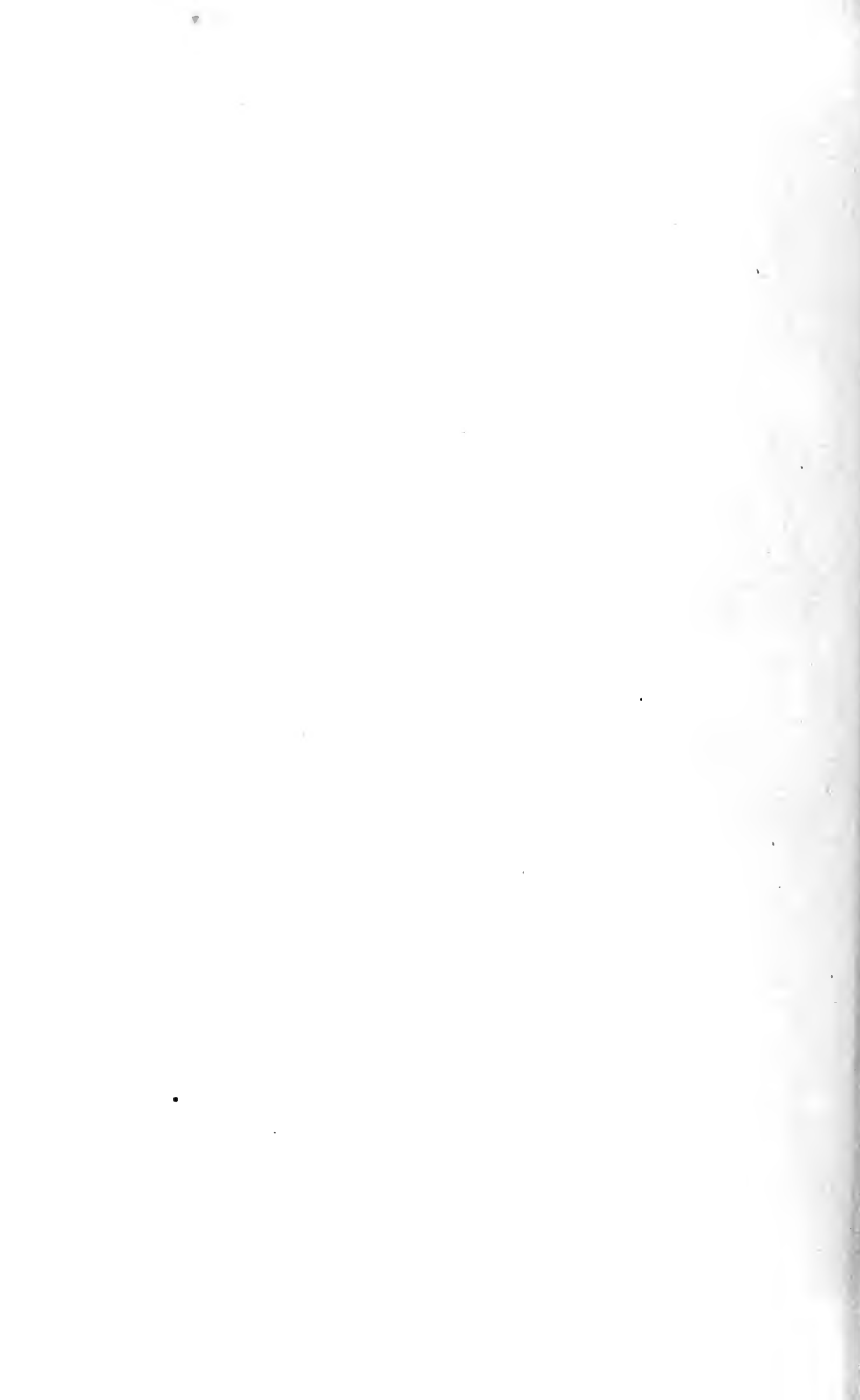


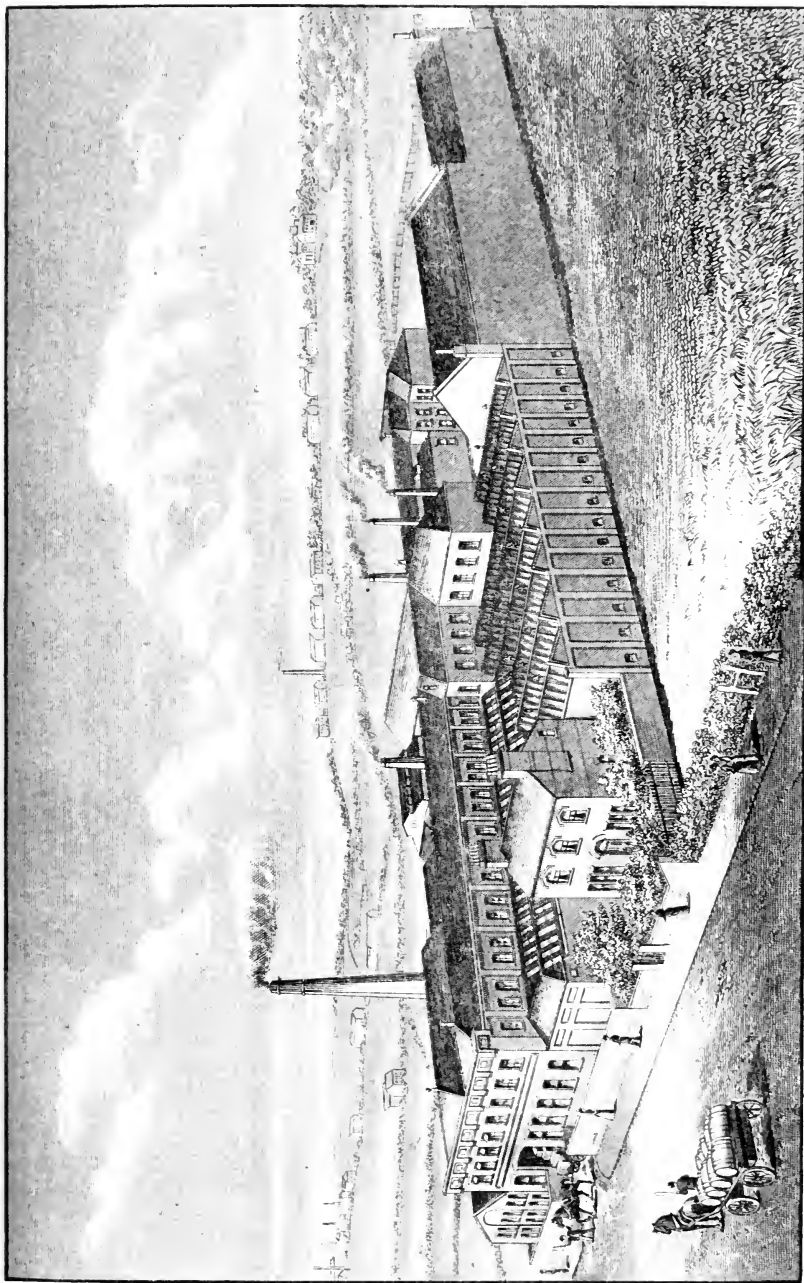
BUTTER CELLAR, AARHUS, DENMARK.



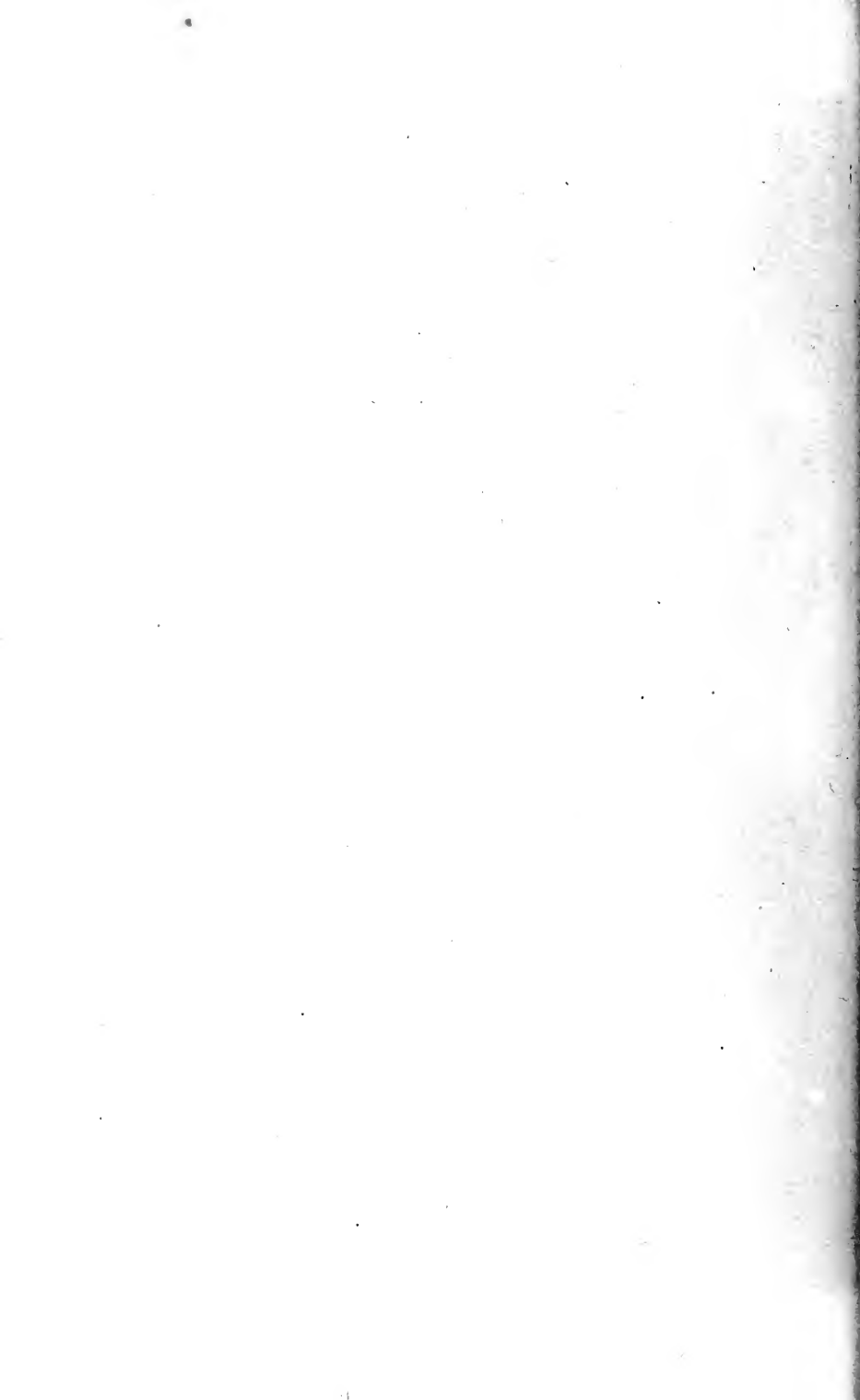


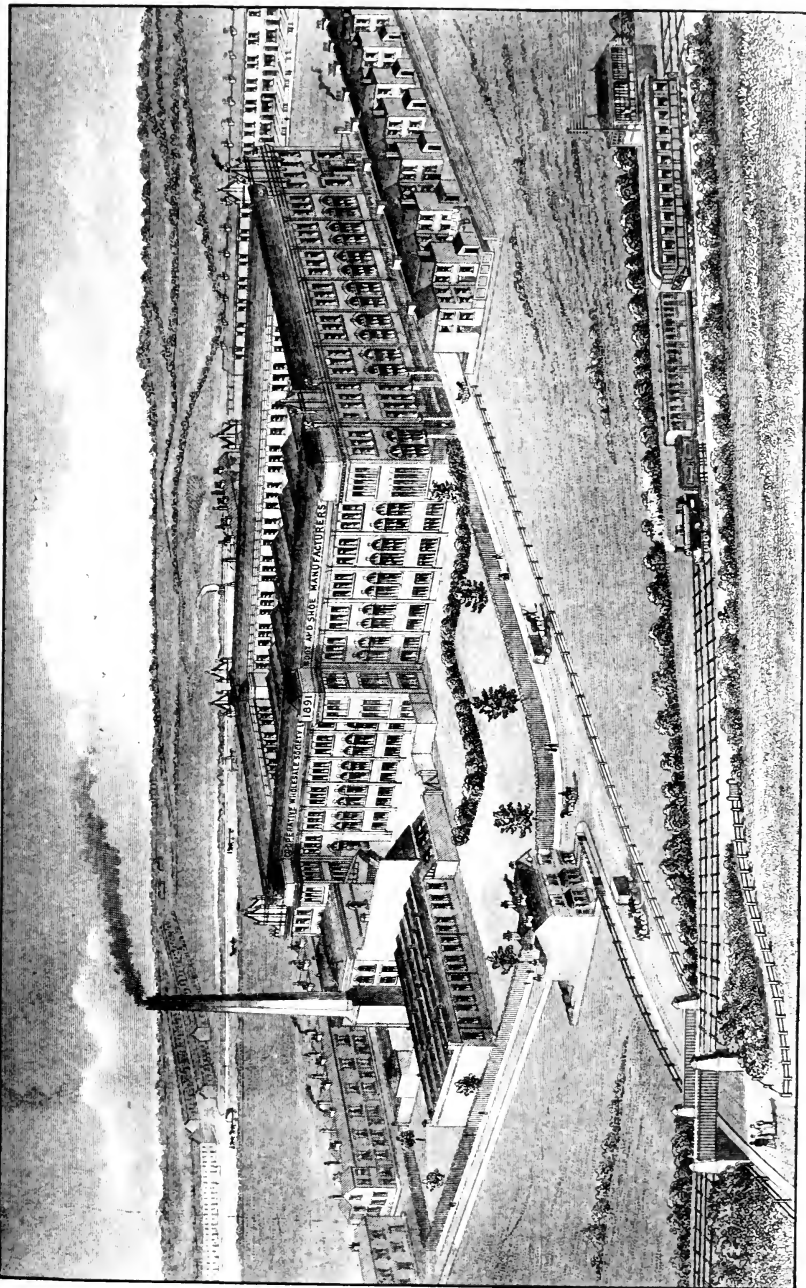
GOTHENBURG BRANCH.--MAGAZINKVARTERET.



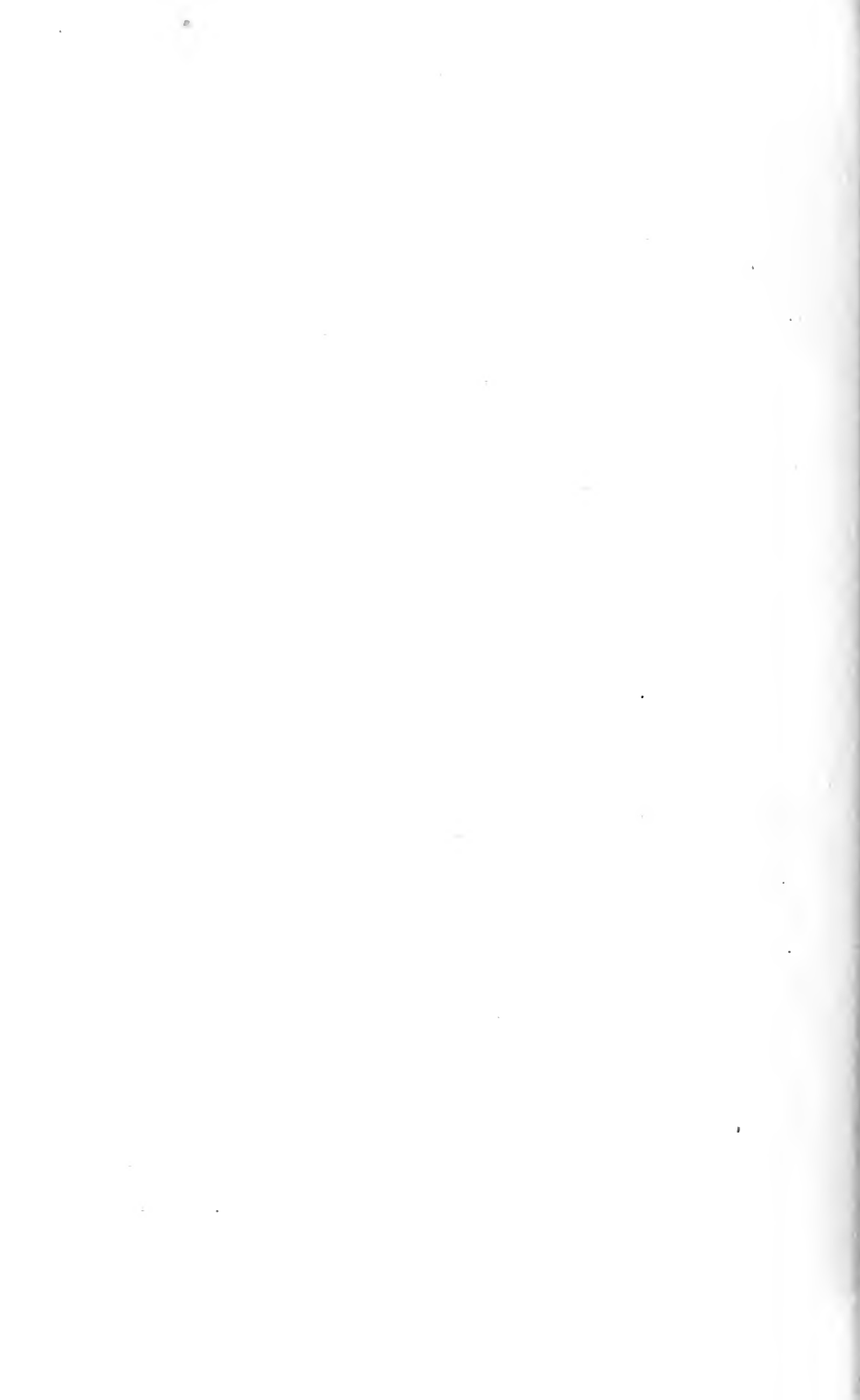


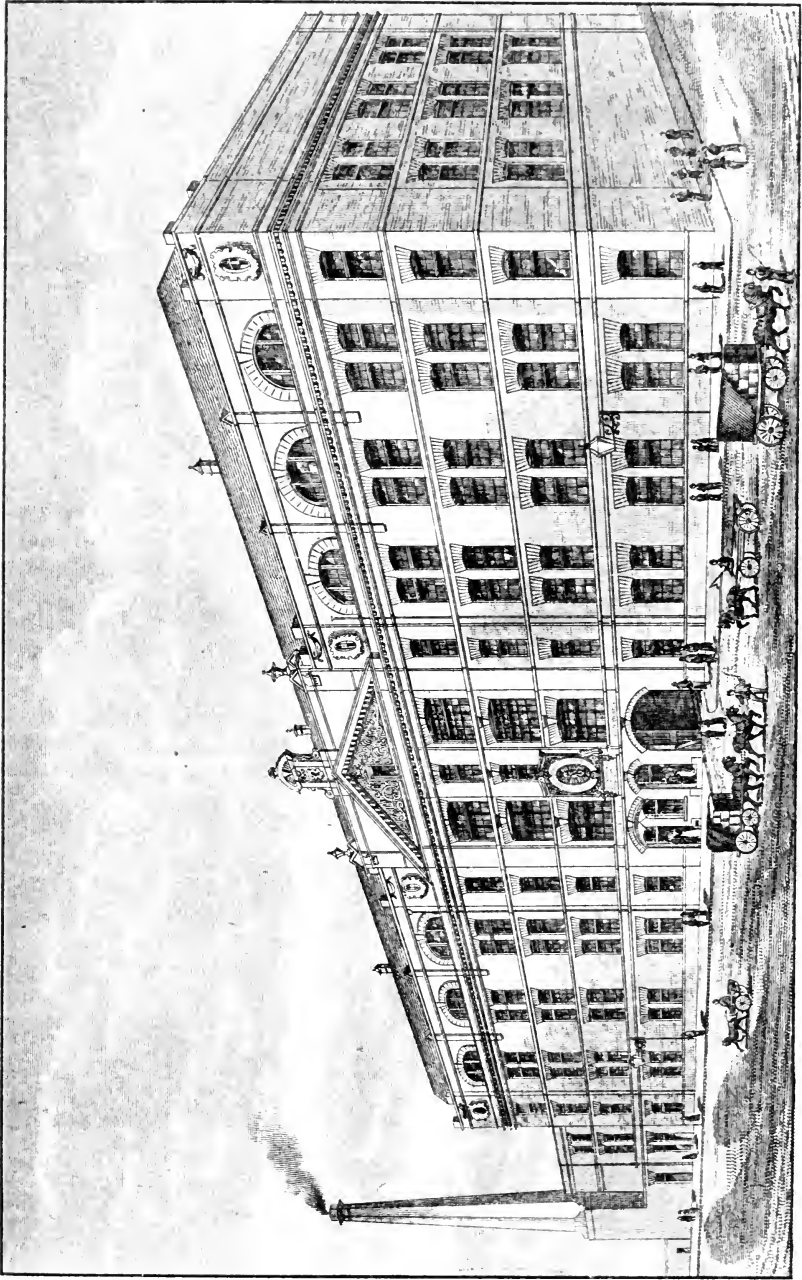
CRUMPSALL BISCUITS AND SWEETS, &C., WORKS.
(See pages 30 and 70.)



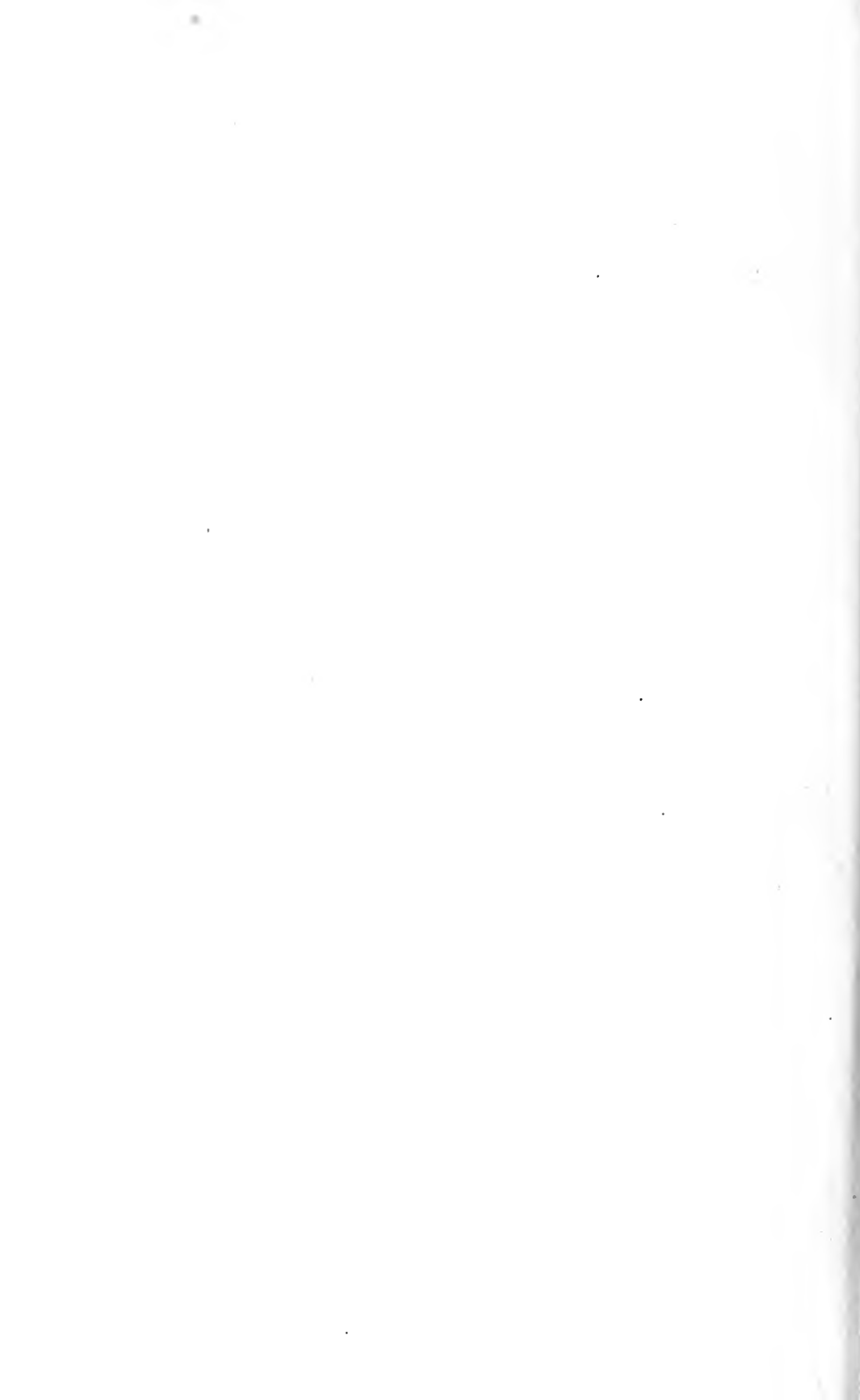


WHEAT SHEAF BOOT AND SHOE WORKS, KNIGHTON FIELDS, LEICESTER.
(See pages 83 and 79.)



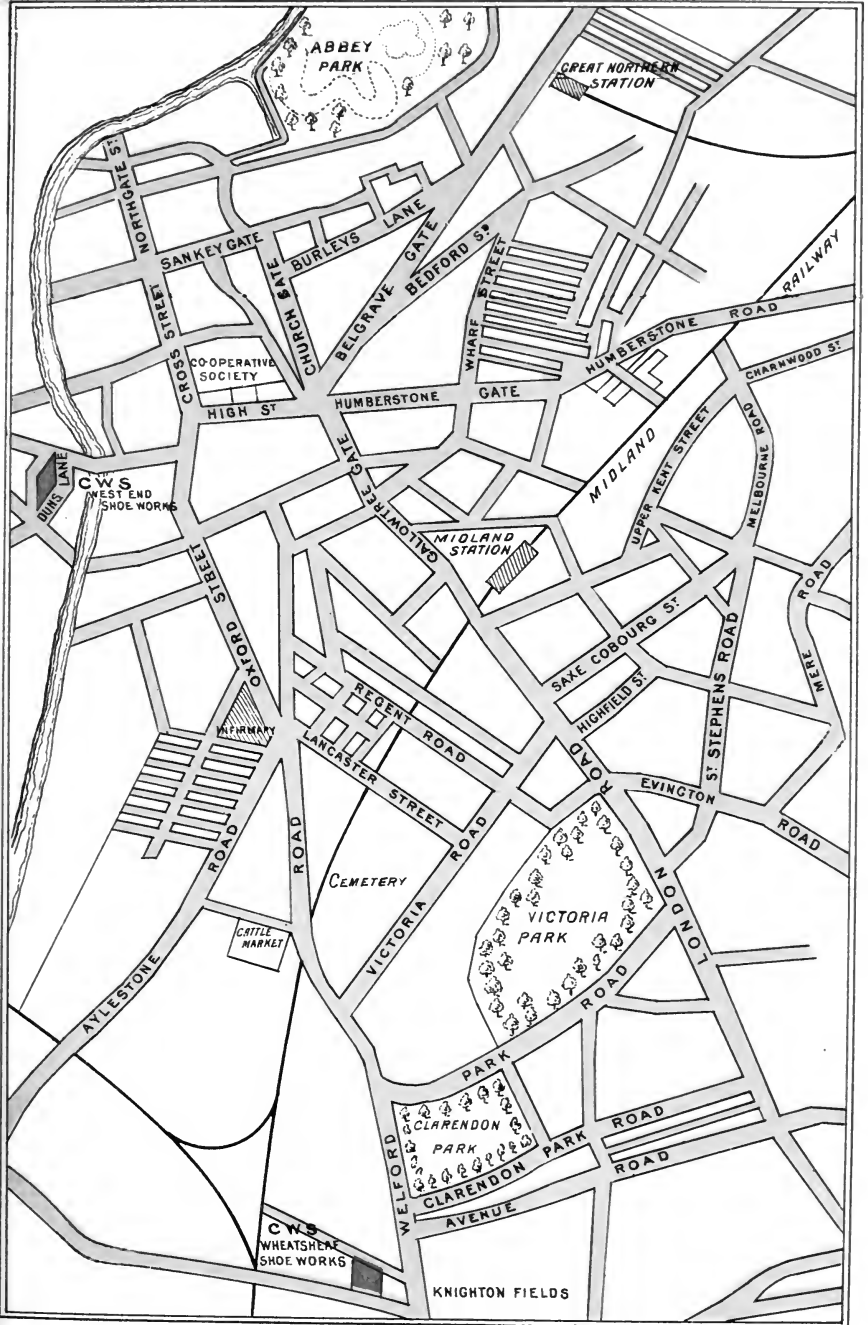


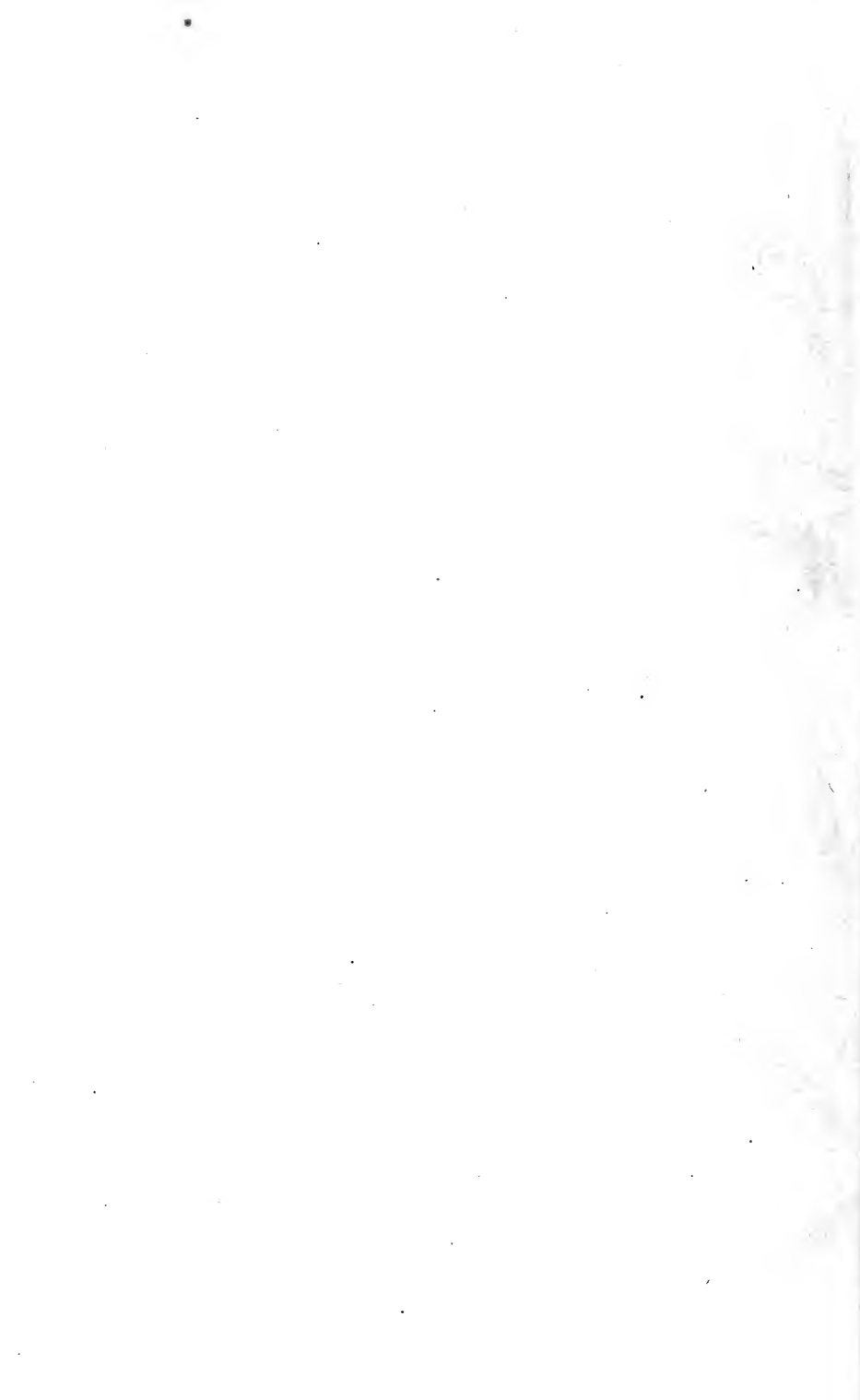
LEICESTER BOOT AND SHOE WORKS, DUNS LANE.
(See pages 33 and 72.)

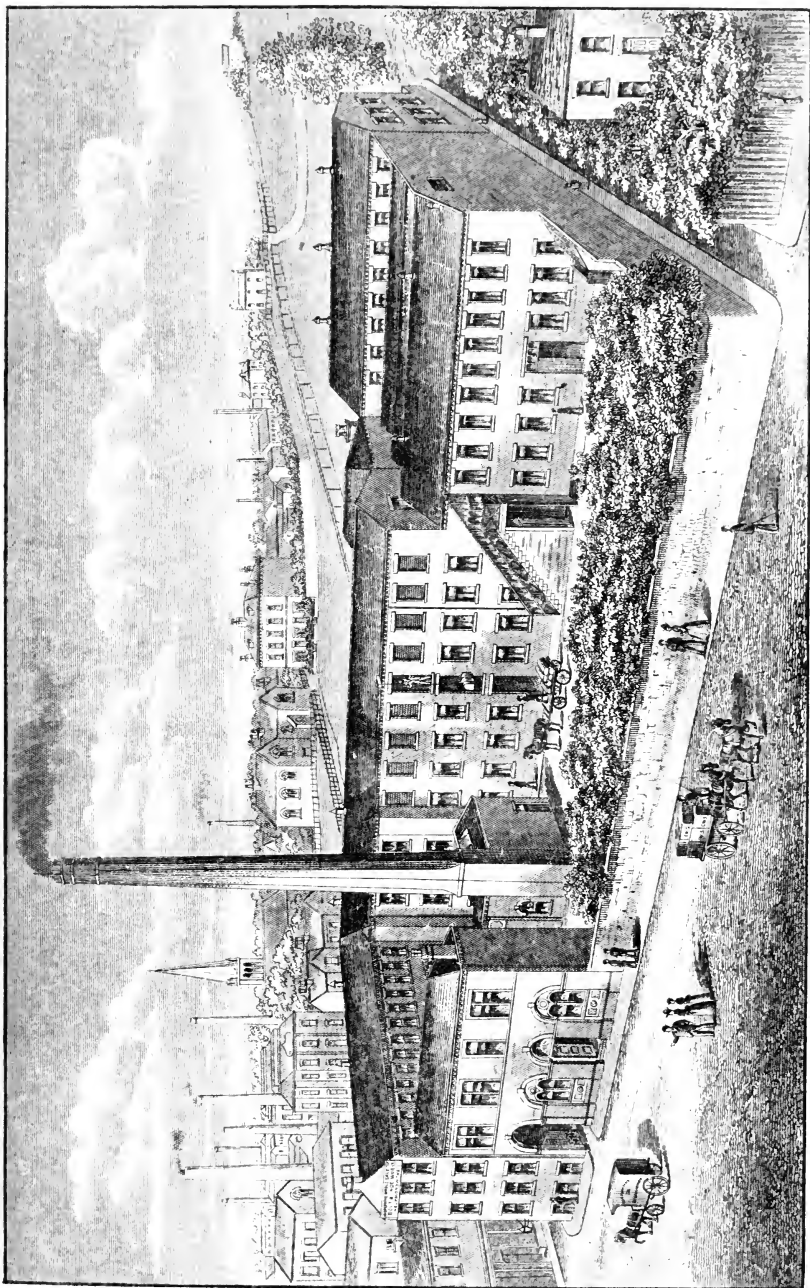


PLAN OF LEICESTER.

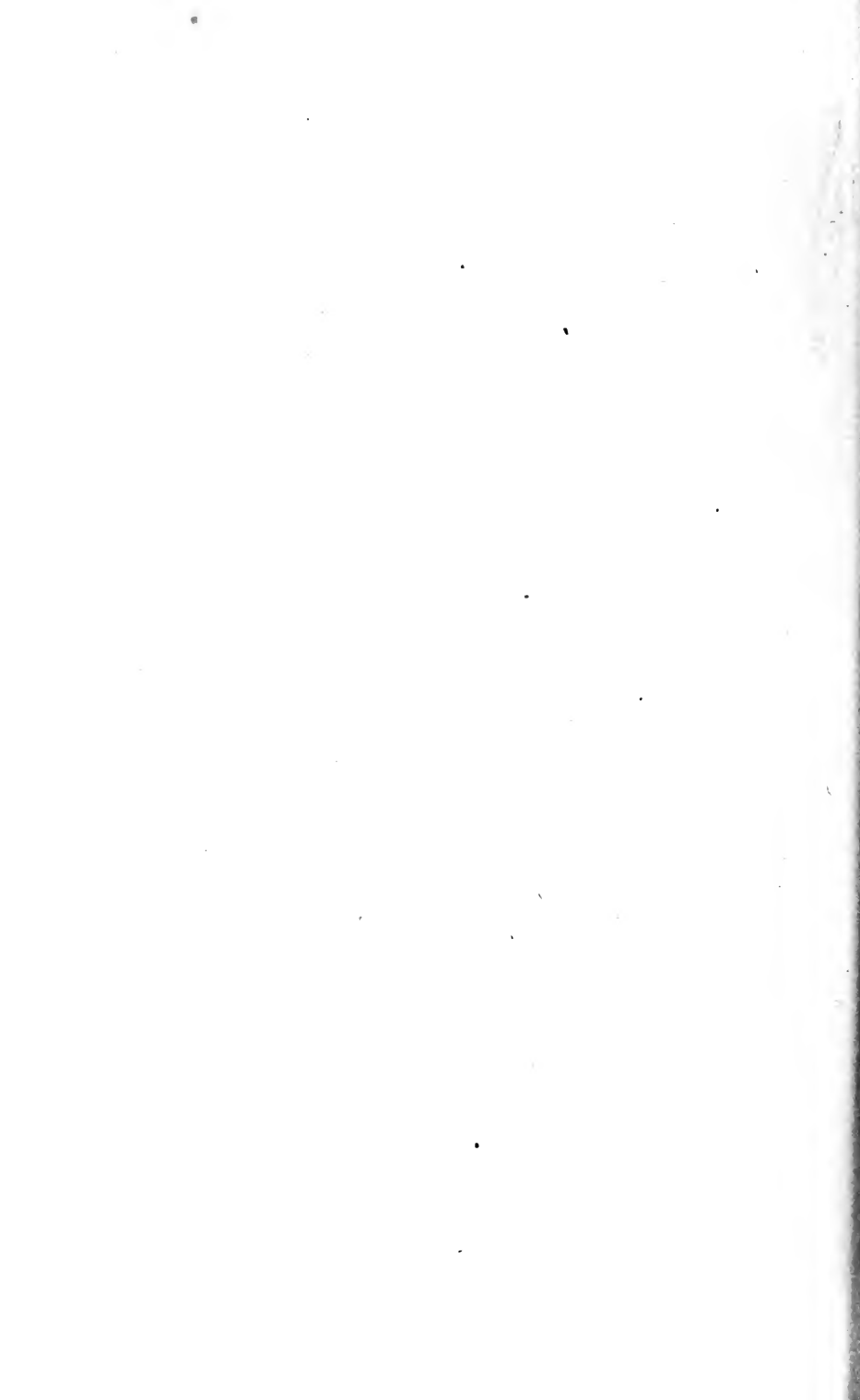
SHOWING THE MOST DIRECT ROUTE TO THE CO-OPERATIVE WHOLESALE SOCIETY'S BOOT AND SHOE WORKS, FROM THE RAILWAY STATIONS AND PRINCIPAL PLACES.

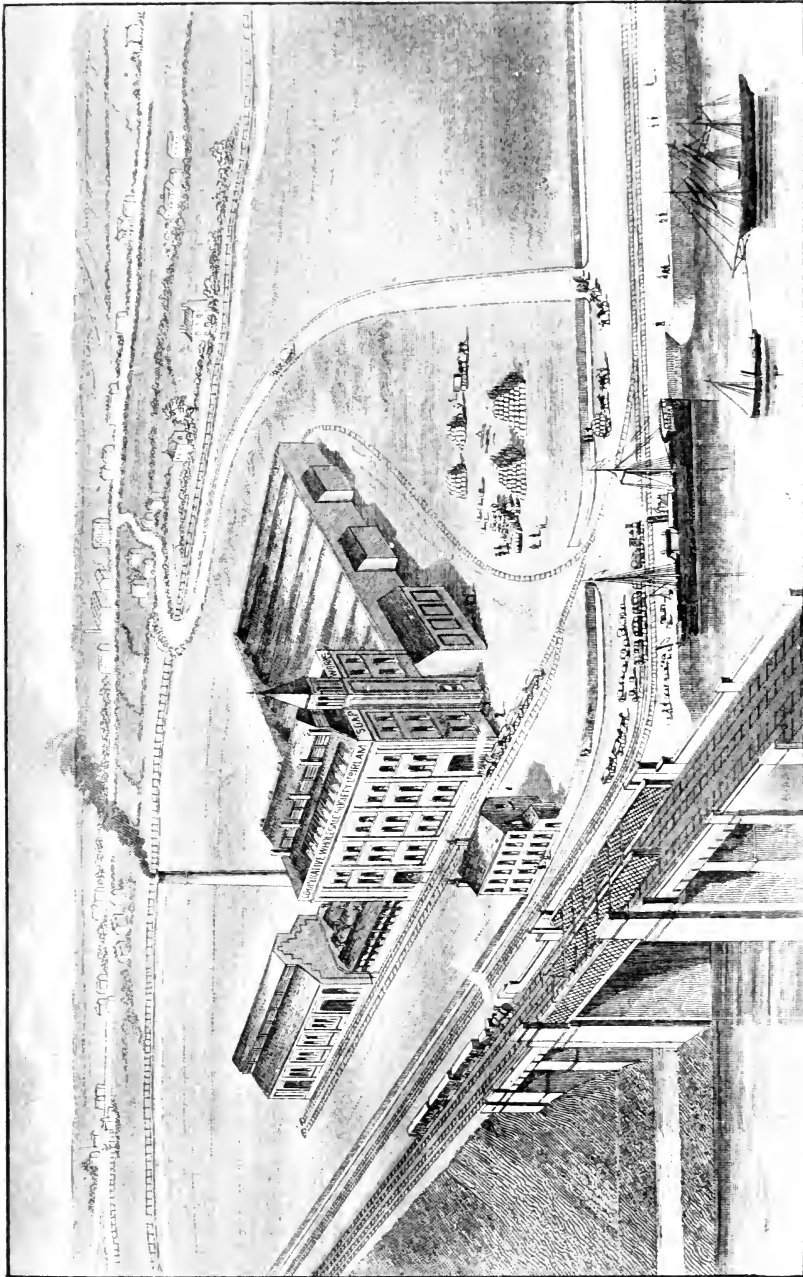




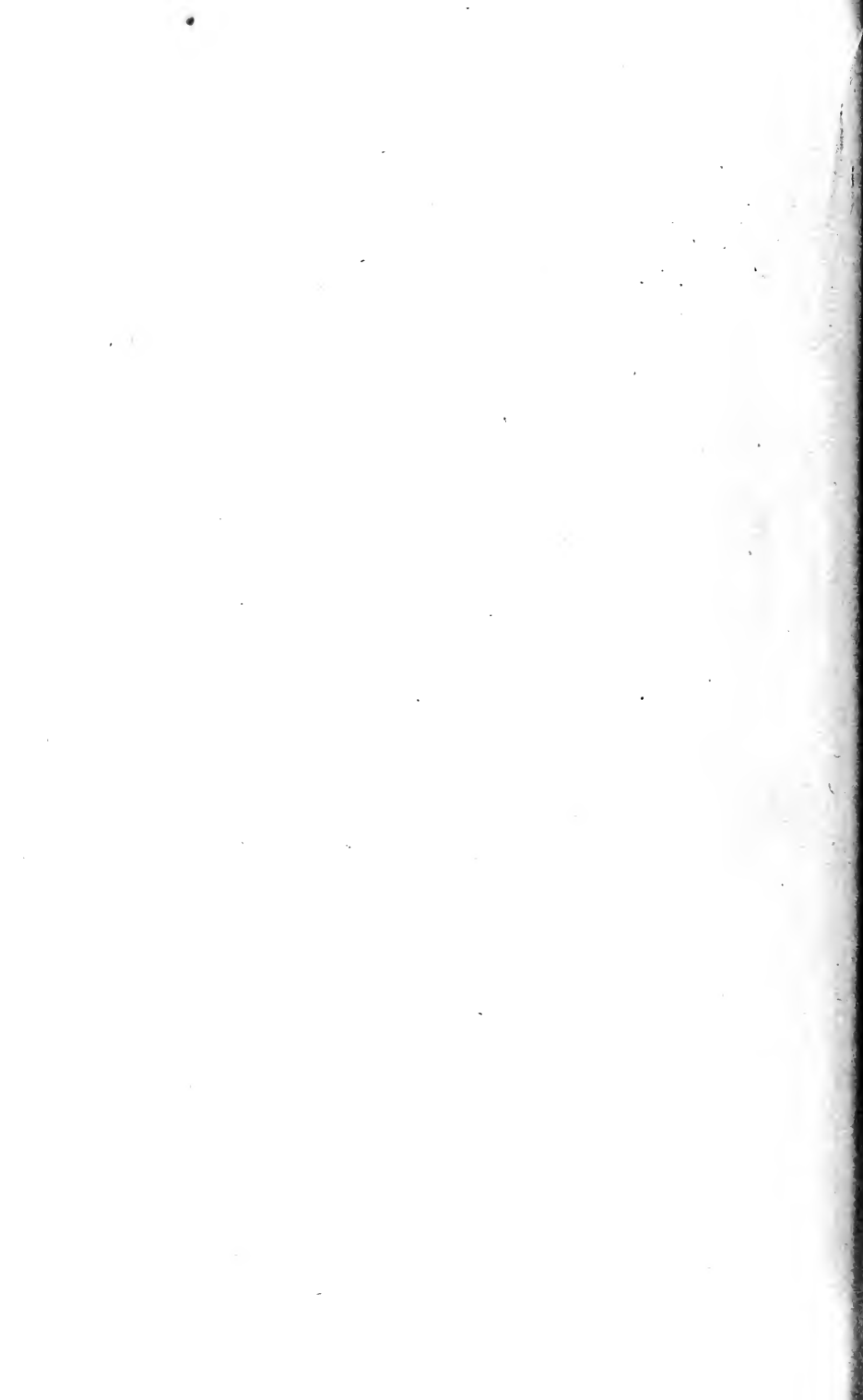


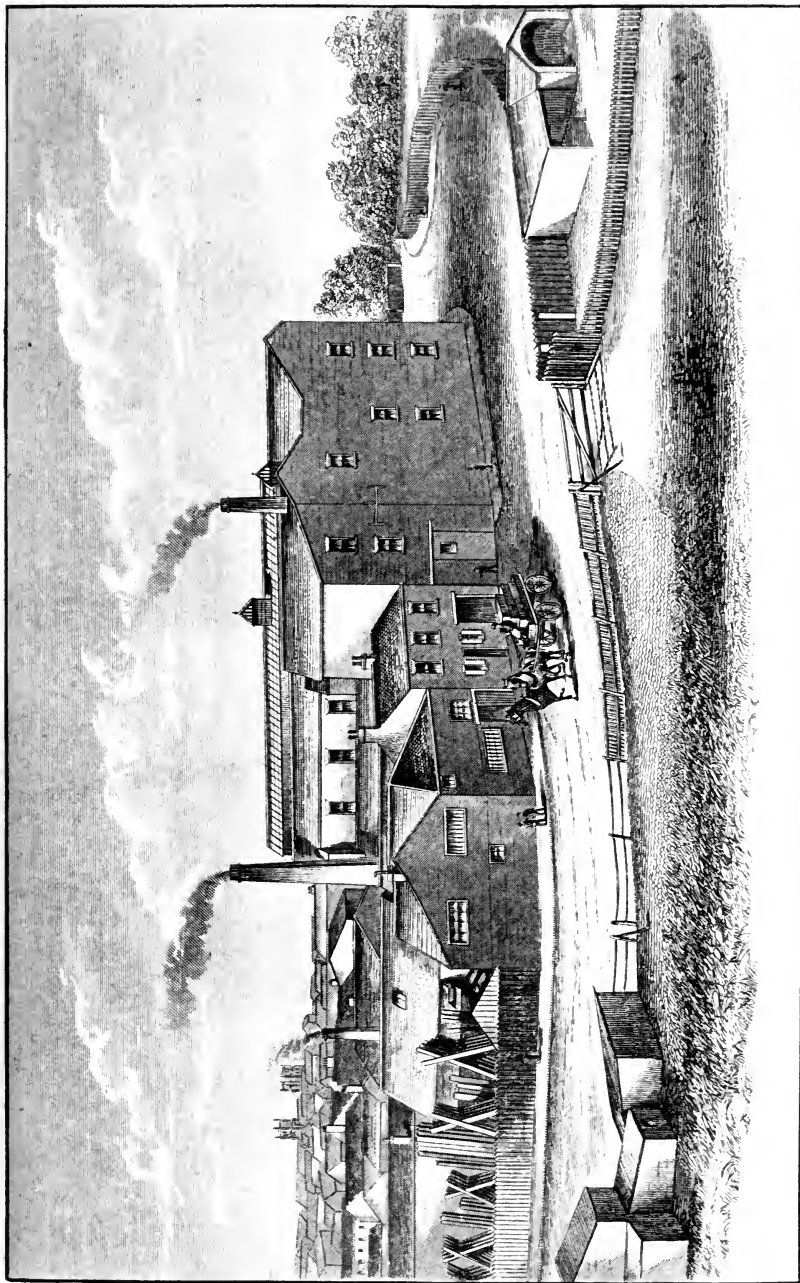
HECKMONDWIKE BOOT AND SHOE AND CURRYING WORKS.
(See pages 37 and 74.)



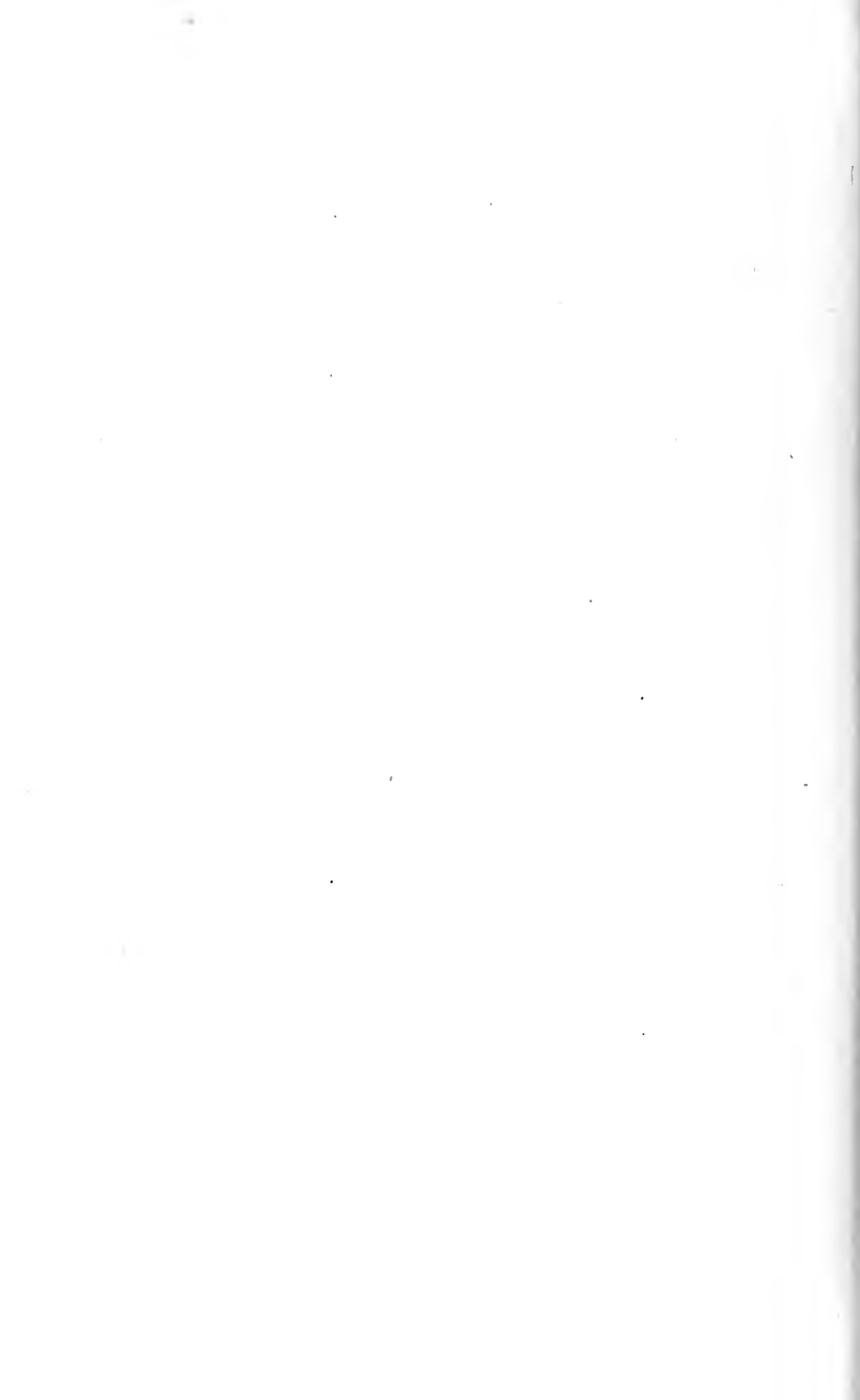


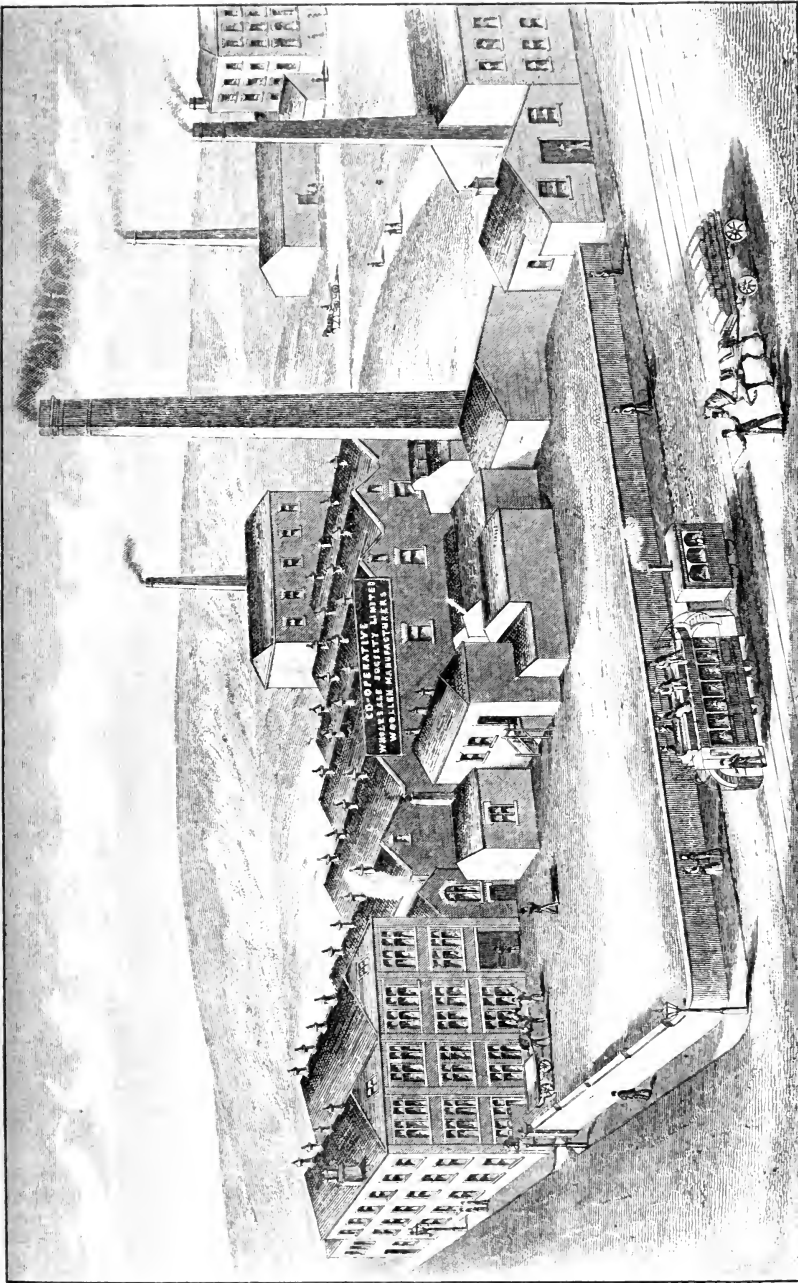
IRLAM SOAP WORKS.
(See page 38.)



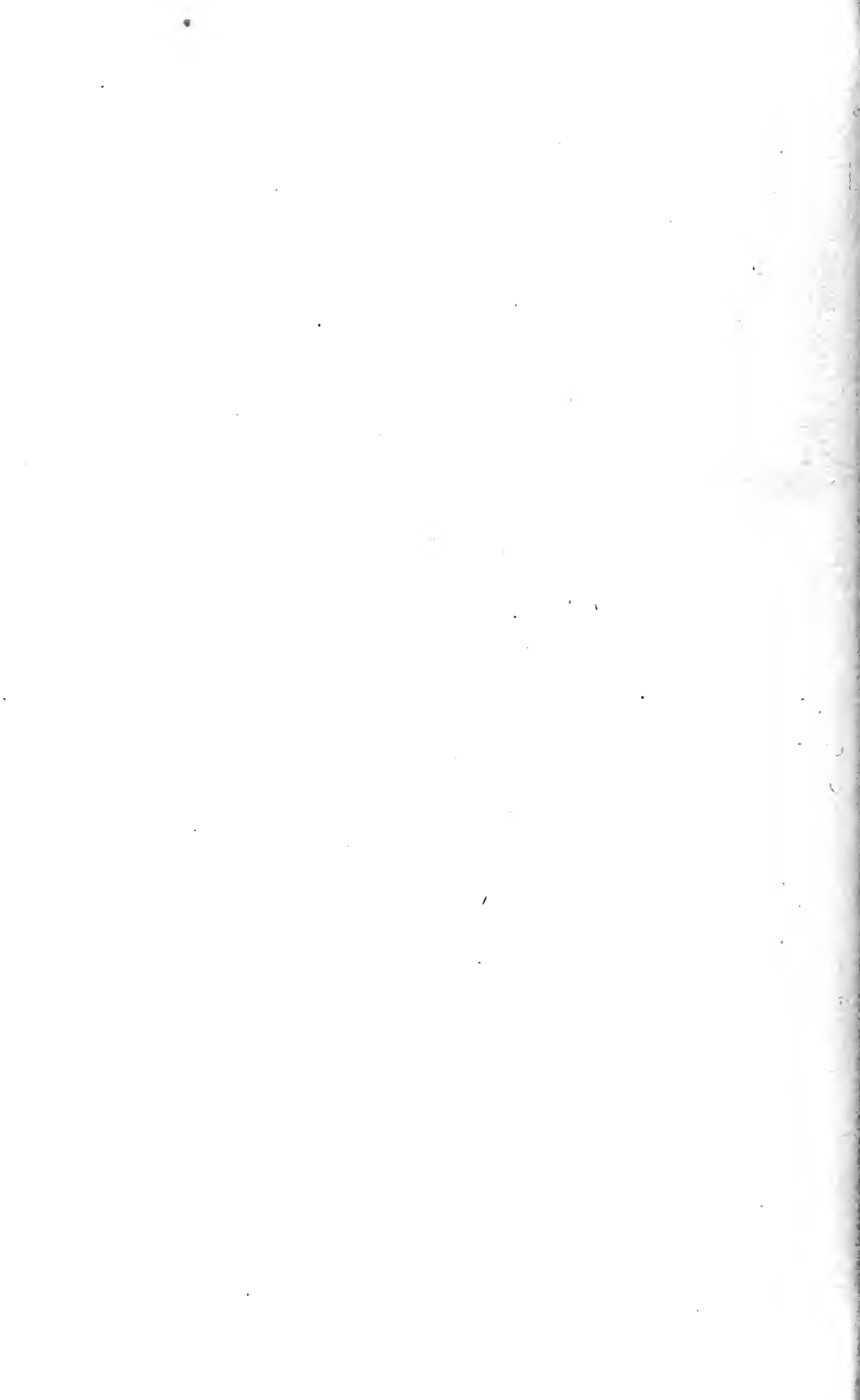


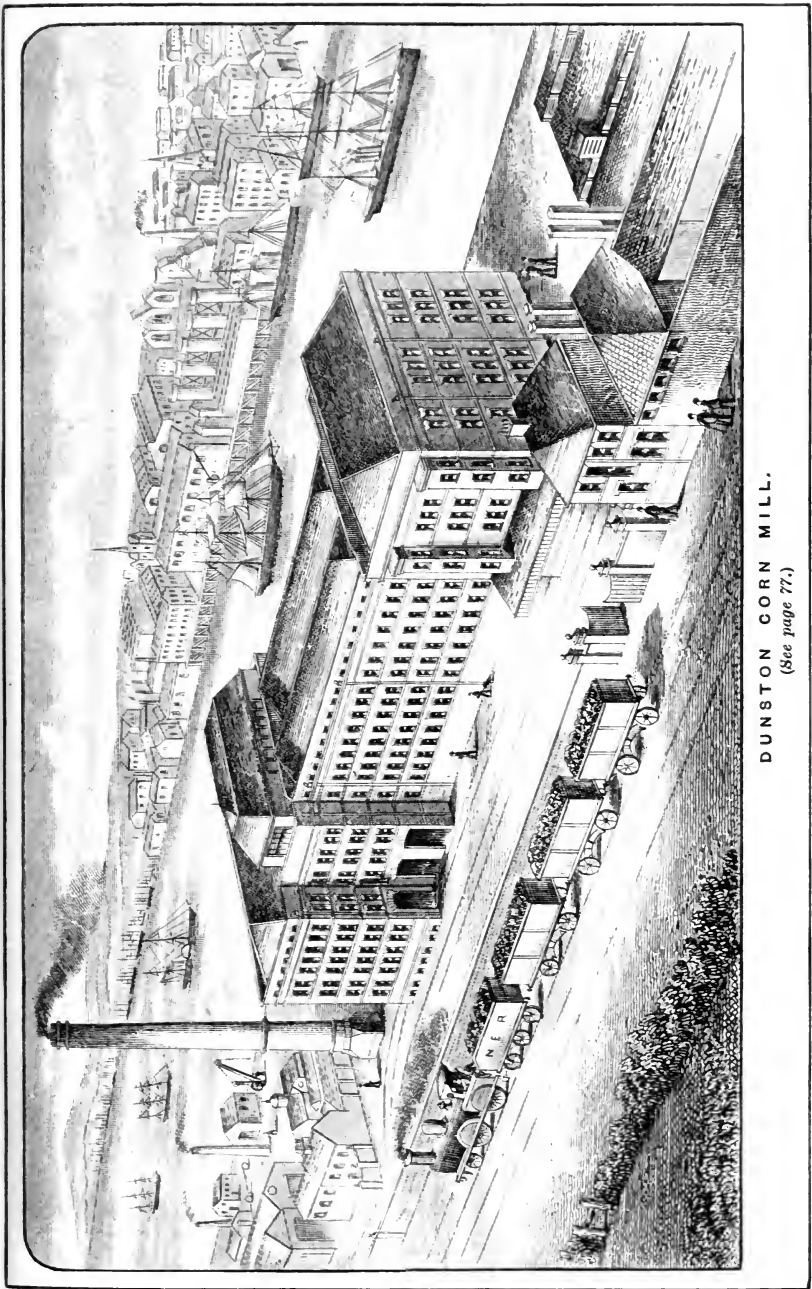
DURHAM SOAP WORKS.
(See pages 38 and 78.)



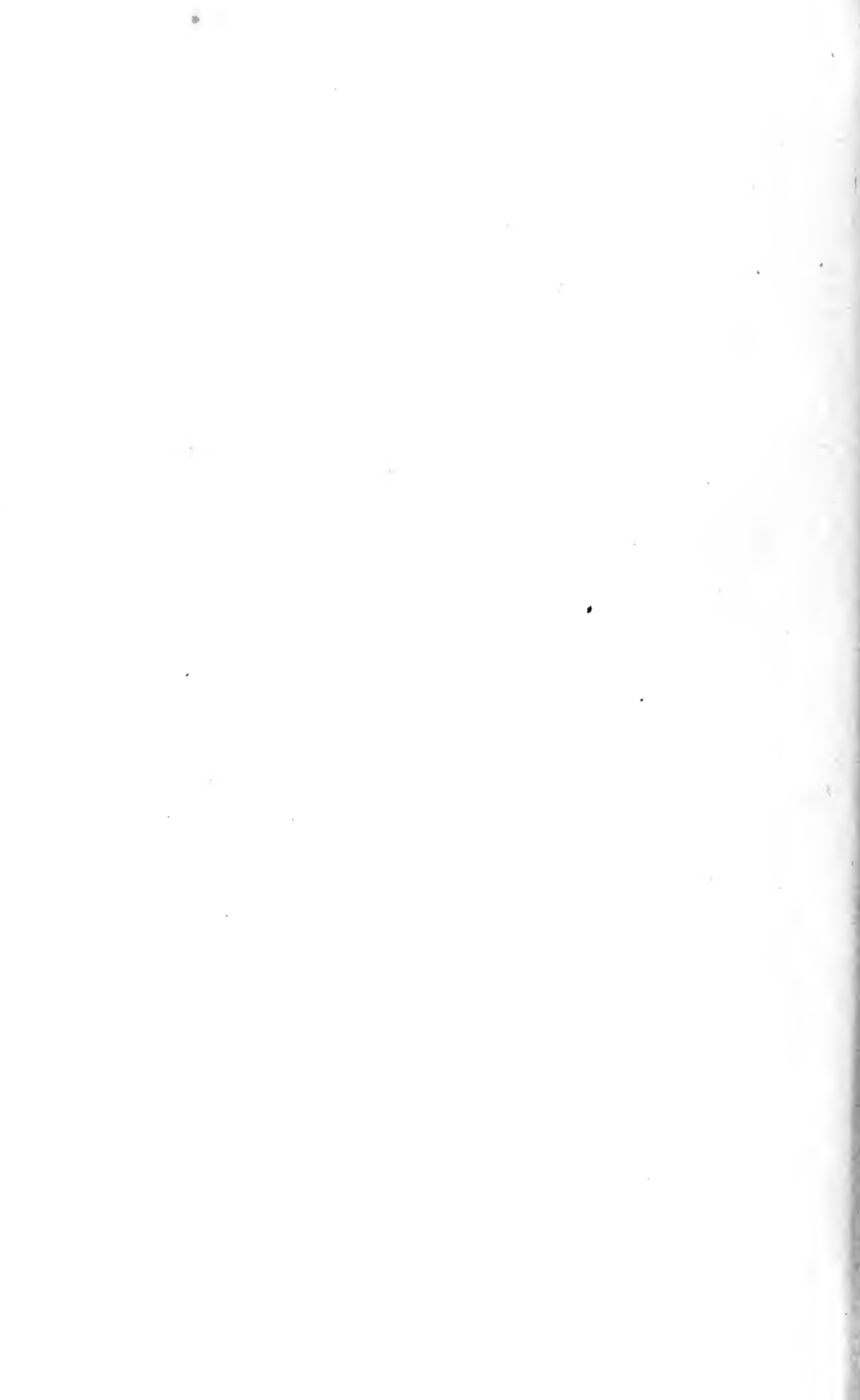


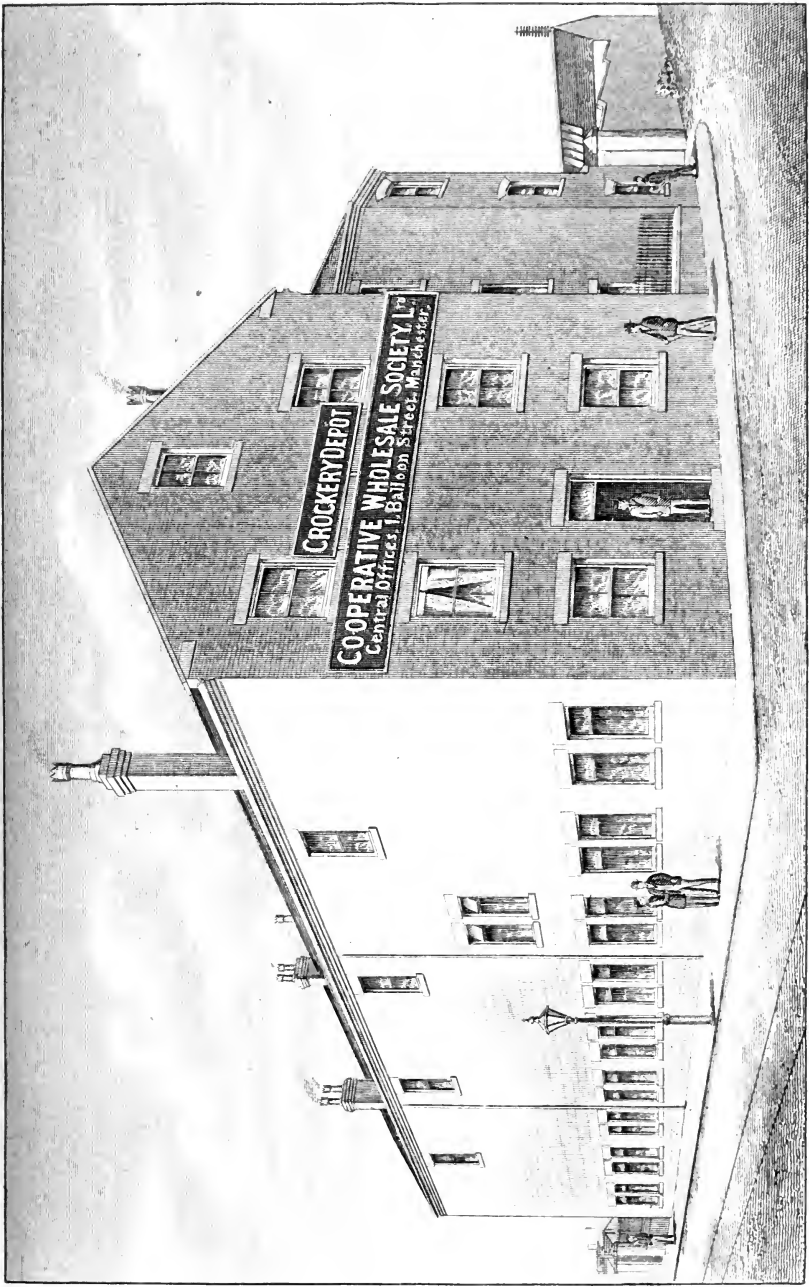
LIVINGSTONE MILL, BATLEY.—WOOLLEN CLOTH WORKS.
(See pages 39 and 80.)



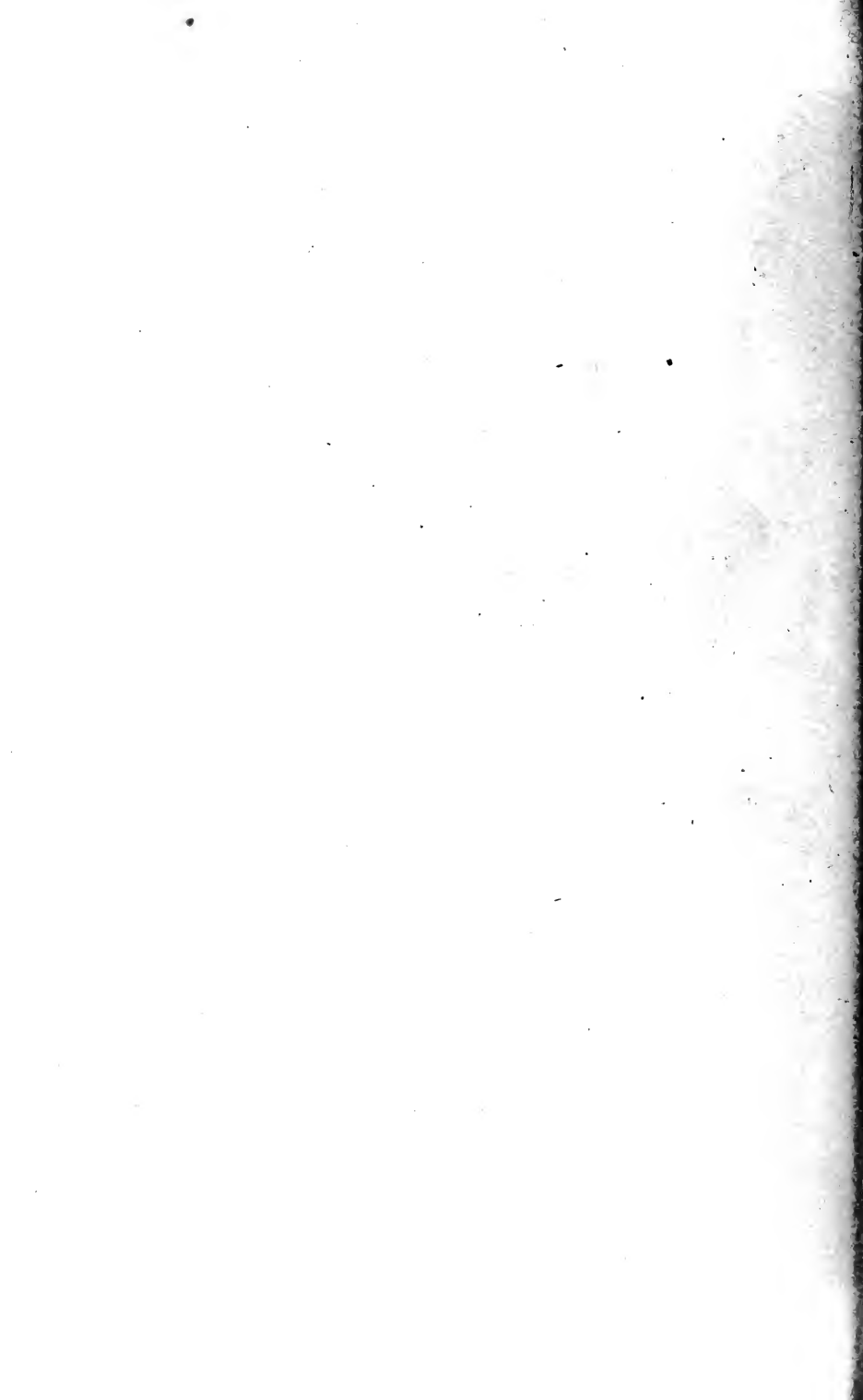


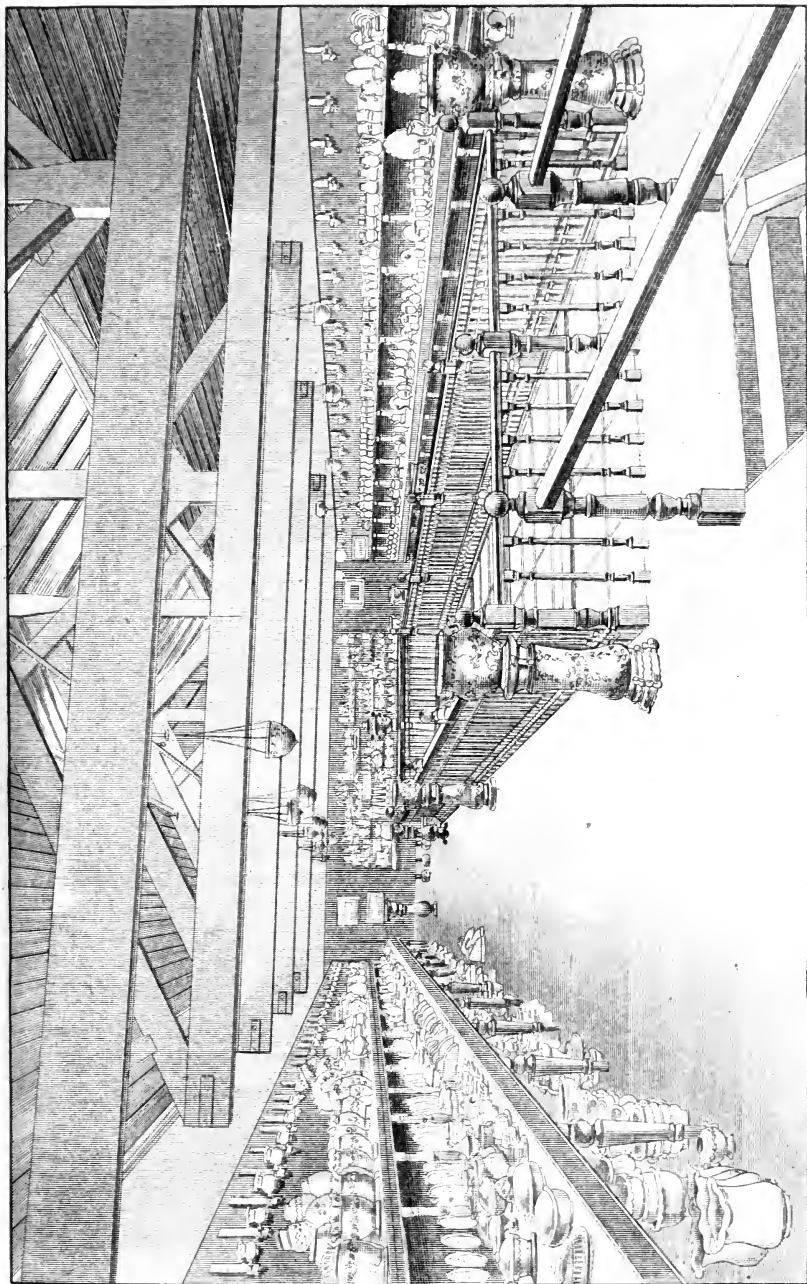
DUNSTON CORN MILL.
(See page 77.)



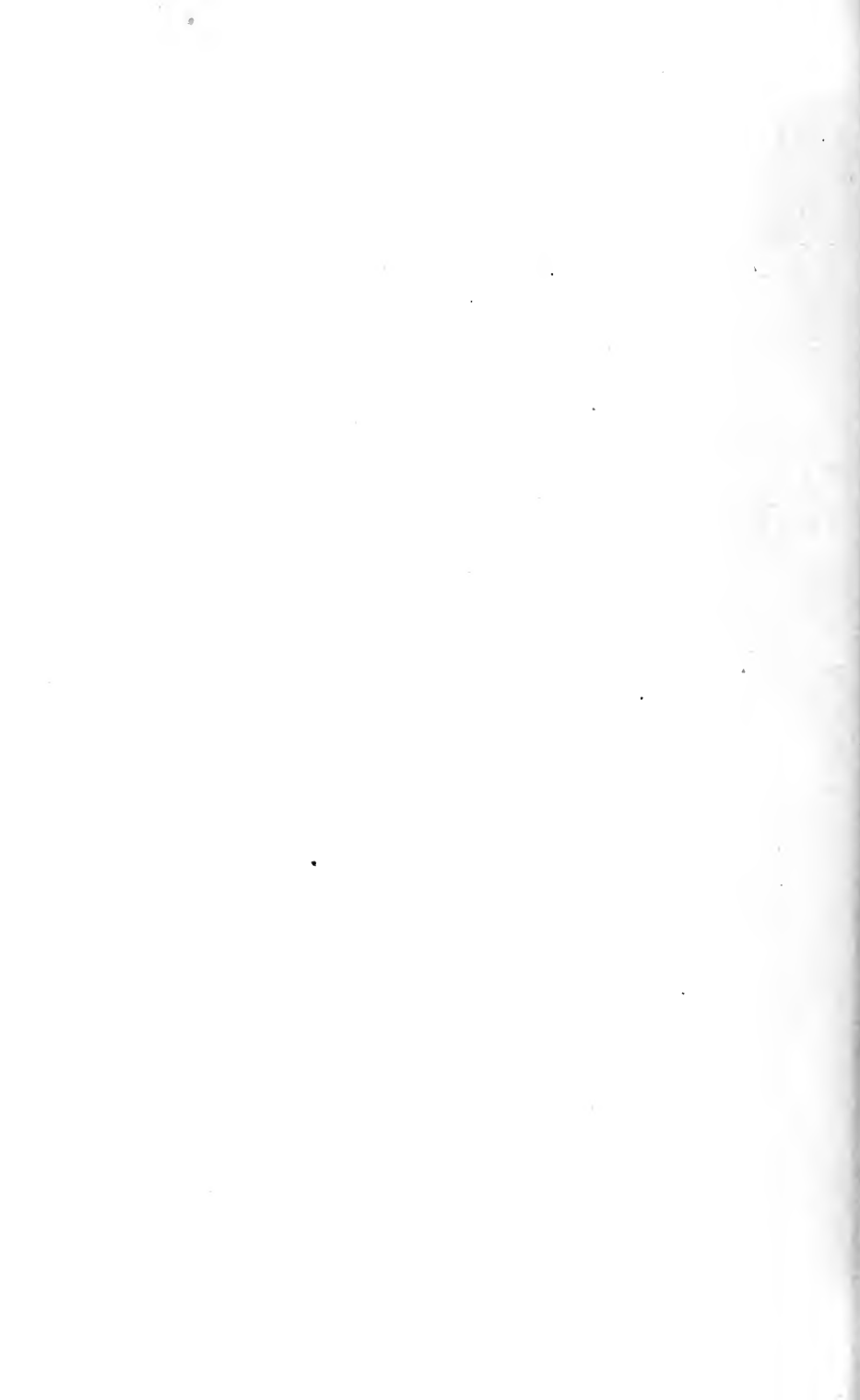


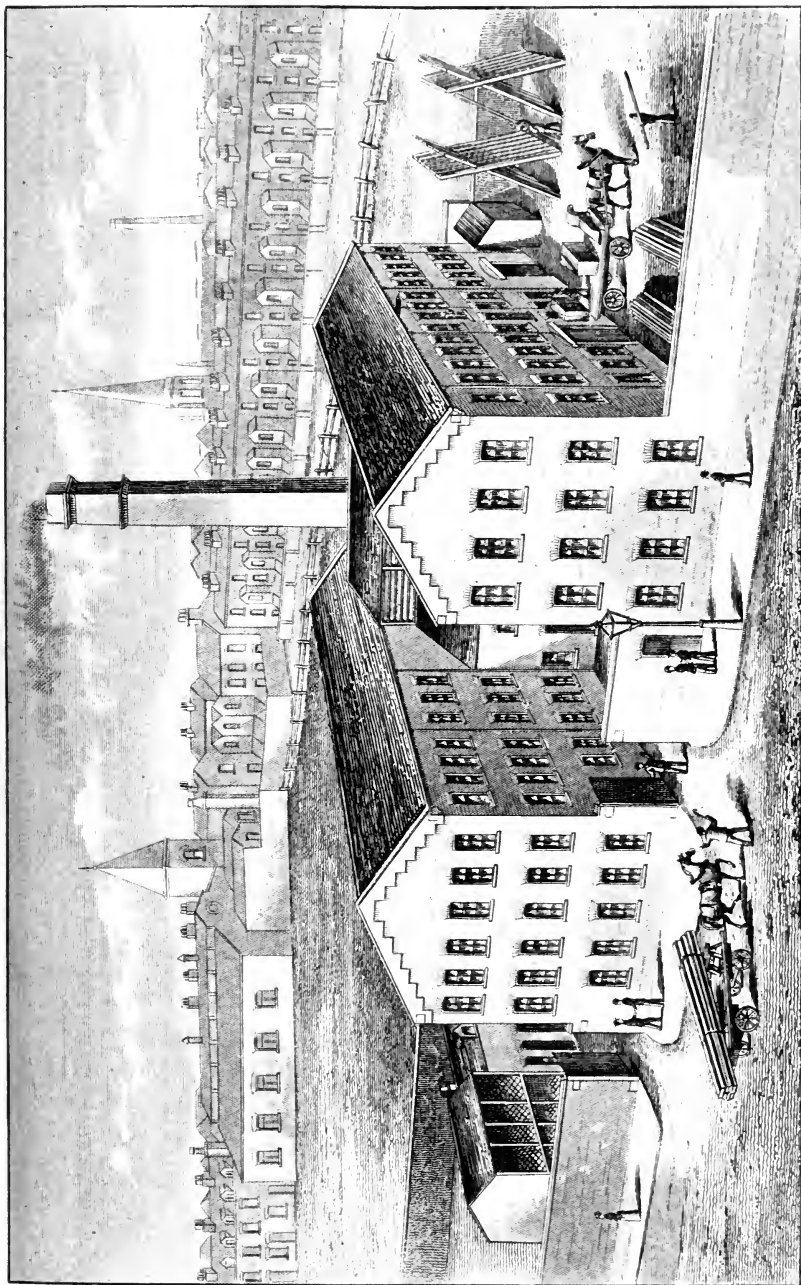
LONGTON CROCKERY DEPOT.
(See page 29.)



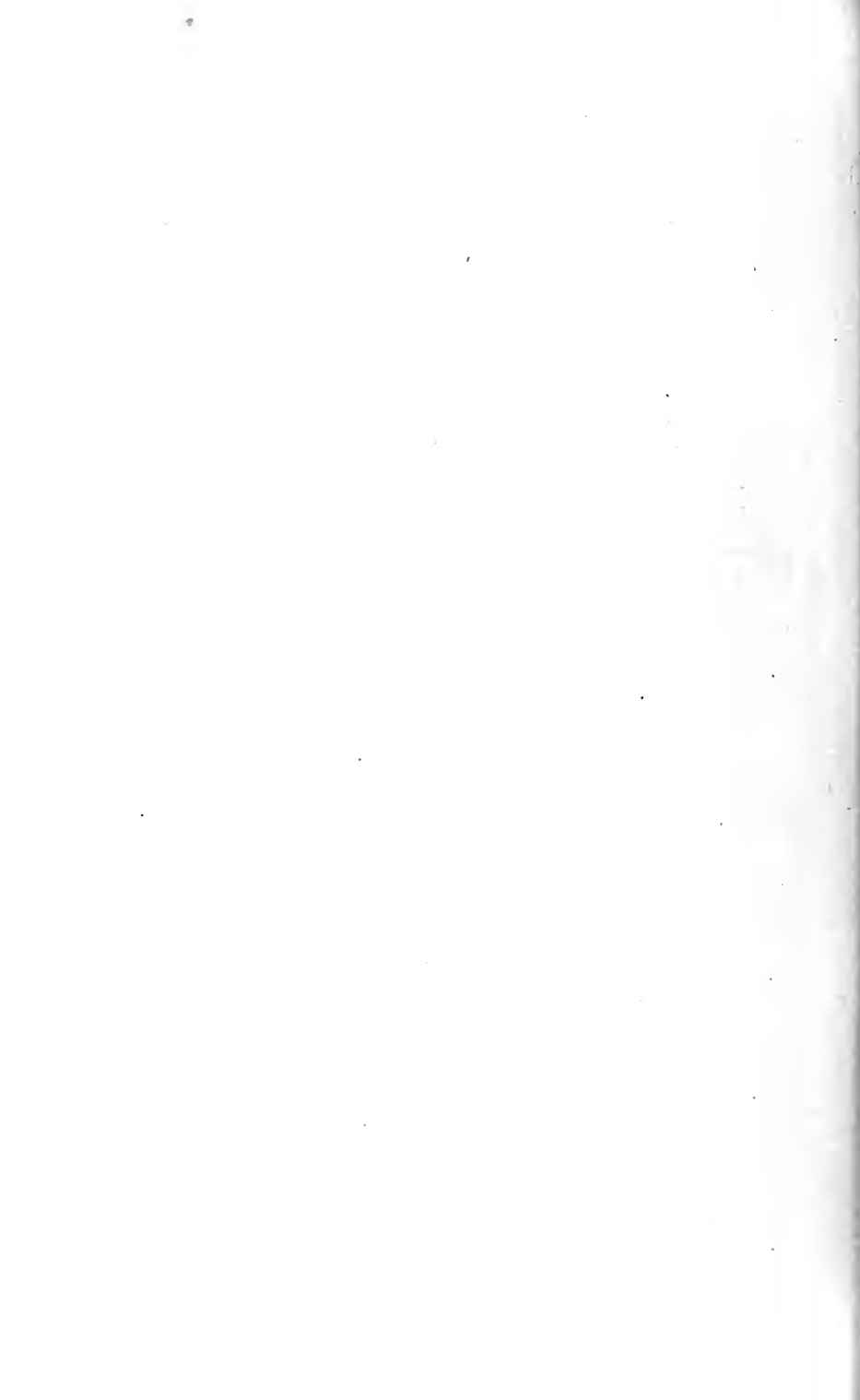


LONGTON CROCKERY DEPOT.—SHOW ROOM. (See page 29.)



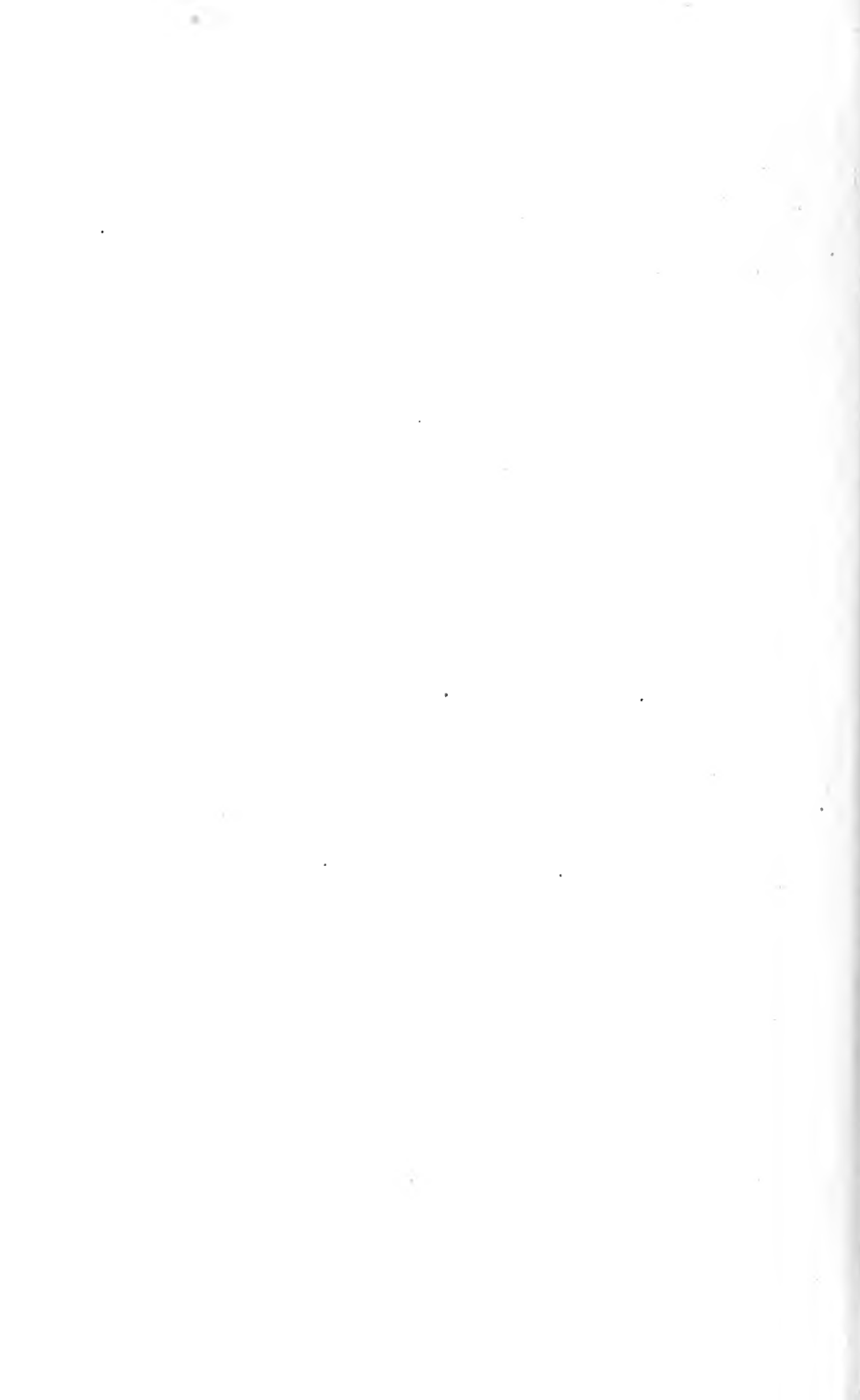


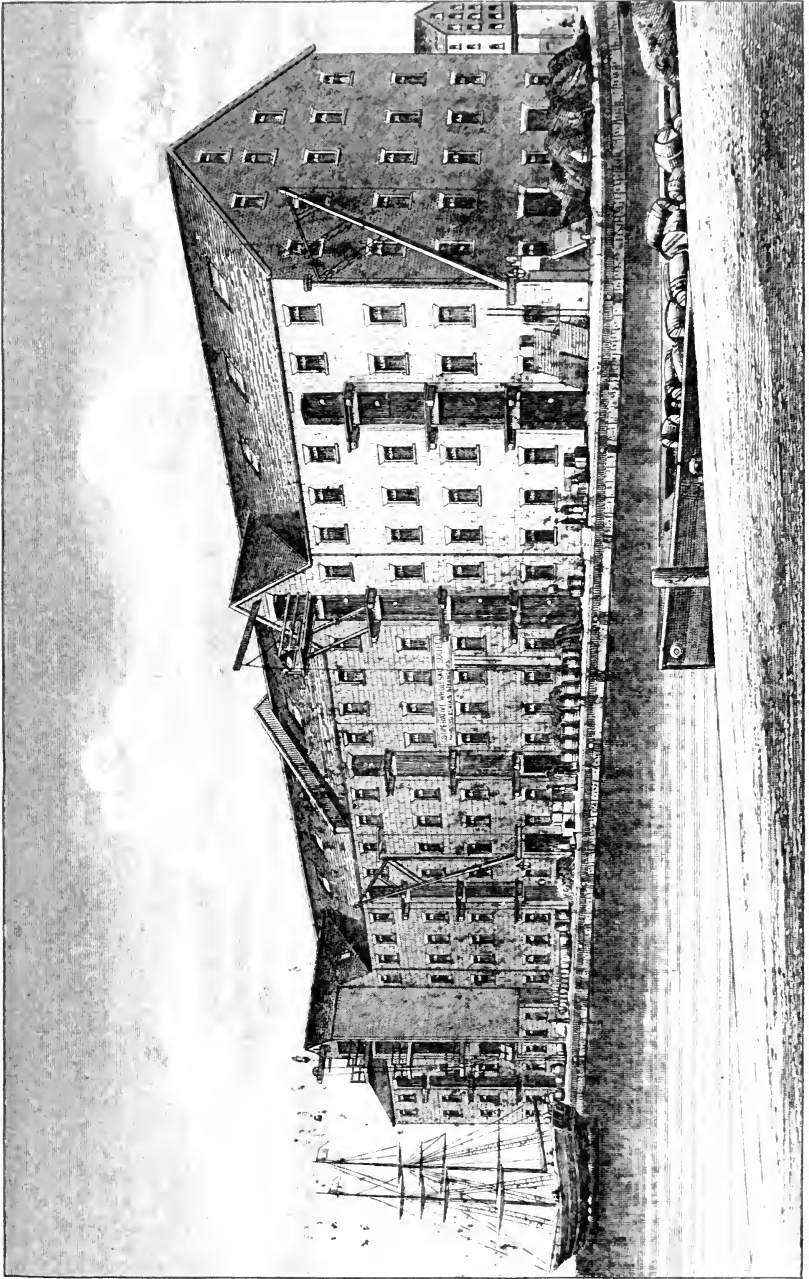
FURNITURE AND READY-MADES FACTORY, BROUGHTON, NEAR MANCHESTER
(See pages 28 and 87.)



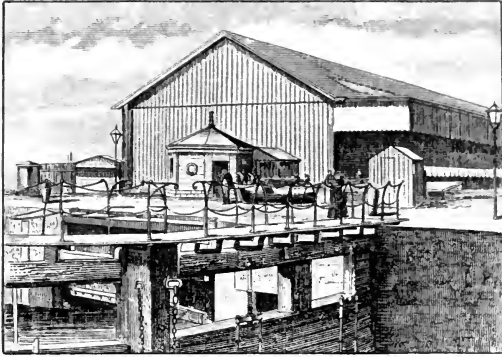


GOOLE OFFICES, STANHOPE STREET.

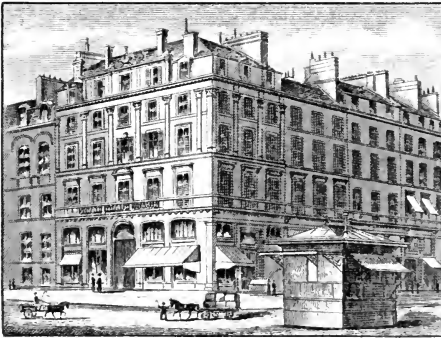




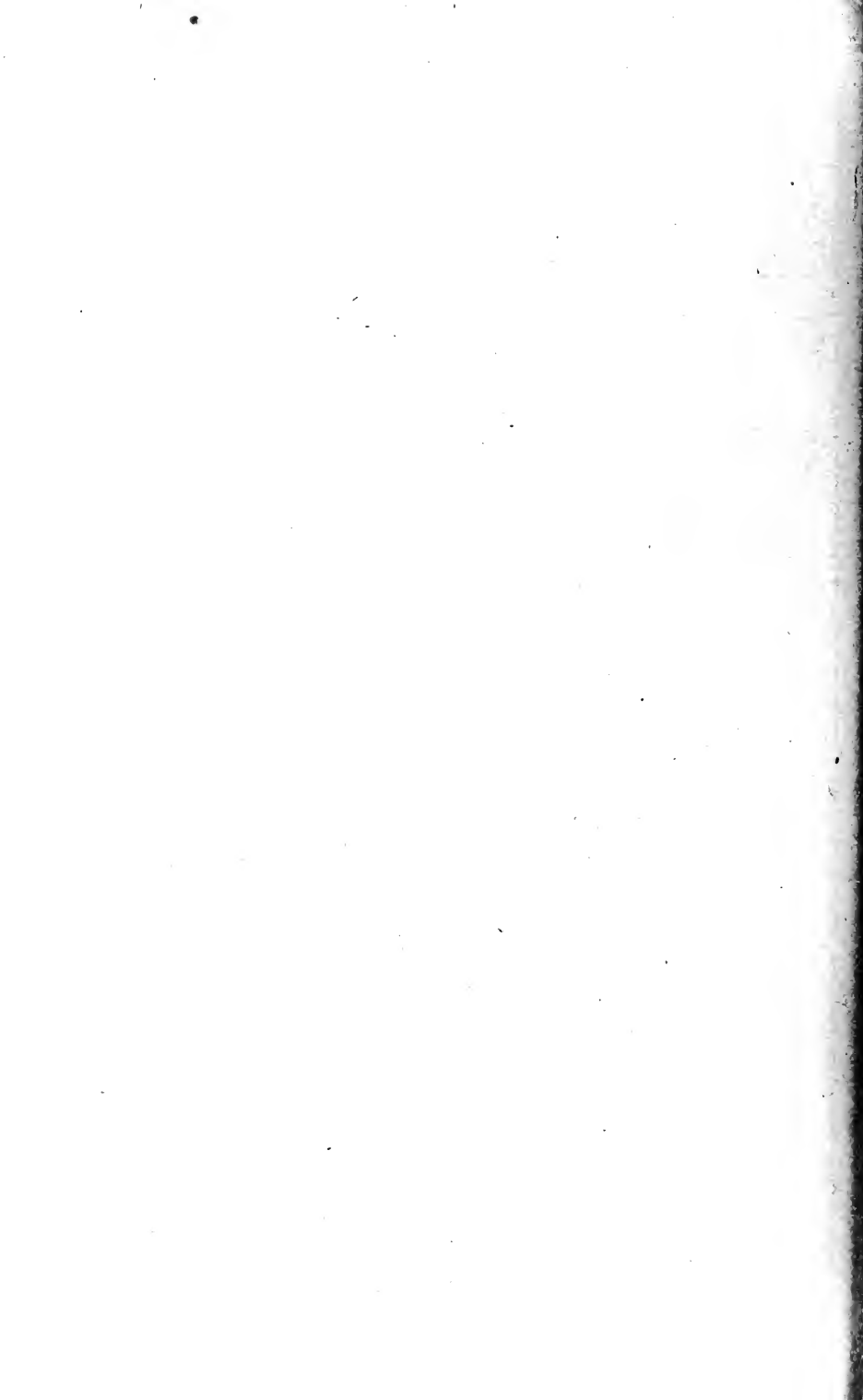
GOOLE WAREHOUSE.

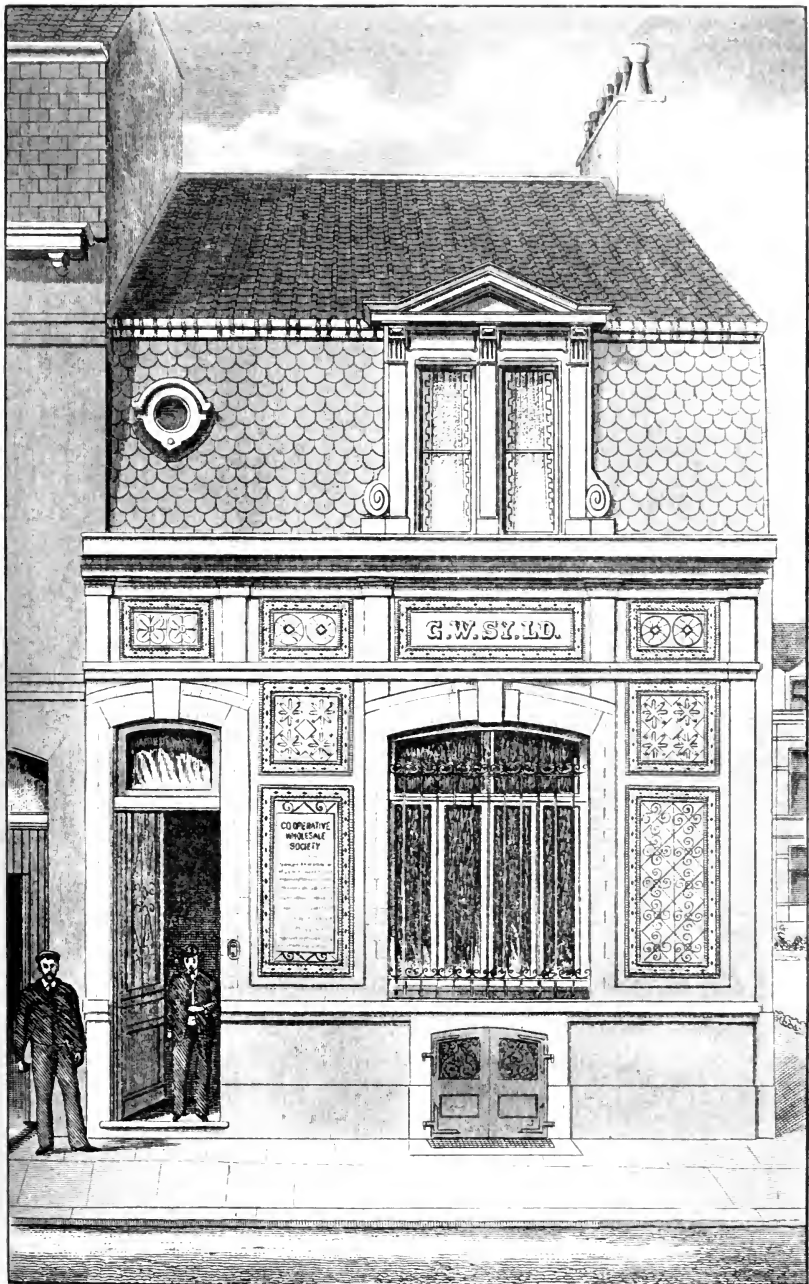


**GARSTON OFFICES,
WEST SIDE, NEW DOCK, GARSTON, NEAR LIVERPOOL.**

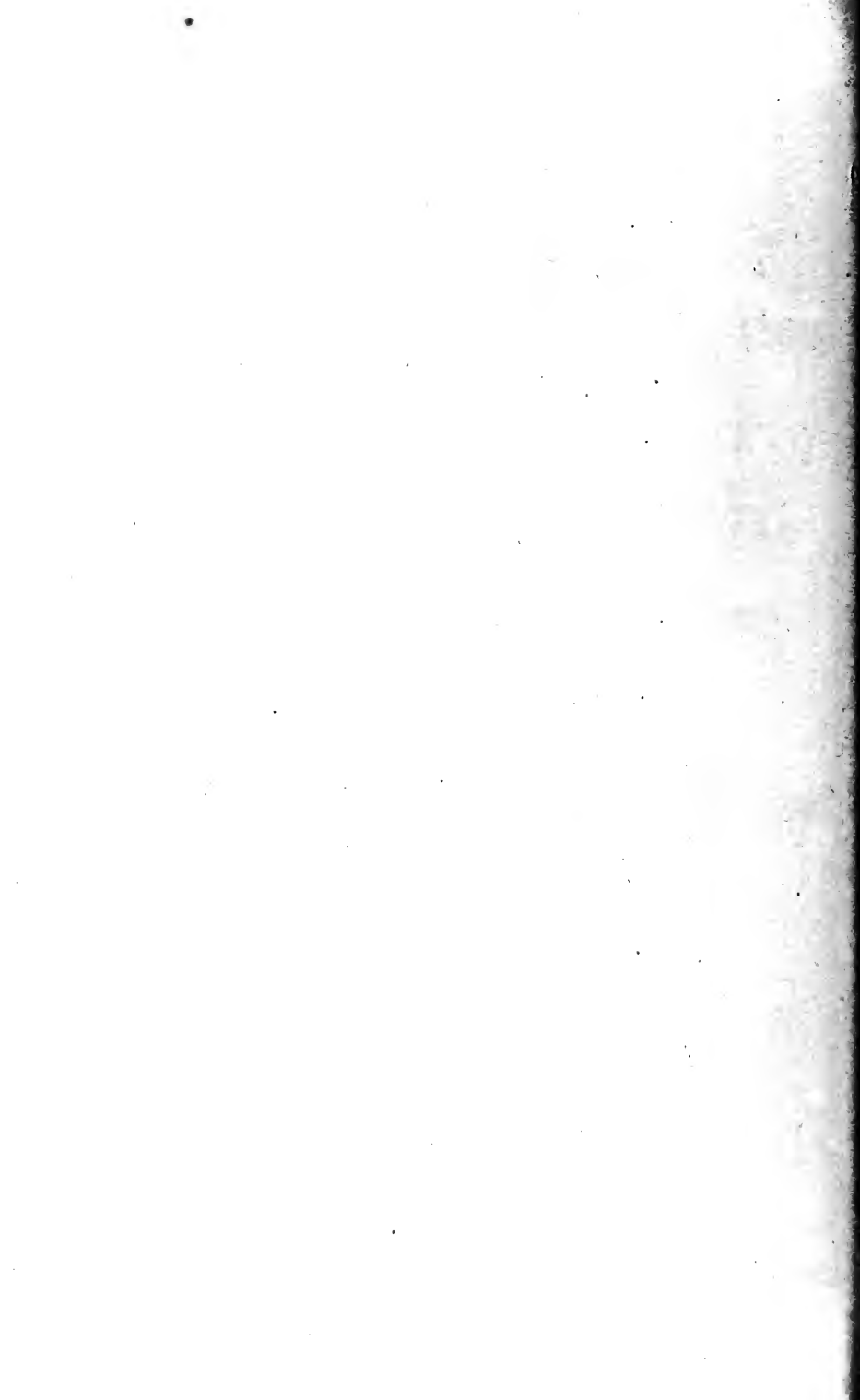


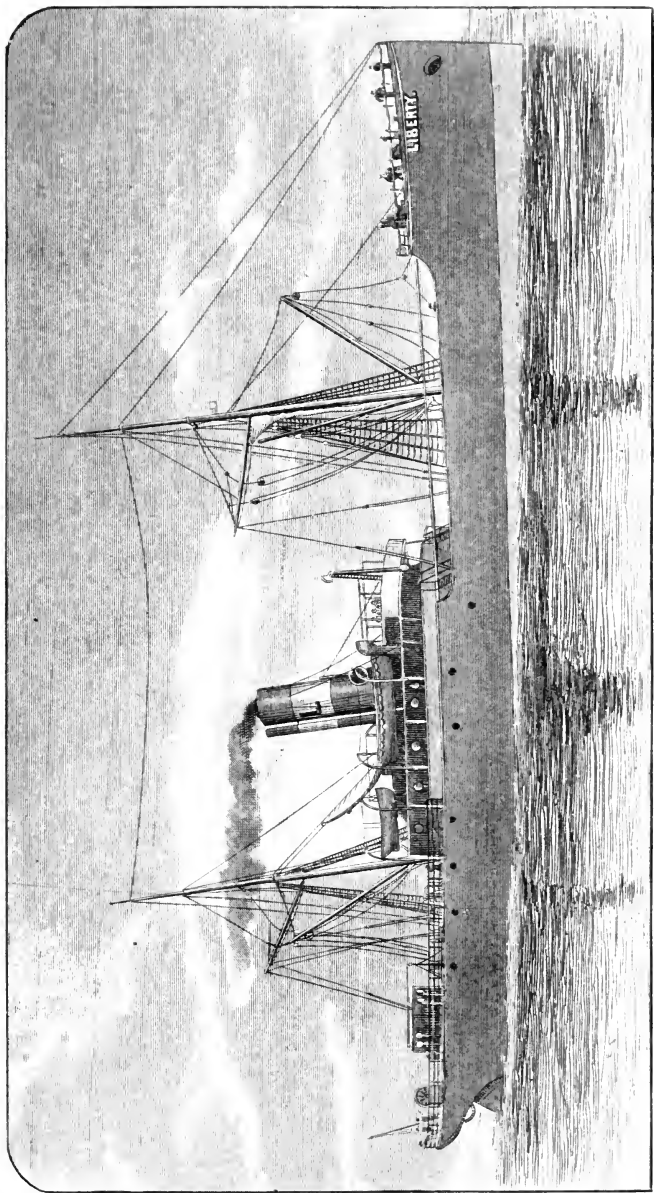
**ROUEN OFFICES,
2, RUE JEANNE D'ARC, ROUEN, FRANCE.**



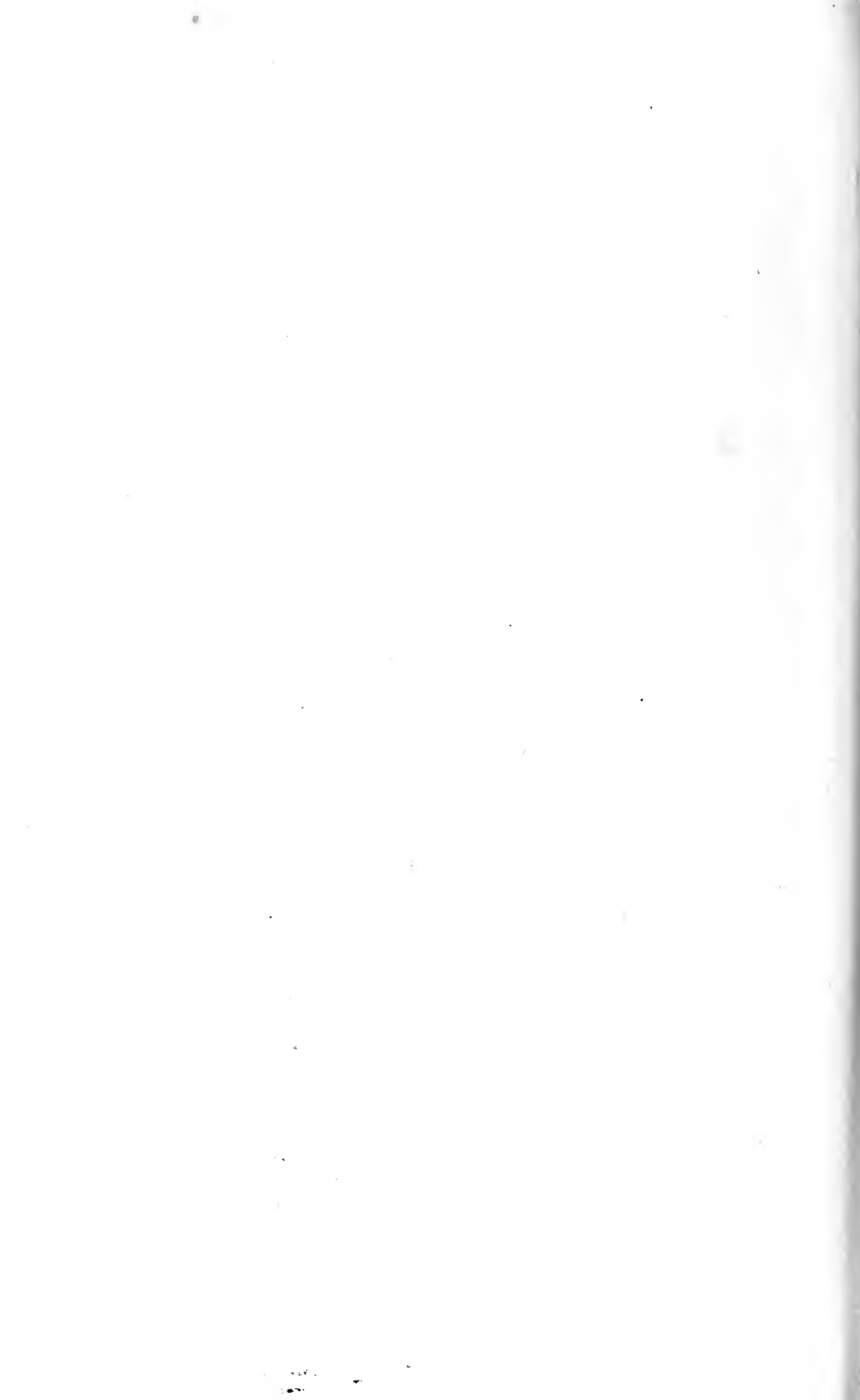


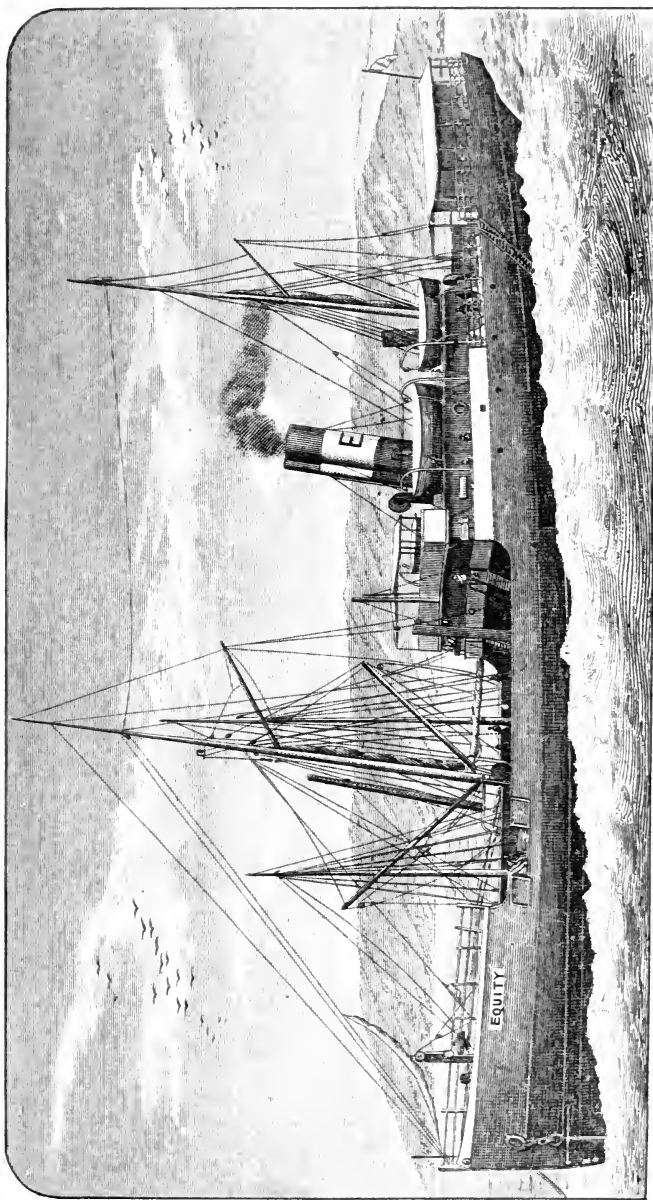
CALAIS OFFICES, RUE DE MADRID.





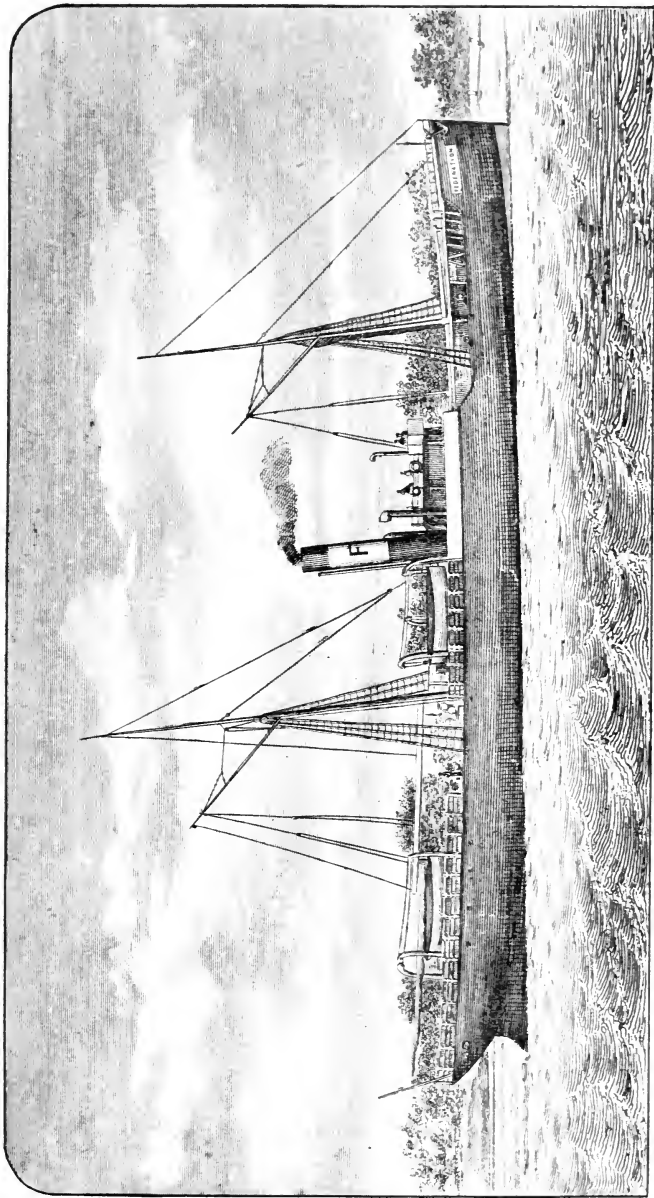
S.S. "LIBERTY," GOOLE-HAMBURG LINE.
(See page 44.)



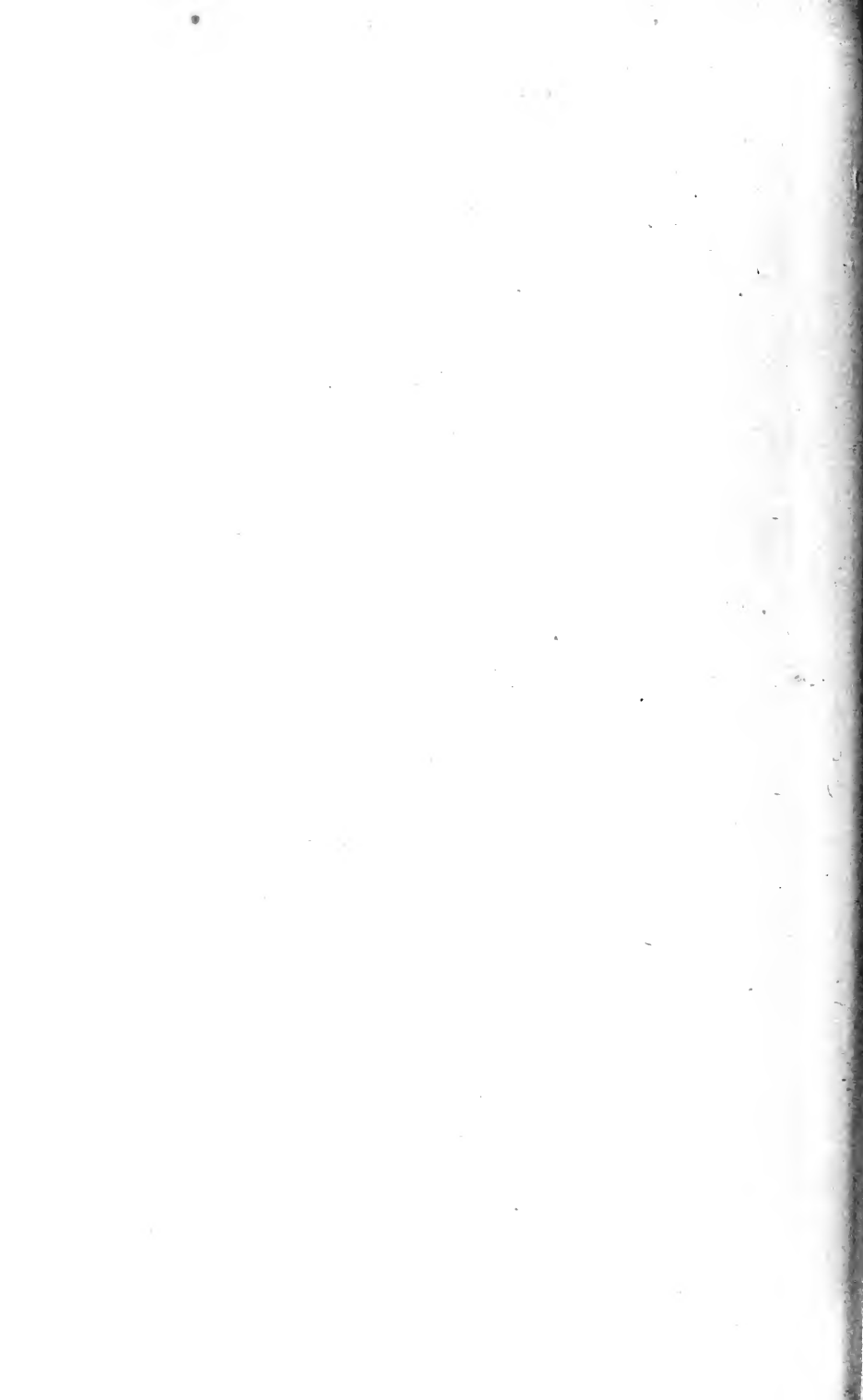


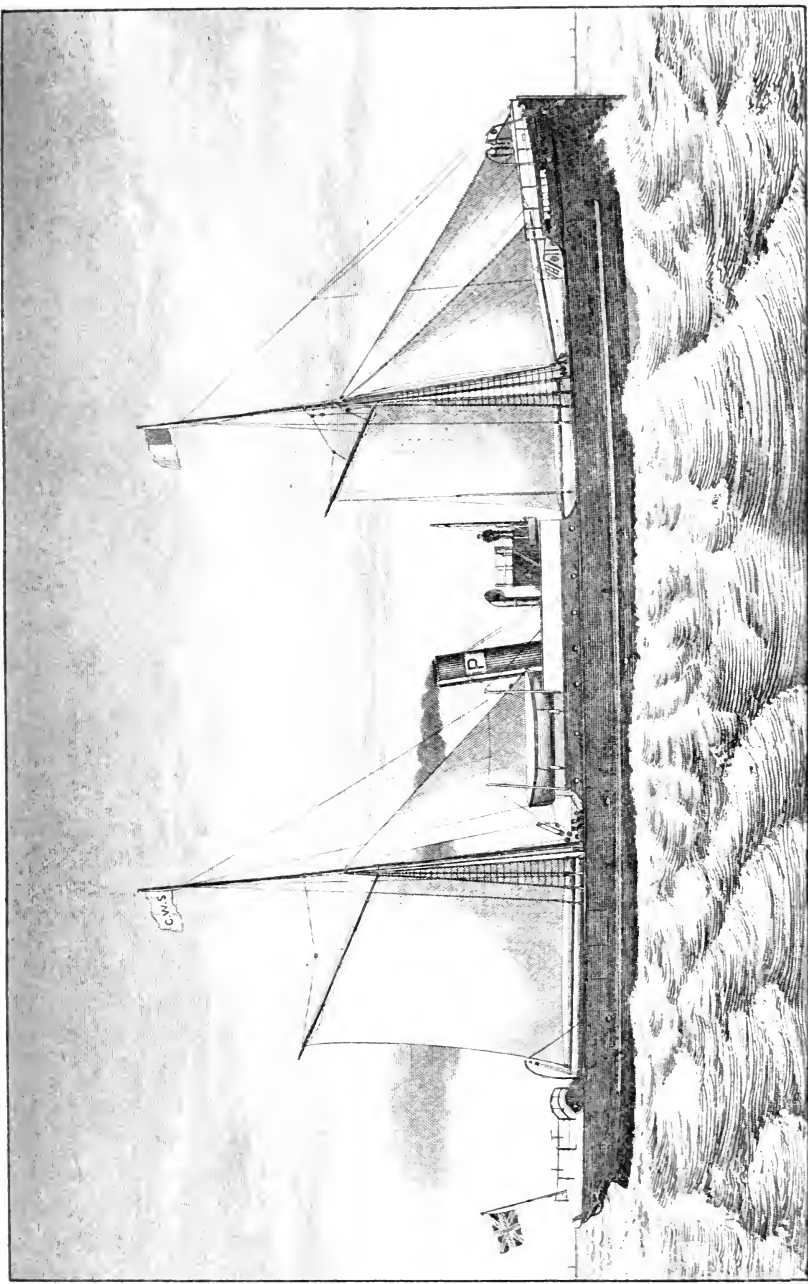
S.S. "EQUITY," GOOLE-HAMBURG LINE.
(See page 44.)



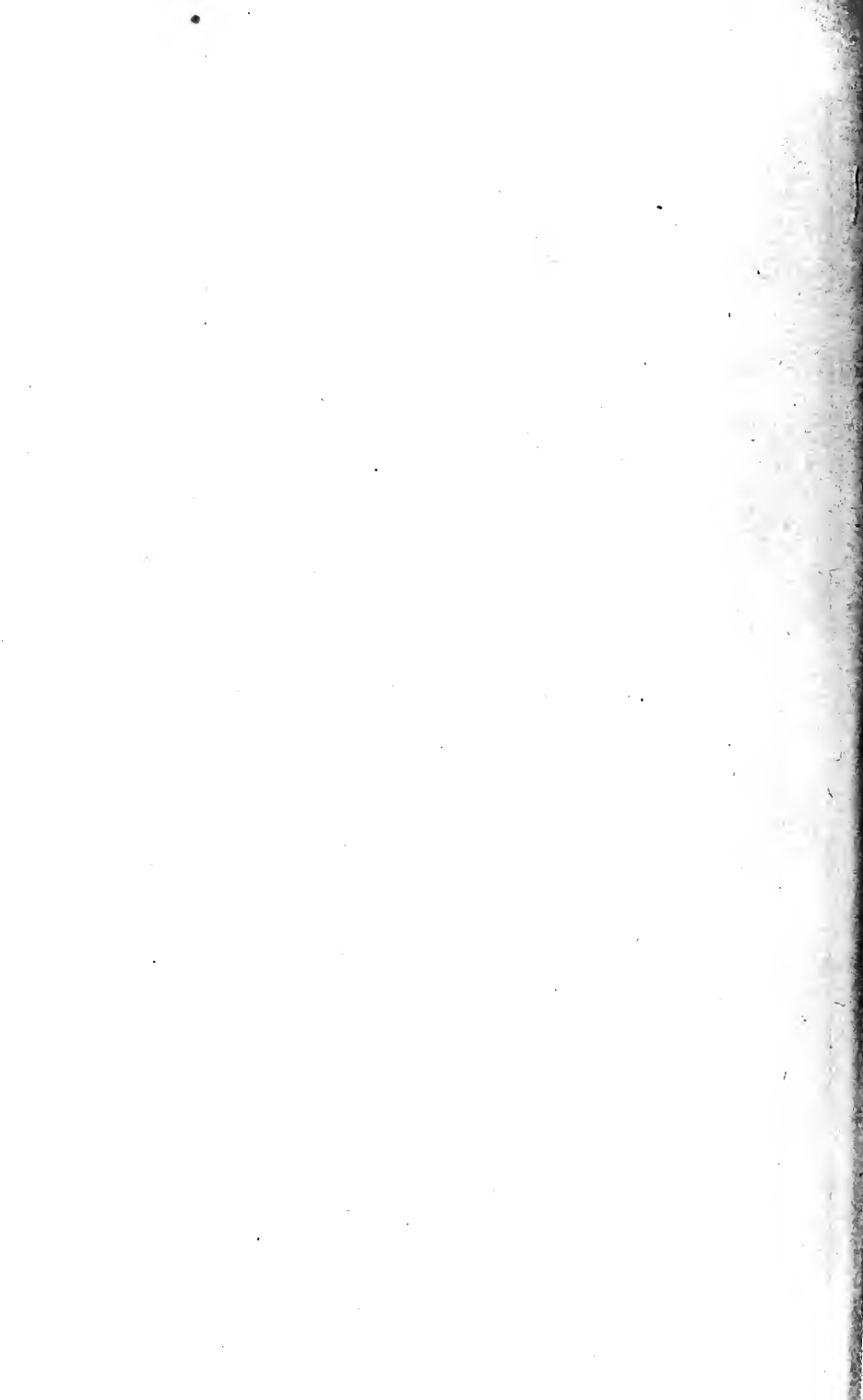


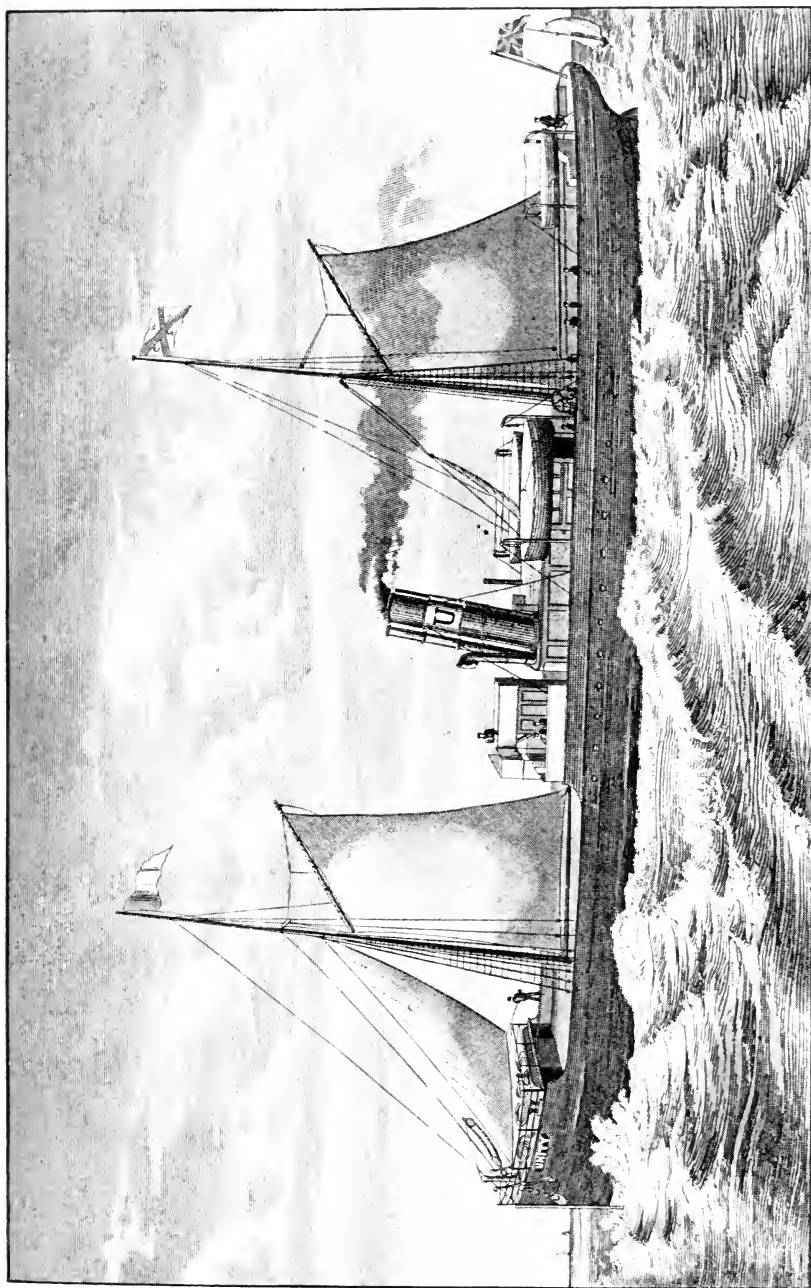
S.S. "FEDERATION," GOOLE-HAMBURG LINE
(See page 44)



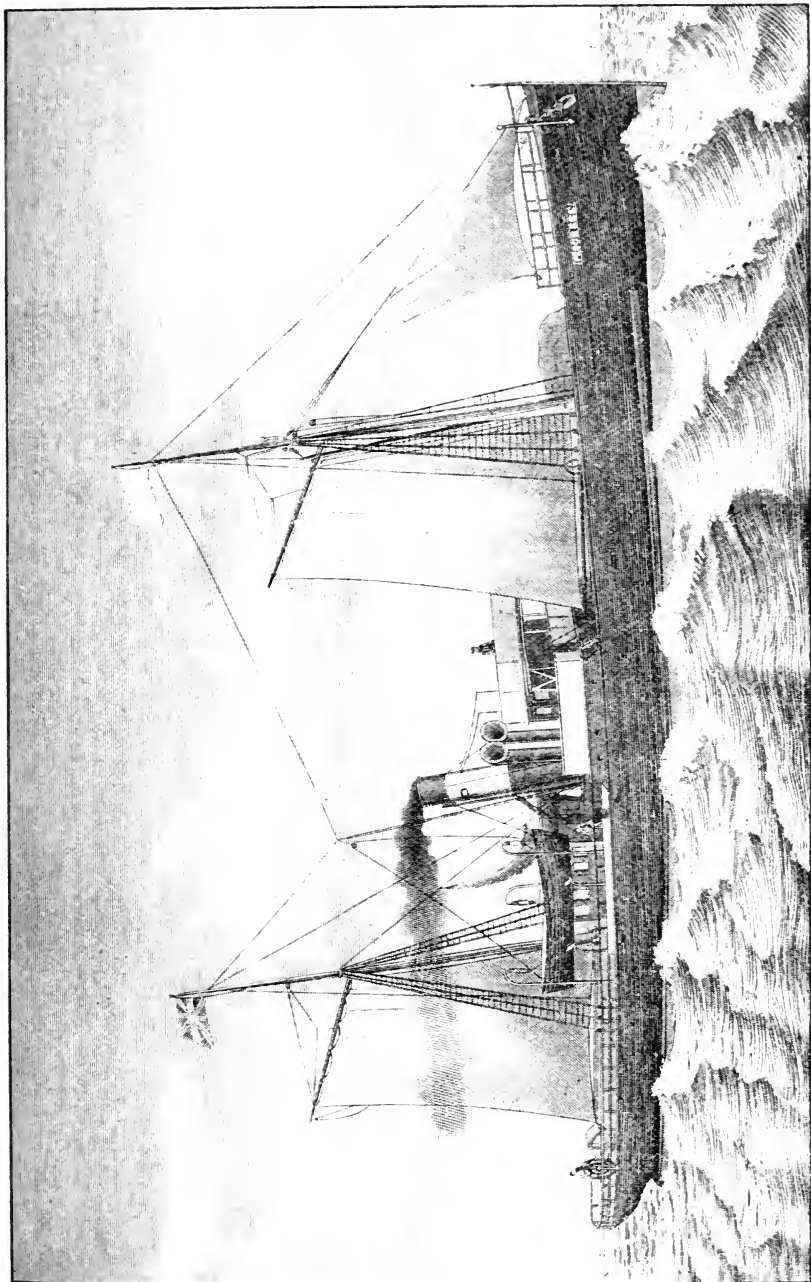


S.S. "PIONEER," MANCHESTER AND ROUEN LINE.
(See page 45.)

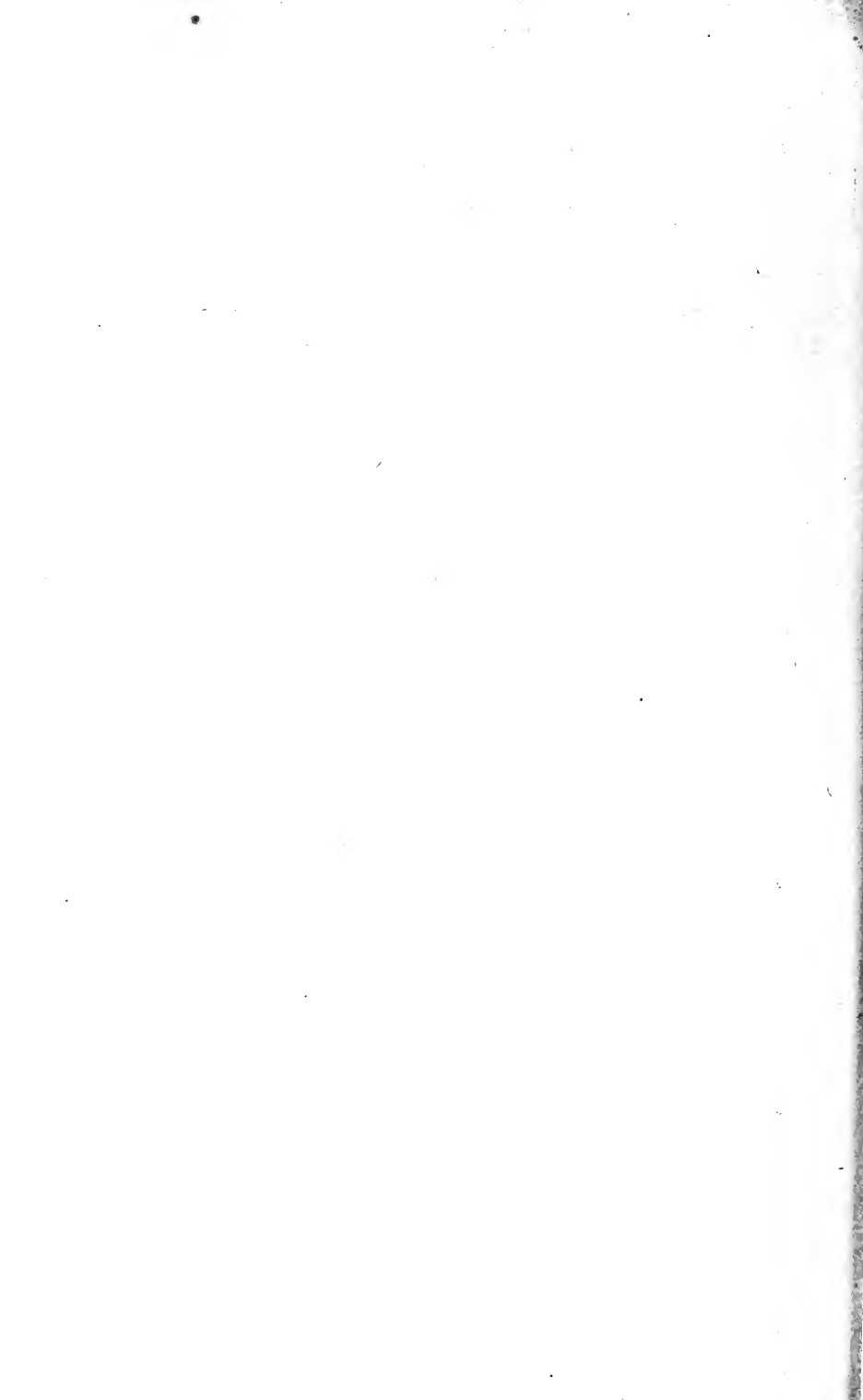




S.S. "UNITY," GARSTON-ROUEN LINE.
(See page 42.)



S.S. "PROGRESS," GOULE-CALAIK LINE.
(See page 43.)



THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.



Enrolled August 11th, 1863, under the Provisions of the Industrial and Provident Societies Act, 25 and 26 Vict., cap. 87, sec. 15, 1862.

Business commenced March 14, 1864. Shares, £5 each,
TRANSFERABLE.



CENTRAL OFFICES, BANK, GROCERY AND PROVISION, AND BOOT AND
SHOE WAREHOUSES:

BALLOON STREET, MANCHESTER.

DRAPERY, WOOLLEN CLOTH, AND READY-MADES WAREHOUSES:

DANTZIC STREET, MANCHESTER.

FURNISHING WAREHOUSE:

HOLGATE STREET, MANCHESTER.

BRANCHES:

WATERLOO STREET, NEWCASTLE-ON-TYNE,
AND LEMAN STREET, LONDON, E.

PURCHASING AND FORWARDING DEPOTS:

ENGLAND:

LIVERPOOL, BRISTOL, LONGTON, GOOLE, AND GARSTON.

IRELAND:

CORK, LIMERICK, TRALEE, AND ARMAGH.

AMERICA:

NEW YORK.

CANADA:

MONTREAL.

GERMANY: HAMBURG.

FRANCE:

CALAIS AND ROUEN.

DENMARK:

COPENHAGEN, AARHUS.

SWEDEN: GOTHENBURG.

DEPOTS AND SALEROOMS:

LEEDS, HUDDERSFIELD, NOTTINGHAM, BLACKBURN,
BIRMINGHAM, BRISTOL, NORTHAMPTON, AND CARDIFF.

PRODUCTIVE WORKS:

BISCUITS, SWEETS, AND JAM WORKS, AND DRY SOAP WORKS:
CRUMPSALL, NEAR MANCHESTER.

BOOT AND SHOE WORKS:
LEICESTER AND HECKMONDWIKE.

SOAP WORKS:
IRLAM AND DURHAM.

WOOLLEN CLOTH WORKS:
LIVINGSTONE MILL, BATLEY.

READY-MADES WORKS:
HOLBECK, LEEDS.

COCOA AND CHOCOLATE WORKS:
116, LEMAN STREET, LONDON.

CORN MILL:
DUNSTON-ON-TYNE.

FURNITURE FACTORY:
BROUGHTON, NEAR MANCHESTER.

PRINTING WORKS:
CORPORATION STREET, MANCHESTER.

SHIPOWNERS AND SHIPPERS:

BETWEEN

GARSTON AND ROUEN;
GOOLE AND CALAIS;
GOOLE AND HAMBURG.

STEAMSHIPS OWNED BY THE SOCIETY:

"LIBERTY." "EQUITY," "FEDERATION,"
"PIONEER," "UNITY," "PROGRESS,"
"DINAH," "BRITON."

BANKING AGENCIES:

THE MANCHESTER AND COUNTY BANK LIMITED.
THE LONDON AND COUNTY BANK.
THE NATIONAL PROVINCIAL BANK OF ENGLAND.
THE MANCHESTER AND LIVERPOOL DISTRICT BANK.
THE LANCASHIRE AND YORKSHIRE BANK.
THE UNION BANK OF MANCHESTER.

General Committee.

CHAIRMAN:

Mr. JOHN SHILLITO,
17, Cavendish Terrace, Halifax.

VICE-CHAIRMAN:

Mr. THOMAS BLAND,
Rashcliffe, Huddersfield.

SECRETARY:

Mr. THOMAS SWANN, Beech Villa, James Street, Masborough.

Mr. WILLIAM BATESGreen Lane, Patricroft.
Mr. JAS. FAIRCLOUGHRedbrook, Barnsley.
Mr. E. GRINDROD8, Apsley Street, Keighley.
Mr. THOMAS HIND53, St. Peter's Road, Leicester.
Mr. R. HOLT84, Tweedale Street, Rochdale.
Mr. THOMAS KILLON45, Heywood Street, Bury.
Mr. WILLIAM LANDER155, Eskrick Street, Halliwell, Bolton.
Mr. JOHN LORD19, Tremellen Street, Accrington.
Mr. T. E. MOORHOUSE.....Reporter Office, Delph.
Mr. ALFRED NORTHMount Pleasant, Batley.
Mr. A. SCOTTON48, Co-operative Street, Derby.
Mr. JOHN STANSFIELD.....Jeremy Lane, Heckmondwike.

* * *

NEWCASTLE BRANCH COMMITTEE.

CHAIRMAN: Mr. T. TWEDDELLCleveland Terrace, West Hartlepool.
VICE-CHAIRMAN: Mr. THOS. SHOTTON .. 189, Coatsworth Road, Gateshead.
SECRETARY: Mr. ROBERT GIBSON, 120, Sidney Grove, Newcastle-on-Tyne.
Mr. GEORGE BINNEY2, Co-op. New Houses, Alligate, Durham.
Mr. W. D. GRAHAM123, Bedburn Road, Jarrow-on-Tyne.
Mr. ROBERT IRVING.....Woodrouffe Terrace, Carlisle.
Mr. THOMAS RULE.....20, Ravensworth Terrace, Bensham, Gateshead.
Mr. WILLIAM STOKER.....South Cramlington, Newcastle-on-Tyne.

* * *

LONDON BRANCH COMMITTEE.

CHAIRMAN: Mr. GEO. HAWKINS, 53, Kingston Road, Oxford.
VICE-CHAIRMAN: Mr. GEO. SUTHERLAND, 78, Maxey Road, Plumstead.
SECRETARY: Mr. HENRY PUMPHREY, Paddock Terrace, Lewes.
Mr. JOSEPH CLAYStratton Road, Gloucester.
Mr. H. ELSEY9, Lynwood Terrace, Lawrence Road, Southsea.
Mr. J. F. GOODEYNew Town Lodge, Colchester.
Mr. GEORGE HINESCroft Street, Ipswich.
Mr. T. E. WEBB .. Kootenay, Durham Road, Cottenham Park, Wimbledon.

* * *

SCRUTINEERS.

Mr. F. HARDERN, Oldham. Mr. J. J. BARSTOW, Dewsbury.

* * *

AUDITORS.

Mr. THOS. J. BAYLIS, Masborough. Mr. JAMES E. LORD, Rochdale.
Mr. ISAAC HAIGH, Barnsley. Mr. THOMAS WOOD, Manchester.

Officers of the Society.

ACCOUNTANT.

Mr. THOMAS BRODRICK, Eccles.

CASHIER.

Mr. A. GREENWOOD, Rochdale.

BUYERS, SALESMEN, &c.

MANCHESTER—GROCERY AND PROVISIONS :

Mr. ISAAC TWEEDALE.

Mr. GEORGE GARLICK.

Mr. THOMAS PEARSON.

Mr. WILLIAM WROOT.

MANCHESTER—DRAPERY :

Mr. JAMES FLETCHER.

Mr. JOHN SHARROCKS.

Mr. WILLIAM T. ALLITT.

Mr. JOHN T. OGDEN.

MANCHESTER—WOOLLENS, BOOTS, AND FURNITURE :

Woollen Cloth Mr. W. GIBSON.

Boot and Shoe Mr. HENRY JACKSON.

Furniture Mr. T. R. ALLEN.

MANCHESTER—TRAVELLERS :

Tea, Coffee, and Cocoa Mr. R. TURNER.

Grocery and Provisions Mr. GEORGE BARLASS.

Productive Societies and Drapery Mr. J. MEADOWCROFT.

” ” ” ” Mr. THOS. A. RANKIN.

” ” ” ” Mr. A. ACKROYD.

SHIPPING DEPARTMENT :

General Manager..... Mr. CHAS. R. CAMERON.

SHIPPING AND FORWARDING DEPOTS :

Rouen (France) Mr. JAMES MARQUIS.

Goole Mr. W. J. SCHOFIELD.

Calais Mr. WILLIAM HURT.

LONDON :

Tea, Coffee, and Cocoa..... Mr. CHARLES FIELDING.

LIVERPOOL :

Grocery and Provisions Mr. ARTHUR W. LOBB.

SALEROOMS :

Leeds Mr. JOSEPH HOLDEN.

Nottingham Mr. G. T. TOWNSEND.

Huddersfield Mr. W. HARRISON.

Birmingham Mr. W. AMOS.

Northampton Mr. A. BAKER.

Cardiff Mr. J. F. JAMES.

LONGTON :

Crockery Dépôt Mr. J. RHODES.

NEWCASTLE :

Grocery and Provisions Mr. ROBT. WILKINSON.

” ” Mr. T. WEATHERSON.

” Drapery Mr. JOHN MACKENZIE.

” Boot and Shoe Mr. O. JACKSON.

Furniture and Hardware Mr. J. W. TAYLOR.

Chief Clerk Mr. H. R. BAILEY.

BUYERS, SALESMEN, &c.**LONDON :**

Grocery and Provisions.....Mr. BENJAMIN JONES.
 " "Mr. WM. OPENSHAW.
 " Drapery".....Mr. F. G. WADDINGTON.
 Boots and ShoesMr. ALFRED PARTRIDGE.
 Furnishing.....Mr. F. E. ODDY.
 Chief ClerkMr. WILLIAM STRAWN.

BRISTOL DEPÔT :

Mr. C. CUNNINGHAM.

IRISH BRANCHES—BUTTER AND EGGS.**CORK :**

Mr. WILLIAM H. STOTT.

TRALEE :

Mr. JAMES DAWSON.

NEW YORK (AMERICA) :

Mr. JOHN GLEDHILL.

COPENHAGEN (DENMARK) :

Mr. JOHN ANDREW.

AARHUS (DENMARK) :

Mr. H. J. W. MADSEN.

LIMERICK :

Mr. WILLIAM L. STOKES.

ARMAGH :

Mr. J. HOLLAND.

MONTREAL (CANADA) :

Mr. A. C. WIELAND.

HAMBURG (GERMANY) :

Mr. WM. DILWORTH.

GOTHENBURG (SWEDEN) :

Mr. H. C. K. PETERSEN.

LOWER CRUMPSALL BISCUIT, ETC., WORKS :

Mr. THOMAS HAYES.

LEICESTER BOOT AND SHOE WORKS :

Mr. JOHN BUTCHER.

HECKMONDWIKE BOOT AND SHOE WORKS :

Mr. J. W. HEMMINGS.

IRLAM AND DURHAM SOAP WORKS :

Mr. J. E. GREEN.

Travellers.....Mr. J. POGSON, Mr. J. ANDERSON.

BATLEY WOOLLEN CLOTH WORKS :

Mr. S. BOOTHROYD.

LEEDS READY-MADES WORKS :

Manager.....Mr. WILLIAM UTTLEY.

TravellerMr. J. STEAD.

DUNSTON CORN MILL :

Mr. TOM PARKINSON.

BROUGHTON (MANCHESTER) CABINET FACTORY :

Mr. J. HODGKINSON.

PRINTING DEPARTMENT :

Mr. G. BREARLEY.

BUILDING DEPARTMENT :

Mr. P. HEYHURST.

Emploÿes.

NUMBER OF EMPLOYËS, AUGUST, 1895.

MANCHESTER:

G ENERAL Drapery, Boot and Shoe, and Furnishing Offices. 261	Boot and Shoe Department....	35
Cashier's Office -19	Furnishing	46
Grocery Department 174	Shipping	6
Drapery	Building	267
Shirt Manufacturing 62	Dining-room	9
Woollen Cloth Department 13	Other	39
	Total Manchester.....	1035
Newcastle Branch		329
" Building Department.....		56
London Branch		230
" Building Department.....		94
" Tea		352
" Stables		20
" Brush and Bedding Productive		39
Leeds Saleroom		4
Nottingham Saleroom		2
Birmingham		1
Northampton		1
Bristol Dépôt		41
Cardiff		4
Liverpool Branch—Grocery and Shipping		22
Longton—Crockery Department.....		18
Irish Branches		55
Rouen Branch		4
Goole		15
Calais		8
Garston		2
New York Branch		5
Montreal		2
Copenhagen		8
Hamburg		4
Aarhus		5
Gothenburg		3
Crumpsall Biscuit Works		315
Leicester Shoe	Knighton Fields	1768
" " " Duns Lane		332
Enderby		110
Heckmondwike Shoe Works.....		284
" Currying Department		53
Durham Soap Works.....		17
Irlam Soap Works		60
Batley Woollen Mill		100
Leeds—Ready Mades.....		358
Dunston Corn Mill.....		161
Broughton Cabinet Factory.....		70
Broughton Tailoring Factory		250
Printing Department.....		55
Steamships—"Pioneer," 14; "Unity," 15; "Progress," 13; "Federa- } tion," 18; "Equity," 19; "Liberty," 19		98
	Total.....	6390

Terms of Membership.

TRADE DEPARTMENT.

FOR the information of Societies and Companies not already purchasers from or members of this Society, we give below— (1) our requirements on opening new accounts; (2) particulars of trade terms; (3) terms and conditions of membership; and (4) a few of the advantages accruing from membership.

Any further information will gladly be given on application.

(1) NEW ACCOUNTS.

Societies desiring to open accounts are requested to furnish us with a copy each of their registered rules and latest balance sheet.

If a balance sheet has not been prepared, then the following information should be sent, viz., the number of members; amount of paid-up share capital; whether credit is allowed, and if so, to what extent; the amount of business done, or expected to be done per week.

(2) TRADE TERMS.

With the first order sufficient cash must be remitted to cover the estimated value of the goods ordered; afterwards payment must be made within seven days from date of invoice; all accounts are rendered strictly net.

Business is conducted on these terms, with *registered* Co-operative Societies and Companies only.

Societies in process of formation and whose rules are not yet registered can be supplied with goods on payment of cash with each order.

(3) TERMS AND CONDITIONS OF MEMBERSHIP.

The following extracts from our Rules contain the principal features in connection with membership:—

(a) ADMISSION OF MEMBERS.—(Extract from Rule 5.)

The members of this society shall consist of such co-operative societies or companies (registered under the Industrial and Provident Societies Act, 1876, or under the Companies Acts, with limited liability, or under any law of the country where they are situate, whereby they acquire the right of trading as bodies corporate, with limited liability) as have been admitted by the general committee, and approved by a majority of delegates voting at a general meeting of the society. An application for shares shall be made by a resolution of some general or committee meeting of the society or company making the application, contained in writing and attested by the signatures of the secretary and three of its members. Every society or company making an application for shares shall state the number of its member, and take up not less than three £5 shares for every twenty members, or fractional part thereof, and agree to increase the number annually as its members increase, making the return of such increase at the time and in accordance with its return to the Registrar.

(b) CAPITAL—HOW PAID UP.—(Extract from Rule 9.)

The capital of this society shall be raised in shares of five pounds each, which shall be transferable only. Every society, on its admission, shall pay the sum of not less than one shilling on each share taken up. Each five pounds so paid shall constitute one fully paid-up share; but no dividend or interest shall be withdrawn by members until their shares are paid up. Any member may pay up shares in advance. After having received the consent of a special meeting, the whole or any part of the share capital may be called up by the general committee on giving notice to that effect.

(c) FORM OF APPLICATION FOR SHARES.

APPLICATION FOR SHARES.

Folio.....

The.....

Co-operative Society Limited.

TO THE DIRECTORS OF THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED, 1, BALLOON STREET, MANCHESTER.

Gentlemen,

Whereas, by a Resolution of the..... Co-operative Society Limited, passed by the..... at a Meeting held on the.....day of.....it was resolved that the Society, which consists of.....Members, agree to take up.....Shares (being not less than Three Shares for every Twenty of our Members, or fractional part thereof) in the Co-operative Wholesale Society Limited, and annually to increase our Shares at the time and in accordance with our return to the Registrar, and to accept such Shares on the terms and conditions specified in your Rules.*

.....189

Attested by } Three Members.
 }
Secretary.

* Members, Committee of Management, or Directors.

(4) ADVANTAGES ACCRUING FROM MEMBERSHIP.

- (a) The liability of each society member is limited to the amount of its shares.
- (b) Members of this Society receive double the rate of dividend on purchases to non-members.
- (c) Share capital receives interest after the rate of £5 per cent per annum.
- (d) Each society composing the "Wholesale" may nominate one representative for every 500 of its members to represent it at the General or Branch Quarterly Meetings, or other Special Meetings which may be convened from time to time, and thus have a direct influence and voice in the control and management of its affairs. The nomination and election of its officers for General and Branch Committees, Auditors, and Scrutineers are effected by means of nomination and voting papers, which are sent to all shareholding societies to be filled up.
- (e) A merely nominal payment secures membership, a deposit of 1s. per share upon application being only required; the dividend on purchases and interest on share capital being credited to share account until paid up.

Those societies not already federated with the "Wholesale" should at once join and thus secure the advantages to themselves and the co-operative movement generally which its extensive and varied operations are intended to confer.

Business Notices.

ALL LETTERS TO BE ADDRESSED TO THE SOCIETY, AND NOT TO INDIVIDUALS.

WE would especially impress upon Societies' Managers and Secretaries the necessity of complying with the following regulations, in order to facilitate the despatch of Goods, to ensure promptitude in the answering and classification of letters, and to prevent disappointment.

LETTERS.

ALL letters must be addressed to the Society, and not to individuals.

Addressed Envelopes are supplied at cost price.

Communications for the following Departments, and relating to the subjects named, should always be made on separate forms or sheets of paper, viz. :—

- (1) Bank and Cashier's Department.
- (2) Accountant's Department.
- (3) Replies to Correspondence.
- (4) Grocery and Provision Department—Orders only.
- (5) " " " Applications for Samples and Prices.
- (6) Drapery Department—Orders and Samples.
- (7) Woollen Cloth and Ready-made Department—Orders and Samples.
- (8) Boot and Shoe Department—Orders and Samples.
- (9) Furnishing Department—
- (10) Coal—Orders and Applications for Prices. "
- (11) Advices of Returns.
- (12) Claims, delays, complaints, &c., for all Departments.
- (13) Printing Department—Orders and Applications for Prices.

Although each of the above classifications requires a separate form, they should all be enclosed under one cover, and addressed to the Society.

At the Central Office, in Manchester alone, the number of Letters, Orders, &c., received daily is enormous. To effectually deal with these communications some division into departments is absolutely necessary.

These classifications have therefore been adopted, and Societies are asked to assist by seeing that their communications are despatched in accordance therewith, as when subjects included in more than one of these divisions are dealt with on one form, much labour is involved in re-writing the portions required to be separated.

ORDERS FOR GOODS.

The name of the Society and the Station to which the Goods are to be forwarded should be written at the head of each order.

ORDERS should contain the Price or Brand of each Article wanted.

Delays would often be prevented by noticing in which column in the Price Lists (Manchester, Newcastle, London, &c.) the Goods are quoted, and posting the Orders direct to the Central, or branches named, as the case requires.

As regards "Direct Quotations," notwithstanding that there are many instances where minimum quantities are fixed, orders are frequently received for less than the stipulated quantities. This necessitates correspondence, and in cases of urgency entails inconvenience to Societies, which would be obviated by carefully noticing the Price List when ordering.

It is desirable that the Forms we have specially prepared should be used in sending Orders.

1. Grocery, Drapery, Woollens, and Furnishing Department.
2. Tailoring (Bespoke), with instructions for measurement.
3. Boot and Shoe Department.
4. " " " (Bespoke), with instructions for measurement.

Books containing 50 Forms, with Duplicates, will be sent free on application.

Orders for each Department should be made out on separate forms.

CONSIGNMENT OF GOODS.

WHENEVER delays occur in the delivery of Goods, Societies will please communicate with the carrier at their end, in addition to informing us.

To prevent any misunderstanding as to who is responsible for the safe delivery of Goods, we would state that when Goods are Carriage Paid we undertake their safe delivery; but when the Carriage is Not Paid, the Carrier is responsible to the Consignees, who, before taking delivery of any Goods, should carefully examine the same, and at once claim for any loss or damage sustained in transit.

EMPTIES.

EMPTY packages should be returned carefully packed, and fully and correctly consigned.

Each package should have a *label or direction card attached, stating the contents, the name of the Society forwarding them, and the name and address of their destination.*

Empties should be returned direct to the manufacturer from whom the Goods were sent. When returned to Manchester or the Branches, additional expense and trouble are incurred in re-consigning them to their proper destination.

A few manufacturers pay carriage on returned empties; where this is done Societies will consign carriage forward, in all other cases carriage should be paid. A list of firms who pay carriage may be obtained on application at the Central Offices.

In all cases an advice giving full particulars of the empties returned (viz., the kind, the quantity, the numbers, the price charged, and reference to invoice where charged) should be immediately posted to us, as unless this is done our rule is not to allow credit for them.

We have a book, which we send free on application, containing 50 forms, with duplicates, specially prepared for this purpose, which Societies are recommended to use.

The importance of carrying out these instructions will be seen when Societies are informed that the Railway Companies seldom make deliveries of empties until they have a complete load, and under such circumstances it is almost impossible to ascertain from what Societies they have been received, unless full particulars are given.

In many cases Societies do not fully carry out these instructions, consequently we are continually receiving empty packages which we are not able to credit because we do not know from whom they have been returned. This is a loss which we are desirous Societies should not incur; we therefore point it out to them so that the necessary precautions may be taken to avoid it.

GOODS CONSIGNED AS EMPTIES.

We cannot hold ourselves responsible for any Goods that may be returned consigned as empties, as any claim made on the Railway Companies for missing Goods under such circumstances would not be entertained.

STATEMENTS OF TRADE ACCOUNTS.

WEEKLY STATEMENTS

ARE sent out to all Societies doing business with us, showing Total of Goods Invoiced, Cash Received, and Allowances made during the week, and Balance, if any, at the week end.

These statements afford a great check on Societies' books, and Secretaries are requested to compare each one as received with their books, and to report to us particulars in case of any discrepancy.

QUARTERLY STATEMENTS

Are issued immediately after our Books are made up for the Quarter.

They are in form similar to the Weekly Statements, and must be returned, duly certified if correct, to our Auditors, who require them as an independent check as to the correctness of our accounts.

We rely upon Societies giving prompt attention to these statements, as the early issue of our Balance Sheets depends to an extent on their immediate return.

In case of any discrepancy, details should be at once given or applied for, but if correct, the Statement should be forthwith signed and returned to the Auditors, in the envelope sent out for that purpose.

SHARE AND LOAN PASS BOOKS.

THESE should be sent to the Head Office (1, Balloon Street, Manchester) every Quarter, viz., in the Second Week of March, June, September, and December, for the purpose of having the previous quarter's Interest and Dividend entered therein. Societies requiring information respecting the amount of their Share or Loan Capital are requested to send their Pass Books for the amount to be filled in, instead of sending for Statements.

When Shares are paid up the Share Book need not again be sent until a further allotment is made.

SOCIETIES' BALANCE SHEETS.

WE especially desire those Societies who have not already done so to send us a copy of their last Balance Sheet, stating on it the number of their Members; also, a copy of their rules.

Trade Department.

CASH ARRANGEMENTS.

WE beg to call the attention of Societies to the arrangements specified below, which will give facility and security when making remittances to this Society :—

1. **All cash must be addressed to the Society only, and not to individuals, nor to the committee or auditors.**

2. **CHEQUES and DRAFTS** to be made payable to the CO-OPERATIVE WHOLESALE SOCIETY LIMITED, Post-office orders to ABRAHAM GREENWOOD. Drafts drawn in favour of the Society must be payable on demand; other drafts when remitted to us must have reached maturity. All drafts, if possible, should be made payable either in London or Manchester.

3. Societies are respectfully requested, when drawing cheques in our favour, to do so in full, viz., Co-operative Wholesale Society Limited, without any abbreviation or variation whatever.

4. In forwarding half notes societies should state whether they are first or second halves ; the latter half notes should be forwarded immediately on receipt of our acknowledgment of the first. Societies not receiving acknowledgment for first or second half notes in due course of post, will oblige by calling attention to the omission.

5. Remittances made through a bank should be advised to the Wholesale at Manchester without delay. Cash Advice Books are supplied free on application.

6. **LOANS, WITHDRAWAL OF.**—Societies, when requiring to withdraw their loans, are respectfully requested to **apply at the Head Office, Manchester**, for an official form, which is provided for and supplied to societies for the purpose of enabling them to withdraw loans and to state definitely the amount of loan they wish to withdraw. Societies will please note this special request. **The Wholesale Society will give due notice when they are prepared to accept new loans.**

Banking Department.

CURRENT ACCOUNTS

OPENED ON THE PLAN USUALLY ADOPTED BY OTHER BANKERS.

CUSTOMERS keeping accounts with the Bank may have moneys paid to their credit at the

HEAD OFFICES,

BALLOON STREET, MANCHESTER,

AT

THE BRANCHES,

WATERLOO STREET, NEWCASTLE-ON-TYNE,

AND

99, LEMAN STREET, WHITECHAPEL, LONDON, E.;

ALSO AT

THE INDUSTRIAL SOCIETY, SCHOOL STREET, OVER DARWEN;

THE CO-OPERATIVE SOCIETY, HIGH STREET, LEICESTER;

AT THE

HEAD OFFICE,

OR ANY BRANCH OF THE FOLLOWING BANKS:

MANCHESTER AND COUNTY BANK,

LONDON AND COUNTY BANK,

NATIONAL PROVINCIAL BANK OF ENGLAND,

UNION BANK OF MANCHESTER,

LANCASHIRE AND YORKSHIRE BANK,

MANCHESTER AND LIVERPOOL DISTRICT BANK,

WILLIAMS DEACON AND MANCHESTER AND SALFORD BANK,

AND THE

UNION BANK OF SCOTLAND LIMITED.

The Banking Turnover is upwards of £30,000,000 per annum.

Grocery and Provision Departments.

A COMPLETE PRICE LIST of the goods dealt in is issued weekly, the prices being fixed for the day of issue only. These Weekly Lists, which are sent to Co-operative Societies with whom we do business, contain reports and opinions as to the state of the markets, as regards some of the principal articles.

The reports are intended for, and calculated to be of service to, Committees and Managers of Societies, in pointing out the tendency of the markets, and when to buy to advantage.

The following is a brief *résumé* of the chief commodities, and how the "Wholesale" is circumstanced in relation thereto:—

BUTTER AND EGGS—IRISH.

THE arrangements in force for conducting this portion of the business are remarkably well adapted for supplying the same on the most favourable terms.

There are buyers attending markets at Cork, Limerick, Tralee, and Armagh. These buyers are gentlemen of the first experience in the trade, and are under the immediate and direct control of the Society—not being merely employed as agents or buyers on commission.

The buyers, although taking up their residences at the places named, attend all the best and noted markets within a radius of twenty or thirty miles, and thus it will be seen that the area covered by their operations embraces a great proportion of the south of Ireland, and some of the most fertile districts of that country.

This Society is by far the most extensive purchaser and shipper of Irish Butter.

BUTTER AND EGGS—DENMARK AND SWEDEN.

THE same remarks may be made in this respect as in the case of Irish Butter and Eggs. We have our own buyers stationed at Copenhagen, Aarhus, and Gothenberg. They purchase direct from farmers who are considered the best producers in both Denmark and Sweden, and contract with them for a weekly supply of all they make.

Before shipment, all goods are carefully examined by our representative.

Societies should encourage this Branch by giving us weekly orders for shipment direct, and thus save the cost of warehousing and of carriage from Manchester.

BUTTER—KIEL, AND GERMAN EGGS.

OUR arrangements for the purchase of these are similar to those at Copenhagen.

Our own buyer is located at Hamburg, and buys firsthand from the farmers and producers.

Our ready-money system of doing business commands the best terms, and enables us to do a very extensive and satisfactory trade in these articles.

BUTTER AND EGGS—FRENCH.

SUPPLIES of these are obtained fresh weekly, and are carefully selected for the Society, by competent and experienced men, from the best dairies and districts in France.

AMERICAN AND CANADIAN BUTTER, CHEESE, BACON,
HAMS, LARD, FLOUR, APPLES, &c., &c.

NEW YORK AND MONTREAL BRANCHES.

BUYERS are located at New York and Montreal, whose duty it is to purchase and export the articles sold by the Society which are grown and manufactured in the United States and Canada.

The business done by the Society, and the Capital always at its command, enables its representatives to enter the markets in an independent manner, and places them in a pre-eminent position to exact terms of the first order. These conditions, and the consequent absence of the intermediate dealers, qualify the Society to transfer the goods from where they are produced to the consumer with the least possible addition to the cost.

CHESHIRE CHEESE.

THE Society's buyers visit the best dairies and farms in Cheshire where this is made, and purchase it from the farmers on the spot.

YEAST.

THIS is imported by the Society direct from the best distillers at Schiedam, Hamburg, and France. It is received in the port of Hull twice in each week—*i.e.*, Mondays and Thursdays—and distributed from there to the Society's customers.

SUGAR.

THE large purchases which the Society is able to make, place it in the best position for securing the utmost advantages from the refiners.

In addition to this, the Society's own buyers are in the centre of operations in Liverpool, London, Greenock, and New York, and are able to obtain information at first hand.

There is a telephone connecting its Liverpool offices with the Central establishment at Manchester, and the buyer in Liverpool is thus in constant telephonic communication with the Central buyer at Manchester, who, being in receipt of the latest and most reliable reports, is enabled to decide which is the most favourable time for making purchases.

Demeraras and other Raws are sampled on arrival, and the most suitable lots selected. Continental Cubes, Loaves and Granulated are bought in many cases direct from the Refiners and shipped to the most convenient ports.

FLOUR, GRAIN, &c.

THE finest brands of Flours are bought direct from the millers in Hungary; our own Registered Brands of Flours are distributed direct from the mill.

The Society's buyers in New York and Montreal make very extensive purchases of Flour, direct from the millers, in the United States and Canada.

Grain is bought in large quantities, "to arrive," and Meal of all kinds from the mills direct.

DRIED FRUIT.

OUR Dried Fruit buyers go annually to Greece, Turkey, and Spain at the season when the fruits are being gathered, and visits the vineyards where the fruits are drying, in order to select the Samples of Currants, Sultanas, Figs, Valencias, and Muscatels most suitable for Co-operative Societies. These are bought direct from the producer, thereby saving the middlemen's profits, and we get a better selection than could otherwise be obtained.

PEPPER AND SPICES.

WE are large dealers in these articles, and the qualities we supply may be relied upon. We have an extensive and up-to-date grinding plant laid down, and these commodities are ground under our own immediate supervision. Their purity is thus guaranteed.

POTATOES, ONIONS, APPLES, &c.

THERE is a special buyer for these goods, who travels over the districts known to produce the best sorts, and they are bought direct from the farmers when it can be done with advantage. Our buyer also regularly attends the Liverpool Green Fruit Auctions.

Purchases to a very large extent are also made in France, Belgium, and Germany, and the goods are imported to Goole and Garston by the Society's own steamers, which ply regularly between Calais and Goole and Hamburg and Goole on the East, and Rouen and Garston on the West Coast.

BISCUITS, SWEETS, PRESERVES, MARMALADE, AND DRY SOAPS.

THESE goods are manufactured by the Society at their Works, Crumpsall, near Manchester. When impartially judged, the quality compares most favourably indeed with the goods made by other houses of older standing, and devoted to the special manufacture for a long period.

CANNED GOODS.

IN regard to this trade we are in a position second to none; our arrangements being such that we have first offers from all the principal packers in America. Salmon, Lobster, Beef, Luncheon Tongues, and Canned Fruits, we have specially packed for us under our own brands.

Tea, Coffee, and Cocoa Department,

LEMAN STREET, LONDON, E.

WE have a buyer on the London Market whose exclusive duty it is to select and purchase Teas, Coffees, and Cocoas direct from the Importers.

The excellence of this arrangement, whether viewed from an economical point, or from that of enabling us to efficiently supply Societies with all the numerous varieties and qualities they may desire, is too apparent to need illustration.

Our unlimited command of money and unequalled organisation places us in a position for doing this trade superior to that of any other house.

ASSAM AND OTHER INDIAN TEAS.

THESE are made a special study. Year by year they are increasing in favour with the public; and their greater pungency and strength, as compared with China Teas, are likely to make them still further popular.

CEYLON TEAS.

THE enterprise of the planters in the Island of Ceylon, which started some few years ago, has proved entirely satisfactory, and the various estates are now yielding a much larger quantity with beneficial results to both growers and consumers.

These Teas are rapidly increasing in favour, and the consumption of 1895 shows a very large excess over 1894.

CHINA TEAS.

WE have again to record a steady decrease in the consumption of China Teas, though the crop generally has turned out better than for some years.

Almost all the really fine parcels have gone to Russia, as the British tea-drinking public are going more and more in favour of the rougher and stronger products of India and Ceylon.

RED LEAF CONGOUS.

THESE are about up to last year's average.

BLACK LEAF CONGOUS.

NINGCHOWS and KEEMUNS are particularly good this season, especially in cup. Other varieties are quite up to the average.

SCENTED TEAS.

THIS crop is considered very good, being well made and strongly scented.

GREEN TEAS.

THESE are getting less and less in demand, and are now only used in a few districts. Very few fine-liquoring Teas have been imported.

BLENDED TEAS.

THE art of blending is now carried to a high pitch of perfection, and to work it successfully requires not only a knowledge of the true affinities of the various growths of India, China, and Ceylon, acquired by a long apprenticeship to tea tasting, but ample capital, large premises, suitable machinery, and a competent staff of well-instructed employés. These have been provided for this section of our Tea and Coffee business.

Extreme care is taken to suit all tastes and districts, and everything that can be thought of to make our arrangements, if possible, still more perfect, will be done.

BULK MIXED.

THESE are packed in cads, half chests, and chests. The saving of capital and labour, the greater efficiency and satisfaction resulting from scientific blending, and the numerous grades supplied by us, is causing a largely-increased demand, and is making them very popular.

We are now supplying

Indian, Ceylon, and China Blends.

Ceylons and Indians, with a preponderance of Ceylons.

Pure Indians.

Pure Ceylons.

Indians and Ceylons, with a preponderance of Indians.

CHINA PACKET TEAS.

IN addition to the excellence of the blending, we are making extra efforts to turn our packets out of a design and appearance that shall command attention and attract the consumer.

Everyone will admit the superiority in appearance of a handsome packet to the ordinary parcel turned out by the shopman when the Tea is weighed over the counter.

By careful attention to the economy of labour, we are able to supply packets, in large and beautiful variety, at a cost less even than would be incurred if made up in the ordinary way in the Store. We pack eight varieties, at prices ranging from 1s. 4d. to 3s. 6d. In order to meet the requirements of those who prefer the delicate flavoured China Teas, or who cannot drink the strong pungent Indian and Ceylon Teas, we supply a pure China Tea in packets.

INDIAN PACKET TEAS.

As we have mentioned before, Indian Teas are rapidly increasing in public favour, and, instead of being mixed with China Teas, are now being extensively used by themselves, so to meet these requirements we have introduced two Indian Packets, one a pure Souchong and the other a pure Pekoe blend.

CEYLON PACKET TEAS.

THESE Teas are rapidly and deservedly growing in public favour, on account of their strong, rich, and delicious flavour, and we now supply three Packet Teas. We warn our readers that a great many mixtures are offered as Pure Ceylon Teas in leaden packets, and represented as being imported direct from Ceylon in this form. Teas offered in such packets should be avoided, as the finest Ceylon Teas are seldom so imported.

COFFEES.

PLANTATION shipments total about the same as last year, and the quality is up to the average, whilst prices compared to previous season have been on a more moderate scale.

EAST INDIA arrivals have been rather less than usual, but quality not being desirable, this kind has been rather neglected.

COSTA RICA.—The finer sorts are rather short in supply. Prices have been rather irregular during the earlier part of the season, but later a substantial advance has taken place.

RIO and SANTOS.—These shipments have been on a more extensive scale than last season, prices in consequence being somewhat lower. Should the next crop be an abundant one also, we may expect further reduction in prices.

RAW COFFEES.

OUR arrangements for the supply of all kinds in use in the home market are as efficient as they can be possibly made.

Samples, both in the raw and roasted state, are sent with all quotations.

ROASTED COFFEES.

WE have now roasting machinery both in London and Manchester, fitted with all the latest improvements.

These enable us to supply the freshly-roasted article in the most expeditious manner; and great care is taken to finish off the berry to suit the particular requirements of customers.

PACKED COFFEE.

GREAT quantities of rubbish have been, and are being, sold under different fancy names. The extraordinary proportions the demand for these articles has assumed have led the Government to impose a special tax on all mixtures, so as to compensate for the loss of revenue on Coffee caused by their consumption.

This will now put the honest trader on a fair footing, and with the great advantage to the consumer that he can make sure of getting a really good and pure article at a reasonable price.

We therefore now sell Coffees of different grades and qualities, both pure and mixed with Chicory, at prices which will be sure to command a good sale.

Our excellent machinery, our economical arrangements, the large scale of our operations, and the well-known beneficial results of division of labour, will enable us to supply Societies cheaper and better than it is possible for them to do for themselves.

COCOA AND CHOCOLATE.

IN order to give Societies the opportunity of getting their supplies at the lowest possible cost, we have commenced the production of the various kinds of Cocoa and Chocolate most in demand.

The greatest care is exercised in the manufacture, ingredients of the best quality only being used. The works are fitted with efficient and modern machinery. The Society is thus in a position to manufacture all classes of Cocoas and Chocolates showing better quality and value than any others in the market.

Special attention is drawn to the following:—

PURE CONCENTRATED EXTRACT IN TINS.

THIS Cocoa is similar in character to the best of the well-known Dutch Cocoas. It possesses great strength, combined with exquisite flavour, and at the same time is most economical in use. We claim for this Cocoa that it is at least as good as any other maker's, at the same time being considerably lower in price.

PURE CONCENTRATED ESSENCE IN PACKETS.

A PREPARATION of the finest selected Cocoa nuts from which the greater part of the fat has been extracted; *contains no sugar and no starch.* With this powder can be made a cup of Cocoa thin in body, like Tea and Coffee, but with far more nutritive qualities than either of these.

PREPARED BREAKFAST COCOA,

MADE of the finest grown nuts and mixed with such other ingredients of the best quality as are necessary to produce a high-class powder, soluble and easy of digestion.

HOMŒOPATHIC COCOA.

WE make four qualities, each of which will be found not inferior to the Cocoas usually sold by this name.

PEARL COCOA.

GREAT care is taken to produce this popular Cocoa in the best form, and the constantly increasing sales show our efforts to have been successful.

ROCK CHOCOLATE.

A PREPARATION of finest Nibs and best Loaf Sugar; specially recommended.

The following also are made, each in various qualities:—

ROCK COCOA, FLAKE, COCOA NIBS, &c.

CHOCOLATE CONFECTIONERY.

WE are now turning out large quantities of this article in various forms of $\frac{3}{4}$ d., 1d., and 2d. Cakes, Drops, also Creams and Cream Cakes, and many other varieties of Chocolate Confectionery.

Societies who have not yet tried these are strongly recommended to do so, for, whilst being very wholesome and nutritious both for children and adults, the sale will be found to be a profitable source of revenue, which Societies may as well secure for themselves as leave to the neighbouring confectioner. In our price list are quoted over twenty different sorts of Eating Chocolates to select from.

We have just completed an important and extensive addition to our factory which will enable us largely to augment our output, and at the same time increase the efficiency of our manufacturing operations. We trust, therefore, Societies will continue energetically pushing the sale of our products so as to keep our factory in its enlarged state fully occupied.

We have a stock of show cards, handbills, &c., for advertising purposes, with which we shall be happy to supply Societies on application.

Drapery Department.

CENTRAL SALEROOM AND WAREHOUSE:

DANTZIC STREET,

MANCHESTER.

NEWCASTLE BRANCH SALEROOM AND WAREHOUSE:

WATERLOO STREET,

NEWCASTLE-ON-TYNE.

LONDON BRANCH SALEROOM AND WAREHOUSE:

LEMAN STREET,

LONDON, E.

THE especial attention of Societies is called to the above Department, which is equipped to serve them in the best possible manner.

Hosiery Department.



HOSIERY OF EVERY KIND AND MAKE.

Wools, Worsted and Yarns (by the best spinners), Linen and Paper Fronts and Collars, Cuffs; Kid, Wool, Lisle, and Silk Gloves; Wool, Union, and Oxford Shirts; Duck Jackets; Men's and Boys' Hats and Caps.



HABERDASHERY AND SMALLWARES

OF EVERY DESCRIPTION.

Silk and Velvet Buttons, Trimmings, Ribbon Velvets, &c.



MILLINERY DEPARTMENT.

We beg to call especial attention to this Department, and would ask your hearty support. The Stock is well assorted, and consists of Felt and Straw Hats, Plain and Fancy Straw Bonnets, in all the newest shapes; Ribbons in Silk, Satin, and Velvet, all shades; Feathers in Ostrich, Fancy Wings, Birds, Ospreys, &c.; French and English Flowers, rich new shades, mounted and unmounted; Silk and Cotton Laces, Spot Nets, Embroidered Crafes, and Leises; Ornaments, newest designs in Jet, Steel, &c.; Silks, Velvets, and Plushes; Steel, Jet, and Gold Millinery Trimmings, newest styles; Trimmed Millinery, Black and Coloured; Children's Millinery, in Hoods, Hats, and Bonnets.



FANCY GOODS.

Ladies' and Gents' Scarfs, Ribbons, Laces, Stays, Corsets; Umbrellas in Silk, Alpaca, Gloria, Dagmar, and Satin.

Mantle Department.



MANTLER.

WE HAVE COMMENCED THE MANUFACTURE OF MANTLES,
AND LIKEWISE KEEP

A WELL-ASSORTED STOCK

FROM THE BEST

ENGLISH MANUFACTURERS.

DRESS DEPARTMENT.

BLACK AND COLOURED MERINOS, FRENCH TWILLS,

SATEENS, SCOTCH AND GERMAN PLAIDS,

BLACK AND COLOURED SILKS AND VELVETS.

SCOTCH AND YORKSHIRE SHAWLS,

WOOL HANDKERCHIEFS,

FELT AND OTHER SKIRTS, &c.

LACE, LENO, AND HARNESS CURTAINS AND

BLINDS, WOOL, DAMASK, &c.

Manchester Department.

THIS DEPARTMENT COMPRISES EVERY KIND OF
 SCOTCH, IRISH, AND BARNSELY LINENS;
 Bleached Calicoes, Sheets, and Sheetings;
 Oxford, Harvard, Flannelettes, and other Cotton
 Shirtings;
 SILESIAS, AND EVERY CLASS OF DYED AND
 PRINTED LININGS;
 Prints, Cretonnes, Damasks, Window Hollands,
 TABLE COVERS, TOILET QUILTS,
 TOILET COVERS, TABLE BAIZES,
 LEATHERS, CLOTHS, &C., &C.

The Stocks are bought from the best manufacturers, and the finish in all cases is carefully attended to. All Goods are sold under their correct quality and numbers, and the widths and lengths guaranteed. These facts should always be considered when comparing the "Wholesale's" prices with those of other firms.

Grey Department.

WIGANS, MEXICANS, AND TWILLS

IN VARIOUS WIDTHS AND QUALITIES.

Yorkshire, Lancashire, and Saxony Flannels.

BATH, BURY, AND TWILL BLANKETS.

BLEACHED AND GREY SHEETS.

ALHAMBRAS

OF EVERY KIND AND IN ALL SIZES.

UNION AND WOOL SHIRTINGS,

LINSEYS, KERSEYS, LAMBSKINS,

DOWN QUILTS, &c.

Woollen Department,

DANTZIC STREET, MANCHESTER.

WOOLLENS.

IN THIS DEPARTMENT THERE IS ALWAYS A LARGE
SELECTION OF THE NEWEST STYLES IN

Woollen and Worsted Coatings, Trouserings, and Suitings

OF THE BEST QUALITY AND VALUE, MANY OF WHICH ARE MADE
AT OUR OWN MILLS.

READY-MADES

IN

Men's, Youths', and Boys' Garments,

OF EVERY DESCRIPTION AND PRICE.

Special orders for Garments to Measure receive our prompt attention.

A Factory specially arranged for this branch of the department has been established beside our Furniture Works at Broughton, and we ask you to give us an opportunity of doing your trade.

TRIMMINGS.

Black and Coloured Siliesias, Striped Siliesias and Sateens,

IN ALL COLOURS AND DESIGNS.

BUCKRAMS, CANVASES, JEANS, POCKETINGS,
BLACK AND COLOURED ITALIANS AND SERGES
AT ALL PRICES.

For choice quality and value this department cannot be beaten by any house in the trade, and merits the support of every society.

Furnishing Department,

HOLGATE STREET, MANCHESTER.



ILLUSTRATED CATALOGUE AND PRICE LIST
SENT FREE OF CHARGE TO ANY SOCIETY ON APPLICATION.



THE STOCK IN THIS DEPARTMENT

CONSISTS OF

Furniture, Carpets, Floorcloths, &c., Hardware,
Clocks, Watches, and Jewellery,
Brushes, and Fancy Goods.

WE CAN ALSO SUPPLY

GAS ENGINES, GROCERS' MACHINERY,
AND EVERY KIND OF SHOP FITTINGS REQUIRED.

MOST OF

OUR FURNITURE IS NOW MANUFACTURED AT OUR
CABINET WORKS,

AND WE ARE PREPARED TO

ESTIMATE FOR SHOP, OFFICE, AND LIBRARY FIXTURES, &c.

Crockery Department,

L O N G T O N .

OUR Depôt in the Potteries is stocked with a choice selection of goods of the best manufacture suitable for the requirements of societies, and as it is now very much enlarged, also with the addition of a fine showroom, we strongly recommend societies to send their buyers to Longton to look at our stock, especially as they will often be able to pay their expenses by job purchases. At the same time we beg to call your attention to the following advantages we possess over manufacturers :—

FIRST :

We can supply crates of mixed goods of all kinds—
Earthenware, China, Jet, Rockingham, Glass, Yellow and
Brown Ware ; also Fancy Vases, &c.

SECONDLY :

With the exception of Tea, Toilet, and Dinner Patterns not stocked, we can supply all general articles and goods from our list promptly, which manufacturers cannot continuously do, as they are certain to run out of stock of some kind very often, and having greatly enlarged our premises we can execute orders quicker than in the past.

THIRDLY :

We can supply very small quantities of each article—which, with the above-mentioned promptitude, will enable you to keep a very small stock, and place it within the power of the smallest store to keep crockery to advantage.

FOURTHLY :

By combining our resources of capital with the services of a buyer on the spot we are able to purchase goods from the *best makers*, and supply them on as good terms as can be got by dealing direct with the manufacturers, and in greater variety.

FIFTHLY :

In dealing with manufacturers there is generally a heavy charge for crates, which will be avoided, as we find crates and credit on return as per page 6 in list.

We have added Sanitary Goods, such as Closets, Lavatory Basins, &c., &c., and can strongly recommend these for price and quality.

We trust that these considerations will induce every society to add crockery to their other business ; and as we keep a number of crates on hand ready packed, consisting of China, Earthenware, Rockingham, and Jet Teapots, &c., suitable for beginning in this branch of trade, we shall be pleased to forward one immediately to any society which will intimate their willingness to give it a trial. For assortment of crates, &c., see our Price List, free to any society on application, also our Illustrated Book of designs.

N.B.—All orders to be sent direct to Longton.

Grumpsall Works.

MANUFACTURERS

OF

Biscuits, Sweets, Jam and Marmalade,
Dry Soap Powder, &c.

WAREHOUSES:

BALLOON STREET, MANCHESTER;

WATERLOO STREET, NEWCASTLE-ON-TYNE;

LEMAN STREET, LONDON, E.;

AND

CHRISTMAS STREET, BRISTOL;

WHERE ALL ORDERS MUST BE SENT.

NO supply some of the requirements of the Retail Stores, this Society established these Works in 1872. By the rules of the Society the custom of the private trader is refused, and none but registered Co-operative Societies are supplied. The Retail Stores, members of the Wholesale Society, are the proprietors of these Works, and, as such, the exclusion of private trade is a regulation made by them. We have, therefore, a just claim upon the Stores that they should support their own Works, whilst we acknowledge that they have a claim upon us to supply a pure and serviceable article, as good and as cheap, of its kind and quality, as can be had elsewhere.

THE BISCUITS ARE MADE OF THE PUREST MATERIALS,

Nearly all the flour used being of co-operative manufacture. The machinery employed is of the latest style and most perfect character. The Biscuits produced are such that we confidently invite comparison, and urgently solicit all Co-operative Societies to give them a trial.

IN THE MAKING OF SWEETS

We boil the best of sugar (all cane); employ the best skill; use only vegetable colouring matter, all of which is perfectly harmless; and we can confidently challenge analysis. Our Sweets need only be tried to be approved.

LOZENGES.

Our machinery is of the newest and most approved construction for the making of Lozenges in all the varieties mostly in request. The difference in value between one Lozenge and another depends almost entirely on the quantity, strength, purity, and delicacy of the flavouring used. In these particulars we aim to excel, and we invite comparison. We trust our friends will give this department a trial, and have no doubt the article produced will bear comparison with the productions of the best makers.

JAMS, JELLIES, AND MARMALADE

Are made of the best fruit procurable, and Cane Sugar is used exclusively.

CITRATE OF MAGNESIA, AND SHERBET, OR LEMON KALI,

Are sometimes pressed by makers upon the attention of the Stores as "a special cheap quality." They can, however, be made "cheap" only by keeping out the Acids, which are expensive, and putting in more sugar. This sort of cheapness makes the article more agreeable to some tastes, but certainly much less useful and less costly. We aim at making the C.W.S. Citrate and Sherbet the best value.

“WHEATSHEAF” BAKING POWDER,

In 1oz. and 2oz. Packets,

Has been tested in practical use with that of the best makers, and with favourable results.

Several cases have recently occurred in which retail grocers have been heavily fined, in addition to the disagreeable public exposure, in consequence of selling Baking Powder containing a large proportion of Alum instead of Tartaric Acid. Our friends will find by reference to the C.W.S. Price List, that Alum costs about £5 per cwt. less than Tartaric Acid. Thus, to make money, the manufacturer produces an article which, used in the making of bread or other eatables, yields a food which is injurious to health.

C.W.S. “WHEATSHEAF” BAKING POWDER

DOES NOT CONTAIN ANY ALUM.

C.W.S. “WHEATSHEAF” BLACK LEAD,

In 1oz. Oblong Blocks, and 1oz. and 2oz. Round Blocks.

We Block the very best of Lead, and our produce cannot be excelled in the brilliancy and polish it imparts. Our Loose Black Lead, in 1oz. and 2oz. packets, we can confidently recommend.

DRY SOAP.

In the manufacture of Dry Soap it is usual to introduce cheap ingredients which have no cleansing properties, and only serve to increase the bulk and the weight, thus catching the unwary by giving them for their money a large packet of small value. We can assure our friends that we use no ingredients which have not valuable detergent or cleansing properties, and our Dry Soap will bear comparison with that of the best makers. This article has been subjected to the test of analysis by the Manchester City Analyst, and his figures show that for detergent value or cleansing power the C.W.S. Dry Soap Powder stands in front when compared with the analysis of three other samples from makers of highest repute and longest standing.

We also make and prepare a large variety of Sundries, particulars of which may be seen in our special list issued monthly with C.W.S. weekly price list.

Wheat Sheaf Works,

WIGSTON ROAD, LEICESTER.



Warehouses:

BALLOON STREET, MANCHESTER;

WATERLOO STREET, NEWCASTLE-ON-TYNE;

LEMAN STREET, LONDON, E.; AND CHRISTMAS STREET, BRISTOL.

Salerooms:

LEEDS, HUDDERSFIELD, NOTTINGHAM, BLACKBURN, BIRMINGHAM,
NORTHAMPTON, AND CARDIFF.



The Co-operative Wholesale Society Limited

MANUFACTURE ALMOST EVERY KIND OF

BOOTS AND SHOES

AT THE ABOVE WORKS, IN

HAND SEWN, GOODYEAR WELTS,

MACHINE SEWN, FAIR STITCHED, SEW ROUNDS,

RIVETTED, STANDARD SCREWED,

WOOD PEGGED, &c., &c.

THE HIGHEST TRADE UNION WAGES PAID.

THE VERY BEST MATERIALS USED.

WORK CARRIED ON UNDER BEST SANITARY CONDITIONS.

Trade rapidly Developing, as the Goods give every satisfaction.

The wants of every class of the community supplied.

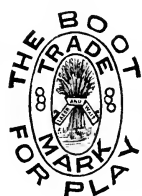
The Fitting of the Goods are unequalled for Comfort, and the
Quality unrivalled for Durability.

HONEST GOODS,

HONEST WAGES,

HONEST PRICES.

WE CAN HIGHLY RECOMMEND THESE
NAMED GOODS:—



Waterproof



Ladies' & Gent's Cloth Gaiters

MADE IN
EVERY SHAPE AND SHADE OF CLOTH.

Samples on Application to Manchester, Newcastle, and London.

CO-OPERATIVE
WHOLESALE SOCIETY
Manufacturers of
CLOTH AND
WHEATSHEAF GAITERS
LEATHER
Wheatsheaf Brand
SIZE

ALL OUR PRODUCTIONS BEAR THE SOCIETY'S
TRADE MARK.

IN OUR ILLUSTRATED LIST

We give the numbers of those usually kept in stock at Manchester, as well as at the branch warehouses in Newcastle and London. Societies requiring any kind of goods not mentioned in our *List*, we shall be glad to make for them upon receiving instructions.

Although there is a growing demand for Low-priced Goods, which we endeavour to meet, we have in no case departed from the principle which has been adhered to since the commencement of these Works—of always using material of known excellence, and *discarding the use of all substitutes for honest leather.*

The Continued and Growing Demand for our Productions

WARRANTS US IN STATING THAT

for quality and price they are equal, if not superior, to anything supplied by the general trade. In addition to the wholesale trade, we are now making about three hundred pairs of Bespoke and Measured Work weekly, and every effort is made to supply these orders promptly; but many delays, misfits, and mistakes would be avoided if Societies would only follow our instructions for measurement. A draft of the foot should in all cases be taken, and sent with the correct measurement. Societies should use our Order Books specially arranged for this department, which can be obtained free at either the Central or Branch Warehouses. **Cut Soles** for Repairing purposes supplied in any quantity or quality. Price List and Samples sent on application.

Orders for Regular Stock should be sent to

1, BALLOON STREET, MANCHESTER;
WATERLOO STREET, NEWCASTLE-ON-TYNE;
LEMAN STREET, LONDON, E.;

And, to prevent delay, orders for

BESPOKE OR MEASURED WORK

MUST BE SENT TO

WHEAT SHEAF WORKS, LEICESTER, *direct.*

Co-operators and Trade Unionists wishing to promote work under the best conditions, should ask for

WHEATSHEAF BRAND of BOOTS and SHOES,

AND TAKE NO OTHER.

Beckmondwike Boot & Shoe Works.

Warehouses:

BALLOON STREET, MANCHESTER;
 WATERLOO STREET, NEWCASTLE-ON-TYNE;
 LEMAN STREET, LONDON, E.; CHRISTMAS STREET, BRISTOL.

Salerooms:

LEEDS, HUDDERSFIELD, NOTTINGHAM, BLACKBURN, BIRMINGHAM,
 NORTHAMPTON, AND CARDIFF.

Orders must be addressed either to Central Office, or to the Branch
 Establishments at Newcastle or London.

THESE Works having been considerably enlarged, we are now in a position
 to double our production, and we appeal to societies to give us their
 support.

The Goods we make are **Men's and Youths' Strong Nailed**, suitable for
 miners, quarrymen, farm labourers, masons, joiners, railway servants, &c. We
 also make in **Men's and Boys'** a quantity of **Medium Strength** with **Smooth
 Bottoms**, with nails driven up, suitable for a working boot in lighter
 occupations.

We also make **Women's Strong Laced Mill Boots**. In the manufacture of
 our goods we pay special attention to the selection of material used for the
 inner sole, which is the foundation of a strong boot, and on which depends
 entirely the wear, and when re-soled and heeled gives the repairer a good
 foundation to work upon. This very important feature applies to the whole of
 the goods we make, from the lowest priced ones upwards.

We desire it to be fully understood that none of our manufactures contain
 paper or composition leather board, but solid leather; and therefore, if in some
 instances our prices are found to be somewhat higher than goods of similar
 appearance, you may rely upon it the difference of the price is in the quality.

CURRYING DEPARTMENT.

The above Department is now in full working order, and we are able to supply
 societies with any of the following Goods:—

LEVANT HIDES.	MEMEL HIDES.	SATIN KIPS.
„ KIPS.	„ HIDE BUTTS.	„ KIP SHOULDERS.
„ KIP SHOULDERS.	„ KIPS.	WAXED HIDE BUTTS.
„ HORSE SHOULDERS.	SATIN HIDES.	„ KIP BUTTS.
„ „ BELLIES.	„ HIDE SHOULDERS.	„ E. J. CALF.

Irlam & Durham Soap Works.

Salerooms and Warehouses :

BALLOON STREET, MANCHESTER ;

WATERLOO STREET, NEWCASTLE-ON-TYNE ;

LEMAN STREET, LONDON, E. ;

CHRISTMAS STREET, BRISTOL ;

LEEDS, HUDDERSFIELD, NOTTINGHAM, BLACKBURN, BIRMINGHAM,
NORTHAMPTON, AND CARDIFF.

THESE Works, and the processes carried on, have been worked out on scientific lines, and the Soaps manufactured are subjected to searching chemical tests before being put on the market.

We manufacture all the ordinary Household, Laundry, and Toilet Soaps, and, in addition, the following specialities :—

Finest French Milled Toilet Soaps.—“Triple Bouquet”—Roses, Violets, and Lilac. “Cold Cream Soap,” superfatted, specially prepared and recommended for tender skins. Glycerine and Cucumber, Medical Carbolic, and Shaving Soaps.

Transparent Soap, neutral and free from all injurious ingredients.

Re-melted Toilet Soaps.—Rose, Oatmeal, Brown Windsor, Carbolic, &c.

Soft Soaps, in Firkins and Tins.

“*Laundry Belle*” and “*Wheatsheaf Tablets*” (registered).—Perfumed 12oz. Tablets, possessing great lathering and cleansing properties.

“*Congress,*” 16oz. Tablets, specially noted for its easy lathering and great durability.

“*Flora*” (registered), the New Health Soap, specially perfumed and purified for family use.

CHEMICALLY PURE GLYCERINE.

CO-OPERATORS! Buy the Soaps made at your own Works with your own Capital.

Livingstone Mills,

BATLEY, YORKSHIRE.

WOOLLEN MANUFACTURERS.

— — — — —
 Salerooms and Warehouses:

1, BALLOON STREET, MANCHESTER;
 WATERLOO STREET, NEWCASTLE-ON-TYNE;
 AND LEMAN STREET, LONDON, E.

— — — — —
 Orders should be sent either direct to the Central Office,
 1, Balloon Street, Manchester, or to the Branches, Waterloo
 Street, Newcastle, and Leman Street, London.

WOOLLENS AND WORSTEDS.

THE Productions of our Batley Mill are not to be surpassed in either
 Quality, Style, or Price.

We are now manufacturing some of the choicest patterns in

Fancy Worsted Trouserings and Tweeds.

Our INDIGO BLUE SERGES AND WOADED BLACK WORSTED
 COATINGS are so well known throughout the Stores as to need no further
 description.

We have lately added to our Weaving Plant some of the newest and
 most efficient Fast Looms and Beaming Machinery, so that we are now
 in a position to meet satisfactorily the increasing demands of our
 customers.

PATTERN CARDS WILL BE SENT ON APPLICATION.

CO-OPERATORS! Ask at your STORES for BATLEY CLOTHS.

See that you get them, and don't be persuaded to take any other.

Productive Societies

FOR WHICH THE

CO-OPERATIVE WHOLESALE SOCIETY ARE AGENTS.



The Agricultural and Horticultural Association Limited.

Reliable Farm and Garden Seeds; special Manures for Fruit, Vegetable, and Garden Crops.



The Airedale Manufacturing Society Limited.

Manufacturers of Black Alpaca Lustres, Black Brilliantines, Black and Coloured French Twills, Mohair Glacés, Black and Coloured Persian, Russel and Cable Cords, Wool Serges, Black Orleans, Black and Coloured Italians, Black and Coloured Figures, Mottles, Mixtures, Stripes, &c., &c.



The Coventry Co-operative Watch Manufacturing Society Limited.

The Watches supplied by this Society we can well recommend as being of uniform good quality, and they engage to keep them in good going order for twelve months from date of purchase. We trust that individuals, through their societies, will give us their orders, so that we may do a larger trade in this department. Watches, from £2. 10s. to £25 each.



The Bromsgrove Nail Manufacturing Society Limited.



The Dudley Productive Co-operative Society Limited.

Manufacturers of all kinds of Galvanised Goods, Buckets, Fenders, &c.



The Eccles Industrial Manufacturing Society Limited.

Manufacturers of Toilet, Alhambra, and Damask Quilts, by hand and power; also Twill Sheetings, all of the best quality, and in tastily-arranged patterns.

Having repeatedly compared the Quilts produced by the Eccles Manufacturing Society with the Quilts made by other firms, we are thoroughly satisfied that those made by them are equal, and, when cost is considered, superior, to those sold by other makers. All Toilet and Honeycomb Quilts sold by the Co-operative Wholesale Society are made by the Eccles Manufacturing Society, and all members, when purchasing, should ask for the Eccles Quilts, and insist upon having them.

Midland Tinplate Workers' Society Limited.

The Hebden Bridge Fustian Manufacturing Society Limited.

Manufacturers of Cords, Moles, Velveteens, Imperials, Diagonals, Sateens, Twills, &c., in every variety and colour; Fustian Clothing, ready-made and to order. Samples and prices on application.

The Heckmondwike Manufacturing Society Limited.

Manufacturers of Carpets, Horse Cloths, Blankets, &c.

The Lancashire and Yorkshire Co-operative Productive Society Limited.

Manufacturers of Flannels, plain and coloured, of guaranteed purity and excellence of manufacture, combined with reasonable prices. Societies ordering sufficiently large may, if desired, have the goods finished to suit their special markets.

The Leek Silk Twist Manufacturing Company Limited.

The Leicester Elastic Web Manufacturing Society Limited.

The Leicester 2nd Hosiery Manufacturing Society Limited.

We are now their sole agents, and keep a stock of all classes of goods made by them.

The Paisley Manufacturing Society Limited.

Manufacturers of Saxony Wool Shawls and Plaids, in plain and fancy checks, Saxony Wool Handkerchiefs and Scarfs, Dress Tartans, and Twilled and Plain Wool Shirtings. A large variety of patterns to select from.

The Rochdale Pioneers' Society Limited.

Manufacturers of Tobacco, Snuffs, &c.

The Sheepshed Hosiery Manufacturing Society Limited.

The Sheffield Co-operative Cutlery Manufacturing Society Limited.

Keighley Ironworks Society Limited,

Manufacturers of Wringing Machines, &c.

Regular Steam Service

BETWEEN

GARSTON (LIVERPOOL) & ROUEN.

OFFICES :

CENTRAL : BALLOON STREET, MANCHESTER.

LIVERPOOL : 7, VICTORIA STREET.

GARSTON : NEW DOCK. ROUEN : 2, RUE JEANNE D'ARC.

A FIRST CLASS POWERFUL AND FAST STEAMER DESPATCHED FORTNIGHTLY.

EXTRA STEAMERS TO SUIT THE REQUIREMENTS OF THE TRADE.

Goods carried at through rates, with quick despatch, between Liverpool, Manchester, Birmingham, and North of England Towns, and Paris, Lyons, Beauvais, Lille, and North and East of France.

For Rates of Freight and other information, apply to the Society's offices, as above.

ON the outward voyages from Garston, in addition to sundry goods, the shipments consist largely of caustic soda, bleaching powder, and other chemicals from Widnes and St. Helens districts—machinery from Manchester and Bolton and neighbouring towns—American and East Indian cotton which has arrived at Liverpool and been ordered for shipment to Rouen, the principal seat of cotton industry in France. There are also considerable shipments of copper. On arrival of the goods at Garston they are taken directly alongside our steamers, in the railway wagons, and then by means of powerful hydraulic cranes they are transferred from the wagons to the hold of the steamers. By this means shippers may rely on the shipments being effected with prompt despatch, and we avoid the risk of damage which sometimes occurs when cartage is employed.

At Rouen the steamers are berthed in close proximity to the railway line, so that goods can be landed from the steamers direct on to the railway wagons. Or when consignees order goods to be forwarded from Rouen by water, the river barges are loaded alongside the steamer, and these are towed by powerful steam tugs up the Seine to Paris. Providing no exceptional delay occurs, the transit up the river occupies little over two days.

On the return journey from Rouen the steamer's cargo principally consists of sugar in bags and cases coming from Paris, also chemicals, dye stuffs, flour, field seeds, metals, and besides there are sundry goods in cases, such as glassware, toys, haberdashery, and *articles de Paris*.

No effort is spared to ensure the steamer being despatched punctually from each port on the appointed dates, and as by this means a regular service is maintained, we are favoured with a large traffic from general shippers.

Goole and Calais Line of Steamers.

CENTRAL OFFICES : 1, BALLOON STREET, MANCHESTER.

GOOLE OFFICES : STANHOPE STREET.

CALAIS OFFICES : RUE DE MADRID.

WEEKLY SERVICE BETWEEN

GOOLE AND CALAIS.

THE powerful and fast steamship "**PROGRESS**," or other steamer, will (weather and other casualties permitting) sail regularly between Goole and Calais, leaving Goole every **Wednesday** and Calais every **Saturday**. This line is in direct communication at Goole with the L. and Y. and N. E. Railway Companies, whose wagons can be loaded direct from the steamers, thereby ensuring despatch with the least risk of damage to the goods carried by the line.

The Aire and Calder Navigation Company run their canal boats alongside the Company's steamers, so that all who prefer their goods carried by canal can have them loaded direct into the Aire and Calder Company's boats and *vice versa*.

At Calais the steamers are berthed near the Custom House and opposite the goods warehouse of the North of France Railway Company, where the goods can be stored waiting the arrival of the steamers.

The North of France Railway Company have a line of rails laid to the place where the steamers are berthed, so that goods entrusted to this line can be safely and quickly despatched to their destination. The Goole and Calais route is the best and cheapest between the great manufacturing centres of the North of England and those of the North of France; and shippers in those districts will find it to their advantage to give this line a trial.

GOODS ARE CARRIED AT THROUGH RATES
FROM ANY PART OF THE UNITED KINGDOM TO THE PRINCIPAL CITIES
OF FRANCE AND THE CONTINENT.

For Rates of Freight and other information apply as above.

Goole and Hamburg Line of Steamers.

CENTRAL OFFICES: 1, BALLOON STREET, MANCHESTER.

GOOLE OFFICES: STANHOPE STREET.

HAMBURG BROKER: D. FUHRMANN (NISSLE AND GÜNTHER SUCCESSOR),
DOVENHOF, HAMBURG.

REGULAR SERVICE BETWEEN

GOOLE AND HAMBURG.

THE POWERFUL AND FAST STEAMSHIPS

"LIBERTY," "EQUITY," and "FEDERATION,"

AND OTHER STEAMERS,

WILL (WEATHER AND OTHER CASUALTIES PERMITTING) SAIL REGULARLY
BETWEEN GOOLE AND HAMBURG,

LEAVING EACH PORT FOUR TIMES A WEEK.

Extra Steamers to suit the requirements of the Trade.

THIS line is in direct communication at Goole with the L. and Y. and N. E. Railway Companies, whose wagons can be loaded direct from the steamer, without the risk or expense of cartage. This is of great importance to shippers, as it ensures a quick delivery of their goods in a clean and undamaged condition.

The Aire and Calder Navigation Company run their canal boats alongside the Company's steamers, so that all who prefer their goods carried by canal can have them loaded direct into the Aire and Calder Company's boats, and *vice versa*.

At Hamburg the steamers are berthed alongside the warehouses of the Railway Company, where the goods can be stored waiting the arrival of the steamers.

GOODS ARE CARRIED AT THROUGH RATES
FROM ANY PART OF THE UNITED KINGDOM TO THE PRINCIPAL CITIES
OF GERMANY AND THE CONTINENT.

For Rates of Freight and other information apply as above.

STEAM SERVICE

BETWEEN

MANCHESTER AND ROUEN.



SINCE THE UNOFFICIAL OPENING DAY OF THE MANCHESTER SHIP CANAL, JANUARY 1st, 1894, WE HAVE HAD THE STEAMSHIP

“PIONEER”

ENGAGED IN TRADE

BETWEEN

Manchester and Rouen.

SHE was the first steamer registered at the Custom House as belonging to the port of Manchester; also the first trading steamer that arrived in the port.

The outwards traffic from Manchester has not yet been so large as we hoped would be the case, but homewards the steamer has loaded fairly well, although at low rates of freight, to compete with other routes.

THE ROUND TRIP IS DONE FORTNIGHTLY.

PRINCIPAL EVENTS IN CONNECTION WITH THE
CO-OPERATIVE WHOLESALE SOCIETY
SINCE ITS COMMENCEMENT.

YEAR.	DAY.	EVENTS.
1863	.. Aug. 11 ..	Co-operative Wholesale Society enrolled.
1864	.. Mar. 14 ..	Co-operative Wholesale Society commenced business.
1866	.. April 24 ..	Tipperary Branch opened.
1868	.. June 1 ..	Kilmallock Branch opened.
1869	.. Mar. 1 ..	Balloon Street Warehouse opened.
"	.. July 12 ..	Limerick Branch opened.
1871	.. Nov. 26 ..	Newcastle-on-Tyne Branch opened.
1872	.. July 1 ..	Manchester Boot and Shoe Department commenced.
"	.. Oct. 14 ..	Bank Department commenced.
1873	.. Jan. 13 ..	Crumpsall Works purchased
"	.. April 14 ..	Armagh Branch opened.
"	.. June 2 ..	Manchester Drapery Department established.
"	.. July 14 ..	Waterford Branch opened.
"	.. Aug. 4 ..	Cheshire Branch opened.
"	.. " 4 ..	Leicester Works purchased.
"	.. " 16 ..	Insurance Fund established.
"	.. Sept. 15 ..	Leicester Works commenced.
1874	.. Feb. 2 ..	Tralee Branch opened.
"	.. Mar. 9 ..	London Branch established.
"	.. Oct. 5 ..	Durham Soap Works commenced.
1875	.. April 2 ..	Liverpool Purchasing Department commenced.
"	.. June 15 ..	Manchester Drapery Warehouse, Dantzic Street, opened.
1876	.. Feb. 14 ..	Newcastle Branch Buildings, Waterloo Street, opened.
"	.. " 21 ..	New York Branch established.
"	.. May 24 ..	S.S. "Plover" purchased.
"	.. July 16 ..	Manchester Furnishing Department commenced.
"	.. Aug. 5 ..	Leicester Works first Extensions opened.
1877	.. Jan. 15 ..	Cork Branch established.
"	.. Oct. 25 ..	Land in Liverpool purchased.
1879	.. Feb. 21 ..	S.S. "Pioneer," Launch of.
"	.. Mar. 24 ..	Rouen Branch opened.
"	.. " 29 ..	S S. "Pioneer," Trial trip.
"	.. June 30 ..	Goole Forwarding Department opened.
1880	.. Jan. 30 ..	S.S. "Plover" sold.
"	.. July 27 ..	S.S. "Cambrian" purchased.
"	.. Aug. 14 ..	Heckmondwike Boot and Shoe Works commenced.
"	.. Sept. 27 ..	London Drapery Department commenced in new premises, 99, Leman Street.
1881	.. June 6 ..	Copenhagen Branch opened.
1882	.. Jan. 18 ..	Garston Forwarding Depot commenced.
"	.. Oct. 31 ..	Leeds Saleroom opened.

PRINCIPAL EVENTS IN CONNECTION WITH THE CO-OPERATIVE WHOLESALE SOCIETY

SINCE ITS COMMENCEMENT.—CONTINUED.

YEAR.	DAY.	EVENTS.
1882	.. Nov. 1 ..	London Tea and Coffee Department commenced.
1883	.. July 21 ..	S.S. "Marianne Briggs" purchased.
1884	.. April 7 ..	Hamburg Branch commenced.
"	.. May 31 ..	Leicester Works second Extensions opened.
"	.. June 25 ..	Newcastle Branch—New Drapery Warehouse opened.
"	.. Sept. 13 ..	Commemoration of the Society's Twenty-first Anniversary at Newcastle-on-Tyne and London.
"	.. " 20 ..	Commemoration of the Society's Twenty-first Anniversary at Manchester
"	.. " 29 ..	Bristol Depôt commenced.
"	.. Oct. 6 ..	S.S. "Progress," Launch of.
1885	.. Aug. 25 ..	Huddersfield Saleroom opened.
"	.. Dec. 30 ..	Fire—Tea Department, London.
1886	.. April 22 ..	Nottingham Saleroom opened.
"	.. Aug. 25 ..	Longton Crockery Depôt opened.
"	.. Oct. 12 ..	S.S. "Federation," Launch of.
1887	.. Mar. 14 ..	Batley Mill commenced.
"	.. June 1 ..	S.S. "Progress" damaged by fire at Hamburg.
"	.. July 21 ..	Manchester—New Furnishing Warehouse opened.
"	.. Aug. 29 ..	Heckmondwike—Currying Department commenced.
"	.. Nov. 2 ..	London Branch—New Warehouse opened.
"	.. " 2 ..	Manufacture of Cocoa and Chocolate commenced.
1888	.. July 7 ..	S.S. "Equity," Launch of.
"	.. Sept. 8 ..	S.S. "Equity," Trial trip.
"	.. " 27 ..	S.S. "Cambrian" sold.
"	.. Oct. 14 ..	Fire—Newcastle Branch.
1889	.. Feb. 18 ..	Enderby Extension opened.
"	.. Nov. 11 ..	Longton Depôt - New Premises opened.
1890	.. Mar. 10 ..	S.S. "Liberty," Trial trip.
"	.. May 16 ..	Blackburn Saleroom opened.
"	.. June 10 ..	Leeds Ready-mades Department commenced.
"	.. Oct. 22 ..	Northampton Saleroom opened.
1891	.. April 18 ..	Dunston Corn Mill opened.
"	.. Oct. 22 ..	Cardiff Saleroom opened.
"	.. Nov. 4 ..	Leicester New Works opened.
"	.. " 16 ..	Aarhus Branch opened.
1892	.. May 5 ..	Birmingham Saleroom opened.
1893	.. " 8 ..	Broughton Cabinet Factory opened.
1894	.. June 29 ..	Montreal Branch opened.
1895	.. Jan 23 ..	Printing Department commenced.
"	.. Oct. 2 ..	Irlam Soap Works opened.
"	.. " 10 ..	Loss of the S.S. "Unity."

LIST OF TELEGRAPHIC ADDRESSES.

- CENTRAL, MANCHESTER: "WHOLESALE, MANCHESTER."
 NEWCASTLE BRANCH: "WHOLESALE, NEWCASTLE-ON-TYNE."
 LONDON BRANCH: "CO-OPERATIVE, LONDON."
 BRISTOL DEPÔT: "WHOLESALE, BRISTOL."
 LIVERPOOL OFFICE AND WAREHOUSE: "WHOLESALE, LIVERPOOL."
 LEEDS SALE AND SAMPLE ROOMS: "WHOLESALE, LEEDS."
 CRUMPSALL WORKS: "BISCUIT, MANCHESTER."
 CARDIFF SALEROOM: "WHOLESALE, CARDIFF."
 LEICESTER SHOE WORKS: "WHOLESALE, LEICESTER."
 HECKMONDWIKE SHOE WORKS: "WHOLESALE, HECKMONDWIKE."
 BATLEY WOOLLEN MILL: "WHOLESALE, BATLEY."
 LEEDS READY-MADES FACTORY: "SOCIETY, LEEDS."
 LONGTON CROCKERY DEPÔT: "WHOLESALE, LONGTON (STAFF.)."
 SOAP WORKS, DURHAM: "WHOLESALE, DURHAM."
 CORN MILL, DUNSTON-ON-TYNE: "WHOLESALE, DUNSTON, GATESHEAD."
 NORTHAMPTON SALEROOM: "WHOLESALE, NORTHAMPTON."

TELEPHONIC COMMUNICATION.

Our Premises in the following towns are directly connected with the Local Telephone System:—

	Nos.
MANCHESTER—GENERAL OFFICES.....	802
" " " ".....	†856
" DRAPERY DEPARTMENT.....	908
" " " ".....	†856B
" FURNISHING DEPARTMENT.....	1755
" " " ".....	†856A
CRUMPSALL—SUB TO MANCHESTER GENERAL OFFICES.	
BROUGHTON—CABINET WORKS.....	†814
NEWCASTLE	1260
" 	†1787
" 	*284
LONDON—GROCERY AND PROVISION.....	2385
" DRAPERY	2384
" TEA DEPARTMENT	2217
BRISTOL	40
LIVERPOOL	397
GARSTON.....	6
GOOLE	2
LEICESTER.....	235
LONGTON.....	416
DUNSTON.....	1261

* Post-office System. † New. All others National Telephone Company.

CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

PAST MEMBERS OF GENERAL COMMITTEE.

NAME.	ADDRESS.	ELECTED.	RETIRED.
*A. Greenwood ..	Rochdale.....	1863 August ..	1870 August.
†Councillor Smithies ..	Rochdale.....	1863 August ..	1869 May.
§James Dyson	Manchester	1863 August ..	1867 May.
Edward Hooson	Manchester	1863 August ..	1864 March.
		1866 May.....	1869 Dec.
John Hilton	Middleton	1863 August ..	1868 Nov.
		1863 August ..	1864 March.
*James Crabtree	Heckmondwike ..	1865 Nov.	1874 May.
		1885 Dec.	1886 March.
		1886 June	1889 Dec.
Joseph Thomasson.....	Oldham	1863 August ..	1864 March.
		1866 May.....	1869 Nov.
Charles Howarth	Heywood	1864 March ..	1866 October.
		1864 March ..	1865 Nov.
J. Neild	Mossley	1867 Nov.	1868 Nov.
Thomas Cheetham....	Rochdale	1864 March ..	1865 Nov.
§E. Longfield	Manchester	1867 May.....	1867 Nov.
		1868 Feb.....	1868 May.
†J. M. Percival.....	Manchester	1870 Feb.....	1872 August.
		1876 March ..	1882 June.
Isaiah Lee	Oldham	1867 Nov.	1868 Nov.
§D. Baxter.....	Manchester	1868 May.....	1871 May.
J. Swindells.....	Hyde.....	1868 Nov.	1869 Nov.
T. Sutcliffe	Todmorden	1868 Nov.	1869 Nov.
†James C. Fox.....	Manchester	1868 Nov.	1871 May.
W. Marcroft	Oldham	1869 May.....	1871 May.
Thomas Pearson	Eccles	1869 Nov.	1871 Nov.
R. Holgate	Over Darwen	1869 Nov.	1870 Nov.
A. Mitchell	Rochdale	1870 August ..	1870 Nov.
W. Moore.....	Batley Carr.....	1870 Nov.	1871 August.
		1871 May.....	1874 Dec.
†Titus Hall	Bradford	1877 June	1885 Dec.
		1871 May.....	1873 May.
B. Hague	Barnsley	1874 Dec.	1884 Sept.
Thomas Shorrocks....	Over Darwen	1871 May.....	1871 Nov.
†R. Allen	Oldham	1871 August ..	1877 April.
		1871 August ..	1872 Feb.
Job Whiteley	Halifax	1873 Feb.....	1874 Feb.
†Thomas Hayes	Failsworth	1871 Nov.	1873 August.
Jonathan Fishwick ..	Bolton	1871 Nov.	1872 Feb.
J. Thorpe	Halifax	1872 Feb.....	1873 Feb.
		1872 Feb.....	1876 June.
†W. Johnson.....	Bolton	1877 June	1885 March.
		1872 August ..	1874 Feb.
§H. Whiley	Manchester	1874 May.....	1876 March.
J. Butcher	Banbury	1873 May.....	1873 August

* Held Office as President.
 † Held Office as Secretary.

† Held Office as Secretary and Treasurer.
 § Held Office as Treasurer.

PAST MEMBERS OF GENERAL COMMITTEE.—*Continued.*

NAME.	ADDRESS.	ELECTED.	RETIRED.
H. Atkinson	Blaydon-on-Tyne ..	1873 August ..	1874 Dec.
J. F. Brearley	Oldham	1874 Feb.....	1874 Dec.
Robert Cooper.....	Accrington	1874 Feb.....	1876 June.
H. Jackson	Halifax	1874 Dec.	1876 June.
J. Pickersgill	Batley Carr	1874 Dec.	1877 March.
W. Barnett	Macclesfield.....	1874 Dec.	1882 Sept.
W. Nuttall	Oldham	1876 June	1877 Dec.
S. Lever	Bacup	1876 Sept.	1885 Sept.
F. R. Stephenson	Halifax	1886 March ..	1888 May.
R. Whittle	Crewe	1876 Sept.	1877 March.
R. Whittle	Crewe	1877 Dec.	1886 March.
Joseph Mc.Nab	Hyde	1883 Dec.	1886 March.
James Hilton	Oldham	1884 Sept.	1890 January.
Samuel Taylor	Bolton	1885 Sept.	1891 Dec.
William P. Hemm.....	Nottingham	1888 Sept.	1889 August.
H. C. Pingstone	Manchester	1886 March ..	1894 June.
* J. T. W. Mitchell.....	Rochdale	1869 Nov.	1895 March.
E. Hibbert	Failsworth	1882 Sept.	1895 June.
James Lownds	Ashton-under-Lyne..	1885 March....	1895 July.

* PAST MEMBERS OF NEWCASTLE BRANCH COMMITTEE.

NAME.	ADDRESS.	ELECTED.	RETIRED.
George Dover	Chester-le-Street ..	1874 Dec.	1877 Sept.
Humphrey Atkinson..	Blaydon-on-Tyne ..	1874 Dec.	1879 May.
† James Patterson ...	West Cramlington..	1874 Dec.	1877 Sept.
John Steel	Newcastle-on-Tyne..	1874 Dec.	1876 Sept.
William Green	Durham	1874 Dec.	1891 Sept.
Thomas Pinkney	Newbottle	1874 Dec.	1875 March.
† John Thirlaway	Gateshead	1876 Dec.	1892 May.
William Robinson	Shotley Bridge	1877 Sept.	1884 June.
William J. Howat	Newcastle-on-Tyne..	1877 Dec.	1883 Dec.
J. Atkinson.....	Wallsend	1883 Dec.	1890 May.
George Fryer	Cramlington	1883 Dec.	1887 Dec.
Matthew Bates	Newcastle-on-Tyne..	1884 June	1893 June.
Richard Thompson ..	Sunderland	1874 Dec.	1893 Sept.
George Scott	Newbottle	1879 May.....	1893 Dec.

* PAST MEMBERS OF LONDON BRANCH COMMITTEE.

NAME.	ADDRESS.	ELECTED.	RETIRED.
J. Durrant	Arundel	1874 Dec.	1875 Dec.
John Green	Woolwich	1874 Dec.	1876 Dec.
† Thomas Fowe	Buckfastleigh	1874 Dec.	1878 March.
† William Strawn	Sheerness	1875 Dec.	1882 March.
Frederick Lamb.....	Banbury	1876 Dec.	1888 Dec.
F. A. Williams	Reading	1882 June	1886 Sept.
J. J. B. Beach.....	Colchester	1886 Dec.	1888 Dec.

* Newcastle and London Branch Committees constituted December, 1874.

† Held Office as Secretary.

CO-OPERATIVE WHOLESALE SOCIETY
LIMITED.



MEMBERS OF GENERAL, AND NEWCASTLE
AND LONDON BRANCH COMMITTEES WHO HAVE DIED
DURING TIME OF OFFICE.

NAME.	ADDRESS.	DATE OF DEATH.
GENERAL.		
Edward Hooson	Manchester	December 11th, 1869.
Robert Allen	Oldham	April 2nd, 1877.
Richard Whittle	Crewe	March 6th, 1886.
Samuel Lever	Bacup	May 18th, 1888.
William P. Hemm	Nottingham	August 21st, 1889.
James Hilton	Oldham	January 18th, 1890.
Samuel Taylor	Bolton	December 15th, 1891.
J. T. W. Mitchell.....	Rochdale	March 16th, 1895.
E. Hibbert.....	Failsworth	June 25th, 1895.
James Lownds	Ashton-un-Lyne..	July 27th, 1895.
NEWCASTLE.		
J. Atkinson	Wallsend	May 25th, 1890.
William Green	Durham	September 9th, 1891.
John Thirlaway	Gateshead	May 1st, 1892.
LONDON.		
J. J. B. Beach	Colchester	December 21st, 1888.

CO-OPERATIVE CONGRESSES.

No.	Year.	Date of Opening.	Where Held.	PRESIDENTS.		
				First Day. Inaugural Address delivered by	Second Day.	Third Day.
1	1869	May 31	London: Society of Arts, John-st., Adelphi	T. Hughes, M.P.	A. J. Mundella, M.P.	W. Morrison, M.P.
2	1870	June 6	Manchester: Memorial Hall	W. Morrison, M.P. [M.P.]	Rev. W. N. Molesworth, M.A.	J. T. Hibbert, M.P.
3	1871	April 10	Birmingham: Midland Institute	Hon. Auberon Herbert,	C. Catell	W. Morrison, M.P.
4	1872	" 1	Bolton: Co-operative Hall	T. Hughes, M.P.	E. V. Neale	W. Morrison, M.P.
5	1873	" 12	Newcastle: Mechanics' Institute	Joseph Cowen, jun.	W. Morrison, M.P.	T. Hughes, M.P.
6	1874	" 6	Halifax: Mechanics' Hall	Thomas Brassey, M.P.	W. Morrison	W. Morrison.
7	1875	Mar. 29	London: Co-operative Institute	Professor T. Rogers ..	T. Hughes, Q.C.	W. Morrison.
8	1876	April 17	Glasgow: Assembly-rooms, 138, Bath-st. }	* Professor Caird	G. Anderson, M.P. ..	Baillie Collins.
9	1877	" 2	Leicester: Museum Hall.	Hon. Auberon Herbert.	Lloyd Jones	Abraham Greenwood
10	1878	" 22	Manchester: Co-op. Hall, Downing-st..	Marquis of Ripon	Bishop of Manchester	Dr. John Watts.
11	1879	" 14	Gloucester: Corn Exchange	Professor Stuart	J. T. W. Mitchell ..	James Crabtree.
12	1880	May 17	Newcastle-on-Tyne: Bath-lane Schoolrm.	Bishop of Durham	R. S. Watson	H. R. Bailey.
13	1881	June 6	Leeds: Albert Hall	Lord Derby	T. Hughes, Q.C.	James Crabtree.
14	1882	May 29	Oxford: Town Hall	Lord Reay	Councillor Pumphrey	George Hines.
15	1883	" 14	Edinburgh: Oddfellows' Hall.	Rt. Hon. W. E. Baxter,	William Maxwell ..	J. Allan. Lincoln
16	1884	June 2	Derby: Lecture Hall, Wardwick	Sedley Taylor	A. Scottin	Councillor Hartley,
17	1885	May 25	Oldham: Co-operative Hall, King-street.	Lloyd Jones	F. Hardern	Lewis Feber.
18	1886	June 14	Plymouth: Guildhall	Earl of Morley	A. H. D. Acland, M.P.	J. H. Young.
19	1887	May 30	Carlisle: Her Majesty's Theatre	C. J. Holyoake	Sir W. Lawson, M.P.	Councillor Rule.
20	1888	" 21	Dewsbury: Industrial Hall	E. V. Neale	Marquis of Ripon ..	Jno. Cave, jun.
21	1889	June 10	Ipswich: Public Hall	Professor A. Marshall.	B. Jones	G. Hines.
22	1890	May 26	Glasgow: City Hall	Earl of Rosebery	William Maxwell ..	James Deans.
23	1891	" 18	Lincoln: Drill Hall, Broadgate	A. H. D. Acland, M.P.	D. M'Innes	J. Hepworth.
24	1892	June 6	Rochdale: Baillie-street Chapel	J. T. W. Mitchell ..	A. Greenwood	Councillor Cheetham
25	1893	May 22	Bristol: Hall of the Y.M.C.A.	Councillor G. Hawkins	J. Clay, J.P.	W. H. Brown, C.C.
26	1894	" 14	Sunderland: Victoria Hall	T. Tweddell, J.P., F.R.G.S.	J. M'Kendrick	W. Crooks.
27	1895	June 3	Huddersfield	Geo. Thomson	Coun. T. Bland, J.P.	Jas. Broadbent.

* Professor Caird presided at this Congress; the inaugural address was delivered by Professor Hodgson. In all other cases the chairman for the day delivered the inaugural address.

MEETINGS AND OTHER COMING EVENTS

IN CONNECTION WITH THE SOCIETY IN 1896.

-
- Feb. 1—SATURDAY....Nomination Lists: Last day for receiving.
- Mar. 3—TUESDAYVoting Lists: Last day for receiving.
- Mar. 7—SATURDAY....Newcastle and London Branch and Divisional
Quarterly Meetings.
- Mar. 14—SATURDAY....General Quarterly Meeting—Manchester.
- Mar. 28—SATURDAY....Quarter Day.
- May 2—SATURDAY....Nomination Lists: Last day for receiving.
- June 2—TUESDAYVoting Lists: Last day for receiving.
- June 6—SATURDAY....Newcastle and London Branch and Divisional
Quarterly Meetings.
- June 13—SATURDAY....General Quarterly Meeting—Manchester.
- June 27—SATURDAY....Quarter Day.
- Aug. 1—SATURDAY....Nomination Lists: Last day for receiving.
- Sept. 1—TUESDAYVoting Lists: Last day for receiving.
- Sept. 5—SATURDAY....Newcastle and London Branch and Divisional
Quarterly Meetings.
- Sept. 12—SATURDAY....General Quarterly Meeting—Manchester.
- Sept. 26—SATURDAY....Quarter Day.
- Oct. 31—SATURDAY....Nomination Lists: Last day for receiving.
- Dec. 1—TUESDAYVoting Lists: Last day for receiving.
- Dec. 5—SATURDAY....Newcastle and London Branch and Divisional
Quarterly Meetings.
- Dec. 12—SATURDAY....General Quarterly Meeting—Manchester.
- Dec. 26—SATURDAY....Quarter Day.

PROGRESS FROM COMMENCEMENT, IN

YEAR ENDING	£s Shares taken up.	No. of Mem- bers belonging to our Shareholders.	CAPITAL.						Net Sales.	
			Shares.	Loans and Deposits.	Trade and Bank Reserve Fund.	Insurance Fund.	Reserved Expenses.	Total.		
			£	£	£	£	£	£	£	
Oct. 1864 (30 weeks) .....	.....	18,387	2,455	Included in	.....	.....	.....	.....	2,455	51,857
" 1865 .....	.....	24,005	7,182	Shares.	.....	.....	.....	.....	7,182	120,754
" 1866 .....	.....	31,030	10,968	82	.....	.....	.....	.....	11,050	175,489
Jan. 1868 (65 weeks) .....	.....	59,349	11,276	14,355	682	.....	.....	.....	26,313	331,744
" 1869 .....	.....	74,737	14,888	16,059	1,115	.....	.....	.....	32,062	412,240
" 1870 .....	.....	79,245	16,556	22,822	1,280	.....	.....	.....	40,658	507,217
" 1871 (53 weeks) .....	.....	89,880	19,015	22,323	2,826	.....	.....	.....	44,164	677,784
" 1872	5,835	114,588	24,410	25,768	1,910	.....	.....	.....	52,088	753,764
" 1873	6,949	134,276	31,352	112,589	2,916	.....	.....	.....	146,857	1,153,192
" 1874	13,899	168,985	48,126	147,949	1,613	2,356	.....	.....	200,044	1,636,950
" 1875	17,326	198,608	60,930	193,594	5,373	3,385	.....	.....	263,282	1,964,829
" 1876	22,254	249,516	73,249	286,614	8,910	5,834	.....	.....	379,607	2,247,395
" 1877 (53 weeks)	24,717	276,522	94,590	299,287	12,631	10,843	634	.....	417,985	2,697,366
" 1878	24,979	274,649	103,091	287,536	14,554	12,556	788	.....	418,525	2,827,052
" 1879	28,206	305,161	117,657	291,939	16,245	15,127	1,146	.....	442,114	2,705,625
Dec. 1879 (50 weeks)	30,688	331,625	130,615	321,670	25,240	15,710	1,095	.....	494,330	2,645,331
" 1880	33,663	361,523	146,061	361,805	38,422	17,905	1,661	.....	565,854	3,339,681
" 1881	34,351	367,973	156,052	386,824	16,037	18,644	2,489	.....	580,046	3,574,095
" 1882	38,643	404,006	171,940	416,832	20,757	19,729	2,945	.....	632,203	4,038,238
" 1883	41,733	433,151	186,692	455,879	20,447	21,949	6,214	.....	691,181	4,546,889
" 1884 (53 weeks)	45,099	459,734	207,080	494,840	25,126	24,324	9,988	.....	761,358	4,675,371
" 1885	51,099	507,772	234,112	524,781	31,094	40,084	11,104	.....	841,175	4,793,151
" 1886	58,612	558,104	270,679	567,527	37,755	57,015	11,409	.....	944,379	5,223,135
" 1887	64,475	604,800	300,953	590,091	39,095	73,237	13,666	.....	1,017,042	5,713,279
" 1888	67,704	634,196	318,583	648,134	51,189	84,201	13,928	.....	1,116,085	6,200,074
" 1889 (53 weeks)	72,399	679,336	342,218	722,321	58,358	119,541	9,197	.....	1,251,635	7,028,944
" 1890	92,572	721,316	434,017	824,974	48,549	155,231	11,695	.....	1,474,466	7,429,073
" 1891	100,022	751,269	473,956	900,752	53,165	193,115	15,409	.....	1,636,397	8,766,430
" 1892	112,339	824,149	523,512	925,471	£6,301	218,534	17,827	.....	1,741,645	9,300,904
" 1893	121,555	873,698	570,149	917,482	35,313	240,884	14,973	.....	1,779,301	9,526,167
" 1894	127,211	910,104	598,496	972,586	37,556	259,976	22,488	.....	1,891,102	9,443,933
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	114,512,848

TRADE

DR.

RESERVE FUND ACCOUNT FROM

	£
Additions to Reserve Fund—	
From Disposal of Profit Account, as above—Net	115,017
Bonus to Employés: Balances between Amounts Provided and actually Paid	811
Dividend on Bad Debts, previously written off	786
Unclaimed Shares, Loans, and Cash	84
Profit on Sale of Strawberry Estate, Newcastle	1,953
" " Land, Liverpool	713
" " Land and Buildings, Rosedale	11
" " " South Shields	96
Interest on Manchester Ship Canal Shares	1,515
Dividend on Sales to Employés	363

£120,804

MARCH, 1864, TO DECEMBER, 1894.

Comparison with corresponding period previous year.		DISTRIBUTIVE EXPENSES.			Net Profit.	Average Dividend paid per £.	ADDITIONS TO TRADE.		Dates Departments and Branches were commenced.
Increase.	Rate.	Amnt.	Rate on Sales				Reserve Fund.	Insurance Fund.	
£	..	£	Per £.	Per £100.	£	d.	£	£	
....	..	347	1 ¹ / ₂	13 4 ¹ / ₂	267	1 ¹ / ₂	....	....
....	..	906	1 ¹ / ₂	15 0	1,858	3 ¹ / ₂	....	....
54,735	45 ¹ / ₂	1,615	2 ¹ / ₂	18 4 ¹ / ₂	2,310	3	234	....	Tipperary.
112,688	51 ¹ / ₂	3,135	2 ¹ / ₂	18 10 ¹ / ₂	4,411	3	450	....	Kilmallock.
124,068	43	3,838	1 ¹ / ₂	16 2 ¹ / ₂	4,862	2 ¹ / ₂	416	....	Limerick.
94,977	23	4,644	2 ¹ / ₂	18 8 ¹ / ₂	4,248	1 ¹ / ₂	542	....
159,379	30 ¹ / ₂	5,588	1	16 5 ¹ / ₂	7,626	2 ¹ / ₂	1,620	....	Newcastle.
86,559	12 ¹ / ₂	6,853	2	19 0	7,867	2 ¹ / ₂	1,036	....	Manchester Boot and Shoe, Crumpsall.
894,368	51 ¹ / ₂	12,811	2 ¹ / ₂	22 2 ¹ / ₂	11,116	2 ¹ / ₂	1,243	....	{ Armagh, M'chester Drapery, Leicester, Hartford, Waterford, Clonmel.
483,518	41 ¹ / ₂	21,147	3	25 10	14,233	2	922	....	London, Tralee, Durham.
837,879	20	28,436	3 ¹ / ₂	28 11 ¹ / ₂	20,684	2	4,461	....	Liverpool.
282,566	14 ¹ / ₂	31,555	3 ¹ / ₂	28 0 ¹ / ₂	26,750	2 ¹ / ₂	4,826	....	{ New York, Goole, Furnishing. S.S. "Plover" purchased. Cork.
401,095	17 ¹ / ₂	42,436	3 ¹ / ₂	31 5 ¹ / ₂	36,979	2 ¹ / ₂	4,925	....
188,897	7 ¹ / ₂	43,169	3 ¹ / ₂	30 6 ¹ / ₂	29,189	2	579	....
121,427*	4 ¹ / ₂ *	43,098	3 ¹ / ₂	31 10 ¹ / ₂	34,959	2 ¹ / ₂	5,970	....
22,774	1 ¹ / ₂	41,309	3 ¹ / ₂	31 2 ¹ / ₂	42,764	2 ¹ / ₂	8,060	....	{ Launch of Steamship "Pioneer," Ronen. Goole forwarding depôt.
611,282	22 ¹ / ₂	47,153	3 ¹ / ₂	28 2 ¹ / ₂	42,090	2 ¹ / ₂	10,651	....	Heckmondwike.
234,414	7	51,306	3 ¹ / ₂	28 8 ¹ / ₂	46,850	2 ¹ / ₂	7,672	....	{ Copenhagen. Purchase of S.S. "Cambrian."
464,143	12 ¹ / ₂	57,840	3 ¹ / ₂	28 4 ¹ / ₂	49,658	2 ¹ / ₂	3,416	....	Tea and Coffee Department, London.
508,651	12 ¹ / ₂	66,057	3 ¹ / ₂	29 0 ¹ / ₂	47,885	2 ¹ / ₂	3,176	....	Purchase of S.S. "Unity."
41,042	1 ¹ / ₂	70,848	3 ¹ / ₂	30 1	54,491	2 ¹ / ₂	6,432	....	{ Hamburg. Bristol Depôt. Launch of S.S. "Progress."
208,946	4 ¹ / ₂	74,305	3 ¹ / ₂	31 0	77,630	3 ¹ / ₂	4,434	13,259	
430,028	8 ¹ / ₂	81,653	3 ¹ / ₂	31 3 ¹ / ₂	83,328	3 ¹ / ₂	7,077	15,469	{ Longton Depôt. Launch of S.S. "Federation."
490,056	9 ¹ / ₂	93,979	3 ¹ / ₂	32 10 ¹ / ₂	65,141	2 ¹ / ₂	9,408	2,778	Batley, Heckmondwike Currying.
486,889	8 ¹ / ₂	105,027	4	33 10 ¹ / ₂	82,490	2 ¹ / ₂	8,684	6,614	{ London Cocoa Department. Launch of S.S. "Equity." Batley Ready Mades.
709,638	11 ¹ / ₂	117,849	4	33 6 ¹ / ₂	101,984	3 ¹ / ₂	2,249	16,658	
532,750	7 ¹ / ₂	126,879	4	34 1 ¹ / ₂	126,979	3 ¹ / ₂	..	20,982	{ Launch of S.S. "Liberty." Leeds Ready-Mades Department.
1,337,387	18	143,151	4 ¹ / ₂	32 7 ¹ / ₂	135,008	3 ¹ / ₂	1,145	14,702	Dunston, Aarhus, Leicester New Works
534,474	6	165,737	4 ¹ / ₂	35 7 ¹ / ₂	98,532	2 ¹ / ₂	6,514	1,000	Broughton Cabinet Works.
235,263	2 ¹ / ₂	179,910	4 ¹ / ₂	37 9 ¹ / ₂	84,156	2 ¹ / ₂	+17,215	7,659	
82,229*	0 ¹ / ₂ *	186,058	4 ¹ / ₂	39 4 ¹ / ₂	126,192	2 ¹ / ₂	26,092	....	Montreal.
....	..	1,857,124	3 ¹ / ₂	32 5 ¹ / ₂	1,472,537	2 ¹ / ₂	+115,017	+99,121	

* Decrease. † From. ‡ From Disposal of Profit Account.

DEPARTMENT.

COMMENCEMENT OF THE SOCIETY.

CR.

Deductions from Reserve Fund—	£
Celebration Dinner: Opening Warehouse, Balloon Street	56
Land and Buildings Account Depreciation, Special	1,148
Fixtures	852
Newcastle Formation Expenses	16
Insurance Fund	6,000
Investments Written off: Bank Department	18,259
Trade Department	10,660
Manchester Ship Canal Shares	20,000
Donations, Subscriptions, &c.	22,547
21st Anniversary Commemoration Expenses, Manchester	2,017
	81,555

BALANCE—Reserve Fund:—December 22nd, 1894, as per Capital Account

" " as per proposed Disposal of Profit Account.

89,249

£120,804

MANCHESTER GROCERY AND PROVISION TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1890; IN QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED.	Sales.	EXPENSES.		NET PROFIT.		Stocks at end.
		Amount.	Rate.	Amount.	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£
January, 1875 (3 quarters) ..	1110155	11716	0 2 $\frac{1}{2}$	11986	0 2 $\frac{1}{2}$	71360
" 1876	1476536	14701	0 2 $\frac{3}{4}$	19042	0 3	56487
" 1877 (53 weeks)	1707637	17692	0 2 $\frac{3}{4}$	27993	0 3 $\frac{1}{2}$	68205
" 1878	1761017	16866	0 2 $\frac{1}{2}$	25745	0 3 $\frac{1}{2}$	59790
" 1879	1688613	17373	0 2 $\frac{3}{4}$	26502	0 3 $\frac{3}{4}$	55319
December, 1879 (50 weeks)	1590007	16761	0 2 $\frac{1}{2}$	28826	0 4 $\frac{1}{2}$	71446
" 1880	1998384	18911	0 2 $\frac{1}{4}$	30977	0 3 $\frac{1}{2}$	70091
" 1881	2047210	19883	0 2 $\frac{1}{4}$	32460	0 3 $\frac{3}{4}$	87277
" 1882	2298350	23666	0 2 $\frac{3}{4}$	30644	0 3 $\frac{1}{2}$	141191
" 1883	2544409	28937	0 2 $\frac{3}{4}$	27455	0 2 $\frac{1}{2}$	109414
" 1884 (53 weeks)	2457288	28522	0 2 $\frac{3}{4}$	24893	0 2 $\frac{3}{4}$	107524
" 1885	2375945	27484	0 2 $\frac{3}{4}$	41757	0 4 $\frac{1}{2}$	92790
" 1886	2571435	29777	0 2 $\frac{3}{4}$	41381	0 3 $\frac{3}{4}$	119620
" 1887	2827624	32979	0 2 $\frac{3}{4}$	45516	0 3 $\frac{3}{4}$	129565
" 1888	3092225	35914	0 2 $\frac{3}{4}$	49798	0 3 $\frac{3}{4}$	139849
" 1889 (53 weeks)	3508195	39805	0 2 $\frac{3}{4}$	61452	0 4 $\frac{1}{2}$	112395
" 1890	3517114	41548	0 2 $\frac{3}{4}$	65984	0 4 $\frac{1}{2}$	123432
Quarter ended:—						
March, 1891	946982	10971	0 2 $\frac{3}{4}$	19441	0 4 $\frac{7}{8}$	101661
June, "	936125	11039	0 2 $\frac{3}{4}$	16001	0 4	99479
September, "	1057205	11427	0 2 $\frac{3}{4}$	19517	0 4 $\frac{3}{8}$	145406
December, "	1172257	13183	0 2 $\frac{3}{4}$	19923	0 4	192161
March, 1892	1034457	12992	0 3	15722	0 3 $\frac{5}{8}$	184174
June, "	1029284	13727	0 3 $\frac{1}{4}$	13622	0 3 $\frac{1}{4}$	154057
September, "	1108358	13560	0 2 $\frac{1}{2}$	11385	0 2 $\frac{1}{2}$	197236
December, "	1228901	14861	0 2 $\frac{1}{2}$	19186	0 3 $\frac{1}{2}$	226266
March, 1893	1047841	14258	0 3 $\frac{1}{4}$	19539	0 4 $\frac{3}{8}$	177536
June, "	1076495	14203	0 3 $\frac{1}{4}$	16895	0 3 $\frac{3}{4}$	179585
September, "	1212846	14449	0 2 $\frac{3}{4}$	173	..	162545
December, "	1208866	14971	0 2 $\frac{3}{4}$	11409	0 2 $\frac{1}{4}$	135325
March, 1894	1037329	14160	0 3 $\frac{1}{4}$	14431	0 3 $\frac{1}{4}$	112569
June, "	1041902	14396	0 3 $\frac{1}{4}$	14409	0 3 $\frac{1}{4}$	105402
September, "	1086623	14318	0 3 $\frac{1}{2}$	16358	0 3 $\frac{1}{2}$	132204
December, "	1180273	15111	0 3	17722	0 3 $\frac{1}{2}$	144705
March, 1895	1026850	14600	0 3 $\frac{3}{4}$	25547	0 5 $\frac{7}{8}$	119255
June, "	1023423	14895	0 3 $\frac{3}{4}$	20763	0 4 $\frac{1}{2}$	118877
	58018161	669056	0 2 $\frac{3}{4}$	884454	0 3 $\frac{5}{8}$	..

MANCHESTER DRAPERY TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1890; IN QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED.	Sales.	EXPENSES.		NET PROFIT.		NET LOSS.		Stocks at end.		
		Amount	Rate.	Amount	Rate.	Amount	Rate.			
Year ended:—		£	£	s. d.	£	s. d.	£	s. d.	£	
January, 1874 (1 quarter)	10575	348	0	8	201	0	4 ⁹ / ₁₆	..	..	11568
" 1875	71290	3872	1	1	1244	0	4 ⁸ / ₁₆	..	..	36824
" 1876	129486	7264	1	1 ¹ / ₂	720	0	1 ¹ / ₂	..	..	72408
" 1877 (53 weeks)	147083	9391	1	3 ⁵ / ₁₆	..	..	..	1420	0	2 ¹ / ₁₆
" 1878	134918	8879	1	5 ³ / ₁₆	..	..	..	4144	0	7 ⁵ / ₁₆
" 1879	134746	8518	1	3 ⁵ / ₁₆	635	0	1 ¹ / ₂	..	..	44439
December, 1879 (50 weeks)	126824	7817	1	2 ¹ / ₁₆	1674	0	3 ⁵ / ₁₆	..	..	43225
" 1880	139421	8511	1	2 ³ / ₁₆	2314	0	4	..	..	44105
" 1881	132914	8168	1	2 ³ / ₁₆	1932	0	3 ¹ / ₂	..	..	42203
" 1882	143019	8337	1	1 ¹ / ₁₆	3504	0	5 ⁵ / ₁₆	..	..	40854
" 1883	156997	8976	1	1 ⁰ / ₁₆	4171	0	6 ³ / ₁₆	..	..	41365
" 1884 (53 weeks)	165770	8365	1	0	5283	0	7 ⁵ / ₁₆	..	..	38026
" 1885	173233	9067	1	0 ¹ / ₂	5387	0	7 ⁵ / ₁₆	..	..	44948
" 1886	195139	9728	0	11 ⁷ / ₁₆	5333	0	6 ¹ / ₂	..	..	54130
" 1887	210705	10798	1	0 ¹ / ₁₆	3624	0	4 ¹ / ₂	..	..	59695
" 1888	232277	11350	0	11 ³ / ₁₆	4791	0	4 ¹ / ₂	..	..	62110
" 1889 (53 weeks)	256449	13168	1	0 ¹ / ₄	4539	0	4 ¹ / ₂	..	..	87849
" 1890	311365	15612	1	0	6991	0	5 ³ / ₁₆	..	..	84739
Quarter ended:—										
March, 1891	84398	3901	0	11	868	0	2 ³ / ₁₆	..	..	81873
June, "	77664	4013	1	0 ² / ₁₆	3098	0	9 ¹ / ₁₆	..	..	83681
September, "	83583	4159	0	11 ³ / ₁₆	1331	0	3 ³ / ₁₆	..	..	87861
December, "	93568	4233	0	10 ³ / ₁₆	2618	0	6 ³ / ₁₆	..	..	82524
March, 1892	92107	4508	0	11 ⁵ / ₁₆	2326	0	6	..	..	82022
June, "	86610	4717	1	1	2142	0	5 ¹ / ₁₆	..	..	87115
September, "	85643	4725	1	1 ³ / ₁₆	2118	0	5 ⁵ / ₁₆	..	..	97505
December, "	106135	4917	0	11	3550	0	8	..	..	90744
March, 1893	97708	4815	0	11 ³ / ₁₆	2432	0	5 ¹ / ₁₆	..	..	92723
June, "	90894	4882	1	0 ³ / ₁₆	2329	0	6 ³ / ₁₆	..	..	91116
September, "	78956	4928	1	2 ³ / ₁₆	13	..	..	..	..	101483
December, "	102208	5274	1	0 ⁵ / ₁₆	3011	0	7	..	..	98217
March, 1894	99859	5227	1	0 ¹ / ₂	2153	0	5 ¹ / ₁₆	..	..	95910
June, "	93284	5451	1	2	1927	0	4 ¹ / ₁₆	..	..	94390
September, "	97192	5487	1	1 ¹ / ₂	1975	0	4 ¹ / ₁₆	..	..	104261
December, "	110478	5532	1	0	3976	0	8 ³ / ₁₆	..	..	97297
March, 1895	103266	5485	1	0 ⁵ / ₁₆	2889	0	6 ³ / ₁₆	..	..	94987
June, "	105908	5745	1	1	4005	0	9	..	..	94074
		4551672	246168	1	0 ⁷ / ₁₆	95104	..	5564	..	..
Less Depreciation allowed, see Disposal of Profit Account, October, 1877					£4757	..	..	
" Loss					5564	10321	..			
Leaves Net Profit .....					..	84783	0	4 ³ / ₁₆		

NOTE.—To December, 1883, the figures include Woollens and Ready-Mades Department

MANCHESTER WOOLLENS AND READY- MADES DEPARTMENT.

Since publishing a separate Account in Balance Sheet.

IN YEARS TO 1890; IN QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED.	Sales.	EXPENSES.		NET PROFIT.		NET LOSS.		Stocks at end.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
Year ended:—		£	s. d.	£	s. d.	£	s. d.	
December, 1884 (53 weeks)	20368	1221	1 2 $\frac{3}{8}$	409	0 4 $\frac{3}{4}$	..	..	4407
" 1885	21210	1249	1 2 $\frac{1}{8}$	336	0 3 $\frac{3}{4}$	..	..	5242
" 1886	22173	1417	1 3 $\frac{1}{2}$	327	0 3 $\frac{1}{2}$	..	..	6275
" 1887	21820	1427	1 3 $\frac{3}{8}$	..	..	2	..	6112
" 1888	23047	1547	1 4	..	..	25	0 0 $\frac{1}{2}$	8450
" 1889 (53 weeks)	26813	1845	1 4 $\frac{1}{2}$	..	..	212	0 1 $\frac{1}{8}$	12277
" 1890	26693	2095	1 6 $\frac{3}{4}$	..	..	1284	0 11 $\frac{1}{2}$	11463
Quarter ended:—								
March, 1891	7896	584	1 5 $\frac{3}{8}$	..	..	805	2 0 $\frac{1}{2}$	13614
June, "	8896	613	1 4 $\frac{1}{2}$	9	0 0 $\frac{1}{4}$	..	..	13880
September, "	7126	609	1 8 $\frac{1}{8}$	..	..	746	2 1	17718
December, "	8028	659	1 7 $\frac{3}{8}$	..	..	752	1 10 $\frac{3}{8}$	19761
March, 1892	9132	758	1 7 $\frac{1}{4}$	..	..	623	1 4 $\frac{1}{2}$	20913
June, "	12597	828	1 3 $\frac{3}{8}$	311	0 5 $\frac{1}{8}$	..	..	19944
September, "	7483	722	1 11 $\frac{1}{8}$	..	..	4178	..	15501
December, "	11437	641	1 1 $\frac{3}{8}$	297	0 6 $\frac{1}{8}$	..	..	12958
March, 1893	12732	721	1 1 $\frac{1}{2}$	182	0 3 $\frac{3}{8}$	..	..	13362
June, "	14133	741	1 0 $\frac{1}{2}$	358	0 6	..	..	10760
September, "	9969	746	1 0 $\frac{1}{2}$	..	..	145	0 3 $\frac{3}{8}$	13888
December, "	12685	759	1 2 $\frac{1}{4}$	87	0 1 $\frac{3}{8}$	..	..	13166
March, 1894	14276	814	1 1 $\frac{5}{8}$	..	..	18	0 0 $\frac{1}{4}$	14239
June, "	17681	818	0 11	857	0 11 $\frac{5}{8}$	..	..	9403
September, "	11151	826	1 5 $\frac{3}{8}$	184	0 3 $\frac{3}{8}$	..	..	13498
December, "	14520	911	1 3	..	..	332	0 5 $\frac{3}{8}$	13655
March, 1895	17034	970	1 1 $\frac{5}{8}$	210	0 2 $\frac{1}{2}$	..	..	15189
June, "	23802	1035	0 10 $\frac{3}{8}$	954	0 9 $\frac{1}{2}$	..	..	11622
	382702	24556	1 3 $\frac{3}{8}$	4521	..	9122	..	..
						Less Profit	4521	..
						Leaves Net Loss	4601	0 2 $\frac{1}{8}$

MANCHESTER BOOT AND SHOE TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1890; IN QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED.	Sales.	EXPENSES.		NET PROFIT.		NET LOSS.		Stocks at end.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£	s. d.	£
January, 1874 (1 quarter)	5506	204	0 8 ³ / ₄	1	..	..	..	4715
„ 1875	37257	1129	0 7 ¹ / ₄	748	0 4 ³ / ₄	..	..	5197
„ 1876	53885	1326	0 5 ⁷ / ₈	775	0 3 ³ / ₈	..	..	7711
„ 1877 (53 weeks)	57907	1811	0 7 ¹ / ₂	586	0 2 ¹ / ₂	..	..	6082
„ 1878	58304	1975	0 8 ¹ / ₂	786	0 3 ³ / ₈	..	..	7935
„ 1879	59327	2192	0 8 ³ / ₄	767	0 3	..	..	10242
December, 1879 (50 weeks)	55270	2135	0 9 ¹ / ₄	752	0 3 ¹ / ₄	..	..	10964
„ 1880	62139	2387	0 9 ³ / ₈	755	0 2 ⁵ / ₈	..	..	11484
„ 1881	71382	2492	0 8 ³ / ₈	842	0 2 ³ / ₈	..	..	11377
„ 1882	76101	2583	0 8 ³ / ₈	1246	0 3 ³ / ₈	..	..	12564
„ 1883	86056	2882	0 8	1261	0 3 ³ / ₄	..	..	12938
„ 1884 (53 weeks)	99694	3150	0 7 ¹ / ₂	1586	0 3 ³ / ₄	..	..	16567
„ 1885	106755	3596	0 8	1395	0 3 ⁵ / ₈	..	..	16074
„ 1886	121432	3772	0 7 ³ / ₈	2767	0 5 ³ / ₈	..	..	16578
„ 1887	126099	4070	0 7 ³ / ₈	3083	0 5 ³ / ₄	..	..	19727
„ 1888	139188	4864	0 8 ³ / ₈	2940	0 5	..	..	22680
„ 1889 (53 weeks)	163002	5491	0 8	3772	0 5 ¹ / ₂	..	..	24067
„ 1890	188530	5983	0 7 ¹ / ₂	4957	0 6 ¹ / ₄	..	..	32095
Quarter ended:—								
March, 1891	56667	1780	0 7 ¹ / ₂	663	0 2 ³ / ₄	..	..	41852
June, „	59897	1842	0 7 ³ / ₈	1628	0 6 ¹ / ₂	..	..	37391
September, „	50425	1757	0 8 ¹ / ₄	1282	0 6	..	..	39962
December, „	51191	1815	0 8 ¹ / ₂	1385	0 6 ³ / ₈	..	..	36875
March, 1892	56859	2238	0 9 ³ / ₈	680	0 2 ³ / ₄	..	..	44703
June, „	73503	2523	0 8 ¹ / ₂	1286	0 4 ¹ / ₂	..	..	44749
September, „	49268	2237	0 10 ¹ / ₂	541	0 2 ³ / ₈	..	..	52322
December, „	53467	2324	0 10 ³ / ₈	537	0 2 ³ / ₈	..	..	52169
March, 1893	58886	2502	0 10 ⁵ / ₈	868	0 3 ¹ / ₂	..	..	60513
June, „	66922	2529	0 9	1078	0 3 ³ / ₄	..	..	59015
September, „	45530	2355	1 0 ³ / ₈	378	0 1 ¹ / ₂	..	..	54570
December, „	51159	2533	0 11 ³ / ₈	493	0 2 ¹ / ₄	..	..	50864
March, 1894	59475	2753	0 11	451	0 1 ³ / ₄	..	..	60688
June, „	68977	2758	0 9 ¹ / ₄	1303	0 4 ¹ / ₂	..	..	60079
September, „	49635	2581	1 0 ³ / ₈	368	0 1 ¹ / ₂	..	..	58483
December, „	54474	2567	0 11 ¹ / ₄	354	0 1 ¹ / ₂	..	..	56515
March, 1895	64234	2733	0 10 ¹ / ₄	835	0 3	..	..	58151
June, „	81333	2843	0 8 ³ / ₈	1791	0 5 ¹ / ₄	..	..	52650
	2619136	94712	0 8 ³ / ₈	44940	0 4	..	..	..

MANCHESTER FURNISHING TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1890; IN QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED.	Sales.	EXPENSES.		NET PROFIT.		NET LOSS.		Stocks at end.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£	s. d.	£
January, 1877 (27 weeks)	5944	405	1 4 ³ / ₈	..	..	52	0 2	2571
„ 1878	15464	984	1 3 ¹ / ₄	65	0 1	..	..	2286
„ 1879	17974	1185	1 4 ¹ / ₄	140	0 1 ⁷ / ₈	..	..	2421
December, 1879 (50 weeks)	18361	1108	1 2 ³ / ₈	60	0 0 ³ / ₄	..	..	3524
„ 1880	24243	1317	1 1	404	0 4	..	..	4307
„ 1881	24844	1293	1 0 ¹ / ₂	171	0 1 ³ / ₈	..	..	3971
„ 1882	29021	1515	1 0 ¹ / ₂	219	0 1 ³ / ₈	..	..	3630
„ 1883	34804	1878	1 0 ⁷ / ₈	423	0 2 ¹ / ₈	..	..	4274
„ 1884 (53 weeks)	44311	2253	1 0	673	0 3 ³ / ₈	..	..	5433
„ 1885	51238	2415	0 11 ¹ / ₄	893	0 4 ¹ / ₈	..	..	5817
„ 1886	62340	2657	0 10 ¹ / ₂	1129	0 4 ¹ / ₂	..	..	6041
„ 1887	72932	3497	0 11 ¹ / ₂	946	0 3	..	..	9497
„ 1888	85484	4755	1 1 ¹ / ₄	546	0 1 ¹ / ₂	..	..	8548
„ 1889 (53 weeks)	96163	4952	1 0 ¹ / ₂	1436	0 3 ¹ / ₄	..	..	9770
„ 1890	122661	5389	0 10 ¹ / ₂	2351	0 4 ¹ / ₂	..	..	12930
Quarter ended:—								
March, 1891	32981	1500	0 10 ⁷ / ₈	360	0 2 ³ / ₈	..	..	13513
June, „	32471	1482	0 10 ⁷ / ₈	399	0 2 ³ / ₈	..	..	14285
September, „	33398	1466	0 10 ¹ / ₂	396	0 2 ³ / ₈	..	..	12812
December, „	38256	1545	0 9 ⁵ / ₈	893	0 5 ¹ / ₂	..	..	12567
March, 1892	33409	1747	1 0 ¹ / ₂	..	..	26	0 0 ⁵ / ₈	13557
June, „	37473	2036	1 1	296	0 1 ⁷ / ₈	..	..	13883
September, „	31686	1866	1 2 ³ / ₈	..	..	41	0 0 ¹ / ₂	12592
December, „	40418	1910	0 11 ¹ / ₄	90	0 0 ³ / ₄	..	..	13455
March, 1893	35083	1902	1 1	9	..	..	..	15263
June, „	38061	1968	1 0 ³ / ₈	91	0 0 ³ / ₄	..	..	16252
September, „	31710	1960	1 2 ³ / ₈	6	..	..	..	15593
December, „	37674	2163	1 1 ¹ / ₄	238	0 1 ¹ / ₂	..	..	17683
March, 1894	37572	2188	1 1 ⁷ / ₈	..	..	37	0 0 ⁵ / ₈	18184
June, „	40834	2277	1 1 ³ / ₈	171	0 1	..	..	18078
September, „	40139	2319	1 1 ³ / ₈	295	0 1 ³ / ₈	..	..	18287
December, „	49176	2441	0 11 ⁷ / ₈	992	0 4 ¹ / ₄	..	..	21775
March, 1895	40945	2471	1 2 ³ / ₈	..	..	95	0 0 ¹ / ₂	23380
June, „	47758	2529	1 0 ³ / ₈	468	0 2 ¹ / ₄	..	..	23109
	1384228	71373	1 0 ¹ / ₄	14160	..	251	..	..
	Less Loss.....			251	..			
	Leaves Net Profit.....			13909	0 2 ³ / ₈			

NOTE.—Since March quarter, 1893, inclusive, the results and Stocks include Broughton Cabinet Works.

NEWCASTLE BRANCH GROCERY AND PROVISION TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1890; IN QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED.	Sales.	EXPENSES.		NET PROFIT.		NET LOSS.		Stocks at end.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
Year ended :-	£	£	s. d.	£	s. d.	£	s. d.	£
January, 1877 (53 weeks)	529244	7727	0 3 $\frac{1}{2}$	4531	0 2	..	..	34591
" 1878	541783	8213	0 3 $\frac{1}{2}$	4139	0 1 $\frac{1}{2}$	..	..	28996
" 1879	457597	7402	0 3 $\frac{1}{2}$	3168	0 1 $\frac{1}{2}$	..	..	22789
December, 1879 (50 weeks)	465108	6823	0 3 $\frac{1}{2}$	7234	0 3 $\frac{1}{2}$	..	..	49145
" 1880	588664	7868	0 3 $\frac{1}{2}$	4636	0 1 $\frac{1}{2}$	..	..	44398
" 1881	703337	8921	0 3	9296	0 3 $\frac{1}{2}$	..	..	54648
" 1882	795007	10098	0 3	8741	0 2 $\frac{1}{2}$	..	..	65390
" 1883	871597	10785	0 2 $\frac{1}{2}$	10476	0 2 $\frac{1}{2}$	..	..	55152
" 1884 (53 weeks)	930803	11395	0 2 $\frac{1}{2}$	12451	0 3 $\frac{1}{2}$	..	..	65158
" 1885	936542	12075	0 3	14422	0 3 $\frac{1}{2}$	..	..	53546
" 1886	949878	12321	0 3	18794	0 4 $\frac{1}{2}$	..	..	71265
" 1887	966148	14220	0 3 $\frac{1}{2}$	11026	0 2 $\frac{1}{2}$	..	..	59632
" 1888	1027528	14125	0 3 $\frac{1}{2}$	19143	0 4 $\frac{1}{2}$	..	..	65838
" 1889 (53 weeks)	1100451	14947	0 3 $\frac{1}{2}$	18421	0 4	..	..	55671
" 1890	1173876	15147	0 3	26496	0 5 $\frac{1}{2}$	..	..	42136
Quarter ended :-								
March, 1891	305909	4063	0 3 $\frac{1}{2}$	7047	0 5 $\frac{1}{2}$	..	..	44873
June, "	396379	4125	0 2 $\frac{1}{2}$	8605	0 6 $\frac{1}{2}$	..	..	35243
September, "	377646	4234	0 2 $\frac{1}{2}$	8594	0 5 $\frac{1}{2}$	..	..	49564
December, "	411915	4522	0 2 $\frac{1}{2}$	7234	0 4 $\frac{1}{2}$	..	..	54737
March, 1892	373558	4570	0 2 $\frac{1}{2}$	7644	0 4 $\frac{1}{2}$	..	..	58940
June, "	343857	4566	0 3 $\frac{1}{2}$	6817	0 4 $\frac{1}{2}$	..	..	54424
September, "	404503	4713	0 2 $\frac{1}{2}$	11377	0 6 $\frac{1}{2}$	..	..	50504
December, "	442203	5137	0 2 $\frac{1}{2}$	11232	0 6	..	..	60431
March, 1893	372336	5685	0 3 $\frac{1}{2}$	9233	0 5 $\frac{1}{2}$	..	..	52253
June, "	377646	5378	0 3 $\frac{1}{2}$	8323	0 5 $\frac{1}{2}$	..	..	52913
September, "	404646	5378	0 3 $\frac{1}{2}$	5087	0 3	..	..	57550
December, "	434726	5904	0 3 $\frac{1}{2}$	7356	0 4	..	..	57932
March, 1894	366539	5524	0 3 $\frac{1}{2}$	4648	0 3	..	..	54983
June, "	366300	5474	0 3 $\frac{1}{2}$	6278	0 4	..	..	42221
September, "	370457	5506	0 3 $\frac{1}{2}$	8903	0 5 $\frac{1}{2}$	..	..	51679
December, "	417788	5784	0 3 $\frac{1}{2}$	5002	0 2 $\frac{1}{2}$	..	..	48910
March, 1895	366270	5609	0 3 $\frac{1}{2}$	6899	0 4 $\frac{1}{2}$	..	..	45779
June, "	396302	5813	0 3 $\frac{1}{2}$	7440	0 4 $\frac{1}{2}$	..	..	42263
	18906597	254052	0 3 $\frac{1}{2}$	310693	0 3 $\frac{1}{2}$	..	..	..

NEWCASTLE BRANCH DRAPERY TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1890; IN QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED.		Sales.	EXPENSES.		NET PROFIT.		Stocks at end.
			Amount.	Rate.	Amount.	Rate.	
Year ended:—		£	£	s. d.	£	s. d.	£
January,	1877 (53 weeks) ..	39896	1728	0 10 ³ / ₈	796	0 4 ³ / ₈	11525
"	1878.....	49559	2211	0 10 ³ / ₈	999	0 4 ³ / ₈	11635
"	1879.....	44161	2159	0 11 ³ / ₈	612	0 3 ³ / ₈	10463
December,	1879 (50 weeks) ..	44674	2153	0 11 ³ / ₈	871	0 4 ³ / ₈	11590
"	1880.....	55979	2494	0 10 ³ / ₈	2206	0 9 ³ / ₈	16171
"	1881.....	69081	2656	0 9 ³ / ₈	2339	0 8 ³ / ₈	16075
"	1882.....	84457	2975	0 8 ³ / ₈	3656	0 10 ³ / ₈	15754
"	1883.....	99354	3387	0 8 ³ / ₈	4499	0 10 ³ / ₈	16594
"	1884 (53 weeks) ..	118345	3983	0 8	4503	0 9 ³ / ₈	18906
"	1885.....	142701	4598	0 7 ³ / ₈	6906	0 11 ³ / ₈	24084
"	1886.....	152433	5342	0 8 ³ / ₈	7562	0 11 ³ / ₈	28645
"	1887.....	144713	5868	0 9 ³ / ₈	5845	0 9 ³ / ₈	25537
"	1888.....	161974	5973	0 8 ³ / ₈	6373	0 9 ³ / ₈	30177
"	1889 (53 weeks) ..	185443	6515	0 8 ³ / ₈	7600	0 9 ³ / ₈	32799
"	1890.....	232360	6850	0 7	10588	0 10 ³ / ₈	33216
Quarter ended:—							
March,	1891.....	64660	1861	0 67 ³ / ₈	9102	0 11 ³ / ₈	35463
June,	"	61882	1848	0 7 ³ / ₈	3255	1 0 ³ / ₈	34561
September,	"	56368	1833	0 7 ³ / ₈	2111	0 8 ³ / ₈	38584
December,	"	68556	1958	0 6 ³ / ₈	2418	0 8 ³ / ₈	35964
March,	1892.....	56448	1956	0 8 ³ / ₈	1949	0 8 ³ / ₈	42429
June,	"	50808	1841	0 8 ³ / ₈	2019	0 9 ³ / ₈	31215
September,	"	59924	1866	0 7 ³ / ₈	3015	1 0	34938
December,	"	73823	2133	0 6 ³ / ₈	2748	0 8 ³ / ₈	36570
March,	1893.....	61141	2220	0 8 ³ / ₈	2026	0 10 ³ / ₈	43565
June,	"	66823	2469	0 8 ³ / ₈	2963	0 7 ³ / ₈	38860
September,	"	58113	2351	0 9 ³ / ₈	2070	0 8 ³ / ₈	45957
December,	"	73880	2533	0 8 ³ / ₈	2770	0 8 ³ / ₈	40770
March,	1894.....	70916	2433	0 8 ³ / ₈	2826	0 9 ³ / ₈	37927
June,	"	74709	2405	0 7 ³ / ₈	3279	0 10 ³ / ₈	35508
September,	"	65897	2342	0 8 ³ / ₈	2808	0 10 ³ / ₈	45042
December,	"	82408	2550	0 7 ³ / ₈	3728	0 10 ³ / ₈	40826
March,	1895.....	67954	2471	0 8 ³ / ₈	2473	0 8 ³ / ₈	45238
June,	"	83208	2527	0 7 ³ / ₈	4360	1 0 ³ / ₈	36154
		2822648	98489	0 8 ³ / ₈	115275	0 9 ³ / ₈	..

NEWCASTLE BRANCH BOOT AND SHOE TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1890; IN QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED.	Sales.	EXPENSES.		NET PROFIT.		Loss.		Stocks at end.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£	s. d.	£
January, 1877 (53 weeks)	25379	649	0 6 $\frac{1}{2}$	406	0 3 $\frac{3}{4}$	..	..	1505
" 1878.	28425	760	0 6 $\frac{3}{4}$	690	0 5 $\frac{3}{4}$	..	..	2242
" 1879.	28375	880	0 7 $\frac{1}{2}$	310	0 2 $\frac{3}{4}$	..	..	3179
December, 1879 (50 weeks)	27708	935	0 8	357	0 3	..	..	4681
" 1880.	34968	1276	0 8 $\frac{3}{4}$	649	0 4 $\frac{3}{8}$	..	..	5971
" 1881.	42991	1307	0 7 $\frac{1}{2}$	938	0 5 $\frac{1}{2}$	..	..	4645
" 1882.	54487	1527	0 6 $\frac{3}{4}$	1336	0 5 $\frac{1}{2}$	..	..	6561
" 1883.	65501	1955	0 7 $\frac{1}{2}$	1890	0 6 $\frac{1}{2}$	..	..	5817
" 1884 (53 weeks)	75054	2408	0 7 $\frac{1}{2}$	1917	0 6 $\frac{1}{2}$	..	..	8266
" 1885.	89117	2783	0 7 $\frac{1}{2}$	2195	0 5 $\frac{5}{8}$	..	..	11319
" 1886.	97148	3646	0 9	1619	0 4	..	..	13442
" 1887.	91029	3929	0 10 $\frac{1}{2}$	1173	0 3	..	..	13974
" 1888.	101272	3978	0 9 $\frac{3}{4}$	1547	0 3 $\frac{3}{4}$	..	..	14483
" 1889 (53 weeks)	90528	3570	0 9 $\frac{3}{4}$	1236	0 3 $\frac{1}{2}$	..	..	12463
" 1890.	113149	3753	0 7 $\frac{1}{2}$	2299	0 4 $\frac{3}{8}$	..	..	11870
Quarter ended:—								
March, 1891.	32032	957	0 7 $\frac{1}{2}$	591	0 4 $\frac{3}{8}$	..	..	14834
June, "	33249	983	0 7	887	0 6 $\frac{3}{8}$	..	..	15129
September, "	31857	981	0 7 $\frac{3}{4}$	784	0 5 $\frac{3}{4}$	..	..	14706
December, "	27569	950	0 8 $\frac{1}{4}$	865	0 7 $\frac{1}{2}$	..	..	12628
March, 1892.	28781	987	0 8 $\frac{1}{2}$	..	..	6	..	14524
June, "	29330	990	0 8	651	0 5 $\frac{1}{2}$	..	..	15712
September, "	33516	1006	0 7 $\frac{3}{4}$	1046	0 7 $\frac{3}{4}$	..	..	17056
December, "	33857	1081	0 7 $\frac{3}{4}$	940	0 6 $\frac{3}{8}$	..	..	15567
March, 1893.	33312	1273	0 9 $\frac{1}{2}$	436	0 3 $\frac{1}{2}$	..	..	21670
June, "	33330	1217	0 8 $\frac{3}{4}$	574	0 4 $\frac{1}{2}$	..	..	26127
September, "	28399	1182	0 9 $\frac{1}{4}$	552	0 4 $\frac{1}{2}$	..	..	23419
December, "	32429	1221	0 9	594	0 4 $\frac{3}{8}$	..	..	18139
March, 1894.	32180	1166	0 8 $\frac{3}{4}$	592	0 4 $\frac{3}{8}$	..	..	17184
June, "	34624	1187	0 8 $\frac{1}{2}$	472	0 3 $\frac{1}{2}$	..	..	17558
September, "	32421	1134	0 8 $\frac{3}{4}$	638	0 4 $\frac{3}{8}$	..	..	19059
December, "	32189	1214	0 9	543	0 4	..	..	17770
March, 1895.	29370	1172	0 9 $\frac{1}{4}$	290	0 2 $\frac{1}{2}$	..	..	19041
June, "	39716	1271	0 7 $\frac{3}{4}$	860	0 5 $\frac{1}{2}$	..	..	18604
	1543301	53328	0 8 $\frac{1}{4}$	29877	..	6	..	..
	Less Loss.....			6	..			
	Leaves Net Profit.....			29871	0 4 $\frac{3}{8}$			

NOTE.—To December, 1888, the figures include Furnishing Department.

NEWCASTLE BRANCH FURNISHING TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1890; IN QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED.	Sales.	EXPENSES.			NET PROFIT.		NET LOSS.		Stocks at end.
		Amount	Rate.	Amount	Rate.	Amount	Rate.		
Year ended :—									
December, 1889 (53 weeks)	£ 49078	£ 2736	s. d. 1 13 ³ / ₄	£ ..	s. d. ..	£ 112	s. d. 0 0 ¹ / ₂	£ 6636	
„ 1890.....	89409	3551	0 9 ¹ / ₂	2499	0 6 ³ / ₈	..	..	10474
Quarter ended :—									
March, 1891.....	22761	967	0 10 ⁵ / ₈	260	0 2 ³ / ₈	..	..	11415
June, „	28616	1077	0 9	1020	0 8 ¹ / ₂	..	..	12518
September, „	21526	1038	0 11 ¹ / ₂	278	0 3	..	..	12367
December, „	26338	1138	0 10 ¹ / ₄	620	0 5 ³ / ₈	..	..	12002
March, 1892.....	18068	1020	1 1 ¹ / ₂	..	..	51	0 0 ⁵ / ₈	12184
June, „	16604	996	1 2 ³ / ₄	150	0 2 ³ / ₈	..	..	11854
September, „	20914	1011	0 11 ¹ / ₂	386	0 4 ³ / ₈	..	..	10787
December, „	26379	1160	0 10 ¹ / ₂	739	0 6 ³ / ₈	..	..	11833
March, 1893.....	17382	1172	1 4 ¹ / ₂	..	..	225	0 3	12515
June, „	23182	1481	1 3 ³ / ₄	340	0 3 ¹ / ₂	..	..	12964
September, „	18962	1397	1 5 ⁵ / ₈	..	..	150	0 1 ⁷ / ₈	13285
December, „	27397	1617	1 2 ¹ / ₂	190	0 1 ³ / ₈	..	..	13261
March, 1894.....	22279	1407	1 3 ¹ / ₂	562	0 6	..	..	13560
June, „	28800	1598	1 1 ¹ / ₄	639	0 5 ¹ / ₄	..	..	13782
September, „	23335	1459	1 3	..	..	50	0 0 ¹ / ₂	13190
December, „	31931	1642	1 0 ¹ / ₄	454	0 3 ³ / ₈	..	..	13377
March, 1895.....	21003	1511	1 5 ¹ / ₄	..	..	301	0 3 ³ / ₈	14896
June, „	30574	1682	1 1 ³ / ₈	616	0 4 ¹ / ₂	..	..	14474
	564538	29660	1 0 ¹ / ₂	8753	..	889	..	..
				889	..				
				7864	0 3 ¹ / ₄				

LONDON BRANCH GROCERY TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1890; IN QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED.	Sales.	EXPENSES.		NET PROFIT.		Stocks at end.
		Amount.	Rate.	Amount.	Rate.	
Year ended:—	£	£	s. d.	£	s. d.	£
January, 1875 (3 quarters) ..	72385	1542	0 5 $\frac{1}{2}$	567	0 1 $\frac{1}{2}$	7315
„ 1876.....	190752	2365	0 4 $\frac{3}{4}$	1584	0 2 $\frac{1}{2}$	7219
„ 1877 (53 weeks) ..	184879	3026	0 3 $\frac{3}{4}$	4182	0 5 $\frac{1}{2}$	12668
„ 1878.....	210415	3283	0 3 $\frac{1}{2}$	2320	0 2 $\frac{3}{4}$	10511
„ 1879.....	216314	3381	0 3 $\frac{1}{2}$	2388	0 2 $\frac{3}{4}$	8489
December, 1879 (50 weeks) ..	232660	3570	0 3 $\frac{1}{2}$	5239	0 5 $\frac{1}{2}$	13594
„ 1880.....	274965	4066	0 3 $\frac{1}{2}$	3559	0 3 $\frac{1}{2}$	20789
„ 1881.....	289748	5310	0 4 $\frac{3}{4}$	2149	0 1 $\frac{3}{4}$	7394
„ 1882.....	296767	5001	0 4	3776	0 3	10636
„ 1883.....	337753	5441	0 3 $\frac{7}{8}$	4630	0 3 $\frac{1}{2}$	13282
„ 1884 (53 weeks) ..	375963	6233	0 4	5062	0 3 $\frac{1}{2}$	18869
„ 1885.....	445876	7485	0 4	9101	0 4 $\frac{1}{2}$	24256
„ 1886.....	527904	8463	0 3 $\frac{3}{4}$	9719	0 4 $\frac{1}{2}$	24739
„ 1887.....	652882	11336	0 4 $\frac{1}{2}$	8839	0 3 $\frac{1}{4}$	47319
„ 1888.....	789279	14028	0 4 $\frac{3}{4}$	9377	0 3	41562
„ 1889 (53 weeks) ..	848378	15176	0 4 $\frac{1}{2}$	10667	0 3	44017
„ 1890.....	893470	17020	0 4 $\frac{1}{2}$	12668	0 3 $\frac{3}{4}$	57347
Quarter ended:—						
March, 1891	245815	4956	0 4 $\frac{3}{4}$	3153	0 3	49228
June, „	256359	5078	0 4 $\frac{1}{2}$	3163	0 2 $\frac{1}{2}$	46274
September, „	287105	5084	0 4 $\frac{1}{2}$	1517	0 1 $\frac{1}{2}$	56994
December, „	333519	5792	0 4 $\frac{3}{4}$	3605	0 2 $\frac{1}{2}$	75578
March, 1892	281030	5827	0 4 $\frac{7}{8}$	4927	0 4 $\frac{1}{2}$	64499
June, „	285441	5827	0 4 $\frac{1}{2}$	1789	0 1 $\frac{1}{2}$	49482
September, „	302238	5825	0 4 $\frac{1}{2}$	2251	0 1 $\frac{3}{4}$	60193
December, „	337740	6311	0 4 $\frac{3}{8}$	4566	0 3 $\frac{3}{8}$	73398
March, 1893	281378	5990	0 5	4625	0 3 $\frac{7}{8}$	63075
June, „	286482	6132	0 5 $\frac{1}{2}$	2756	0 2 $\frac{1}{2}$	51931
September, „	316274	6345	0 4 $\frac{3}{8}$	4229	0 0 $\frac{1}{2}$	55916
December, „	343360	6688	0 4 $\frac{3}{8}$	4616	0 3 $\frac{3}{8}$	64854
March, 1894	285481	6538	0 5 $\frac{1}{2}$	4122	0 3 $\frac{3}{4}$	52674
June, „	278433	6405	0 5 $\frac{1}{2}$	2083	0 1 $\frac{3}{4}$	43702
September, „	318253	6451	0 4 $\frac{3}{8}$	3623	0 2 $\frac{1}{2}$	53783
December, „	354205	7232	0 4 $\frac{3}{8}$	5761	0 3 $\frac{1}{2}$	54454
March, 1895	287697	6917	0 5 $\frac{1}{2}$	5258	0 4 $\frac{1}{2}$	40798
June, „	305080	6790	0 5 $\frac{1}{2}$	5096	0 4	35098
	12116280	226914	0 4 $\frac{3}{4}$	158309	0 3	..

LONDON BRANCH BOOT AND SHOE TRADE.

Since commencing to keep a separate Account.

IN YEARS TO 1890; IN QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED.	Sales.	EXPENSES.		NET PROFIT.		NET LOSS.		Stocks at end.
		Amount	Rate.	Amount	Rate.	Amount	Rate.	
Year ended:—								
December, 1887 (13 weeks)	£ 7155	£ 323	s. d. 0 10 ³ / ₄	£ ..	s. d. ..	£ 47	s. d. 0 1 ¹ / ₂	£ 3891
" 1888	30103	1593	1 0 ³ / ₄	89	0 0 ⁵ / ₈	..	..	4884
" 1889 (53 weeks)	32653	1791	1 1 ¹ / ₂	..	..	55	0 0 ³ / ₈	6305
" 1890	35527	1933	1 1	165	0 1	..	..	6051
Quarter ended:—								
March, 1891	8866	556	1 3	..	..	57	0 1 ¹ / ₂	6509
June, "	10440	590	1 1 ¹ / ₂	..	..	45	0 1	7281
September, "	10833	584	1 0 ³ / ₄	65	0 1 ³ / ₈	..	..	7231
December, "	11110	587	1 0 ⁵ / ₈	61	0 1 ¹ / ₂	..	..	7337
March, 1892	9183	658	1 5 ¹ / ₈	..	..	182	0 4 ³ / ₄	8043
June, "	12742	682	1 0 ³ / ₄	30	0 0 ¹ / ₂	..	..	7193
September, "	11362	758	1 4	..	..	130	0 2 ³ / ₄	11296
December, "	13157	880	1 4	..	..	284	0 5 ¹ / ₈	12194
March, 1893	10676	883	1 7 ³ / ₈	..	..	248	0 5 ¹ / ₄	14094
June, "	12507	857	1 4 ³ / ₈	..	..	193	0 3 ⁵ / ₈	13849
September, "	11048	785	1 5	..	..	204	0 4 ³ / ₈	11781
December, "	11726	790	1 4 ³ / ₈	..	..	87	0 1 ³ / ₄	10718
March, 1894	10932	775	1 5	..	..	257	0 5 ⁵ / ₈	10256
June, "	13799	792	1 1 ³ / ₄	23	0 0 ³ / ₈	..	..	10810
September, "	12614	797	1 3 ¹ / ₄	..	..	92	0 1 ⁵ / ₈	10184
December, "	14775	855	1 1 ¹ / ₂	..	..	90	0 1 ³ / ₈	10730
March, 1895	11344	896	1 5 ⁵ / ₈	..	..	412	0 8 ⁵ / ₈	10880
June, "	15560	919	1 2 ⁵ / ₈	305	0 4 ⁵ / ₈	..	..	12011
	318112	19224	1 2 ¹ / ₂	738	..	2383	..	..
						Less Profit	738	..
						Leaves Net Loss	1645	0 1 ¹ / ₂

LEEDS CLOTHING DEPARTMENT.

Since Commencing.

IN YEARS TO 1890; IN QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED,	EXPENSES.				NET PROFIT.		NET LOSS.		Stocks at end.
	Net Supplies.		Interest.		Amount.		Amount.		
	£	s.	£	s.	£	s.	£	d.	
Year ended:—									
December, 1888 (1 quarter)	318	8	413	38	0	28	182	11	390
December, 1889 (53 weeks)	4132	49	2940	58	1	08	812	3	495
December, 1890	6202	71	3338	78	2	04	131	0	1316
Quarter ended:—									
March, 1891	3417	28	1591	33	38	0	..	..	1199
June, " "	2381	30	1490	33	123	1	..	..	1923
September, " "	3344	34	1620	35	343	2	..	..	2123
December, " "	3787	29	1488	31	183	0	..	..	1498
March, 1892	4311	31	2200	35	383	1	..	..	2033
June, " "	3816	32	2008	38	128	0	..	..	1963
September, " "	2935	36	1844	38	153	0	..	..	2367
December, " "	3654	32	2152	37	153	0	..	..	2274
March, 1893	5741	34	2651	34	419	1	..	..	1825
June, " "	4443	30	2621	35	54	0	..	..	1959
September, " "	5173	31	2611	35	429	1	..	..	1687
December, " "	2765	32	2229	35	161	1	..	..	2898
March, 1894	7619	36	3655	37	463	1	..	..	2034
June, " "	6604	26	3709	38	588	1	..	..	2139
September, " "	5499	34	3601	40	570	2	..	..	2297
December, " "	4574	31	2396	40	121	0	..	..	2662
March, 1895	7702	67	4623	81	351	0	..	..	2927
June, " "	8466	60	4758	81	404	0	..	..	2547
	96643	888	53788	761	4921	..	1149	..	..
					1149	..		..
			Less Loss.		3772	0		94	
			Leaves Net Profit						

CRUMPSALL BISCUIT

Since commencing to
IN YEARS TO 1890; IN

YEAR OR QUARTER ENDED.	Net Supplies.	Pro-duction.	EXPENSES.			
			Sundry.	Depre- ciation.	Interest.	Total.
Year ended:—	£	£	£	£	£	£
January, 1874 (1 quarter)	2987	2878	604	60	87	751
" 1875	13189	13124	2190	323	495	3008
" 1876	13664	13392	2515	324	371	3210
" 1877 (53 weeks)	15866	16065	3282	398	441	4121
" 1878	18018	18126	2672	444	500	3616
" 1879	17553	17289	2798	481	481	3760
December, 1879 (50 weeks)	16623	16454	2852	532	447	3831
" 1880	19153	19069	2985	572	429	3986
" 1881	20122	20274	3056	576	429	4061
" 1882	21632	21578	3095	578	401	4074
" 1883	21897	21712	3228	589	408	4225
" 1884 (53 weeks)	21549	21565	3841	665	490	4936
" 1885	21479	21830	4794	786	454	6034
" 1886	23534	22885	5815	897	529	7241
" 1887	23314	29100	6371	1278	745	8394
" 1888	32079	32155	6616	1364	862	8842
" 1889 (53 weeks)	42081	42836	7483	1375	929	9737
" 1890	51916	54197	9431	1394	957	11782
Quarter ended:—						
March, 1891	14526	14346	2476	348	261	3085
June, "	15122	12262	2720	422	296	3438
September, "	21160	24594	3421	503	380	4304
December, "	17753	19740	3257	505	375	4137
March, 1892	15174	14749	3231	506	420	4157
June, "	14880	11629	3065	510	394	3969
September, "	20023	31647	3959	511	452	4922
December, "	20620	17555	3401	511	462	4374
March, 1893	19893	14001	3044	511	436	3991
June, "	19517	17759	3337	514	385	4236
September, "	24309	37197	4252	514	450	5216
December, "	22440	15574	3745	518	437	4700
March, 1894	23343	16512	3685	557	437	4679
June, "	17964	13666	3599	557	377	4533
September, "	31134	42665	4733	557	407	5697
December, "	23664	23668	4070	557	444	5071
March, 1895	23592	18011	3832	558	436	4826
June, "	21919	15798	4030	559	375	4964
	768689	765902	137485	21854	16619	175958

WORKS TRADE.

keep a separate Account.

QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED.	RATE ON PRODUCTION.		NET PROFIT.		NET LOSS.		Stocks at end.
	Per cent.	Per £.	Amount	Rate per £.	Amount	Rate per £.	
Year ended:—	£ s. d.	s. d.	£	s. d.	£	s. d.	£
January, 1874 (1quarter)	26 1 10	5 2½	15	0 1½	..	..	1678
" 1875	22 18 5	4 7	228	0 4½	..	..	2029
" 1876	23 19 5	4 9½	712	1 0¾	..	..	1538
" 1877 (53 weeks)	25 13 0	5 1½	630	0 9¾	..	..	2867
" 1878	19 18 11	3 11¼	514	0 6¾	..	..	2961
" 1879	21 15 0	4 4½	1518	1 9	..	..	2506
December, 1879 (50 weeks)	23 5 8	4 7½	1004	1 2¾	..	..	2335
" 1880	20 18 1	4 2½	983	1 0½	..	..	1793
" 1881	20 0 7	4 0	887	0 10¼	..	..	2105
" 1882	18 17 7	3 9¼	1498	1 4¾	..	..	1703
" 1883	19 9 2	3 10¾	2081	1 11	..	..	1896
" 1884 (53 weeks)	22 17 9	4 6¼	2030	1 10½	..	..	2129
" 1885	27 12 9	5 6¼	1491	1 4¾	..	..	3534
" 1886	31 12 9¾	6 3¾	..	..	61	0 0½	4207
" 1887	28 16 10¾	5 9¼	..	..	3	..	5518
" 1888	27 9 11¼	5 5¾	..	..	222	0 1½	7633
" 1889 (53 weeks)	22 16 11¾	4 6¼	1274	0 7¼	..	..	9411
" 1890	21 14 9¾	4 4½	39	0 0½	..	..	12712
Quarter ended:—							
March, 1891	21 10 1	4 3¼	769	1 0¾	..	..	12575
June, "	28 0 9	5 7¼	672	0 10¾	..	..	12621
September, "	17 10 0	3 6	220	0 2¾	..	..	19472
December, "	20 19 1¾	4 7¼	1620	1 9¾	..	..	22353
March, 1892	28 3 8¾	5 7¾	1512	1 11½	..	..	19633
June, "	34 2 7¾	6 9¾	..	..	178	0 2¾	19042
September, "	15 11 0¾	3 1¼	693	0 8¼	..	..	31512
December, "	24 18 3¾	4 11¾	458	0 5¼	..	..	28264
March, 1893	28 10 11½	5 8¾	800	0 9¾	..	..	22855
June, "	23 17 0½	4 9¼	281	0 3¾	..	..	21623
September, "	14 0 5¾	2 9¾	1348	1 1¼	..	..	34095
December, "	30 3 6¼	6 0¾	..	..	28	0 0½	25454
March, 1894	28 6 8¾	5 8	763	0 7¾	..	..	17859
June, "	33 3 4	6 7¾	729	0 9¾	..	..	17399
September, "	13 7 0¾	2 8	3001	1 11¾	..	..	26252
December, "	21 8 6½	4 3¾	1816	1 6¾	..	..	26409
March, 1895	26 15 10¾	5 4¼	1944	1 7¾	..	..	20469
June, "	31 8 5¾	6 3¾	1177	1 0¾	..	..	15611
	22 19 5½	4 7½	32707	..	492	..	..
Less Loss			492	..	..	..	..
Leaves Net Profit			32215	0 10	..	..	..

LEICESTER BOOT AND

Since commencing to

IN YEARS TO 1890; IN

YEAR OR QUARTER ENDED.	Net Supplies.	Pro-duction.	EXPENSES.			
			Sundry.	Depre- ciation.	Interest.	Total.
Year ended:—	£	£	£	£	£	£
January, 1874 (1 quarter)	3422	5190	1281	6	29	1316
" 1875	29456	38684	10047	36	342	10425
" 1876	53687	53702	16336	124	543	17603
" 1877 (53 weeks)	62205	60104	20631	246	780	21657
" 1878	71140	67603	23357	416	1023	24736
" 1879	73881	72939	25902	424	998	27324
December, 1879 (50 weeks)	77476	77746	28016	417	945	29378
" 1880	84655	84429	29866	444	1241	31551
" 1881	87607	89150	32682	448	1087	34217
" 1882	99098	99517	36388	495	1113	37996
" 1883	91986	90214	33868	511	1040	35419
" 1884 (53 weeks)	107166	106333	39237	838	1267	41342
" 1885	109464	107806	39846	1077	1315	42238
" 1886	122463	122703	44731	1104	1244	47079
" 1887	126417	124324	45895	1120	1230	48245
" 1888	143488	139955	53206	1124	1381	55711
" 1889 (53 weeks)	172267	175712	65998	1236	1633	68867
" 1890	206499	220763	81461	1140	2134	84735
Quarter ended:—						
March, 1891	72088	63995	24294	248	687	25229
June, "	64294	59885	23034	249	645	23923
September, "	57530	55491	21329	249	663	22241
December, "	41498	51487	20693	249	684	21626
March, 1892	63457	61229	22467	791	976	24234
June, "	71332	75562	27737	991	1058	29786
September, "	68769	71494	28825	959	1092	30876
December, "	52558	84098	30782	1014	1238	33034
June, 1893 (2 quart'rs)	159833	132940	54024	2289	2881	59194
December, " "	83463	89370	36717	2350	2752	41819
March, 1894	71373	63209	24971	1182	1393	27546
June, "	81597	74587	28292	1207	1290	30789
September, "	54346	50974	21366	1212	1310	23888
December, "	50722	66658	25589	1220	1285	28094
March, 1895	69745	64692	26480	1227	1422	29129
June, "	85413	73515	28154	1253	1370	30777
	2870395	2876060	1074102	27896	40091	1142089

SHOE WORKS TRADE.

keep a separate Account.

QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED.	RATE ON PRODUCTION.		NET PROFIT.		NET LOSS.		Stocks at end.
	Per cent.	Per £.	Amount	Rate.	Amount	Rate.	
Year ended:—	£ s. d.	s. d.	£	s. d.	£	s. d.	£
January, 1874 (1 quarter)	25 6 8	5 0 $\frac{3}{4}$	..	..	8	0 0 $\frac{1}{2}$	2579
" 1875	26 18 11	5 4 $\frac{3}{4}$	584	0 3 $\frac{3}{4}$	..	..	6466
" 1876	32 15 6	6 6 $\frac{3}{4}$	912	0 4	..	..	9186
" 1877 (53 weeks)	36 0 6	7 2 $\frac{3}{4}$	886	0 3 $\frac{1}{2}$	..	..	14131
" 1878	36 13 6	7 4	211	0 0 $\frac{3}{4}$	..	..	12922
" 1879	37 9 9	7 6	1575	0 5 $\frac{1}{2}$	..	..	14515
December, 1879 (50 weeks)	37 15 8	7 6 $\frac{3}{4}$	1645	0 5	..	..	24733
" 1880	37 7 4	7 5 $\frac{3}{4}$	..	..	309	0 0 $\frac{3}{4}$	15772
" 1881	38 8 8	7 8	452	0 1 $\frac{1}{2}$	..	..	15594
" 1882	38 3 5	7 7 $\frac{1}{2}$	1649	0 3 $\frac{1}{2}$	..	..	14192
" 1883	39 5 2	7 10 $\frac{1}{4}$	190	0 3 $\frac{1}{2}$	..	..	10384
" 1884 (53 weeks)	38 17 7	7 9 $\frac{1}{4}$	3261	0 7 $\frac{1}{2}$	..	..	17800
" 1885	39 3 7	7 10	3078	0 6 $\frac{3}{4}$	..	..	15752
" 1886	38 7 4 $\frac{3}{4}$	7 8	6059	0 11 $\frac{3}{4}$	..	..	17738
" 1887	38 16 1 $\frac{1}{2}$	7 9 $\frac{1}{4}$	6344	1 0	..	..	19116
" 1888	39 16 1 $\frac{1}{2}$	7 11 $\frac{1}{2}$	6453	0 10 $\frac{3}{4}$	..	..	22496
" 1889 (53 weeks)	39 3 10 $\frac{1}{4}$	7 10	8347	0 11 $\frac{1}{4}$	..	..	33265
" 1890	38 7 7 $\frac{1}{4}$	7 8	8743	0 10 $\frac{3}{4}$	..	..	61935
Quarter ended:—							
March, 1891	39 8 5 $\frac{1}{2}$	7 10 $\frac{1}{4}$	1201	0 9 $\frac{1}{2}$	..	..	52523
June, "	39 19 1 $\frac{1}{2}$	7 11 $\frac{3}{4}$	1812	0 6 $\frac{3}{4}$	..	..	55257
September, "	40 1 7 $\frac{1}{4}$	8 0 $\frac{1}{2}$	755	0 3 $\frac{1}{2}$	..	..	57066
December, "	42 0 0 $\frac{3}{4}$	8 4 $\frac{3}{4}$	..	..	1174	0 6 $\frac{3}{4}$	62980
March, 1892	39 11 8 $\frac{1}{2}$	7 10 $\frac{1}{2}$	..	..	1131	0 4 $\frac{1}{2}$	56163
June, "	39 8 4 $\frac{1}{2}$	7 10 $\frac{1}{2}$	4119	1 1 $\frac{1}{2}$	..	..	55554
September, "	43 3 8 $\frac{3}{4}$	8 7 $\frac{3}{4}$	..	..	92	0 0 $\frac{1}{4}$	64317
December, "	39 5 7 $\frac{1}{4}$	7 10 $\frac{1}{2}$	2065	0 9 $\frac{3}{4}$	..	..	97381
June, 1893 (2 quart'rs)	44 10 6 $\frac{3}{4}$	8 10 $\frac{3}{4}$	5624	0 8 $\frac{3}{4}$	..	..	77716
December, " "	46 15 10 $\frac{1}{4}$	9 4 $\frac{1}{4}$	..	..	6895	1 7 $\frac{3}{4}$	83812
March, 1894	43 11 7	8 8 $\frac{1}{2}$	1501	0 5	..	..	77828
June, "	41 5 7 $\frac{1}{4}$	8 3	4404	1 0 $\frac{1}{2}$	..	..	68833
September, "	46 17 3 $\frac{1}{2}$	9 4 $\frac{3}{4}$	850	0 3 $\frac{1}{2}$	..	..	70000
December, "	42 2 11 $\frac{3}{4}$	8 5 $\frac{1}{4}$	2819	1 1 $\frac{1}{4}$	..	..	92078
March, 1895	45 0 6 $\frac{1}{4}$	9 0	2590	0 8 $\frac{1}{2}$	..	..	85337
June, "	41 17 3 $\frac{1}{2}$	8 4 $\frac{3}{4}$	4280	1 0	..	..	76550
	39 14 2 $\frac{3}{4}$	7 11 $\frac{1}{4}$	82409	..	9609	..	..
Less Loss			9609	..		..
Leaves Net Profit			72800	0 6			

HECKMONDWIKE BOOT, SHOE,

Since commencing to

IN YEARS TO 1890;

YEAR OR QUARTER ENDED.	Net Supplies.	Production.	EXPENSES.			
			Sundry.	Depreciation.	Interest.	Total.
Year ended:—	£	£	£	£	£	£
December, 1880 (2 quart'rs)	3060	3438	1057	16	30	1103
" 1881	11151	11417	3592	57	157	3806
" 1882	14602	15454	5041	66	183	5290
" 1883	16661	16377	5435	68	222	5725
" 1884 (53 weeks)	18215	18138	5924	94	220	6238
" 1885	22666	23811	7832	176	256	8264
" 1886	22231	23418	7867	267	405	8539
" 1887	22519	19641	7110	313	380	7803
" 1888	29907	22998	9371	488	588	10447
" 1889 (53 weeks)	29815	22899	9155	602	687	10444
" 1890	35135	28064	11036	719	797	12552
Quarter ended:—						
March, 1891	11088	8572	3519	186	195	3900
June, "	7363	7954	3257	186	218	3661
September, "	9778	8699	3329	188	247	3764
December, "	14690	9628	3798	188	212	4198
March, 1892	11233	9009	3629	188	217	4034
June, "	9206	9412	3490	191	227	3908
September, "	10255	9386	3518	200	250	3968
December, "	15504	11540	4518	205	232	4955
March, 1893	12008	10413	4430	227	257	4914
June, "	6678	8720	3685	231	290	4206
September, "	8268	8561	3502	232	312	4046
December, "	13725	8737	3639	241	295	4175
March, 1894	11951	7332	3613	238	303	4154
June, "	7382	8415	3644	260	316	4220
September, "	12018	9392	3985	260	317	4562
December, "	15492	11425	4744	261	281	5286
March, 1895	12533	10615	4480	265	305	5050
June, "	9750	9253	3941	265	316	4522
	424284	372718	142141	6878	8715	157734

AND CURRYING TRADE.

keep a separate Account.

IN QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED.	RATE ON PRODUCTION.		NET PROFIT.		NET LOSS.		Stocks at end.
	Per cent.	Per £.	Amount	Rate.	Amount	Rate.	
Year ended:—	£ s. d.	s. d.	£	s. d.	£	s. d.	£
December, 1880 (2 quart'rs)	32 1 7	6 4 $\frac{1}{2}$	..	..	181	1 0 $\frac{3}{8}$	2473
" 1881	33 6 8	6 8	..	..	608	1 0 $\frac{3}{8}$	2238
" 1882	34 4 8	6 10 $\frac{1}{2}$	..	..	163	0 2 $\frac{1}{2}$	4016
" 1883	34 19 1 $\frac{1}{2}$	6 11 $\frac{1}{2}$	294	0 4 $\frac{1}{2}$	..	..	3950
" 1884 (53 weeks)	34 7 10	6 10 $\frac{1}{2}$	287	0 3 $\frac{1}{2}$	..	..	3506
" 1885	34 14 1	6 11 $\frac{1}{4}$	261	0 2 $\frac{3}{4}$	..	..	5314
" 1886	36 9 3 $\frac{1}{2}$	7 3 $\frac{1}{2}$	375	0 4	..	..	6869
" 1887	37 10 3 $\frac{1}{2}$	7 6	237	0 2 $\frac{1}{2}$	..	..	5382
" 1888	35 3 10 $\frac{1}{2}$	7 0 $\frac{1}{2}$	1021	0 8 $\frac{1}{2}$	..	..	10863
" 1889 (53 weeks)	35 10 8 $\frac{1}{2}$	7 1 $\frac{1}{2}$	1922	1 3 $\frac{1}{2}$	..	..	10280
" 1890	34 15 9 $\frac{1}{8}$	6 11 $\frac{3}{8}$	1398	0 9 $\frac{1}{2}$	..	..	11325
Quarter ended:—							
March, 1891	36 2 4 $\frac{1}{2}$	7 2 $\frac{1}{2}$	631	1 1 $\frac{1}{2}$	..	..	10903
June, "	36 18 8 $\frac{1}{2}$	7 4 $\frac{1}{2}$	246	0 8	..	..	16018
September, "	35 3 0 $\frac{1}{2}$	7 0 $\frac{1}{2}$	881	1 9 $\frac{1}{2}$	..	..	16164
December, "	36 2 0 $\frac{1}{2}$	7 2 $\frac{1}{2}$	1522	2 0 $\frac{1}{2}$	..	..	14594
March, 1892	37 1 5 $\frac{1}{2}$	7 5	441	0 9 $\frac{3}{8}$	..	..	13021
June, "	34 7 5	6 10 $\frac{3}{8}$	..	..	246	0 6 $\frac{3}{8}$	15149
September, "	35 5 8 $\frac{3}{4}$	7 0 $\frac{5}{8}$	832	1 7 $\frac{3}{8}$	..	..	17802
December, "	36 7 2 $\frac{1}{2}$	7 3 $\frac{1}{4}$	990	1 3 $\frac{1}{4}$	..	..	15875
March, 1893	40 1 8 $\frac{1}{2}$	8 0 $\frac{1}{2}$	381	0 7 $\frac{1}{2}$	..	..	17917
June, "	40 4 7	8 0 $\frac{1}{2}$	..	..	288	0 10 $\frac{1}{4}$	21145
September, "	40 2 0	8 0 $\frac{1}{4}$	599	1 5 $\frac{3}{8}$	..	..	22621
December, "	39 5 7 $\frac{3}{8}$	7 10 $\frac{1}{4}$	440	0 7 $\frac{3}{8}$	..	..	19487
March, 1894	45 9 17 $\frac{1}{2}$	9 1	..	..	219	0 4 $\frac{1}{2}$	18938
June, "	40 14 0 $\frac{1}{4}$	8 1 $\frac{1}{2}$	..	..	162	0 5 $\frac{1}{4}$	20560
September, "	39 18 9 $\frac{1}{2}$	7 11 $\frac{1}{2}$	960	1 7 $\frac{1}{2}$	..	..	21350
December, "	38 7 7 $\frac{1}{4}$	7 8 $\frac{1}{2}$	621	0 9 $\frac{1}{2}$	..	..	18260
March, 1895	40 3 4 $\frac{1}{2}$	8 0 $\frac{1}{2}$	..	..	119	0 2 $\frac{1}{4}$	19835
June, "	39 19 6 $\frac{1}{4}$	7 11 $\frac{1}{8}$	968	1 11 $\frac{1}{4}$	..	..	21444
	36 11 9 $\frac{1}{8}$	7 3 $\frac{1}{2}$	15307	..	1986	..	..
			Less Loss.....	1986	..		
			Leaves Net Profit..	13321	0 7 $\frac{1}{2}$		

DURHAM SOAP WORKS SUPPLIES,
Since
IN YEARS TO 1890;

YEAR OR QUARTER ENDED.	Net Supplies.	Pro-duction.	EXPENSES.			
			Sundry.	Depre- ciation.	Interest.	Total.
	£	£	£	£	£	£
Year ended:—						
January, 1875 (2 quart'rs)	2099	2976	190	75	85	290
" 1876	9264	9309	512	155	213	880
" 1877 (53 weeks)	9549	9725	488	177	271	996
" 1878	11098	11913	684	336	448	1468
" 1879	11735	11169	883	345	430	1658
December, 1879 (50 weeks)	8908	9387	715	277	349	1341
" 1880	11730	11404	781	289	323	1393
" 1881	11871	12265	842	292	376	1510
" 1882	12801	12504	795	292	350	1437
" 1883	14751	15941	910	299	359	1568
" 1884 (53 weeks)	15219	14721	849	327	343	1519
" 1885	17911	17994	1117	320	300	1737
" 1886	15886	15783	1623	320	252	2195
" 1887	15280	14888	1516	320	244	2080
" 1888	21756	22126	1916	320	269	2505
" 1889 (53 weeks)	24643	23986	1821	328	299	2448
" 1890	28456	28318	1800	327	255	2382
Quarter ended:—						
March, 1891	7766	7106	416	44	74	534
June, "	8464	8505	495	43	67	605
September, "	9065	8403	449	43	70	562
December, "	8137	8289	509	43	58	610
March, 1892	8062	7535	451	43	78	572
June, "	7907	7913	441	43	78	562
September, "	9019	8142	453	43	62	558
December, "	8993	8938	497	43	50	590
March, 1893	9549	9171	486	43	52	581
June, "	9142	9289	515	43	56	614
September, "	9748	9227	460	43	54	557
December, "	9461	10029	513	44	56	613
March, 1894	9380	8806	509	43	66	618
June, "	9562	8640	547	43	68	658
September, "	9454	9167	500	45	67	612
December, "	9288	9146	562	45	62	669
March, 1895	8256	8180	582	45	87	714
June, "	8915	8551	547	45	96	688
	403120	399446	26314	5583	6367	38264

EXPENSES, PROFIT, AND STOCKS.

Commencing.

IN QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED.	RATE ON PRODUCTION.		NET PROFIT.		NET LOSS.		Stocks at end.
	Per cent.	Per £.	Amount.	Rate.	Amount.	Rate.	
Year ended:—	£ s. d.	s. d.	£	s. d.	£	s. d.	£
January, 1875 (2 quart'rs)	9 14 10	1 11 $\frac{1}{4}$	19	0 1 $\frac{1}{2}$	..	..	1809
" 1876	9 9 0	1 10 $\frac{5}{8}$	236	0 6	..	..	1303
" 1877 (53 weeks)	9 12 6	1 11	191	0 4 $\frac{1}{2}$	..	..	3871
" 1878	12 6 5	2 5 $\frac{1}{2}$	..	..	307	0 6 $\frac{1}{2}$	3721
" 1879	14 16 10	2 11 $\frac{1}{2}$	..	..	670	1 2 $\frac{3}{8}$	3130
December, 1879 (50 weeks)	14 5 8	2 10 $\frac{1}{4}$	..	..	115	0 2 $\frac{1}{2}$	3769
" 1880	12 4 3	2 5 $\frac{1}{4}$	138	0 2 $\frac{1}{2}$	..	..	3571
" 1881	12 6 2	2 5 $\frac{1}{4}$	132	0 2 $\frac{1}{2}$	..	..	3707
" 1882	11 9 10	2 3 $\frac{1}{4}$	..	..	90	0 1 $\frac{1}{2}$	2628
" 1883	9 16 8	1 11 $\frac{1}{2}$	62	0 0 $\frac{1}{4}$	..	..	5185
" 1884 (53 weeks)	10 6 4	2 0 $\frac{3}{4}$	97	0 1 $\frac{1}{2}$	..	..	3489
" 1885	9 13 0	1 11 $\frac{1}{8}$	907	1 0	..	..	4361
" 1886	13 18 1 $\frac{3}{4}$	2 9 $\frac{3}{8}$	741	0 11 $\frac{1}{8}$	..	..	3999
" 1887	13 19 5	2 9 $\frac{1}{2}$	524	0 8 $\frac{1}{4}$	..	..	3637
" 1888	11 6 5 $\frac{1}{2}$	2 3 $\frac{1}{4}$	590	0 6 $\frac{1}{2}$	..	..	5448
" 1889 (53 weeks)	10 4 1 $\frac{1}{2}$	2 0 $\frac{1}{2}$	234	0 2 $\frac{1}{4}$	..	..	4938
" 1890	8 8 2 $\frac{1}{4}$	1 8 $\frac{1}{8}$	733	0 6 $\frac{1}{8}$	..	..	5097
Quarter ended:—							
March, 1891	7 10 3 $\frac{1}{2}$	1 6	261	0 8	..	..	4509
June, "	7 2 3 $\frac{1}{2}$	1 5	259	0 7 $\frac{1}{2}$	..	..	4247
September, "	6 13 9 $\frac{1}{2}$	1 4	351	0 9 $\frac{1}{4}$	..	..	3465
December, "	7 7 2 $\frac{1}{2}$	1 5 $\frac{5}{8}$	377	0 11	..	..	5694
March, 1892	7 11 9 $\frac{1}{2}$	1 6 $\frac{1}{2}$	274	0 8 $\frac{1}{2}$	..	..	6230
June, "	7 2 0 $\frac{1}{2}$	1 5	349	0 10 $\frac{1}{2}$	..	..	4720
September, "	6 17 0 $\frac{1}{2}$	1 4 $\frac{3}{8}$	810	1 9 $\frac{1}{4}$	..	..	3901
December, "	6 12 0 $\frac{1}{2}$	1 3 $\frac{1}{8}$	883	1 11 $\frac{1}{2}$	..	..	3251
March, 1893	6 6 8 $\frac{3}{8}$	1 3 $\frac{1}{4}$	485	1 0 $\frac{1}{2}$	..	..	2524
June, "	6 12 2 $\frac{3}{8}$	1 3 $\frac{3}{4}$	465	1 0 $\frac{1}{2}$	..	..	3001
September, "	6 0 8 $\frac{3}{8}$	1 2 $\frac{3}{4}$	840	1 8 $\frac{1}{2}$	..	..	3969
December, "	6 2 2 $\frac{3}{8}$	1 2 $\frac{3}{8}$	402	0 10 $\frac{1}{8}$	..	..	3051
March, 1894	7 0 4 $\frac{1}{4}$	1 4 $\frac{3}{4}$	867	1 10 $\frac{1}{4}$	..	..	5569
June, "	7 12 3 $\frac{1}{4}$	1 6 $\frac{1}{4}$	191	0 4 $\frac{1}{4}$	..	..	5263
September, "	6 13 6 $\frac{1}{4}$	1 4	815	1 8 $\frac{1}{2}$	..	..	3540
December, "	7 6 3 $\frac{1}{2}$	1 5 $\frac{1}{2}$	493	1 0 $\frac{1}{2}$	..	..	6400
March, 1895	8 14 6 $\frac{3}{4}$	1 8 $\frac{1}{4}$	753	1 9 $\frac{1}{4}$	..	..	8372
June, "	8 0 11	1 7 $\frac{1}{4}$	566	1 9 $\frac{1}{2}$	..	..	4780
	9 11 7	1 10 $\frac{1}{8}$	14045	..	1191	..	..
Less Loss.....			1191	..			
Leaves Net Profit			12854	0 7 $\frac{1}{2}$			

BROUGHTON CABINET WORKS.

STATEMENT SHOWING SUPPLIES, EXPENSES, STOCKS, ALSO RESULT OF WORKING,

Since Commencing.

NOTE.—These Figures are included in the Manchester Furnishing Department Account.

QUARTER ENDED.	Supplies.	EXPENSES.				RESULT OF WORKING.		Stocks at end.
		Sundry.	Depre- ciation.	Interest.	Total.	Loss.	Rate per £ on Supplies.	
	£	£	£	£	£	£	s. d.	£
December, 1892.....	..	..	..	..	..	..	..	307
March, 1893.....	394	545	..	16	561	68	3 5 $\frac{3}{4}$	1355
June, ,,	1158	998	125	100	1223	217	3 8 $\frac{7}{8}$	2431
September, ,,	1545	1007	115	107	1229	132	1 8 $\frac{1}{2}$	2687
December, ,,	1302	938	109	106	1153	213	3 3 $\frac{1}{4}$	3360
March, 1894.....	1417	1083	109	114	1306	201	2 10	3888
June, ,,	1686	1281	109	118	1508	122	1 5 $\frac{1}{4}$	4569
September, ,,	3095	1916	112	129	2157	97	0 7 $\frac{1}{2}$	4808
December, ,,	3255	1686	113	128	1927	*208	1 3 $\frac{1}{4}$	5343
March, 1895.....	1745	1366	111	135	1612	311	3 6 $\frac{3}{4}$	5711
June, ,,	1978	1384	104	133	1621	199	2 0 $\frac{1}{8}$	5905
	17575	12204	1007	1086	14297	1560	..	..
						Less Profit.....	208	..
						Leaves Net Loss ..	1352	1 6 $\frac{3}{8}$

LONGTON CROCKERY

Since

IN YEARS TO 1890;

YEAR OR QUARTER ENDED.	SUPPLIES.			TOTAL EXPENSES.	
	Selves.	Scottish.	Total.	Amount.	Rate.
	£	£	£	£	s. d.
Year ended:—					
December, 1886 (2 quarters) . . .	3968	..	3968	372	1 10½
" 1887	11925	304	12229	876	1 5¼
" 1888	14473	1072	15545	1000	1 3½
" 1889 (53 weeks)	17466	1183	18649	1174	1 3
" 1890	21792	981	22773	1644	1 5¼
Quarter ended:—					
March, 1891	6157	26	6183	425	1 4¾
June, "	5600	..	5600	483	1 8½
September, "	5687	..	5687	433	1 6¼
December, "	9794	..	9794	478	0 11½
March, 1892	6774	..	6774	485	1 5½
June, "	7744	..	7744	523	1 4½
September, "	7569	..	7569	473	1 2½
December, "	7540	..	7540	533	1 4½
March, 1893	5809	..	5809	529	1 9¾
June, "	4977	..	4977	558	2 2½
September, "	5628	..	5628	503	1 9½
December, "	6666	..	6666	527	1 6½
March, 1894	5564	..	5564	552	1 11¾
June, "	6712	..	6712	544	1 7½
September, "	7054	..	7054	502	1 5
December, "	9058	..	9058	563	1 2½
March, 1895	7103	..	7103	577	1 7¾
June, "	6677	..	6677	675	2 0¼
	191737	3566	195303	14429	1 5½

DEPÔT TRADE, &c.

Commencing.

IN QUARTERS SINCE 1890.

YEAR OR QUARTER ENDED.	NET PROFIT.		NET LOSS.		Stocks at end.
	Amount.	Rate.	Amount.	Rate.	
	£	s. d.	£	s. d.	£
Year ended:—					
December, 1886 (2 quarters) .....	..	..	37	0 2½	540
" 1887	179	0 3½	..	..	596
" 1888	353	0 5½	..	..	1116
" 1889 (53 weeks)	533	0 6¾	..	..	1929
" 1890	543	0 5½	..	..	3053
Quarter ended:—					
March, 1891	137	0 5½	..	..	3014
June, "	104	0 4½	..	..	2948
September, "	14	0 0¼	..	..	2716
December, "	233	0 5½	..	..	2884
March, 1892	22	0 0¾	..	..	3411
June, "	114	0 3½	..	..	3699
September, "	166	0 5½	..	..	2963
December, "	379	1 0	..	..	2868
March, 1893	58	0 2¾	..	..	3254
June, " .....	..	..	59	0 2¾	3159
September, "	88	0 3¾	..	..	3083
December, "	252	0 9	..	..	2829
March, 1894	1	..	..	..	2973
June, "	110	0 3½	..	..	3195
September, "	164	0 5½	..	..	2899
December, "	427	0 11½	..	..	2518
March, 1895	207	0 6½	..	..	3077
June, "	148	0 5½	..	..	2956
	4232	..	96	..	..
Less Loss	96	..			
Leaves Net Profit	4136	0 5			

DISTRIBUTIVE EXPENSES AND RATE PER CENT ON

SALES = Expenses =	TOTALS.		MANCHESTER	
	£8,677,265.		GROCERY.	
	£4,346,127.			
	Amount.	Rate ₣ £100.	Amount.	Rate ₣ £100.
	£	d.	£	d.
Wages.....	79928·08	221·07	23565·03	180·13
Auditors' Fees.....	300·00	0·83	150·45	0·83
" Deputation Fees.....	14 28	0·04	7·15	0·04
" Fares.....	113·35	0·31	56·85	0·32
" Deputation Fares.....	20·25	0·06	10·15	0·06
Fees—General and Branch Committees....	829·29	2·29	294·29	1·63
" Sub-Committees.....	512·46	1·42	107·92	0·60
" Propaganda Committee.....	13·13	0·04	6·58	0·04
" Finance Committee.....	80·80	0·22	40·53	0·22
" Stocktakers.....	50 91	0·14	6·37	0·03
" Scrutineers.....	8·25	0·02	4·14	0·02
" " Deputations.....	1·00	0·00	0·50	0·00
" Secretaries.....	90·00	0·25	25·00	0·14
" Deputations.....	888·50	2·46	400·61	2·21
Mileages—General and Branch Committees	183·12	0·51	55·14	0 30
" Sub-Committees.....	148·40	0·41	16·33	0·09
" Propaganda Committee.....	4·28	0·01	2·14	0·01
" Finance Committee.....	31·06	0·09	15·59	0·09
" Stocktakers.....	12·71	0·03	0·98	0·00
" Deputations.....	74·24	0·21	26·32	0·15
Fares and Contracts—General and Branch Committees.....	583·90	1·61	207·53	1·15
" Sub-Committees.....	279·63	0·77	48·13	0·27
" Propaganda Committee.....	1·18	0·00	0·60	0·00
" Finance Committee.....	13·87	0·04	6·98	0·04
" Stocktakers.....	15·27	0 04	1·83	0·01
" Scrutineers.....	7·02	0·02	3·54	0·02
" " Deputations.....	0·57	0 00	0·30	0·00
" Deputations.....	793·23	2·21	383·92	2·12
Price Lists: Printing.....	1731·84	4·79	735·85	4 06
" Postage.....	342·80	0·95	173·27	0·96
Balance Sheets: Printing.....	360·50	1·00	174·95	0·97
Printing and Stationery.....	5602·09	15·49	2026·98	11·19
Periodicals.....	125·68	0·35	65·45	0·36
Travelling.....	7479·49	20·69	1494·67	8·25
Telegrams.....	452·60	1·25	236·52	1·64
Stamps.....	4850·19	12 03	2077·71	11·47
Petty Cash.....	437·12	1·21	216·30	1·19
Advertisements.....	409·23	1·13	121·75	0·67
Rents, Rates, and Taxes.....	4275·32	11·82	1126·35	6·22
Coals, Gas, and Water.....	3016·58	8·34	1074·71	5·93
Oil, Waste, and Tallow.....	373·92	1·03	218·35	1·21
Expenses: Quarterly Meetings.....	531·99	1·47	345·92	1·91
Legal.....	50·10	0·14	30·23	0·17
Repairs, Renewals, &c.....	4491·25	12·42	1922·85	10·62
Telephones.....	309·48	0·86	127·45	0·70
Conference and Exhibition Expenses.....	84 51	0·23	53·30	0·29
Propaganda Expenses.....	6·02	0·01	4·97	0·03
Employés' Picnic.....	96·05	0·27	22·72	0·13
" Annual.....	1112·84	3·08	558·49	3·08
Dining-rooms.....	5075·17	14·04	2398·64	13·22
Insurance—Fire and Guarantee.....	2343·32	6·50	280·83	1·55
Depreciation: Land.....	2132·03	5·90	623·37	3·46
" Buildings.....	9653·77	26·70	2216·00	12·24
" Fixtures.....	1910·00	16 35	1639·67	9·17
Interest.....	40295·77	111·45	12493·63	68·99
	186058 34	514·60	57986·06	320 20

SALES FOR THE YEAR ENDING DECEMBER 22ND, 1894.

M A N C H E S T E R .

DRAPERY.		WOOLLENS AND READY-MADES.		BOOT AND SHOE.		FURNISHING.	
£400,813.		£57,627.		£232,562.		£167,720.	
Amount.	Rate $\frac{p}{\pounds 100}$.	Amount.	Rate $\frac{p}{\pounds 100}$.	Amount.	Rate $\frac{p}{\pounds 100}$.	Amount.	Rate $\frac{p}{\pounds 100}$.
£	d.	£	d.	£	d.	£	d.
9656.76	578.23	1858.92	565.95	3970.75	409.78	3826.89	547.54
18.86	0.83	2.00	0.83	8.08	0.84	5.58	0.79
0.66	0.04	0.09	0.04	0.39	0.04	0.26	0.04
5.25	0.31	0.75	0.31	3.05	0.32	2.09	0.30
0.94	0.06	0.13	0.05	0.56	0.06	0.38	0.06
27.07	1.62	3.89	1.62	15.81	1.63	10.74	1.54
40.41	2.4	5.87	2.44	23.66	2.44	15.89	2.27
0.61	0.04	0.09	0.04	0.35	0.04	0.24	0.03
8.76	0.23	0.55	0.23	2.23	0.23	1.47	0.21
10.85	0.65	1.50	0.63	2.23	0.23	1.50	0.21
0.88	0.02	0.05	0.02	0.23	0.02	0.15	0.02
0.05	0.00	0.01	0.00	0.03	0.00	0.02	0.00
7.42	0.44	0.45	0.19	4.18	0.43	2.95	0.42
67.11	4.02	16.38	6.82	39.43	4.07	27.84	3.98
5.10	0.31	0.73	0.31	2.96	0.31	2.02	0.29
14.42	0.86	2.10	0.88	8.48	0.88	5.62	0.81
0.20	0.01	0.03	0.01	0.11	0.01	0.07	0.01
1.44	0.09	0.21	0.09	0.85	0.09	0.57	0.08
3.70	0.22	0.23	0.10	0.74	0.08	0.58	0.08
7.94	0.47	0.77	0.32	2.82	0.29	1.83	0.26
19.90	1.16	2.75	1.15	11.11	1.15	7.58	1.09
6.10	0.36	0.88	0.37	3.45	0.36	2.45	0.35
0.06	0.00	0.01	0.00	0.03	0.00	0.02	0.00
0.65	0.04	0.10	0.04	0.40	0.04	0.24	0.03
0.58	0.03	0.18	0.07	0.81	0.08	0.26	0.04
0.33	0.02	0.05	0.02	0.19	0.02	0.13	0.02
0.03	0.00	..	..	0.01	0.00	0.01	0.00
47.78	2.86	11.61	4.84	28.19	2.91	21.45	3.07
6.98	0.41	2.20	0.92	124.98	12.90	96.65	13.83
..	..	1.25	0.52	5.30	0.55	10.06	1.44
16.11	0.96	2.32	0.97	9.38	0.97	6.44	0.92
431.68	28.84	67.66	28.18	273.19	28.15	190.96	27.33
4.30	0.26	0.85	0.35	2.92	0.30	2.30	0.33
975.70	58.42	586.62	223.49	176.25	18.19	405.00	57.95
10.68	0.64	9.83	4.09	2.85	0.30	6.57	0.94
189.05	11.32	27.78	11.57	111.46	11.50	75.63	10.82
28.21	1.69	8.07	1.23	21.61	2.23	11.93	1.71
11.68	0.70	64.97	26.68	9.03	0.93	4.11	0.59
411.28	24.63	50.37	20.98	220.39	22.75	318.32	45.55
165.63	9.92	12.73	5.30	75.61	7.80	52.84	7.56
20.09	1.20	4.95	2.06	11.26	1.16	7.98	1.14
31.90	1.91	4.63	1.33	18.61	1.92	12.70	1.82
0.81	0.05	0.15	0.06	0.59	0.06	0.35	0.05
459.37	27.51	33.30	16.87	190.81	19.69	96.10	13.75
12.24	0.73	7.21	3.00	3.24	0.34	17.80	2.55
4.88	0.29	0.61	0.25	2.45	0.25	2.00	0.29
0.43	0.03	0.09	0.04	0.33	0.03	0.20	0.03
13.92	0.83	0.92	0.38	8.45	0.87	7.99	1.14
51.43	3.08	7.45	3.10	30.35	3.13	20.46	2.93
567.08	33.96	80.49	33.52	323.00	33.84	226.24	32.37
307.95	18.44	40.98	17.07	168.75	17.42	79.45	11.37
840.78	20.41	43.08	17.94	226.67	23.39	314.30	44.98
1231.50	73.74	162.25	67.57	719.88	74.29	1019.73	145.92
984.52	58.95	87.01	36.24	452.87	46.74	397.88	56.94
542.660	324.94	700.37	291.68	3337.71	344.45	1903.48	272.37
21697.51	1299.20	3368.57	1402.91	10659.07	1100.00	9225.70	1320.16

DISTRIBUTIVE EXPENSES AND RATE PER CENT ON

		NEWCASTLE.					
		GROCERY.		DRAPERY.		BOOTS & SHOES.	
SALES=		£1,521,138.		£293,931.		£131,413.	
Expenses=		Amount.	Rate % £100.	Amount.	Rate % £100.	Amount.	Rate % £100.
		£	d.	£	d.	£	d.
Wages	11008 33	173 69		4136 35	337 75	1800 08	328 74
Auditors' Fees	52 65	0 83		10 17	0 83	4 56	0 83
" Deputation Fees	2 51	0 04		0 49	0 04	0 22	0 04
" Fares	19 83	0 31		3 84	0 32	1 72	0 31
" Deputation Fares	3 56	0 06		0 69	0 06	0 81	0 06
Fees—General and Branch Committees	199 13	3 14		52 35	4 28	20 24	3 70
" Sub-Committees	101 39	1 60		37 31	3 05	14 60	2 67
" Propaganda Committee	2 30	0 04		0 45	0 04	0 20	0 04
" Finance Committee	14 21	0 22		2 75	0 25	1 24	0 23
" Stocktakers	3 37	0 05		2 62	0 23	1 12	0 21
" Scrutineers	1 45	0 02		0 28	0 02	0 12	0 02
" Deputations	0 18	0 00		0 03	0 00	0 02	0 00
" Secretaries	12 67	0 20		8 01	0 65	0 79	0 14
" Deputations	92 67	1 46		26 56	2 17	6 64	1 21
Mileages—Gen. & Branch Committees..	35 75	0 56		8 68	0 71	3 70	0 63
" Sub-Committees ..	17 35	0 27		4 62	0 38	2 14	0 39
" Propaganda Committee	0 75	0 01		1 05	0 01	0 07	0 01
" Finance Committee	5 45	0 09		1 05	0 08	0 47	0 09
" Stocktakers ..	1 15	0 02		0 52	0 04	0 04	0 01
" Deputations ..	7 42	0 12		1 78	0 14	0 41	0 07
Fares and Contracts—General and							
" Branch Committees	127 95	2 02		28 57	2 33	11 98	2 19
" Sub-Committees	54 58	0 86		8 35	0 68	3 43	0 63
" Propaganda Committee	0 21	0 00		0 04	0 00	0 02	0 00
" Finance Committee	2 44	0 04		0 52	0 04	0 22	0 04
" Stocktakers	1 20	0 02		0 34	0 03	0 07	0 01
" Scrutineers	1 24	0 02		0 23	0 02	0 10	0 02
" " Deputations	0 10	0 00		0 02	0 00	0 01	0 00
" Deputations	43 65	0 69		8 00	0 65	3 68	0 67
Price Lists : Printing	151 98	2 40		..	..	4 55	0 83
" Postage	35 78	0 56		..	..	1 09	0 20
Balance Sheets: Printing	42 72	0 67		8 26	0 67	3 70	0 67
Printing and Stationery	578 80	9 13		203 15	16 50	126 37	23 08
Periodicals	13 87	0 22		2 85	0 23	1 39	0 24
Travelling	532 43	8 40		518 26	42 32	270 90	49 47
Telegrams	100 72	1 59		4 00	0 33	4 00	0 73
Stamps	433 41	6 84		159 44	13 02	51 28	9 37
Petty Cash	89 42	1 41		11 50	0 94	6 34	1 16
Advertisements	67 68	1 07		27 02	2 21	3 95	0 72
Rents, Rates, and Taxes	369 75	5 83		227 98	18 61	189 08	34 53
Coals, Gas, and Water	521 07	8 22		153 25	12 51	43 04	7 86
Oil, Waste, and Tallow	53 41	0 84		10 07	0 82	4 56	0 83
Expenses: Quarterly Meetings	40 33	0 64		7 91	0 65	3 48	0 63
Legal	11 58	0 18		1 91	0 16	0 83	0 15
Repairs, Renewals, &c.	465 06	7 34		126 54	10 33	92 26	16 85
Telephones	75 57	1 19		12 25	1 0 3	6 03	1 10
Conference and Exhibition Expenses..	0 71	0 01		0 14	0 01	0 05	0 01
Propaganda Expenses .....	..	..		..	..	..	..
Employés' Picnic	7 25	0 11		6 65	0 54	2 32	0 42
" Annual	195 25	3 08		37 69	3 08	17 06	3 12
" Dining-rooms	570 50	9 00		158 26	12 92	69 77	12 74
" Insurance—Fire and Guarantee	152 37	2 40		184 27	15 04	89 23	16 30
" Depreciation: Land	131 03	2 07		95 05	7 76	60 18	10 98
" " Buildings	721 90	11 39		549 00	44 83	338 53	61 83
" " Fixtures	416 12	6 57		400 2	32 71	194 38	35 50
Interest	4696 84	74 11		2480 27	202 52	1238 49	236 19
	22288 60	351 65		9730 11	794 48	4700 87	858 52

SALES FOR THE YEAR ENDING DECEMBER 22ND, 1894.

NEWCASTLE.		LONDON.									
FURNISHING.		GROCERY.		DRAPERY.		BOOTS & SHOES.		FURNISHING.			
£106,346.		£1,236,371.		£89,552.		£52,120.		£41,545.			
Amount.	Rate ₤ £100.	Amount.	Rate ₤ £100.	Amount.	Rate ₤ £100.	Amount.	Rate ₤ £100.	Amount.	Rate per £100.		
£	d.	£	d.	£	d.	£	d.	£	d.		
2476·91	558·99	11987·46	281·73	3067·84	822·18	1450·54	667·94	1672·77	966·34		
3·67	0·83	42·71	0·63	3·08	0·82	1·80	0·83	1·45	0·84		
0·18	0·04	2·01	0·04	0·15	0·04	0·09	0·04	0·07	0·04		
1·39	0·31	16·13	0·32	1·16	0·31	0·68	0·31	0·54	0·31		
0·25	0·06	2·87	0·06	0·21	0·06	0·18	0·06	0·10	0·06		
16·08	3·62	155·06	3·01	19·50	5·23	8·27	3·81	6·89	3·98		
11·70	2·64	103·56	2·02	28·74	7·70	11·70	5·39	9·72	5·62		
0·16	0·04	1·88	0·04	0·14	0·04	0·08	0·04	0·06	0·03		
0·97	0·22	11·40	0·22	0·82	0·22	0·48	0·22	0·39	0·23		
2·63	0·59	9·72	0·19	4·72	1·26	1·72	0·79	2·55	1·47		
0·10	0·02	1·18	0·02	0·08	0·02	0·05	0·02	0·03	0·02		
0·01	0·00	0·14	0·00	0·01	0·00	0·01	0·00	0·01	0·01		
0·53	0·12	18·91	0·37	7·50	2·01	0·85	0·39	0·73	0·42		
5·80	1·81	171·99	3·34	16·02	4·29	9·45	4·35	7·99	4·62		
2·97	0·67	53·08	1·03	7·29	1·95	3·10	1·43	2·63	1·52		
1·71	0·39	42·32	0·82	19·36	5·19	7·45	3·43	6·50	3·76		
0·06	0·01	0·61	0·01	0·05	0·01	0·02	0·01	0·02	0·01		
0·38	0·09	4·40	0·08	0·32	0·08	0·19	0·09	0·15	0·09		
0·39	0·09	1·69	0·03	1·79	0·48	0·07	0·03	0·84	0·49		
0·33	0·07	20·67	0·40	1·61	0·43	1·47	0·68	0·87	0·50		
9·36	2·11	133·53	2·59	12·08	3·24	6·65	3·06	5·49	3·17		
2·89	0·65	129·43	2·51	9·70	2·60	5·62	2·59	4·50	2·60		
0·01	0·00	0·16	0·00	0·01	0·00	..	..	..	..
0·16	0·04	1·91	0·04	0·13	0·03	0·08	0·04	0·07	0·04		
0·08	0·02	9·55	0·18	0·12	0·03	0·18	0·08	0·06	0·03		
0·08	0·02	1·00	0·02	0·07	0·02	0·04	0·02	0·03	0·02		
..	..	0·08	0·00	..	..	..	..	..	..
3·61	0·81	207·60	4·08	20·41	5·47	9·75	4·49	8·60	4·97		
44·78	10·11	495·11	9·61	14·35	3·85	17·47	8·05	37·00	21·37		
0·60	0·14	112·03	2·17	..	..	3·41	1·57	..	..
2·98	0·67	81·55	1·58	5·90	1·68	3·42	1·57	2·75	1·59		
112·24	25·33	1024·48	19·89	245·10	65·69	113·61	52·32	159·38	92·07		
1·07	0·24	28·69	0·56	1·14	0·30	0·20	0·09	0·75	0·43		
176·11	39·74	1130·79	21·95	603·23	161·67	364·82	167·99	294·53	170·15		
4·00	0·90	12·22	0·24	0·64	0·17	0·34	0·16	0·25	0·14		
132·65	29·98	935·74	18·16	78·57	21·06	41·30	19·02	36·15	20·88		
7·63	1·72	25·92	0·50	12·18	3·26	0·57	0·26	2·44	1·41		
3·35	0·76	88·68	1·72	2·68	0·72	1·45	0·67	3·77	2·18		
230·98	52·13	812·41	15·77	114·26	30·62	79·62	36·66	124·54	71·94		
37·38	8·44	617·85	11·99	115·21	30·88	46·52	21·42	100·74	58·20		
3·64	0·82	36·60	0·71	1·40	0·38	0·55	0·25	1·07	0·62		
2·85	0·64	55·40	1·07	4·08	1·08	2·34	1·08	1·86	1·07		
0·74	0·17	2·45	0·05	0·20	0·05	0·12	0·06	0·10	0·06		
30·20	6·81	817·33	15·87	95·08	25·43	31·77	14·63	124·58	71·97		
4·65	1·05	33·05	0·64	4·67	1·25	2·48	1·14	2·86	1·65		
0·05	0·01	20·31	0·40	..	..	..	..	..	..
..		
0·77	0·18	13·50	0·26	5·40	1·45	1·85	0·63	4·80	2·77		
13·52	3·05	157·83	3·06	11·32	3·03	6·66	3·06	5·84	3·08		
57·22	12·91	416·18	8·07	104·61	28·04	60·17	27·71	48·00	27·78		
105·78	23·87	445·96	8·66	245·69	65·85	125·23	57·66	121·83	70·38		
130·15	29·37	393·40	1·82	38·13	10·22	12·13	5·53	18·80	10·86		
769·47	173·65	1071·08	20·79	454·57	121·83	154·83	71·30	245·02	141·54		
309·46	69·84	592·84	11·51	257·87	69·11	75·98	34·99	80·77	46·66		
1382·75	312·06	4424·29	85·88	1158·04	310·36	552·80	254·55	500·55	289·16		
6107·38	1378·30	26626·74	516·86	6797·18	1821·64	3219·61	1482·55	3650·94	2109·10		

The Co-operative Union Limited.

OFFICES: LONG MILLGATE, MANCHESTER.

WHAT IS THE CO-OPERATIVE UNION?

IT is an institution charged with the duty of keeping alive and diffusing a knowledge of the principles which form the life of the Co-operative movement, and giving to its active members, by advice and instruction—literary, legal, or commercial—the help they may require, that they may be better able to discharge the important work they have to do.

WHAT HAS IT DONE?

THE greater part of the legal advantages enjoyed by Co-operators originated in the action of the Central Board of the Union, and the Central Committee which it succeeded. They may be summarised as follows:—

- (1) The right to deal with the public instead of their own members only.
- (2) The incorporation of the Societies, by which they have acquired the right of holding in their own name lands or buildings and property generally, and of suing and being sued in their own names, instead of being driven to employ trustees.
- (3) The power to hold £200 instead of £100 by individual members of our Societies.
- (4) The limitation of the liability of members for the debts of the Society to the sum unpaid upon the shares standing to their credit.
- (5) The exemption of Societies from charge to income tax on the profits of their business, under the condition that the number of their shares shall not be limited.
- (6) The authorising one Registered Society to hold shares in its own corporate name to any amount in the capital of another Registered Society.
- (7) The extension of the power of members of Societies to bequeath shares by nomination in a book, without the formality of a will or the necessity of appointing executors, first from £30 to £50, and now to £100, by the Provident Nominations and Small Intestacies Act, 1883, which also makes this power apply to loans and deposits as well as to shares.
- (8) The Industrial and Provident Societies Act, 1871, which enables Societies to hold and deal with land freely.
- (9) The Industrial and Provident Societies Act 1876, which consolidated into one Act the laws relating to these Societies, and, among many smaller advantages too numerous to be mentioned in detail, gave them the right of carrying on banking business whenever they offer to the depositors the security of transferable share capital.
- (10) The Industrial and Provident Societies Act, 1893.

The Union consists of Industrial and Provident Societies, Joint-Stock Companies, and other bodies corporate.

No Society is admitted into Union unless its management is of a representative character, nor unless it agree—

- (1) To accept the statement of principles in the rules of the Union as the rules by which it shall be guided in all its own business transactions.
- (2) To contribute to the fund called the Congress Fund the annual payment following:—
 - (a) If the number of members of any such Society is less than 1,000, then the sum of 2d. for each member.
 - (b) If the number of such members exceeds 1,000, then, at least, the sum of 2,000d.

In estimating the number of members of a Society comprising other Societies, each such Society is considered to be one member.

The subscription is considered due, 1d. in the first and 1d. in the third quarter of each year, but may be wholly paid in the first quarter.

The financial year commences on January 1st in each year, and ends on December 31st following.

N.B.—Secretaries forwarding Cheques on account of the Union are requested to make them payable to the Co-operative Union Limited; Money Orders to A. WHITEHEAD, Cashier.

SUMMARY OF THE LAW RELATING TO SOCIETIES UNDER THE INDUSTRIAL AND PROVIDENT SOCIETIES ACT, 1893.

I. The Formation of Societies—

1. Application must be made to the Registrar of Friendly Societies, in London, Edinburgh, or Dublin, according to the case, on a form supplied by the office, signed by seven persons and the secretary, accompanied by two copies of the rules, signed by the same persons.

2. These rules must provide for twenty matters stated on the form of application.

3. No fees charged on the registration of a society.

N.B.—Model rules on these twenty matters can be obtained from the Registrar's office; and the CO-OPERATIVE UNION LIMITED, LONG MILLGATE, MANCHESTER, publishes, at the cost of 1½d. a copy, general rules, approved of by the Chief Registrar, providing also for many other matters on which rules are useful; and capable of being adopted, either with or without alterations, by a few special rules, with a great saving in the cost of printing.

The General Secretary of the Union will prepare such special rules, without charge, on receiving a statement of the rules desired.

II. Rights of a Registered Society—

1. It becomes a body corporate, which can by its corporate name sue and be sued, and hold and deal with property of any kind, including shares in other societies or companies, and land to any amount.

2. Its rules are binding upon its members, though they may have signed no assent to them; but may be altered by amendments duly made as the rules provide, and registered, for which a fee of 10s. is charged. The application for registration must be made on a form supplied by the Registrar's office.

3. It can sue its own members, and can make contracts, either under its seal or by a writing signed by any person authorised to sign, or by word of mouth of any person authorised to speak for it, which will be binding wherever a contract similarly made by an individual would bind him.

4. It may make all or any of its shares either transferable or withdrawable, and may carry on any trade, including the buying and selling of land, and banking under certain conditions, and may apply the profits of the business in any manner determined by its rules; and, if authorised by its rules, may receive money on loan, either from its members or others, to any amount so authorised.

5. If it has any withdrawable share capital it may not carry on banking, but may take deposits, within any limits fixed by its rules, in sums not exceeding 10s. in any one payment, or £20 for any one depositor, payable at not less than two clear days' notice.

6. It may make loans to its members on real or personal security; and may invest on the security of other societies or companies, or in any except those where liability is unlimited.

7. It may make provision in its rules for the settlement of disputes between members and the Society or any officer thereof, and any decision given in accordance with the conditions stated in the rules is binding on all parties to the dispute, and is not removable into any court of law.

8. If the number of its shares is not limited either by its rules or its practice, it is not chargeable with income tax on the profits of its business.

9. It can, in the way provided by the Act, amalgamate with or take over the business of any other society, or convert itself into a company.

10. It can determine the way in which disputes between the society and its officers or members shall be settled.

11. It can dissolve itself, either by an instrument of dissolution signed by three-fourths of its members, or by a resolution passed by a three-fourths vote at a special general meeting, of which there are two forms—(A) purely voluntary, when the resolution requires confirmation at a second meeting; (B) on account of debts, when one meeting is sufficient. In such a winding up hostile proceedings to seize the property can be stayed.

III. Rights of the Members (see also IV., 4, 5, 6)—

1. They cannot be sued individually for the debts of the society, nor compelled to pay more towards them than the sum remaining unpaid on any shares which they have either expressly agreed to take or treated as their property, or which the rules authorise to be so treated.

2. If they transfer or withdraw their shares, they cannot be made liable for any debts contracted subsequently, nor for those subsisting at the time of the transfer or withdrawal, unless the other assets are insufficient to pay them.

3. Persons not under the age of 16 years may become members, and legally do any acts which they could do if of full age, except holding any office.

4. An individual or company may hold any number of shares allowed by the rules, not exceeding the nominal value of £200, and any amount so allowed as a loan. A society may hold any number of shares.

5. A member who holds at his death not more than £100 in the society as shares, loans, or deposits, may, by a writing recorded by it, nominate, or vary or revoke the nomination of any persons to take this investment at his death; and if he dies intestate, without having made any subsisting nomination, the committee of management of the society are charged with the administration of the fund; subject in either case to a notice to be given to the Commissioners of Inland Revenue whenever the sum so dealt with exceeds £80.

6. The members may obtain an inquiry into the position of the society by application to the Registrar.

IV. Duties of a Registered Society—

1. It must have a registered office, and keep its name painted or engraved outside, and give due notice of any change to the Registrar.

2. It must have a seal on which its name is engraved.

3. It must have its accounts audited at least once a year, and keep a copy of its last balance sheet and the auditors' report constantly hung up in its registered office.

4. It must make to the Registrar, before the 31st of March in every year, a return of its business during the year ending the 31st December previous, and supply a copy of its last returns gratis to every member and person interested in its funds on application.

5. It must allow any member or person interested in its funds to inspect his own account and the book containing the names of the members.

6. It must supply a copy of its rules to every person on demand, at a price not exceeding one shilling.

7. If it carries on banking, it must make out in February and August in every year, and keep hung up in its registered office, a return, in a form prescribed by the Act; and it has also to make a return every February to the Stamp-office under the Banking Act.

The non-observance by a society of these duties exposes it and its officers to penalties varying from £1 to £50, which are in some cases cumulative for every week during which the neglect lasts.

THE
 “Co-operative News”

AND
 JOURNAL OF ASSOCIATED INDUSTRY.

—◆—
 THE

Official Organ of Industrial and Provident Co-operative Societies.

CIRCULATION, 43,000 WEEKLY.

THE *NEWS* is the property of a Federation of Co-operative Societies located in all parts of Great Britain. It is an exponent of opinion, thoroughly impartial and comprehensive, upon all subjects connected with Association, particularly in its application to the Distribution and Production of Wealth.

—◆—
 ALFRED MARSHALL, M.A. (Professor of Political Economy at the University of Cambridge), speaking at the Co-operative Congress at Ipswich, referred to the *Co-operative News* as “**A Marvellous Paper! A Wonderful and Unprecedented Pennyworth!**”

Mr. N. O. NELSON, of St. Louis, U.S.A., says:—“The *News* is a magnificent organ of the movement—a splendid compendium of co-operative facts and news, and lacking nothing in literary merit.”

—◆—
 The *News* may be had by application to any Bookseller, through the Local Stores, or from the Offices of the Society,

LONG MILLGATE, MANCHESTER;

119, PAISLEY ROAD, GLASGOW;

AND

35, RUSSELL STREET, COVENT GARDEN, LONDON, W.C.

—◆—
PRICE ONE PENNY WEEKLY.

Sold at many of the Stores at One Halfpenny.

THE
Co-operative Insurance Co.

LIMITED.

ESTABLISHED 1867.

HEAD OFFICE:

Long Millgate, Manchester.

PRINCIPAL AGENCIES:

SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED,
 119, PAISLEY ROAD, GLASGOW;

And each Branch of the Co-operative Wholesale Society Limited.

DIRECTORS:

CHAIRMAN—MR. WILLIAM BARNETT, Macclesfield.

MR. WM. BAMFORTH, Manchester.

MR. ROBERT HOLT, Rochdale.

MR. B. HEPWORTH, Heckmondwike.

MR. A. MILLER, Glasgow.

MR. W. A. HILTON, Bolton.

MR. T. RAWLINSON, Burnley.

MR. T. WOOD, Manchester.

AUDITORS:

MR. A. HACKNEY, Bolton, and MR. J. E. LORD, Rochdale.

MANAGER:

JAMES ODGERS.

BANKERS:

THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

The Co-operative Insurance Company Limited

Was registered on August 29th, 1867, to save the difference between the premiums usually charged for insurance and the actual losses and central and local expenses incurred.

This difference consists of two parts—

- (A) Any excess of Agents' Commission over fair payment for local work done; such commissions being fixed percentages, irrespective of the ratios of losses and expenses of management.
- (B) The balances of premiums left after paying claims, expenses, and commissions; such balances increasing the funds when the claims do not exceed the average, and reducing them when the claims are exceptionally heavy.

Every member, whether a shareholder or not, guarantees £5, no part of which is to be paid up except in the remote contingency of the Company being wound up. In the latter event no loss can be suffered under these guarantees, unless the fully subscribed capital of £50,000 should prove insufficient to meet the liabilities.

The balances of premiums are required by the Articles of Association to be accumulated to form three separate Insurance Funds, for the Fire, Fidelity, and Life Departments respectively, "neither of which shall be available for the payment of a dividend to shareholders as such," this growth of the funds being needed to provide for the growing liabilities of the Company under its policies.

The income from the investments of the Life Insurance Fund is credited to that fund, the profits of which are divisible exclusively with Life policy-holders. The balance of the income from all other investments after paying an annual dividend of 6 per cent upon one-fifth of the shareholders' liability, *i.e.*, upon the four shillings per share called up, is carried to the Reserve Fund to increase the general security.

The following statement shows the progress of the Company to the end of 1894:—

YEAR.	No. of Society Members.	Subscribed Capital, 4s. per Share Called up.	FIRE INSURANCE.		FIDELITY GUARANTEE.		LIFE INSURANCE.		Commission Allowed to Society Agents.	Funds in excess of Paid-up Capital.
			Premiums after Deducting Re-Insurances.	Losses.	Pre-miums.	Losses.	Pre-miums.	Claims.		
1868..	Sevenths	£ only—	£ included	£ with	£ next year.	£	£	£	£	£
1869..	41	1,715	208	6	67	Nil.	Nil.	Nil.		188
1870..	41	1,715	157	1	123	..	..	..		378
1871..	42	4,216	173	Nil.	162	..	..	..		597
1872..	46	6,468	256	62	253	..	..	..		961
1873..	51	9,494	369	28	392	3	..	..		1,488
1874..	64	10,706	571	29	449	200	..	..		2,121
1875..	71	11,314	1,075	1,861	559	Nil.	..	..	*100	1,508
1876..	89	11,877	1,725	39	457	..	..	..	18	3,444
1877..	96	12,365	3,896	1,613	525	270	..	..	34	5,250
1878..	109	13,208	6,343	6,933	399	Nil.	..	..	51	3,545
1879..	128	15,996	5,114	3,888	568	23	..	..	142	4,094
1880..	144	17,698	3,405	3,403	543	50	..	..	229	3,425
1881..	169	19,377	3,062	2,738	541	402	..	..	357	3,068
1882..	180	20,170	2,834	1,741	537	692	..	..	426	3,197
1883..	194	22,985	3,111	2,275	551	278	..	..	509	3,403
1884..	204	23,760	3,448	461	620	286	..	..	470	5,369
1885..	236	26,475	4,425	2,463	777	1,132	..	..	552	5,665
1886..	260	29,020	4,711	1,117	699	300	118	..	588	8,007
1887..	268	30,540	5,590	1,387	803	794	613	..	663	10,655
1888..	278	31,855	6,138	1,245	786	225	963	..	672	14,761
1889..	287	33,775	6,702	3,400	894	726	1,069	123	722	17,153
1890..	293	43,465	7,393	3,005	958	37	1,256	100	745	21,376
1891..	305	50,000	8,086	2,634	1070	268	1,692	25	835	26,767
1892..	317	50,000	9,199	5,261	1188	222	1,950	100	898	30,396
1893..	337	50,000	10,002	3,530	1306	308	2,017	200	1,002	37,076
1894..	356	50,000	11,044	1,574	1494	822	2,205	400	1,114	46,058

Individuals are no longer admitted members of the Company, and when existing members wish to dispose of their shares the preference as transferees is given to societies.

All Co-operative Societies in the United Kingdom that are not yet connected with the Company are invited to join it as members and agents. By doing so they will be entitled to take part, by representation, in the general meetings which elect the directors and control the administration; and will obtain the usual commission on insurances effected through their agency, including commission on insurances of their own corporate property.

FIRE DEPARTMENT BEGUN 1868.
CLAIMS PAID, £50,694.

INSURANCES against loss by Fire are effected on Co-operative Stores, Dwelling-houses, Schools, Public Buildings, Churches, Chapels, Farming Property, and most other classes of risk.

Losses by Lightning are paid, also losses by the Explosion of Coal Gas in buildings other than gasworks.

Societies are invited to transfer Insurances from other companies to the "Co-operative." Their members are also invited to have their Houses, Furniture, and other property insured by it.

FIDELITY DEPARTMENT BEGUN 1869.

CLAIMS PAID, £7,038.

POLICIES are issued insuring Co-operative Societies against loss by acts of Embezzlement or Theft committed by persons employed by them in situations of trust.

LIFE DEPARTMENT BEGUN 1886.

CLAIMS PAID, £950.

LOW RATES.—Surplus divisible exclusively with Life policy-holders. Claims paid immediately after proof of death and title. All reasonable facilities given to prevent lapsing of policies. Liberal surrender values.

PREMIUMS FOR THE INSURANCE OF £100 at DEATH.

Age next Birthday.	Single Premium.	Yearly.	Half-yearly.	Quarterly.	Age next Birthday.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
20	37 8 6	1 15 8	0 18 10	0 10 0	20
30	43 17 1	2 5 10	1 4 0	0 12 8	30
40	51 13 3	3 1 8	1 12 1	0 16 8	40
50	60 17 5	4 7 6	2 5 4	1 3 4	50

PREMIUMS FOR THE INSURANCE OF £100 AT AGE 60 OR AT DEATH, IF THAT EVENT SHOULD OCCUR EARLIER.

Age next Birthday.	Single Premium.	Yearly.	Half-yearly.	Quarterly.	Age next Birthday.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
20	43 1 2	2 5 2	1 3 11	0 12 11	20
30	51 19 2	3 3 0	1 12 11	0 17 5	30
40	63 11 7	4 17 11	2 10 9	1 6 6	40
50	79 11 4	9 14 11	5 1 4	2 12 3	50

NEW SYSTEM OF DEFERRED INSURANCE ON CHILDREN'S LIVES WITHOUT MEDICAL EXAMINATION.

The full sum insured becomes payable at death if taking place after age twenty-one, or on the attainment of age fifty. The whole of the premiums paid, with compound interest thereon at 4 per cent per annum, will be returned in the event of death occurring under age twenty-one.

The policies carry the right to participation in the profits of the not medically examined section of the Life business of the Company.

The Rates of Premium for the various Insurances will be supplied on application.

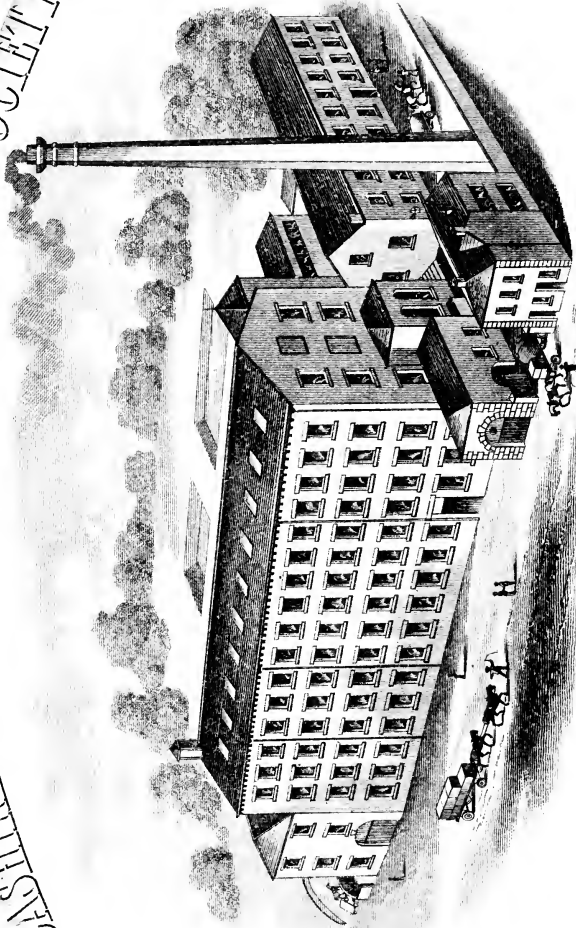
Policies Insuring £25, £50, and £75 are issued for proportionate parts of the premium for £100, subject to the limitation that no Life Policy is issued for a less premium than Five Shillings.

Forms of Application for Admission of Societies as Members, and for Appointment as Agents; also Proposal Forms for Insurance, and full information, may be obtained from the Office as above.

THE LANCASHIRE & YORKSHIRE PRODUCTIVE SOCIETY LIMITED.

Anti-Rheumatic Flannels.

Domestic Flannels.



MANUFACTURERS,

HARE HILL MILLS, LITTLEBOROUGH, near Manchester.

The Celebrated Economic Flannels.

We beg most respectfully to ask your kind and generous support of the above Society.

The various descriptions of FLANNELS now made are admitted by those who have fully tried them to be unsurpassed in MAKE, WEIGHT, QUALITY, and PRICE.

It is earnestly requested that all Co-operative Societies press the sale of these Flannels amongst their members.

Economy is the order of the day, and we are fully justified in describing the Flannels made at the above mills as the

Celebrated Economic Flannels.

Whenever you are buying be sure and ask for them.

They can be had at any of the following Co-operative Establishments :

1, BALLOON STREET, MANCHESTER.

WATERLOO STREET, NEWCASTLE-ON-TYNE.

LEMAN STREET, WHITECHAPEL, LONDON.

SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY, PAISLEY ROAD, GLASGOW.
AND AT

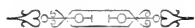
THE MILLS, HARE HILL ROAD, LITTLEBOROUGH.

THE
SCOTTISH
CO-OPERATIVE WHOLESALE SOCIETY
LIMITED.

PLATES, ADVERTISEMENTS, STATISTICS, &c.,

PAGES 100 TO 146.

INTRODUCTION.



TO THE MEMBERS :

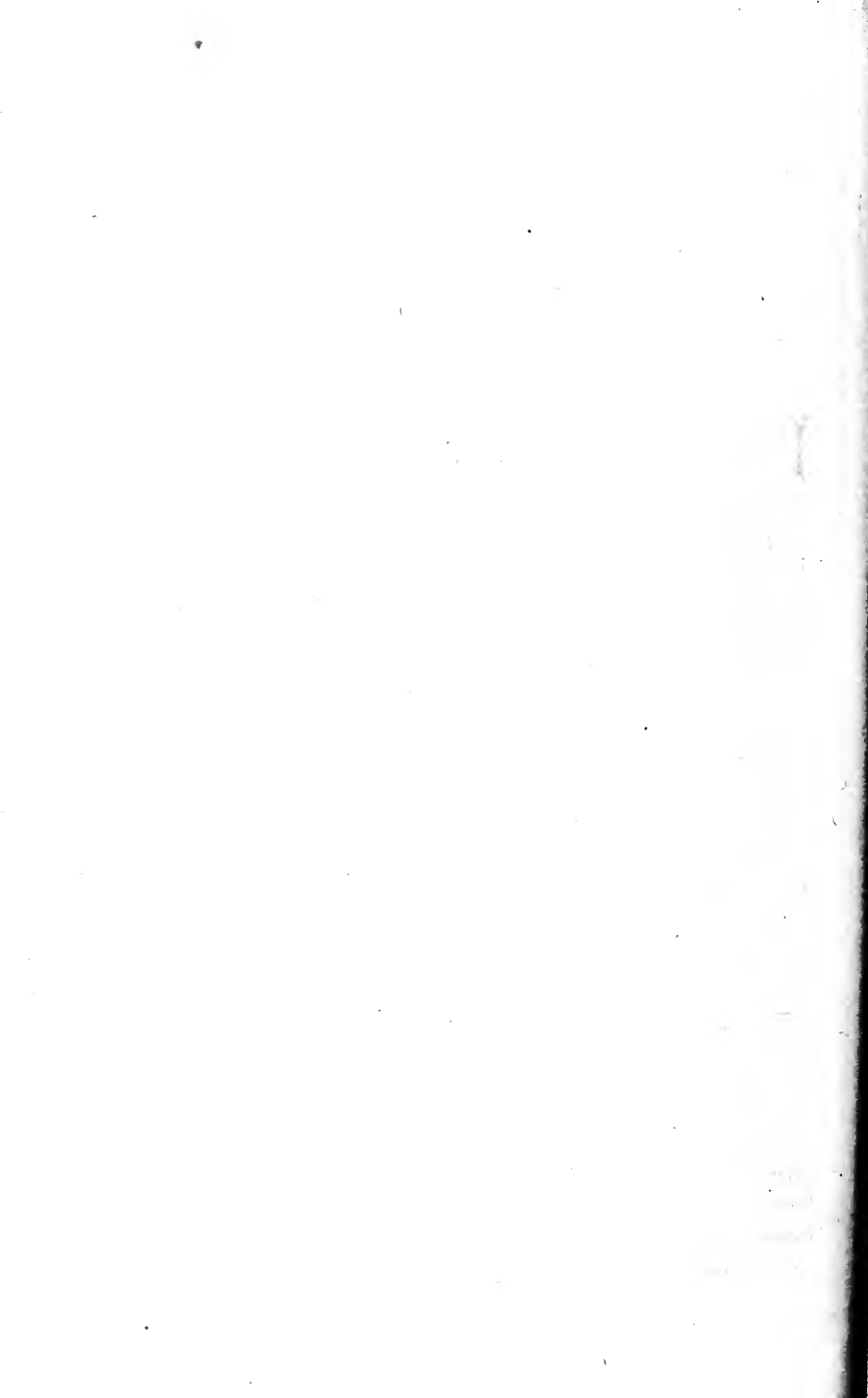
IT is with pleasure we place in your hands the volume containing the statistics for another year of Co-operative Enterprise.

The Wholesale Societies' "Annual" for 1896 has at least one feature in common with its predecessors; it is a record of continued and steady progress in every Department of the varied and ever-extending Industries in which we are engaged.

Year after year we have chronicled the advance of the Co-operative Movement, and year after year have endeavoured to meet the growing desire for information on social, commercial, and scientific subjects, and we venture to hope that this, our latest volume, will be found to equal if not surpass all previous issues, both in interest and usefulness.

The exhaustive and racy article on our Shieldhall Works and Chancelot Flour Mills, to which we invite your special attention, is well worthy of careful perusal, and leaves little to be said here beyond remarking that so comprehensive a history of these works from their commencement should be peculiarly interesting and gratifying to the great body of co-operators whose combined efforts have made them such a conspicuous success.

"Forward" must still be our watchword. Fresh enterprises, new and arduous undertakings, are before us, but with your loyal and intelligent support we confidently expect that the business in which we are all so much interested will in the future show the same phenomenal success that has marked it in the past.



SCOTTISH CO-OPERATIVE
WHOLESALE SOCIETY LIMITED.



Enrolled 20th April, 1868, under the provisions of the Industrial and Provident Societies Act, 20th August, 1867, 30 and 31 Vict., cap. 117, sec. 4.

Business Commenced 8th September, 1868.

REGISTERED OFFICE, GROCERY AND PROVISION WAREHOUSE:
119, PAISLEY ROAD, GLASGOW.

DRAPERY WAREHOUSE:
DUNDAS AND ST. JAMES' STREETS, GLASGOW.

BOOT AND SHOE WAREHOUSE:
PATERSON AND ST. JAMES' STREETS, GLASGOW.

FURNITURE WAREHOUSE:
DUNDAS STREET, GLASGOW.

BOOT AND SHOE FACTORY, CLOTHING FACTORIES,
CABINET WORKSHOP, PRINTING WORKSHOP, PRESERVE AND
CONFECTION WORKS, COFFEE ESSENCE WORKS,
TOBACCO FACTORY, AND PICKLE WORKS:
SHIELDHALL, near GOVAN, GLASGOW.

Scottish Co-operative Wholesale Society Limited.

BRANCHES :

LINKS PLACE, LEITH.

GRANGE PLACE, KILMARNOCK.

TRADES LANE, DUNDEE.

HENRY STREET, ENNISKILLEN, IRELAND.

CHANCELOT ROLLER FLOUR MILLS, CHANCELOT,
EDINBURGH.

TEA AND COFFEE DEPARTMENT :

Hooper Square, Lemn Street, Whitechapel, London.

BANKERS :

THE UNION BANK OF SCOTLAND LIMITED.

HEAD OFFICES :

GLASGOW :	LONDON :	EDINBURGH :
INGRAM STREET.	62, CORNHILL, E.C.	GEORGE STREET.
GENERAL MANAGER :	MANAGER :	MANAGER :
ROBERT BLYTH.	JOHN A. FRADGLEY.	HENRY HAY NORIE.

Officers of the Society.

MANAGER :

Mr. JAMES MARSHALL, Glasgow.

ACCOUNTANT :

Mr. ROBERT MACINTOSH, Glasgow.

CASHIER :

Mr. ALLAN GRAY, Glasgow.

BUYERS, SALESMEN, &c.

GROCERY AND PROVISION DEPARTMENTS.

Mr. E. ROSS	Glasgow.
Mr. J. MACDONALD	Glasgow.
Mr. R. REYBURN	Glasgow.
Mr. JNO. JAMIESON.....	Glasgow.
Mr. JAS. CALDWELL (Carting Superintendent)	Glasgow.
Mr. W. F. STEWART (Chancelot Roller Flour Mills)	Edinburgh.
Mr. PETER ROBERTSON.....	Leith.
Mr. WM. Mc.LAREN	Leith.
Mr. W. LAIRD	Kilmarnock.
Mr. DAVID CALDWELL	Kilmarnock.
Mr. J. BARROWMAN	Dundee.
Mr. WILLIAM WHYTE	Enniskillen.
Mr. CHARLES FIELDING (Tea)	London.
Mr. JOHN M'INTYRE (Potatoes)	Glasgow.
Mr. JOHN WHITE (Potatoes)	Leith.
Mr. N. ANDERSON (Traveller, Grocery Department)	Glasgow.
Mr. GEORGE BLACKWOOD (Traveller, Grocery Department) ..	Glasgow.
Mr. WM. DUNCAN (Cattle Buyer).....	Glasgow.
Mr. JAS. AITKENHEAD (Carbrook Mains Farm).....	Larbert.

Mr. DAVID GARDINER (Drapery Department)	Glasgow.
Mr. ALEX. Mc.FARLANE (Tailoring Factory)	Glasgow.
Mr. ALBERT JOHNSON (Boot and Shoe Factory)	Glasgow.
Mr. WILLIAM MILLER (Furniture Department).....	Glasgow.
Mr. DAVID CAMPBELL (Printing)	Glasgow.
Mr. THOMAS HARKNESS (Tobacco Factory)	Glasgow.
Mr. JAMES DAVIDSON (Clerk of Works)	Glasgow.
Mr. JAMES COATS (Mechanics' Department).....	Glasgow.

Business Arrangements.

REGISTERED OFFICE :
119, PAISLEY ROAD, GLASGOW.

BRANCHES :
LINKS PLACE, LEITH; GRANGE PLACE, KILMARNOCK;
TRADES LANE, DUNDEE;
HENRY STREET, ENNISKILLEN, IRELAND;
CHANCELOT ROLLER FLOUR MILLS, EDINBURGH;
HOOPER SQUARE, LEMAN STREET, WHITECHAPEL, LONDON.

BUSINESS ARRANGEMENTS.

SOCIETIES or Companies Registered (to *which our trade is strictly confined*) desirous of opening an account with this Society, will please forward a copy of the registered Rules and latest issued balance sheet. If newly started, a statement showing the number of members; value of shares; amount subscribed for and paid up; weekly turnover expected; also, if credit is allowed, the amount per member in proportion to the capital paid up. The information forwarded will be carefully considered, and, if found satisfactory, goods will be supplied on the usual business terms.

CASH PAYMENTS.

BESIDES the usual invoice sent with each consignment of goods, a weekly statement of accounts (see page 108) is sent to each society, so that there may be no delay in remitting the amount due for the month, the limit of credit allowed by this Society. Interest at the rate of 5 per cent per annum is charged on all overdue accounts, and by a resolution adopted at a general meeting of the members, the committee of management are instructed and empowered to examine the books of defaulting societies and take the necessary steps to protect the interest of the federated societies.

BUSINESS NOTICE.

WHEN ordering goods state price or brand of the article wanted, also mode of transit, and name of station to which the goods are to be sent. Orders for the different departments should be written on separate slips. Goods not approved of must be returned at once and intact. No claim for breakage, short weight, &c., can be entertained unless made within six days after goods are received. Delay in delivery should be at once advised.

WEEKLY STATEMENT OF ACCOUNT.

5TH WEEK.
73RD QUARTER.

LEDGER FOLIO, 929.
119, PAISLEY ROAD,
GLASGOW, September 3rd, 1887.

The Grahamston and Bainsford Co-operative Society Limited.

Dr. To The Scottish Co-operative Wholesale Society Limited. Cr.

GOODS.			CASH AND CREDITS.			
Date.	Amount of each Invoice.	Balance last Statement.	Date.	Cash.	Credit.	Totals.
	£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.
		698 7 2				
Aug. 30..	0 4 3	....	Aug. 30..	....	0 5 0	....
" 30..	18 11 7	....	" 31..	....	1 0 0	....
" 30..	29 0 8	....	" 31..	....	0 12 9	....
" 30..	32 4 0	....	" 31..	....	0 12 10	....
" 30..	0 17 7	....	Sept. 1..	....	0 5 6	....
" 30..	4 10 0	....	" 1..	....	0 1 0	....
" 30..	4 4 0	....	" 1	....	1 3 6	....
" 30..	3 2 6	....	" 1..	....	2 7 0	....
" 31..	0 6 6	....	" 2..	....	0 12 9	....
" 31..	0 8 3	....	" 2..	....	0 12 9	....
" 31..	0 10 10	....	" 2..	....	0 14 9	....
" 31..	0 8 3	....	" 2..	....	0 10 0	....
" 31..	1 5 0	....	" 3..	....	0 15 6	....
" 31..	0 10 11	....	" 3..	....	10 11 1	....
" 31..	59 16 9	....	" 3..	....	0 15 6	....
" 31..	0 11 3	....	" 3..	....	1 12 0	....
" 31..	7 3 5	....				22 11 11
Sept. 1..	2 10 6	....	" 2..	600 0 0	....	600 0 0
" 1..	4 17 6	....			
" 1..	0 15 2	....			
" 3..	0 6 6	....			
" 3..	0 9 2	....			
" 3..	17 10 0	....			
" 3..	0 18 0	....			
" 3..	3 10 6	....			
" 3..	5 13 8	....			
" 3..	12 11 1	....			
" 3..	4 18 7	....			
" 3..	5 3 6	....			
" 3..	0 12 9	....			
" 3..	0 1 10	....			
" 3..	2 14 9	....			
" 3..	1 8 6	....			
" 3..	27 12 8	....			
		255 10 5				
	To balance,	....			By balance	331 5 8
	£	953 17 7			£	953 17 7

If the above Statement differs from your Books, we shall be glad if you will point out the difference at once.

Terms of Membership.

ADMISSION OF MEMBERS.

The Rules relating to the admission of members are:—

6.—The society shall consist of such co-operative societies registered under the Industrial and Provident Societies Act, 1876, or companies under the Companies Act, 1862 and 1867, or any employé of this society who is over twenty-one years of age, as have been admitted by the Committee, but no society trafficking in intoxicating liquors be eligible for membership in the society, and each admission must be entered in the minute book of the society. Every application for shares must be sanctioned by a resolution of a general meeting of any society or company making such, and the application must be made in the form given in schedule A (see appendix at end of rules), said form to be duly attested by the signature of the president, secretary, and three of the members thereof, and stamped with such society's seal. Every society or company making an application for shares shall state the number of its members, and take up not less than one share for each member, and shall increase the number annually as its members increase, in accordance with its last return to the Registrar; but no member other than a society registered under the Industrial and Provident Societies Act, 1876, shall hold an interest in the funds exceeding £200. The society shall supply gratis a copy of its rules to each member, immediately after their admission, and to every person on demand at a price not exceeding one shilling.

CAPITAL: HOW PAID UP.

7.—The capital of the society shall be raised in shares of twenty shillings each. Every member, society, or employé, on admission, shall pay the sum of not less than one shilling on each share taken up, and the unpaid portion of the shares may be paid by dividends, or bonus, and interest; but any member may pay up shares in full or in part at any time. An employé wishing to become a shareholder must apply for not less than five 20s. shares. Fifty shall be the maximum number of shares allowed to each employé.

APPLICATION FORM.

Whereas, by a resolution of the Co-operative Society Limited, passed at a general meeting held on the....day of....., it was resolved to take up.....shares (being one share of twenty shillings for each member), said shares being transferable, in the Scottish Co-operative Wholesale Society Limited, and to accept the same on the terms and conditions specified in the Rules. Executed under the seal of the society on the....day of..... Attested by

..... }
 } Three Members.

BENEFITS DERIVED FROM MEMBERSHIP.

(a) The liability of the member is limited, each member being only responsible for the value of the shares held.

(b) Members receive double the rate of dividend on purchases paid to non-members.

(c) Share capital is paid 5 per cent per annum.

(d) Members have a share in the management of the Wholesale in proportion to the amount of goods bought, as each society, besides one vote in right of membership, is allowed an extra vote for each £1,000 worth of goods bought.

These advantages, added to the special benefits secured by the leading position of the Wholesale, will, we trust, induce societies as yet non-members to carefully reconsider the question, and take the necessary steps to secure to their members the full benefits of co-operative distribution.

CORRESPONDENCE.

All letters must be addressed to the society, and not to individuals. Addressed envelopes are supplied at cost price. Separate slips ought to be used for the different departments—the Accountant's, Grocery and Provision, Drapery, Boot and Shoe, Furniture. The slips can all be enclosed in the one envelope. Attention to this simple rule will greatly facilitate the despatch of goods and ensure promptitude in answering inquiries; it will also aid in the classification of the letters for reference in any case of irregularity or dispute.

Cash Remittance.

Cheques must be made payable to the Society. If remitted through the UNION BANK OF SCOTLAND LIMITED, the usual commission charged will be saved.

LIST OF BRANCHES OF THE UNION BANK OF SCOTLAND LIMITED.

HEAD OFFICES:—GLASGOW, INGRAM STREET; EDINBURGH, GEORGE STREET.
LONDON OFFICE:—62, CORNHILL, E.C.

Branches:

Aberdeen.	Edinburgh, Norton Park.	Leslie.
Aberdeen, George Street.	„ S. Morningside	Lochgelly, Fifeshire.
„ West End.	(sub to Morningside).	Lochgilphead.
Aberfeldy.	Edzell.	Macduff.
Aberlour, Strathspey.	Elgin.	Maybole.
Alloa.	Ellon.	Mearns (open on Tues-
Alva.	Errol.	days and Fridays—sub
Ardrossan.	Fochabers.	to Barrhead).
Auchterarder.	Forfar.	Millport.
Auchtermuchty.	Fraserburgh.	Moffat.
Ayr.	Galston.	Moniaive.
Ballater.	Gatehouse.	New Aberdour (open on
Banchory.	Girvan.	Mondays and Fridays—
Banff.	Glasgow, Anderston.	sub to Rosehearty).
Barrhead.	„ Bridgeton Cross.	New Pitsligo.
Barrhill.	„ Charing Cross.	Paisley.
Bathgate.	„ Cowcaddens.	Partick.
Beith.	„ Hillhead.	Perth.
Blair-Athole (sub to Pit-	„ Kinning Park.	Peterhead.
lochrie).	„ Maryhill.	Pitlochrie.
Blairstown.	„ St. Vincent St.	Port-Glasgow.
Braemar.	„ Shawlands.	Portsoy.
Brechin.	„ Tradeston.	Renfrew.
Bridge of Allan.	„ Trongate.	Rosehearty. (Orkney.
Buckie, Banffshire.	„ Union Street.	St. Margaret's Hope,
Castle-Douglas.	Gourock.	Scalloway, Shetland (open
Coatbridge.	Govan.	on Tuesdays and Fri-
Coupar-Angus.	Greenock.	days—sub to Lerwick).
Crieff.	Hamilton.	Stewarton.
Cullen.	Helensburgh.	Stirling.
Dalbeattie.	Huntly.	Stonehouse (open on Mon-
Dalry, Galloway.	Inverary.	days, Wednesdays, and
Darvel (sub to Galston).	Inverness.	Fridays—sub to Lark-
Doone.	Inverurie.	hall).
Dumbarton.	Irvine.	Strachur, Lochfyne (open
Dumfries.	Johnstone.	on Thursdays—sub to
Dunblane.	Keith.	Inveraray).
Dundee.	Killin.	Stranraer.
Dunkeld.	Kilmarnock.	Strathaven.
Dunning.	Kincardine.	Stromness.
Dunoon.	Kirkcaldy.	Tarbert, Lochfyne.
Edinburgh, Forrest Road.	Kirkwall.	Tarland.
„ Golden Acre.	Kirriemuir.	Thornhill.
„ Haymarket.	Ladybank.	Tillicoultry.
„ Hunter Square	Largs.	Troon.
„ Lothian Road.	Larkhall.	Turriff.
„ Morningside.	Leith.	Wick.
„ Newington.	Lerwick.	

*STATEMENT Showing the PROGRESS of the SOCIETY FROM ITS COMMENCEMENT in September, 1868, till date,
with COMPARISONS of SALES, and other information.*

1st Quarter	Year or Quarter ending.	Number of Shares subscribed—Societies.	Number of Shares subscribed—Employees.	Capital: Includes Share, Loan Reserve, and Insurance Funds.	Net Sales.	Gross Total.	Increase on Corresponding Quarter or previous Year.	Rate per Cent Inc.	Expenses.	Rate per £ on Sales.
Dec. 7, 1868	Dec. 7, 1868	..	..	£1,795	£9,697	£	£	..	£153	3·8
1st Year—52 wks	Dec. 5, 1869	..	..	5,174	81,049	90,791	..	..	1,045	3·0
2nd "	Nov. 19, 1870	..	..	12,542	105,294	196,041	24,155	29·7	1,549	3·5
3rd "	" 18, 1871	..	..	18,009	162,658	358,699	57,408	54·5	2,180	3·2
4th "	" 16, 1872	18,708	..	30,931	262,530	621,230	99,872	61·4	3,469	3·1
5th "	" 15, 1873	21,271	..	50,433	384,489	1,005,719	121,958	46·4	5,055	3·1
6th "	" 14, 1874	24,654	..	48,981	409,947	1,415,667	25,458	6·6	6,696	3·9
7th "	" 13, 1875	27,112	..	56,750	430,169	1,845,836	20,222	4·9	7,137	3·9
8th "	" 4, 1876	29,008	..	67,218	457,529	2,303,365	27,359	6·3	7,540	3·9
9th "	" 3, 1877	31,945	..	72,568	589,221	2,892,586	131,692	28·7	8,648	3·5
10th "	" 2, 1878	34,830	..	83,173	690,590	3,493,177	11,369	1·9	10,095	4·0
11th "	" 2, 1879	36,008	..	93,076	630,097	4,123,275	29,507	4·9	11,117	4·2
12th "	Oct. 30, 1880	41,584	..	110,179	845,221	4,968,496	215,124	34·1	13,020	3·7
13th "	Nov. 5, 1881	49,073	..	135,713	986,646	5,955,143	141,424	16·7	15,757	3·8
14th "	" 4, 1882	53,684	..	169,428	1,100,588	7,055,732	113,942	11·5	19,686	4·2
15th "	" 3, 1883	59,529	..	195,396	1,253,154	8,308,886	152,565	13·8	22,120	4·2
16th "	" 1, 1884	65,331	..	244,186	1,300,331	9,609,218	47,177	3·7	24,307	4·5
17th "	Oct. 31, 1885	70,066	..	288,945	1,438,220	11,047,438	137,888	10·6	27,314	4·5
18th "	Dec. 25, 1886	79,874	..	333,658	1,857,152	12,904,590	418,931	29·1	36,942	4·7
19th "	" 31, 1887	87,220	..	367,309	1,810,015	14,714,606	153,965	9·2	35,800	4·7
20th "	" 29, 1888	96,521	..	409,668	1,963,853	16,678,460	178,897	10·0	39,411	4·8
21st "	" 28, 1889	107,004	..	480,622	2,273,782	18,952,242	309,928	15·7	44,311	4·6
22nd "	" 27, 1890	117,664	..	575,322	2,475,601	21,427,843	201,819	8·8	49,641	4·6
23rd "	" 26, 1891	131,086	..	671,108	2,828,036	24,255,880	352,435	14·2	58,140	4·8
24th "	" 31, 1892	139,022	..	778,494	3,104,768	27,360,648	276,731	9·7	64,905	5·0
25th "	" 30, 1893	149,164	2,726	869,756	3,135,562	30,496,211	30,793	1·0	72,255	5·5
26th "	" 29, 1894	159,820	2,629	940,835	3,056,582	33,552,794	*78,979	*2·5	75,816	5·9
10th Quarter	Mar. 30, 1895	162,876	2,649	1,016,306	771,736	34,324,530	44,020	6·0	19,085	5·9
10th "	June 29, 1895	165,963	2,819	1,087,448	852,452	35,176,982	62,266	7·8	19,747	5·6

* Decrease.

STATEMENT Showing the PROGRESS of the SOCIETY FROM ITS COMMENCEMENT in September, 1868, till date,
with COMPARISONS of SALES, and other information.—Continued.

1st Quarter....	Year or Quarter ending.	Net Profit.	Total Net Profit.	Aver- age Divi- dend.	RESERVE AND INSURANCE FUNDS.		DEPRECIATIONS ALLOWED ON BUILDINGS AND FIXTURES.	
					Added.	Withdrawn.	Amount.	Total Amount.
		£48	£	d.	£48	£	£9	£
December 7, 1868..								
1st Year—52 wks	December 5, 1869..	1,303	1,352	3½	63	112	129	138
2nd "	December 19, 1870..	2,418	3,770	4½	324	436	111	250
3rd "	November 18, 1871..	4,131	7,902	5½	578	1,014	205	455
4th "	" 16, 1872..	5,435	13,337	4½	..	1,485	346	801
5th "	" 15, 1873..	7,445	20,783	4½	..	1,700	657	1,439
6th "	" 14, 1874..	7,553	28,336	4½	1,049	2,644	784	2,243
7th "	" 13, 1875..	8,232	36,569	4	338	2,402	321	2,565
8th "	" 4, 1876..	8,836	45,405	4	791	2,522	452	3,017
9th "	" 3, 1877..	10,925	56,330	4	918	3,097	485	3,503
10th "	" 2, 1878..	11,968	68,298	4	721	3,549	1,155	4,659
11th "	" 2, 1879..	14,988	83,287	4½	2,215	5,606	1,336	5,995
12th "	October 30, 1880..	21,685	104,973	6½	3,134	8,404	1,086	7,082
13th "	November 5, 1881..	23,981	128,954	6	3,086	8,796	1,653	8,735
14th "	" 4, 1882..	23,219	152,174	5½	3,824	334	1,688	10,424
15th "	" 3, 1883..	28,365	180,540	5½	3,801	1,530	2,420	12,844
16th "	" 1, 1884..	29,434	209,974	5½	4,438	17,471	2,039	14,884
17th "	October 31, 1885..	39,641	249,616	6½	4,393	610	3,475	18,359
18th "	December 25, 1886..	50,398	300,014	6½	5,628	21,254	2,980	21,340
19th "	" 31, 1887..	47,278	347,293	6½	8,474	1,389	3,019	24,360
20th "	" 29, 1888..	53,538	400,832	6½	7,615	3,392	8,170	32,530
21st "	" 28, 1889..	61,756	462,588	6½	10,244	2,941	6,284	38,815
22nd "	" 27, 1890..	76,545	539,134	7	10,636	1,931	52,882	45,659
23rd "	" 26, 1891..	89,090	628,225	6½	12,326	3,362	11,433	57,092
24th "	" 23, 1892..	96,027	724,252	6½	17,353	74,147	10,219	67,311
25th "	" 30, 1893..	89,116	813,368	6½	15,205	4,004	14,201	81,512
26th "	" 29, 1894..	88,452	901,820	6	14,839	34,460	18,404	129,917
10th Quarter	March 30, 1895..	27,154	928,974	6	3,903	1,547	4,330	134,248
107th "	June 29, 1895..	30,683	959,657	7	4,096	1,036	9,264	143,512

GROCERY DEPARTMENT, GLASGOW.
YEARLY STATEMENT. SALES, EXPENSES, AND NET PROFIT.

Quarter ending	NET SALES.										Expenses.	Rate per £ of Sales.	Net Profit.	Rate per £ of Sales.	Stocks.										
	Drapery and Boots.			Dundee.		Kilmarnock.		Grocery, Glasgow.		Total.															
	£	s.	d.	£	s.	d.	£	s.	d.	£						s.	d.	£	s.	d.	£				
Dec. 7, 1868..	449,887	15	1	21,507	10	0	13,962	1	4	30,025,845	16	8	20,509,678	8	1	815,570	14	4	460,654	13	1	5	4	4,648	
" 5, 1869..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	5,478
Nov. 9, 1870..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	9,060
" 18, 1871..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	14,000
" 16, 1872..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	21,050
" 15, 1873..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	24,510
" 14, 1874..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	24,700
" 18, 1875..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	29,400
" 3, 1876..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	39,550
" 3, 1877..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	40,130
" 2, 1878..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	50,400
" 2, 1879..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	68,980
Oct. 30, 1880..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	61,920
Nov. 5, 1881..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	84,620
May 6, 1882..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	38,374
Nov. 4, 1882..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	90,081
" 3, 1883..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	28,180
" 1, 1884..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	87,450
Oct. 31, 1885..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	56,095
Dec. 23, 1886..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	44,610
" 31, 1887..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	56,000
" 28, 1888..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	63,000
" 27, 1889..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	87,400
" 26, 1891..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	86,860
" 31, 1892..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	86,705
" 30, 1893..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	60,023
" 29, 1894..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	67,527
Mar. 30, 1895..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	....
June 29, 1895..	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	....
Totals.....	449,887	15	1	21,507	10	0	13,962	1	4	30,025,845	16	8	20,509,678	8	1	815,570	14	4	460,654	13	1	5	4	4,648	

GROCERY DEPARTMENT, LEITH.

YEARLY STATEMENT, SHOWING SALES, EXPENSES, AND NET PROFIT.

	Net Sales.		Expenses.		Rate per £ of Sales.		Net Profit.		Rate per £ of Sales.		Amount of Stock.	
	£	s. d.	£	s. d.	d.	s.	£	s. d.	d.	s.	£	s. d.
Year ending November 3, 1877—52 weeks.....	30,984	0 9	451	17 0	3-5		481	12 9	3-7		4,590	
" " 2, 1878	76,767	11 1	1,119	10 4	3-5		1,679	0 11	5-2		3,000	
" " 1, 1879	88,101	15 11	1,284	16 8	3-5		2,368	8 3	6-4		6,480	
" " October 30, 1880	145,764	0 3	2,140	6 2	3-5		3,777	4 2	6-2		8,410	
" " November 5, 1881—53	193,833	10 10	2,826	11 8	3-5		5,542	7 9	6-8		13,400	
" " 4, 1882—52	205,728	16 3	2,927	11 2	3-4		4,895	11 9	5-7		14,890	
" " 3, 1883	255,160	2 2	3,488	17 9	3-2		6,093	19 3	5-7		20,045	
" " 1, 1884	281,509	2 4	3,992	8 2	3-4		6,935	10 4	5-9		16,250	
" " 31, 1885	363,664	7 11	5,031	1 8	3-3		10,572	0 8	6-9		29,750	
" " December 25, 1886—60	496,240	13 8	7,160	19 5	3-4		12,452	11 4	6-0		24,000	
" " 31, 1887—53	496,673	11 8	7,256	5 4	3-5		13,217	13 3	6-3		42,420	
" " 29, 1888—52	536,600	10 6	7,971	7 4	3-5		14,112	13 9	6-3		31,080	
" " 28, 1889—52	584,617	12 1	8,381	3 1	3-4		13,525	12 9	5-5		35,750	
" " 27, 1890—52	602,908	9 5	8,371	5 10	3-3		15,031	4 6	5-9		34,600	
" " 26, 1891—52	693,179	13 10	9,825	7 8	3-4		18,421	11 10	6-4		42,820	
" " 31, 1892—53	737,663	6 4	10,317	18 1	3-3		17,767	8 10	5-7		41,050	
" " 30, 1893—52	757,569	9 10	10,935	4 7	3-4		15,898	18 7	5-0		52,409	
" " 29, 1894—52	706,466	3 9	10,718	5 3	3-6		16,488	12 2	5-6		33,464	
Quarter ending March 30, 1895—13	170,931	10 4	2,530	14 4	3-5		4,804	9 7	6-7		26,625	
" " June 29, 1895—13	183,055	15 0	2,642	2 3	3-4		5,687	6 3	7-4		21,665	
Totals	7,607,420	3 11	109,373	13 9	3-4		189,748	18 8	5-9		....

QUARTERLY STATEMENT,
FROM DATE OF KEEPING

Quarter Ending	Net Sales.	Expenses.
August 5, 1882	£6,594 0 5	£190 15 1
November 4, 1882	8,849 10 3	221 7 8
February 3, 1883	9,894 13 1	245 18 11
May 5, 1883	10,192 13 4	236 7 10
August 4, 1883	7,979 7 10	245 14 8
November 3, 1883	11,625 19 8	225 0 1
February 2, 1884	8,446 16 2	217 1 5
May 3, 1884	9,492 2 9	197 12 5
August 2, 1884	9,145 12 11	208 15 8
November 1, 1884	12,989 5 11	198 7 11
January 31, 1885	10,094 9 8	204 18 3
May 2, 1885	8,874 3 9	159 14 3
August 1, 1885	8,644 2 7	192 11 6
October 31, 1885	14,012 17 7	208 14 3
January 30, 1886	9,461 10 4	204 13 0
May 1, 1886	9,439 14 11	177 13 5
July 31, 1886	9,434 7 4	193 15 8
* December 25, 1886	23,129 5 10	309 3 2
March 26, 1887	11,129 13 7	170 3 9
June 25, 1887	9,928 13 5	189 4 9
September 24, 1887	15,469 2 4	221 10 8
† December 31, 1887	16,152 2 11	245 9 8
March 31, 1888	11,715 9 7	179 9 8
June 30, 1888	13,539 14 3	202 10 10
September 29, 1888	13,946 14 7	218 14 2
December 29, 1888	15,162 13 11	229 9 1
March, 30 1889	10,597 0 5	178 4 0
June 29, 1889	11,538 7 6	216 13 3
September 28, 1889	14,378 11 7	224 18 1
December 28, 1889	17,926 18 8	233 2 5
March 29, 1890	12,361 8 6	194 12 5
June 28, 1890	13,618 4 4	275 0 3
September 27, 1890	14,223 6 2	199 8 3
December 27, 1890	16,807 11 3	246 2 10
March 28, 1891	14,162 9 0	222 13 6
June 27, 1891	14,804 7 6	274 11 7
September 26, 1891	16,299 14 11	264 15 11
December 26, 1891	22,168 2 4	327 1 2
March 26, 1892	16,745 1 7	276 11 9
June 25, 1892	15,327 12 8	315 14 3
September 24, 1892	17,342 12 1	335 16 11
† December 31, 1892	23,251 16 11	374 11 5
April 1, 1893	17,353 1 8	305 15 3
July 1, 1893	15,298 10 11	339 9 7
September 30, 1893	17,856 2 9	371 12 1
December 30, 1893	20,351 19 6	411 12 1
March 31, 1894	18,471 14 6	394 9 5
June 30, 1894	17,103 10 6	400 14 8
September 29, 1894	17,723 14 11	407 3 10
December 29, 1894	21,701 16 6	437 16 7
March 30, 1895	20,133 13 0	419 6 3
June 29, 1895	17,831 14 10	418 13 7
Totals	730,799 3 5	13,561 9 1

* Twenty-one weeks.

† Fourteen weeks.

GROCERY DEPARTMENT, KILMARNOCK.
A SEPARATE ACCOUNT.

Rate per £ of Sales.	Net Profit.	Rate per £ of Sales.	Stocks.
7·0d.	£163 7 8	6·0d.	£535
6·0	137 9 1	3·7	1,550
5·9	362 11 7	8·7	2,320
5·5	472 3 0	11·1	2,120
7·3	238 4 11	7·1	720
4·6	176 13 6	3·6	1,663
6·1	123 10 4	3·5	2,898
4·9	162 2 9	4·0	1,781
5·4	114 15 5	3·0	963
3·7	235 6 3	4·2	2,812
4·8	69 14 9	1·6	2,521
4·3	258 5 9	6·9	1,750
5·3	102 4 1	2·8	1,132
3·5	534 12 2	9·1	2,300
5·2	295 13 5	7·5	2,010
4·5	289 7 4	7·3	1,600
4·9	264 10 0	6·7	760
3·2	908 16 9	9·4	2,070
3·6	364 3 8	7·8	2,615
4·5	255 7 8	6·1	1,525
3·4	895 18 3	13·6	1,070
4·2	758 15 6	11·2	2,585
4·0	328 8 3	6·7	2,850
3·6	379 15 5	6·7	2,410
3·8	23 10 11	0·4	2,329
3·6	324 10 8	5·1	3,200
4·0	178 19 2	4·0	2,080
4·5	102 6 9	2·1	2,600
3·7	406 12 5	6·8	1,420
3·1	623 11 11	8·3	2,910
3·7	560 3 8	10·8	2,040
4·8	563 8 7	9·9	1,050
3·3	550 8 9	9·2	190
3·5	972 15 1	13·8	2,400
3·7	685 3 1	11·6	1,480
4·4	609 2 3	9·8	2,000
3·8	620 3 7	9·1	1,170
3·5	875 2 0	9·5	2,225
3·9	1,070 6 5	15·3	2,400
4·9	786 7 3	12·3	2,440
4·6	358 10 10	4·9	2,070
3·8	897 7 7	9·2	2,000
4·2	658 4 6	9·1	2,070
5·3	298 14 7	4·6	1,985
4·9	433 0 5	5·8	1,840
4·8	782 16 4	9 2	1,850
5·1	534 4 2	6·9	2,570
5·6	623 10 7	8·7	1,890
5·5	†337 17 2	4·5	1,540
4·8	1,273 17 4	14·0	2,370
5·0	889 13 2	10·6	2,945
5·6	405 4 8	5·4	2,515
4·4	23,656 17 0	7·7	....

QUARTERLY STATEMENT, GROCERY DEPARTMENT,

Quarter Ending	Net Sales.	Expenses.
August 5, 1882	£6,328 4 0	£237 2 11
November 4, 1882	7,180 12 3	207 17 9
February 3, 1883	8,513 10 1	217 6 4
May 5, 1883	8,583 16 3	226 13 4
August 4, 1883	9,050 6 4	245 1 3
November 3, 1883	8,533 5 8	218 11 2
February 2, 1884	9,278 1 10	235 12 9
May 3, 1884	10,943 14 6	252 16 9
August 2, 1884	12,648 2 11	262 11 10
November 1, 1884	13,776 3 6	275 12 6
January 31, 1885	12,080 7 2	291 8 8
May 2, 1885	13,424 7 0	242 12 6
August 1, 1885	14,930 3 3	251 12 1
October 31, 1885	15,685 3 4	271 7 11
January 30, 1886	12,248 16 9	248 12 8
May 1, 1886	13,616 12 9	283 8 7
July 31, 1886	14,912 1 10	265 7 11
* December 25, 1886	22,975 17 8	397 17 9
March 26, 1887	13,916 4 6	244 6 5
June 25, 1887	13,810 2 11	241 9 2
September 24, 1887	15,064 15 6	265 8 7
† December 31, 1887	16,231 4 0	281 14 4
March 31, 1888	12,205 12 7	246 11 4
June 30, 1888	14,865 19 7	262 6 11
September 29, 1888	14,857 13 3	281 9 7
December 29, 1888	15,323 1 0	284 8 1
March 30, 1889	16,415 11 3	256 13 3
June 29, 1889	20,090 11 2	286 1 0
September 28, 1889	19,022 12 6	295 18 4
December 28, 1889	17,987 11 8	284 1 6
March 29, 1890	15,713 6 7	274 19 11
June 28, 1890	16,324 16 0	288 16 9
September 27, 1890	18,593 3 6	321 13 11
December 27, 1890	16,411 8 5	303 8 0
March 28, 1891	19,284 18 2	322 10 5
June 27, 1891	19,673 16 4	313 17 9
September 26, 1891	21,683 3 1	310 16 4
December 26, 1891	19,207 14 2	296 1 6
March 26, 1892	21,503 7 8	290 18 2
June 25, 1892	22,609 4 1	314 3 2
September 24, 1892	24,100 0 1	354 16 8
† December 31, 1892	23,459 3 2	314 3 2
April 1, 1893	21,282 4 1	299 13 0
July 1, 1893	24,031 11 5	313 9 1
September 20, 1893	23,872 2 1	310 0 1
December 30, 1893	23,682 9 9	317 2 7
March 31, 1894	21,590 11 5	305 17 0
June 30, 1894	23,132 16 7	308 3 0
September 29, 1894	24,272 16 2	333 9 7
December 29, 1894	20,739 17 2	306 0 9
March 30, 1895	21,641 16 11	288 17 1
June 29, 1895	24,223 17 1	319 7 5
Totals	871,561 10 11	14,670 8 6

* Twenty-one weeks.

† Fourteen weeks.

DUNDEE, FROM DATE OF KEEPING A SEPARATE ACCOUNT.

Rate per £ of Sales.	Net Profit.	Rate per £ of Sales.	Net Loss.	Rate per £ of Sales.	Stocks.
8-8d.	....	..	£126 19 9	4-8d.	£1,205
7-0	....	..	98 12 7	3-3	1,474
6-1	£57 12 4	1-8d.	....	..	1,040
6-3	96 1 7	2-7	....	..	1,080
6-5	5 15 3	0-1	....	..	1,923
6-1	71 2 5	2-0	....	..	2,455
6-1	88 14 11	2-2	....	..	2,250
5-6	181 7 10	4-0	....	..	1,975
5-0	260 9 7	4-9	....	..	2,950
4-8	73 16 8	1-3	....	..	2,690
5-8	111 1 3	2-2	....	..	1,080
4-3	189 3 2	3-4	....	..	1,950
4-0	359 16 4	5-8	....	..	2,940
4-2	348 15 2	5-3	....	..	2,890
4-8	238 13 5	4-6	....	..	1,300
5-0	86 11 2	1-5	....	..	2,670
4-2	205 17 7	3-3	....	..	3,250
4-1	348 8 3	3-7	....	..	2,600
4-2	163 5 0	2-8	....	..	1,885
4-2	210 10 3	3-6	....	..	3,050
4-2	212 6 11	3-4	....	..	3,020
4-2	279 17 11	4-2	....	..	3,210
4-8	286 9 8	5-6	....	..	2,770
4-2	154 19 5	2-5	....	..	3,740
4-5	253 8 2	4-1	....	..	5,370
4-4	321 3 11	5-0	....	..	2,710
3-7	245 2 6	3-5	....	..	3,230
3-4	618 7 4	7-3	....	..	5,940
3-7	60 4 11	0-7	....	..	4,590
3-7	206 9 7	2-7	....	..	4,150
4-2	244 7 7	3-7	....	..	3,420
4-2	214 8 2	3-6	....	..	3,590
4-1	290 8 8	3-7	....	..	5,390
4-4	364 2 5	5-3	....	..	4,070
4-0	282 12 10	3-5	....	..	4,070
3-8	309 10 10	3-7	....	..	5,200
3-4	458 0 11	5-0	....	..	4,360
3-7	338 8 8	4-2	....	..	3,550
3-2	390 5 0	4-3	....	..	3,500
3-3	251 1 8	2-6	....	..	4,660
3-5	464 9 11	4-7	....	..	7,940
3-2	553 0 11	5-6	....	..	3,990
3-3	453 10 4	5-1	....	..	2,970
3-1	606 6 8	6-0	....	..	5,280
3-1	511 9 8	5-1	....	..	3,780
3-2	658 12 7	6-6	....	..	2,900
3-4	593 13 6	6-6	....	..	2,704
3-2	629 8 7	6-5	....	..	4,377
3-2	599 1 7	5-9	....	..	3,380
3-5	517 8 3	6-3	....	..	2,214
3-2	483 1 9	5-3	....	..	1,670
3-1	614 15 4	6-0	....	..	2,812
4-0	15,633 18 4	..	225 12 4	..	....
	225 12 4	..			
	15,408 6 0	4-2			

QUARTERLY STATEMENT, DRAPERY DEPARTMENT,

Quarter Ending	NET SALES.								
	Boots.			Furniture.			Drapery.		
August 5, 1882.....	£8,351	15	0	£2,693	6	11	£21,144	6	11
November 4, 1882.....	9,267	11	10	2,057	1	11	25,587	12	9
February 3, 1883.....	7,520	4	4	2,280	17	3	22,301	14	3
May 5, 1883.....	8,159	0	7	1,904	14	4	25,682	6	9
August 4, 1883.....	9,368	12	4	3,045	1	9	23,937	10	11
November 3, 1883.....	9,658	4	3	2,518	11	10	30,562	12	8
February 2, 1884.....	8,944	16	1	2,994	17	9	26,445	3	8
May 3, 1884.....	9,782	13	2	2,307	11	1	30,463	14	9
August 2, 1884.....	10,981	0	10	4,595	4	10	28,337	2	6
November 1, 1884.....	10,884	13	3	2,887	1	9	34,034	16	0
January 31, 1885.....	.....	.....	.....	.....	.....	.....	30,267	3	3
May 2, 1885.....	.....	.....	.....	.....	.....	.....	37,153	15	9
August 1, 1885.....	.....	.....	.....	.....	.....	.....	33,578	12	7
October 31, 1885.....	.....	.....	.....	.....	.....	.....	39,994	14	4
January 30, 1886.....	.....	.....	.....	.....	.....	.....	33,029	17	3
May 1, 1886.....	.....	.....	.....	.....	.....	.....	44,570	7	11
July 31, 1886.....	.....	.....	.....	.....	.....	.....	42,129	5	5
*December 25, 1886.....	.....	.....	.....	.....	.....	.....	75,835	10	10
March 26, 1887.....	.....	.....	.....	.....	.....	.....	40,647	13	5
June 25, 1887.....	.....	.....	.....	.....	.....	.....	50,432	4	9
September 24, 1887.....	.....	.....	.....	.....	.....	.....	47,697	15	3
†December 31, 1887.....	.....	.....	.....	.....	.....	.....	55,420	13	10
March 31, 1888.....	.....	.....	.....	.....	.....	.....	48,630	9	0
June 30, 1888.....	.....	.....	.....	.....	.....	.....	56,216	13	4
September 29, 1888.....	.....	.....	.....	.....	.....	.....	57,138	9	11
December 29, 1888.....	.....	.....	.....	.....	.....	.....	56,928	16	6
March 30, 1889.....	.....	.....	.....	.....	.....	.....	55,006	13	0
June 29, 1889.....	.....	.....	.....	.....	.....	.....	64,163	10	4
September 28, 1889.....	.....	.....	.....	.....	.....	.....	67,747	18	7
December 28, 1889.....	.....	.....	.....	.....	.....	.....	74,256	1	8
March 29, 1890.....	.....	.....	.....	.....	.....	.....	71,632	4	4
June 28, 1890.....	.....	.....	.....	.....	.....	.....	81,166	2	4
September 27, 1890.....	.....	.....	.....	.....	.....	.....	82,909	0	0
December 27, 1890.....	.....	.....	.....	.....	.....	.....	90,353	10	7
March 28, 1891.....	.....	.....	.....	.....	.....	.....	75,469	2	3
June 27, 1891.....	.....	.....	.....	.....	.....	.....	87,041	2	1
September 26, 1891.....	.....	.....	.....	.....	.....	.....	87,043	18	2
December 26, 1891.....	.....	.....	.....	.....	.....	.....	100,331	15	2
March 26, 1892.....	.....	.....	.....	.....	.....	.....	90,987	12	0
June 25, 1892.....	.....	.....	.....	.....	.....	.....	100,312	14	3
September 24, 1892.....	.....	.....	.....	.....	.....	.....	97,495	2	3
†December 31, 1892.....	.....	.....	.....	.....	.....	.....	112,572	7	1
April 1, 1893.....	.....	.....	.....	.....	.....	.....	92,117	12	4
July 1, 1893.....	.....	.....	.....	.....	.....	.....	94,045	12	6
September 30, 1893.....	.....	.....	.....	.....	.....	.....	103,764	6	9
December 30, 1893.....	.....	.....	.....	.....	.....	.....	102,613	8	2
March 31, 1894.....	.....	.....	.....	.....	.....	.....	99,436	13	4
June 30, 1894.....	.....	.....	.....	.....	.....	.....	104,784	14	0
September 29, 1894.....	.....	.....	.....	.....	.....	.....	102,180	18	3
December 29, 1894.....	.....	.....	.....	.....	.....	.....	113,241	0	11
March 30, 1895.....	.....	.....	.....	.....	.....	.....	109,852	12	5
June 29, 1895.....	.....	.....	.....	.....	.....	.....	117,549	19	10
Totals.....	92,918	11	8	27,284	9	5	3,396,245	7	1

* Twenty-one weeks

† Fourteen weeks.

FROM DATE OF KEEPING A SEPARATE ACCOUNT.

NET SALES.		Rate		Rate	
Total.	Expenses.	per £ of Sales.	Net Profit.	per £ of Sales.	Stocks.
£32,189 8 10	£1,123 9 9	£8·4	£1,171 8 2	£8·7	£28,560
36,912 6 6	1,356 1 2	8·8	1,308 6 6	8·7	34,030
32,102 15 10	1,409 11 3	10·5	967 14 0	7·2	33,260
35,746 1 8	1,438 12 11	9·6	1,090 8 2	7·3	31,231
36,351 5 0	1,447 8 1	9·5	1,284 12 4	8·5	31,253
42,739 8 9	1,534 9 3	8·6	1,807 4 8	10·1	32,281
38,384 17 6	1,588 18 8	9·9	1,605 11 5	10·0	33,192
42,553 19 0	1,666 5 8	9·4	1,591 16 7	9·0	36,065
43,913 8 2	1,731 9 9	9·4	1,717 4 10	9·3	35,784
47,806 11 0	1,827 15 5	9·1	1,899 14 5	9·5	39,661
30,267 3 3	1,290 0 9	10·2	1,319 11 1	10·1	31,084
37,153 15 9	1,414 15 11	9·1	1,492 17 7	9·6	32,340
33,578 12 7	1,438 19 0	10·2	1,211 0 11	8·7	31,020
39,994 14 4	1,547 6 10	9·2	1,847 0 5	11·0	35,990
33,029 17 3	1,554 9 2	11·2	1,216 7 10	9·0	33,150
44,570 17 11	1,641 9 6	8·8	1,709 19 3	9·2	36,340
42,129 5 5	1,705 8 3	9·7	1,801 11 5	10·3	40,100
75,835 10 10	3,362 6 4	10·6	3,983 5 11	12·6	45,740
40,647 13 5	2,028 12 8	11·9	1,248 2 8	7·3	47,670
50,432 4 9	2,081 15 1	9·9	2,185 17 1	10·4	42,170
47,697 15 3	2,065 14 10	10·3	2,234 6 10	11·2	45,870
55,420 13 10	2,294 1 9	10·0	2,487 10 2	10·7	41,400
48,630 9 0	2,176 17 7	10·7	1,661 14 11	8·2	48,645
56,216 13 4	2,257 18 4	9·6	2,175 16 9	9·2	43,240
57,138 9 11	2,324 4 0	9·7	2,186 15 11	9·2	50,050
56,928 16 6	2,486 11 6	10·4	2,057 16 3	8·6	47,990
55,006 13 0	2,493 3 11	10·8	2,294 3 2	10·0	54,600
64,163 10 4	2,645 6 9	9·9	3,167 18 6	11·8	50,900
67,747 18 7	2,776 1 7	9·8	2,707 18 0	9·5	64,600
74,256 1 8	2,887 18 9	9·3	3,230 4 0	10·4	58,800
71,632 4 4	2,997 12 3	10·0	3,297 1 4	11·0	72,080
81,166 2 4	3,306 17 9	9·7	3,416 9 5	10·1	62,200
82,909 0 0	3,597 19 6	10·4	3,400 5 8	9·8	74,620
90,353 10 7	3,709 0 1	9·8	4,456 19 3	11·8	64,000
75,469 2 3	3,915 7 4	12·4	2,738 0 2	8·7	78,000
87,041 2 1	4,101 15 7	11·3	3,088 16 11	8·5	70,100
87,043 18 2	4,030 16 4	11·1	3,269 6 3	9·0	80,980
100,331 15 2	4,091 11 4	9·7	4,716 18 9	11·2	69,970
93,987 12 0	4,312 4 7	11·3	3,410 19 8	9·0	84,400
100,312 14 3	4,375 13 0	10·4	4,331 15 8	10·3	77,810
97,495 2 3	4,541 0 1	11·1	4,141 16 5	10·2	85,680
112,572 7 1	4,838 11 9	10·3	5,132 1 9	10·9	79,420
92,117 12 4	4,708 2 4	12·2	2,895 2 10	7·5	90,050
94,045 12 6	4,793 14 5	12·2	3,645 10 11	9·3	85,269
103,764 6 9	5,078 19 6	11·7	4,204 13 9	9·7	90,033
102,613 8 2	4,950 13 3	11·5	3,824 19 5	8·9	81,459
99,436 13 4	5,131 13 5	12·4	2,937 12 1	7·1	88,312
104,784 14 0	5,276 10 0	12·0	4,033 18 10	9·2	83,201
102,180 18 3	5,356 18 6	12·5	3,463 9 7	8·1	89,089
113,241 0 11	5,185 12 8	10·9	4,787 0 6	10·1	77,012
109,852 12 5	5,505 8 3	12·0	2,793 5 11	6·1	82,726
117,549 19 10	5,635 5 6	11·5	4,656 12 4	9·5	81,329
3,516 448 8 2	157,038 11 10	10·7	139 306 17 2	9·5	....

QUARTERLY STATEMENT,
FROM DATE OF KEEPING

Quarter Ending		Net Sales.			Expenses.		
		£	s.	d.	£	s.	d.
January	31, 1885	10,188	11	5	290	18	9
May	2, 1885	12,549	19	5	353	2	4
August	1, 1885	16,185	10	11	429	16	10
October	31, 1885	16,542	18	4	529	0	6
January	30, 1886	14,120	7	6	549	9	11
May	1, 1886	16,190	5	3	556	12	0
July	31, 1886	16,467	16	11	538	0	6
*December	25, 1886	28,856	18	8	980	7	10
March	25, 1887	14,242	19	10	602	18	11
June	25, 1887	18,416	14	3	602	10	3
September	24, 1887	17,259	16	10	598	15	6
†December	31, 1887	20,704	14	9	736	4	10
March	31, 1888	16,373	12	5	669	10	7
June	30, 1888	19,721	3	3	652	6	7
September	29, 1888	19,657	10	9	705	7	2
December	29, 1888	22,183	2	7	781	13	8
March	30, 1889 ..	18,000	17	5	751	17	11
June	29, 1889	24,306	1	9	873	14	1
September	28, 1889	22,671	17	5	872	5	2
December	28, 1889	26,200	2	6	893	19	7
March	29, 1890	22,593	13	8	900	17	4
June	28, 1890	28,847	19	5	1,022	19	8
September	27, 1890	29,285	17	2	929	3	8
December	27, 1890	31,008	16	11	958	18	0
March	28, 1891	27,090	17	3	988	0	7
June	27, 1891	34,702	19	11	1,040	19	8
September	26, 1891	33,273	16	8	1,019	3	9
December	26, 1891	37,424	1	0	1,097	15	8
March	26, 1892	29,028	13	5	1,088	15	7
June	25, 1892	39,526	1	10	1,230	1	10
September	24, 1892	35,601	10	8	1,200	1	5
†December	31, 1892	42,902	19	10	1,387	11	9
April	1, 1893	52,874	3	1	1,352	1	5
July	1, 1893	43,534	17	11	1,742	5	2
September	30, 1893	36,008	15	2	1,771	7	0
December	30, 1893	41,348	0	6	1,871	15	6
March	31, 1894	34,803	19	0	1,890	8	9
June	30, 1894	46,030	15	0	1,898	3	1
September	29, 1894	34,833	2	10	1,880	16	10
December	29, 1894	44,641	12	0	1,947	9	5
March	30, 1895	37,839	2	0	1,963	12	10
June	29, 1895	53,632	11	11	2,087	11	2
Totals		1,167,675	9	2	44,238	13	0

* Twenty-one weeks. † Fourteen weeks.

BOOT AND SHOE DEPARTMENT.

A SEPARATE ACCOUNT.

Rate per £ of Sales.	Net Profit.	Rate per £ of Sales.	Stocks.
	£ s. d.		£
6·8	596 3 8	14·0	5,990
6·7	608 18 9	11·6	5,530
6·4	777 3 8	11·5	9,400
7 6	499 12 2	7·2	11,520
9·3	460 5 6	7·8	11,200
8·3	560 19 3	8·3	11,130
7·9	585 11 5	8·5	11,490
8·2	942 0 7	7·8	15,500
10·1	256 19 6	4·3	14,150
7·8	616 6 6	8·0	13,185
8·2	310 11 7	4·3	14,730
8·3	605 2 9	7·0	15,490
10·1	153 9 6	2·3	15,630
8·0	389 16 3	4·7	11,710
8·6	464 2 1	5·6	13,300
8·4	424 2 5	4·7	15,390
10·0	240 2 8	3·2	14,680
8·6	589 8 9	5·8	15,070
9·2	441 5 7	4·7	18,000
8·2	720 13 3	6·6	16,950
9·5	444 10 10	4·7	16,420
8·5	885 16 10	7·4	16,560
7·7	888 6 1	7·2	15,650
7·4	1,012 6 5	7·8	14,360
8·7	889 8 2	7·8	14,930
7·2	1,292 6 11	8·9	17,050
7·3	1,238 11 2	8·9	14,800
7·0	1,515 18 10	9·7	17,470
9·0	1,009 4 2	8·3	17,630
7·4	1,645 17 8	9·9	16,760
8·1	1,208 12 7	8·1	16,650
7·7	1,906 4 3	10·6	20,490
9·8	1,084 0 1	7·9	21,480
9·6	1,442 18 6	7·9	25,747
11·8	883 16 4	5·8	25,372
10·8	1,145 6 1	6·6	29,188
13·0	743 5 0	5·0	27,095
9·9	1,126 12 10	5·9	24,974
12·9	592 16 6	4·0	28,874
10·4	1,154 13 1	6·2	31,096
12·4	539 0 3	3·4	31,105
9·3	1,519 1 9	6·8	26,774
9·0	34,411 10 2	7·0	....

QUARTERLY STATEMENT, FURNITURE

FROM DATE OF KEEPING

Quarter ending	Net Sales.			Expenses.		
	£	s.	d.	£	s.	d.
January 31, 1885	3,022	18	2	210	11	11
May 2, 1885	2,636	9	6	262	5	10
August 1, 1885	7,200	12	9	392	6	7
October 31, 1885 ..	5,599	11	1	420	1	5
January 20, 1886	6,744	8	11	445	7	4
May 1, 1886	7,026	7	0	470	18	2
July 31, 1886	9,621	1	11	500	9	6
* December 25, 1886	13,157	12	1	914	4	7
March 25, 1887	7,315	11	8	577	14	1
June 25, 1887	11,033	17	4	590	17	11
September 24, 1887	8,567	19	0	618	12	4
† December 31, 1887	11,956	12	7	723	6	11
March 31, 1888	8,295	17	1	667	6	7
June 30, 1888	12,865	9	6	738	3	6
September 29, 1888	9,876	13	4	780	1	6
December 29, 1888	12,582	11	8	860	10	4
March 30, 1889	9,970	0	8	814	4	1
June 29, 1889	15,812	15	7	918	7	0
September 28, 1889	12,451	19	0	905	16	2
December 28, 1889	16,871	0	8	930	18	5
March 29, 1890	14,418	6	7	926	4	4
June 28, 1890	21,501	17	11	1,045	3	0
September 27, 1890	18,076	15	11	1,103	5	1
December 27, 1890	22,149	13	4	1,261	10	4
March 28, 1891	15,095	13	8	1,287	17	7
June 27, 1891	25,335	18	11	1,412	1	8
September 26, 1891	19,759	6	0	1,384	18	2
December 26, 1891	24,953	4	7	1,471	7	10
March 26, 1892	18,157	8	11	1,492	1	11
June 25, 1892	27,834	1	5	1,578	10	5
September 24, 1892	20,853	9	11	1,527	8	3
† December 31, 1892	27,476	19	0	1,740	6	7
April 1, 1893	19,575	15	1	1,662	14	7
July 1, 1893	28,271	11	10	1,870	18	4
September 30, 1893	19,573	12	11	1,766	3	7
December 30, 1893	25,411	2	3	1,902	10	7
March 31, 1894	18,760	10	6	1,850	11	9
June 30, 1894	33,459	2	0	2,048	4	1
September 29, 1894	19,778	16	11	1,853	0	3
December 29, 1894	28,259	5	11	1,945	9	0
March 30, 1895	21,432	7	2	1,975	2	7
June 29, 1895	36,377	16	6	2,104	18	10
Totals.....	699,122	6	9	47,952	12	11

* Twenty-one weeks.

† Fourteen weeks.

AND FURNISHING DEPARTMENT.

A SEPARATE ACCOUNT.

Rate per £ of Sales.	Net Profit.			Rate per £ of Sales.	Stocks.
d.	£	s.	d.	d.	£
16·7	81	13	3	6·4	3,500
23·8	†4	17	11	0·4	4,410
13·0	221	4	9	7·4	4,620
18·0	133	3	10	5·6	5,600
15·8	145	4	10	5·2	6,180
16·0	195	9	8	6·4	7,020
12·4	410	10	0	10·2	7,650
16·6	292	9	7	5·4	7,400
18·9	160	16	8	5·2	8,750
12·8	641	14	4	13·9	9,290
17·3	323	12	11	9·0	9,570
14·5	677	17	2	13·6	9,150
19·3	311	7	10	9·0	10,370
13·9	735	16	7	13·9	10,540
18·9	245	16	0	5·9	10,000
16·4	412	16	5	7·8	10,820
19·6	285	2	3	6·8	11,990
13·9	762	19	10	7·5	11,170
17·4	625	14	2	12·0	10,380
13·2	916	2	10	13·0	10,450
15·4	567	11	8	9·4	11,410
11·6	1,339	5	4	14·9	11,150
15·3	1,287	13	10	17·0	12,240
13·6	1,504	10	0	16·2	13,600
20·4	557	8	2	8·8	15,700
13·3	1,323	6	11	12·5	16,350
16·8	1,138	9	3	13·8	16,520
14·1	1,026	0	6	9·9	16,400
19·7	410	18	11	5·4	18,330
13·6	1,368	12	10	11·8	16,600
17·2	1,096	18	3	12·6	16,700
15·2	1,298	19	10	11·3	16,330
20·3	356	2	2	4·3	17,350
16·0	1,440	19	1	12·2	17,453
21·6	629	7	3	7·7	17,729
17·9	787	7	1	7·4	18,150
23·6	440	7	1	5·6	18,816
14·7	1,718	12	8	12·3	17,140
22·4	619	6	11	7·5	17,731
16·5	1,253	3	8	10·6	17,057
22·1	926	11	4	10·3	19,745
13·8	2,492	7	9	16·4	18,890
16·4	31,168	10	4	10·7	....

PRODUCTIVE
HALF-YEARLY STATEMENT SHOWING
TAILORING

Half Year Ending	Transferred.	Production.	Expenses on Production.
	£ s. d.	£ s. d.	£ s. d.
*November 4, 1882..	427 10 10	427 10 10	319 12 11
May 5, 1883..	1,083 16 1	1,083 16 1	790 8 0
November 3, 1883..	1,185 12 0	1,185 12 0	842 11 4
May 3, 1884..	1,051 9 0	1,051 9 0	740 0 2
November 1, 1884..	1,469 18 10	1,469 18 10	913 13 9
May 2, 1885..	1,499 9 9	1,499 9 9	917 12 1
October 31, 1885..	2,112 2 0	2,112 2 0	1,261 13 6
May 1, 1886..	2,602 2 9	2,602 2 9	1,556 13 2
†December 25, 1886..	3,650 15 10	3,650 15 10	2,289 17 2
June 25, 1887..	3,852 13 11	3,852 13 11	2,278 0 6
December 31, 1887..	4,226 12 8	3,892 18 11	2,569 7 4
June 30, 1888..	3,742 1 6	3,919 7 2	2,413 7 11
December 29, 1888..	4,589 14 3	4,719 19 4	2,897 10 0
June 29, 1889..	4,357 3 8	4,233 12 8	2,661 2 9
December 28, 1889..	4,892 19 11	5,165 18 0	2,919 0 10
June 28, 1890..	6,702 17 5	6,446 19 3	3,660 17 11
December 27, 1890..	7,166 9 4	7,691 2 10	4,171 19 9
June 27, 1891..	6,127 2 2	6,012 16 5	3,575 1 8
December 26, 1891..	6,990 5 3	6,743 18 1	3,712 11 5
June 25, 1892..	7,444 4 7	7,283 9 10	4,186 6 0
‡December 31, 1892..	8,153 15 0	8,533 19 11	4,410 12 3
July 1, 1893..	8,039 8 5	8,263 11 8	4,697 14 5
December 30, 1893..	7,655 9 0	7,207 19 7	4,224 19 5
June 30, 1894..	8,143 3 4	8,011 18 7	4,673 12 4
December 29, 1894..	8,018 8 9	8,125 19 3	4,472 5 8
June 29, 1895..	9,212 1 2	9,191 3 11	5,053 18 6
Totals	124,397 7 5	124,380 6 5	72,210 10 9

* Thirteen weeks.

† Thirty-four weeks.

‡ Twenty-seven weeks.

DEPARTMENTS.

EXPENSES AND NET PROFIT.

FACTORY.

Rate per Cent.	Net Profit on Production.	Rate per Cent.	Net Loss.	Rate per Cent.	Stocks.
	£ s. d.		£ s. d.		£
74·70	1 11 2	0·23	....	....	..
72·94	19 0 5	1·75	....	....	187
71·05	....	....	7 11 0	0·59	304
70·40	11 18 5	1·04	....	....	344
62·15	33 10 9	2·24	....	....	341
61·10	16 1 9	1·06	....	....	327
59·70	64 2 7	3·03	....	....	445
59·80	34 13 0	1·30	....	....	326
62·71	....	....	21 3 4	0·57	485
59·13	133 1 3	3·45	....	....	617
66·00	....	....	208 9 3	5·34	424
61·57	152 9 4	3·87	....	....	687
61·39	356 14 1	7·54	....	....	1,083
62·86	325 17 1	7·67	....	....	1,012
56·51	609 5 0	11·79	....	....	1,280
56·77	646 2 7	10·02	....	....	1,191
54·23	699 16 9	9·10	....	....	1,564
59·46	550 6 9	9·15	....	....	1,638
55·02	736 18 7	10·92	....	....	1,222
57·47	867 10 0	11·90	....	....	1,218
51·67	1,011 1 4	11·84	....	....	1,663
56·84	1,026 10 2	12·41	....	....	1,782
58·61	820 1 8	11·37	....	....	1,120
58·83	1,083 4 8	13·51	....	....	1,133
55·03	957 2 11	11·77	....	....	1,177
54·98	1,444 18 8	15·72	....	....	1,175
58·05	11,601 18 11	....	237 3 7	....	..
	237 3 7	....		
	11,364 15 4	9·13			

PRODUCTIVE
HALF-YEARLY
SHIRT

Half Year Ending	Transferred.	Production.	Expenses on Production.
	£ s. d.	£ s. d.	£ s. d.
*November 4, 1882..	201 11 0	201 11 0	159 13 10
May 5, 1883..	415 17 10	415 17 10	348 1 9
November 3, 1883..	343 15 3	343 15 3	306 18 0
May 3, 1884..	459 18 4	459 18 4	381 12 5
November 1, 1884..	410 1 3	410 1 3	362 9 4
May 2, 1885..	768 16 11	768 16 11	500 2 1
October 31, 1885..	638 10 9	638 10 9	384 18 7
May 1, 1886..	764 15 0	764 15 0	461 14 1
†December 25, 1886..	1,128 1 11	1,128 1 11	670 18 5
June 25, 1887..	792 4 10	792 4 10	484 1 9
December 31, 1887..	839 11 6	858 1 2	549 9 0
June 30, 1888..	1,071 16 3	1,074 14 6	691 14 1
December 29, 1888..	1,296 19 3	1,306 0 6	885 13 2
June 29, 1889..	1,442 12 0	1,430 15 2	873 5 1
December 28, 1889..	1,355 5 8	1,373 13 3	855 2 2
June 28, 1890..	1,369 13 2	1,357 11 9	841 1 3
December 27, 1890..	1,488 19 11	1,495 2 10	940 0 2
June 27, 1891..	1,667 17 0	1,687 17 8	998 4 1
December 26, 1891..	1,722 15 2	1,666 15 3	1,048 14 10
June 25, 1892..	1,547 4 6	1,570 7 10	1,021 3 4
‡December 31, 1892..	1,813 15 7	1,862 13 4	1,192 15 2
July 1, 1893..	1,875 9 4	1,816 19 3	1,216 18 9
December 30, 1893..	1,976 0 8	1,980 17 8	1,250 12 8
June 30, 1894..	2,109 9 2	2,114 11 6	1,328 8 7
December 29, 1894..	2,653 1 10	2,677 12 11	1,544 0 8
June 29, 1895..	3,344 5 1	3,357 18 7	1,871 6 3
Totals	33,498 9 2	33,555 6 3	21,168 19 6

* Thirteen weeks.

† Thirty-four weeks.

‡ Twenty-seven weeks.

DEPARTMENTS.

STATEMENT.

FACTORY.

Rate per Cent.	Net Profit on Production.	Rate per Cent.	Net Loss.	Rate per Cent.	Stocks.
	£ s. d.		£ s. d.		£
79-10	21 9 4	10-44	....	....	..
83-85	13 13 2	3-13	....	....	12
89-21	8 6 0	2-33	....	....	15
83-00	17 15 6	3-70	....	....	22
88-29	....	....	16 6 7	3-90	20
65-10	50 17 10	6-51	....	....	55
60-18	38 7 8	5-95	....	....	70
60-34	25 8 10	3-27	....	....	43
59-39	46 14 6	4-07	....	....	48
61-11	16 18 11	2-02	....	....	90
63-98	23 6 6	2-68	....	....	92
64-33	11 1 11	1-02	....	....	115
67-76	....	....	24 7 5	1-83	112
61-04	99 15 8	6-92	....	....	106
62-27	110 13 8	8-01	....	....	119
61-09	122 10 9	8-99	....	....	98
62-87	131 5 9	8-76	....	....	72
59-16	142 5 10	8-41	....	....	131
62-90	192 18 10	11-58	....	....	120
65-03	141 6 3	8-98	....	....	215
64-01	103 19 8	5-58	....	....	208
66-97	147 2 7	8-09	....	....	146
63-13	181 12 10	9-14	....	....	256
62-82	216 1 10	10-21	....	....	372
57-67	417 12 4	15-77	....	....	764
55-73	....	....	17 14 0	0-53	802
63-08	2,281 6 2 58 8 0	....	58 8 0	....	..
	2,222 18 2	6-62			

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.
SLOP FACTORY.

Half Year Ending	Transferred.			Production.			Expenses on Production.			Rate per Cent.			Net Profit on Production.			Rate per Cent.			Stocks.	
	£	s.	d.	£	s.	d.	£	s.	d.	Rate per Cent.	£	s.	d.	Rate per Cent.	£	s.	d.	Rate per Cent.		£
*June 27, 1891 ..	1,372	12	5	1,426	13	5	988	1	7	69.28	48	16	4	3.36	192					
December 26, 1891 ..	1,189	6	11	1,211	19	8	867	1	7	71.53	40	2	6	3.30	186					
June 25, 1892 ..	1,315	0	7	1,272	2	11	894	15	9	70.28	68	11	9	5.34	126					
†December 31, 1892 ..	1,477	0	3	1,358	1	6	955	16	10	70.32	67	2	6	4.93	100					
July 1, 1893 ..	1,576	14	2	1,481	6	11	1,005	13	4	67.86	36	10	0	2.43	434					
December 30, 1893 ..	1,582	3	6	1,558	0	2	996	11	6	63.92	5	7	4	0.32	476					
June 30, 1894 ..	1,665	5	10	1,608	10	1	1,082	2	11	67.28	111	14	11	6.96	825					
December 29, 1894 ..	1,828	1	6	1,826	8	2	1,027	14	9	56.24	1	18	3	0.10	410					
June 29, 1895 ..	1,640	7	2	1,633	7	5	1,198	15	9	73.36	117	16	11	7.16	314					
Totals	13,346	12	4	13,376	10	3	9,016	14	0	67.40	498	0	6	3.72	.....				

* Twenty-nine weeks.

† Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.—MANTLE FACTORY.

Half Year Ending	Transferred.	Production.	Expenses on Production.	Rate per Cent.	Net Profit on Production.	Rate per Cent.	Net Loss.	Rate per Cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£ s. d.		£
June 27, 1891.....	994 10 2	1,005 7 3	734 6 4	73.03	....	....	86 17 4	8.61	203
Dec. 26, 1891.....	1,330 1 0	1,352 19 4	870 3 6	64.30	....	....	52 3 0	3.84	350
June 25, 1892.....	1,157 19 8	1,165 4 11	809 12 10	69.44	....	....	107 17 7	9.26	324
*Dec. 31, 1892.....	1,559 2 2	1,541 19 2	892 11 5	57.84	97 6 1	6.30	....	....	275
July 1, 1893.....	1,160 1 1	1,166 0 2	799 2 11	68.52	....	....	63 4 9	5.40	463
Dec. 30, 1893.....	1,188 9 9	1,188 13 11	787 5 7	66.24	....	....	92 16 3	7.74	382
June 30, 1894.....	1,330 12 7	1,320 11 10	765 7 1	57.95	26 6 4	1.97	....	....	372
Dec. 29, 1894.....	1,380 18 3	1,380 18 3	731 3 4	52.97	....	....	5 11 10	0.40	178
June 29, 1895.....	1,349 9 9	1,349 9 9	733 2 4	54.33	60 1 11	4.44	....	....	151
Totals.....	11,451 4 5	11,471 4 7	7,122 15 4	62.08	183 14 4	....	408 10 9	....	..
							183 14 4		
							224 16 5	1.96	

* Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.
HALF-YEARLY STATEMENT SHOWING

Half Year Ending	Transferred.	Production.	Expenses.
*May 2, 1885..	£3,298 16 7	£3,298 16 7	£1,183 10 5
October 31, 1885..	10,505 15 7	10,505 15 7	3,328 18 5
May 1, 1886..	11,992 1 5	11,992 1 5	3,733 7 5
†December 25, 1886..	21,824 5 3	21,824 5 3	6,391 18 6
June 25, 1887..	14,863 9 5	14,863 9 5	4,957 18 9
December 31, 1887..	18,993 10 11	18,971 7 5	6,080 12 7
June 30, 1888..	14,421 8 10	15,456 0 7	5,506 7 8
December 29, 1888..	23,752 4 3	23,911 13 1	8,056 18 10
June 29, 1889..	22,306 15 8	24,829 5 11	8,341 2 10
December 28, 1889..	27,323 7 10	29,256 15 8	10,581 3 6
June 28, 1890..	27,000 12 3	28,621 13 5	10,465 6 5
December 27, 1890..	30,407 10 8	30,503 13 1	11,379 17 10
June 27, 1891..	32,049 7 0	36,406 9 8	12,584 0 3
December 26, 1891.	39,077 18 1	36,629 1 10	13,442 9 3
June 25, 1892..	37,242 4 10	38,374 15 3	14,141 17 0
‡December 31, 1892..	45,510 0 11	47,150 2 10	17,174 4 2
July 1, 1893..	47,638 17 8	52,446 7 4	18,043 6 7
December 30, 1893..	51,067 8 4	46,571 6 2	18,989 11 10
June 30, 1894..	46,791 19 6	51,486 16 6	19,553 9 6
December 29, 1894..	55,931 9 10	59,200 17 5	21,447 5 10
June 29, 1895..	55,806 6 10	60,418 2 5	22,869 19 4
Totals.....	637,805 11 8	662,718 16 10	238,253 6 11

* Thirteen weeks.

† Thirty-four weeks.

‡ Twenty-seven weeks.

BOOT AND SHOE FACTORY.

EXPENSES AND NET PROFIT.

Rate per Cent on Production.	Net Profit on Production.	Rate per Cent on Production.	Net Loss.	Rate per Cent.	Stocks.
35·87	....	..	£47 9 10	1·42	£2,176
31·68	£240 19 3	2·28	....	....	3,435
31·12	247 1 10	2·05	....	....	4,042
29·28	867 3 2	3·97	....	....	4,020
33·35	124 7 11	0·83	....	....	7,350
32·04	1,013 15 11	5·33	....	....	5,406
35·62	687 14 1	4·44	....	....	7,886
33·69	1,072 2 11	4·48	....	....	11,869
33·59	1,041 3 7	4·19	....	....	12,588
36·16	1,509 19 4	5·15	....	....	15,890
36·56	1,867 10 10	6·52	....	....	19,920
37·30	1,744 10 11	5·71	....	....	17,349
34·56	1,635 2 2	4·49	....	....	24,080
36·69	1,996 18 7	5·45	....	....	18,292
36·85	2,115 17 8	5·51	....	....	18,006
36·42	2,743 19 7	5·82	....	....	18,220
34·40	4,070 11 6	7·76	....	....	24,660
40·77	3,360 15 11	7·21	....	....	20,696
37·97	3,378 12 5	6·56	....	....	27,948
36·22	4,052 10 0	6·84	....	....	27,177
37·85	3,701 7 10	6·12	....	....	33,558
35·95	37,472 5 5	..	47 9 10	....	....
	47 9 10	..			
	37,424 15 7	5·64			

PRODUCTIVE DEPARTMENTS.
CABINET

Half Year Ending	Transferred.	Production.	Expenses on Production.
	£ s. d.	£ s. d.	£ s. d.
May 2, 1885..	482 11 10	482 11 10	282 11 9
October 31, 1885..	805 18 0	805 18 0	442 17 3
May 1, 1886..	732 8 1	732 8 1	428 0 11
*December 25, 1886..	1,499 5 10	1,499 5 10	776 10 10
June 25, 1887..	1,202 14 1	1,202 14 1	639 11 8
December 31, 1887..	1,286 2 6	1,354 12 11	739 17 5
June 30, 1888..	1,418 3 10	1,452 12 5	714 18 7
December 29, 1888..	2,671 15 2	2,871 0 11	1,595 3 9
June 29, 1889..	3,275 7 8	3,409 18 0	1,835 15 3
December 28, 1889..	4,379 0 5	4,362 1 6	2,186 9 9
June 28, 1890..	6,137 16 9	6,116 7 10	3,260 18 5
December 27, 1890..	7,200 18 4	7,312 2 1	3,855 8 1
June 27, 1891..	6,976 13 6	7,340 2 9	3,931 9 3
December 26, 1891..	7,702 14 3	7,806 11 0	4,065 6 4
June 25, 1892..	7,556 16 4	7,784 17 1	4,251 2 6
†December 31, 1892..	8,961 9 5	9,602 0 0	5,020 15 3
July 1, 1893..	8,532 16 8	9,781 11 7	4,937 16 1
December 30, 1893..	8,351 5 9	7,872 10 10	5,037 6 9
June 30, 1894..	8,763 6 1	8,719 3 0	5,022 7 11
December 29, 1894..	9,837 7 10	10,378 12 10	5,914 12 10
June 29, 1895..	10,344 12 9	7,783 11 10	5,502 12 0
Totals.....	108,119 5 1	108,670 14 5	60,441 12 7

* Thirty-four weeks.

† Twenty-seven weeks.

HALF-YEARLY STATEMENT.
WORKS.

Rate per Cent.	Net Profit on Production.	Rate per Cent.	Net Loss.	Rate per Cent.	Stocks.
	£ s. d.		£ s. d.		£
58·50	....	....	6 4 1	1·24	294
54·90	26 14 4	3·22	....	....	364
58·47	16 1 4	2·18	....	....	484
51·76	83 10 11	5·53	....	....	425
53·16	24 19 3	2·07	....	....	676
54·57	42 11 9	3·10	....	....	1,069
49·17	36 17 3	2·48	....	....	1,281
55·55	....	....	57 9 4	1·98	2,152
53·82	49 8 7	1·43	....	....	2,358
50·11	134 9 11	3·07	....	....	2,466
53·30	478 5 4	7·81	....	....	3,470
52·72	420 19 9	5·75	....	....	4,975
53·55	....	....	40 12 10	0·54	5,484
52·07	215 6 10	2·75	....	....	6,124
54·61	216 4 7	2·77	....	....	5,845
52·28	724 4 5	7·54	....	....	6,808
50·48	510 16 10	5·21	....	....	7,976
63·98	600 19 11	7·63	....	....	8,696
57·59	365 12 5	4·18	....	....	8,139
56·98	302 10 3	2·91	....	....	9,233
70·69	470 14 2	6·03	....	....	8,826
55·61	4,720 7 10	..	104 6 3	....	....
	104 6 3	..			
	4,616 1 7	4·24			

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.
BRUSH FACTORY.

Half Year Ending	Transferred.		Production.		Expenses on Production.		Rate per Cent.		Net Profit on Production.		Rate per Cent.		Stocks.	
	£	s. d.	£	s. d.	£	s. d.	Rate per Cent.	Rate per Cent.	£	s. d.	Rate per Cent.	Rate per Cent.	£	s. d.
June 28, 1890..	1,357	19 8	1,510	1 0	599	3 8	39.66	9.53	144	15 1	9.53	823		
December 27, 1890..	1,769	4 3	2,295	16 10	830	4 4	36.16	5.27	121	13 11	5.27	1,302		
June 27, 1891..	2,003	6 8	2,244	13 0	913	12 6	40.68	7.48	168	15 11	7.48	1,775		
December 26, 1891..	1,794	13 0	1,849	7 7	797	0 1	43.10	4.75	88	8 1	4.75	2,758		
June 25, 1892..	2,092	6 4	1,975	19 11	838	18 8	42.46	3.39	67	8 4	3.39	2,281		
*December 31, 1892..	2,399	5 10	2,454	14 4	1,082	17 0	44.13	5.25	128	15 7	5.25	2,991		
July 1, 1893..	2,289	14 8	2,526	6 10	963	10 9	38.12	1.19	30	0 11	1.19	2,920		
December 30, 1893..	1,941	6 5	1,416	6 5	804	5 10	56.78	11.30	160	12 3	11.30	2,971		
June 30, 1894..	2,700	17 2	2,681	17 9	952	3 6	35.49	6.30	169	8 2	6.30	2,844		
December 29, 1894..	2,158	14 9	2,090	0 9	915	15 8	43.78	8.85	185	9 8	8.85	3,277		
June 29, 1895..	2,867	5 1	2,942	1 3	1,018	17 0	34.63	10.74	316	15 4	10.74	2,842		
Totals	23,374	13 10	23,987	5 8	9,716	9 0	40.50	6.59	1,582	3 3	6.59	....	....	....

* Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.
PRINTING WORKSHOP.

Half Year Ending	Transferred.	Production.	Expenses on Production.	Rate per Cent.	Net Profit on Production.	Rate per Cent.	Stocks.
*December 31, 1887 ..	£649 14 2	£653 15 5	£347 14 7	53·13	£41 19 10	6·43	£175
June 30, 1888 ..	1,466 11 6	1,475 13 9	705 16 7	47·79	117 10 5	7·93	180
December 29, 1888 ..	1,648 5 10	1,645 18 9	775 0 9	47·11	168 12 0	10·21	228
June 29, 1889 ..	1,770 9 10	1,842 0 2	1,000 3 1	54·28	115 6 1	6·24	425
December 28, 1889 ..	2,084 17 7	2,143 11 9	1,126 4 6	52·54	146 14 5	6·81	602
June 28, 1890 ..	3,093 3 5	3,170 2 11	1,526 11 10	48·10	291 9 3	9·17	706
December 27, 1890 ..	4,148 16 11	4,008 9 9	1,770 11 1	44·16	200 9 5	4·99	832
June 27, 1891 ..	4,096 9 8	4,074 16 11	1,796 19 0	44·10	245 16 10	6·03	1,223
December 26, 1891 ..	4,921 14 11	5,084 10 0	2,059 18 5	40·51	472 6 10	9·28	1,341
June 25, 1892 ..	5,730 6 5	5,867 10 10	2,405 9 7	40·99	596 19 0	10·17	2,144
†December 31, 1892 ..	6,913 1 10	6,866 7 6	2,979 16 5	43·38	290 3 4	4·22	2,058
July 1, 1893 ..	7,452 17 5	7,437 13 11	3,041 11 5	40·89	797 17 0	10·73	1,850
December 30, 1893 ..	7,520 17 6	7,374 7 0	2,972 7 8	40·30	749 19 9	10·17	1,584
June 30, 1894 ..	7,078 10 1	7,101 4 8	2,924 18 6	41·19	678 12 2	9·54	1,677
December 29, 1894 ..	8,414 1 5	8,440 6 9	3,034 17 8	35·94	1,479 13 5	17·52	1,688
June 29, 1895 ..	8,414 2 5	8,474 17 6	3,357 10 0	39·61	1,151 18 10	13·59	1,6 2
Totals	75,404 0 11	75,661 7 7	31,825 11 1	42·06	7,545 8 7	9·97	....

* Thirteen weeks.

† Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.
PRESERVE WORKS.

Half Year Ending	Transferred.		Production.		Expenses on Production.		Rate per Cent.		Net Profit on Production.		Rate per Cent.		Stocks.
	£	s. d.	£	s. d.	£	s. d.	Rate per Cent.	Rate per Cent.	£	s. d.	Rate per Cent.	Rate per Cent.	
*December 27, 1890 ..	11,200	5 8	12,816	4 7	1,036	0 6	8·08		681	6 4	....		3,091
June 27, 1891 ..	8,633	11 2	7,615	18 9	1,066	0 9	14·00		592	6 2	7·77		5,980
December 26, 1891 ..	20,734	0 8	28,495	2 7	1,934	11 8	6·78		1,147	2 0	4·02		9,042
June 25, 1892 ..	18,770	4 10	10,410	16 11	2,010	2 5	19·30		1,063	13 3	10·21		11,041
†December 31, 1892 ..	23,729	11 5	40,212	8 7	3,041	17 4	7·56		1,742	14 3	4·33		21,380
July 1, 1893 ..	26,389	17 10	21,419	16 11	2,810	5 2	13·11		757	10 6	3·53		16,566
December 30, 1893 ..	25,696	12 10	27,306	10 9	3,773	3 8	13·81		1,402	7 8	5·35		20,553
June 30, 1894 ..	29,166	6 6	24,276	15 1	4,045	16 7	16·66		1,697	6 2	6·99		14,792
December 29, 1894 ..	27,596	1 11	37,606	16 3	3,971	1 1	10·55		2,457	4 9	6·53		17,925
June 29, 1895 ..	29,558	10 10	22,581	4 1	3,884	12 9	17·20		1,293	7 9	5·72		14,012
Totals.....	221,475	3 8	232,741	14 6	27,573	11 11	11·84		12,894	18 10	5·54		....

* Twenty-eight weeks.

† Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.

CONFECTIONERY WORKS.

Half Year Ending	Transferred.		Production.		Expenses on Production.		Rate per Cent.		Net Profit on Production.		Rate per Cent.		Net Loss.		Rate per Cent.		Stocks.
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	
Dec. 26, 1891.....	3,166	2 9	3,278	7 3	413	0 10	12.59	95	10 10	2.89	.....	.....	.....	.....	.....	.....	439
June 25, 1892.....	2,185	15 6	2,073	11 0	295	12 1	14.23	45	6 7	2.17	.....	.....	.....	.....	.....	.....	344
*Dec. 31, 1892.....	3,293	18 0	3,991	17 5	987	12 1	24.72	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,234
July 1, 1893.....	5,194	4 3	5,157	1 5	1,458	8 6	28.27	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,175
Dec. 30, 1893.....	5,700	8 3	5,819	17 4	1,443	5 10	24.79	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,619
June 30, 1894.....	6,796	19 3	6,741	14 1	1,491	11 0	22.11	288	18 2	4.28	.....	.....	.....	.....	.....	.....	1,987
Dec. 29, 1894.....	7,246	15 4	8,056	18 4	1,574	4 11	19.53	429	8 10	5.32	.....	.....	.....	.....	.....	.....	1,495
June 29, 1895.....	6,373	4 0	6,460	14 3	1,552	18 10	24.04	249	3 10	3.58	.....	.....	.....	.....	.....	.....	1,968
Totals.....	39,957	7 4	41,580	1 1	9,216	14 1	22.16	1,108	8 3	.....	.....	.....	.....	.....	.....	.....	..
								932	6 0	.....	.....	.....	.....	.....	.....	.....	..
								176	2 3	0.42							

* Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.
TOBACCO WORKS.

Half Year Ending	Transferred.			Production.			Expenses on Production.			Rate per Cent.	Net Profit on Production.	Rate per Cent.	Stocks.		
	£	s.	d.	£	s.	d.	£	s.	d.						
Dec. 26, 1891	15,510	4	8	21,326	17	2	1,704	19	6	7·99	651	11	11	3·05	8,958
June 25, 1892	25,947	5	8	26,056	14	0	2,253	18	3	8·65	713	4	9	2·73	9,233
*Dec. 31, 1892	33,885	18	6	32,859	15	4	2,512	17	8	7·64	1,725	6	10	5·25	13,461
July 1, 1893	33,515	17	8	32,756	15	0	2,668	3	5	8·14	1,216	10	8	3·71	18,572
Dec. 30, 1893	33,886	8	8	35,071	17	7	2,547	4	9	7·26	1,426	13	6	4·06	15,580
June 30, 1894	35,212	6	2	35,751	16	2	2,561	10	8	7·16	494	10	7	1·38	14,063
Dec. 29, 1894	38,795	13	3	39,137	16	4	2,733	0	6	6·98	1,105	1	11	2·82	17,381
June 29, 1895	46,043	6	10	45,896	15	6	3,054	13	1	6·65	1,650	18	2	3·60	16,783
Totals	262,297	1	5	268,858	7	1	20,036	7	10	7·45	8,983	18	4	3·34	....

* Twenty-seven weeks.

PRODUCTIVE DEPARTMENTS.—HALF-YEARLY STATEMENT.
CHANCELOT FLOUR MILLS.

Half Year Ending	Sales and Transfers.	Production.	Expenses on Production.	Rate per Cent.	Net Loss on Production.	Rate per Cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£
December 29, 1894 ..	23,102 14 7	88,609 14 5	4,592 10 6	11·89	1,348 17 6	3·49	51,096
June 29, 1895 ..	113,158 15 6	105,711 16 11	10,065 16 10	9·52	3,033 19 3	2·87	40,335
Totals	136,261 10 1	144,321 11 4	14,658 7 4	10·15	4,382 16 9	3·03	.....

Employés.

NUMBER OF EMPLOYÉS, SEPTEMBER 28TH, 1895.

DISTRIBUTIVE DEPARTMENTS.

	Collective Totals.
Counting House—General .....Glasgow	102
Grocery	80
Stationery	8
Saddlery	8
Ham Curing	19
Potato	3
Cattle Buying	1
Drapery—General	140
Mantle.....	11
Millinery.....	4
Furniture	57
Boot	39
Clarence Street Dining-room.....	5
Sausage Work	13
Carting and Fodder	82
Dining-rooms.....Shieldhall	13
Leith	53
Kilmarnock	17
Dundee	4
Enniskillen	17
Edinburgh—Sample-room.....	2
Greenock—Sugar Forwarding	1
	585
	94

PRODUCTIVE DEPARTMENTS.

General	Shieldhall	8
Boot Factory	"	766
"	Parkview	169
Tailoring Factory	Shieldhall	245
Printing Department	"	140
Cabinet Workshop	"	206
		1,534
Carried forward		2,213

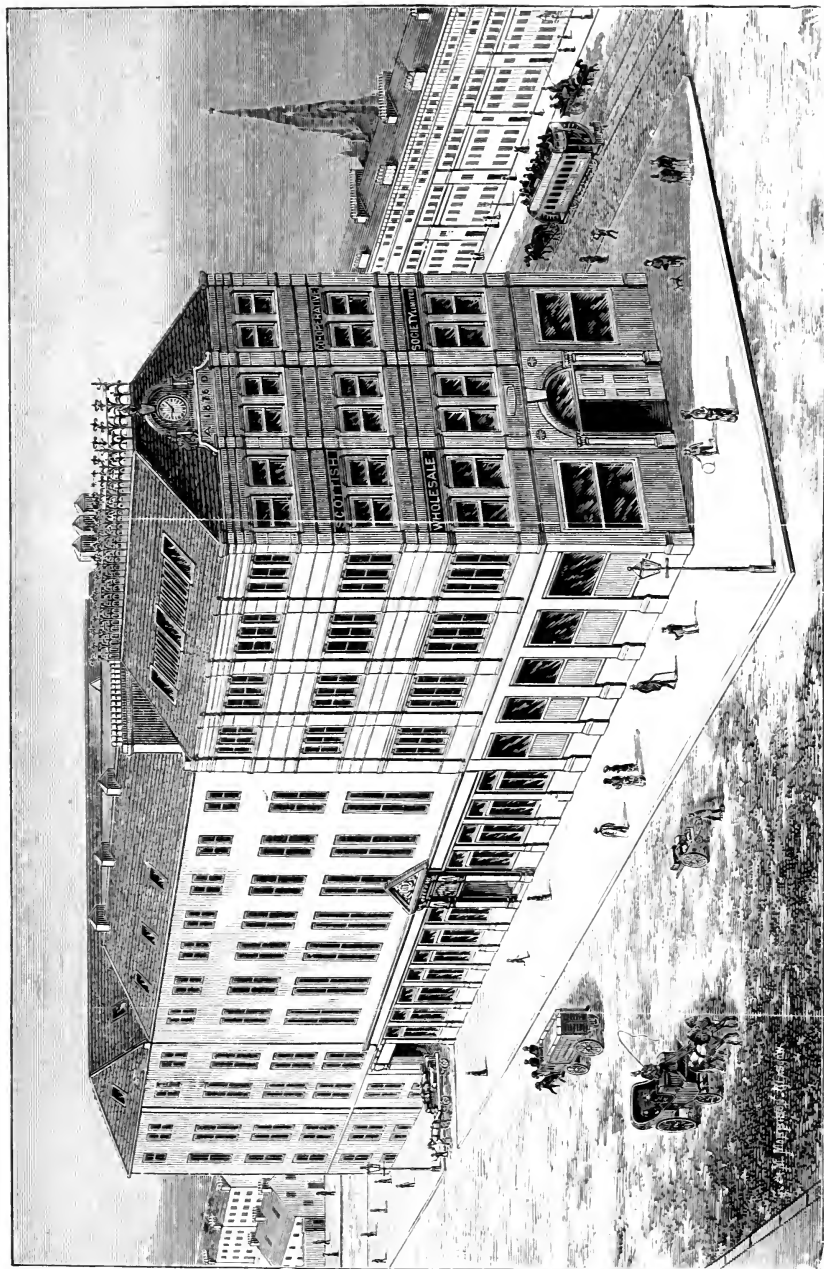
NUMBER OF EMPLOYÉS, SEPTEMBER 28TH, 1895.

PRODUCTIVE DEPARTMENTS.—*Con.*

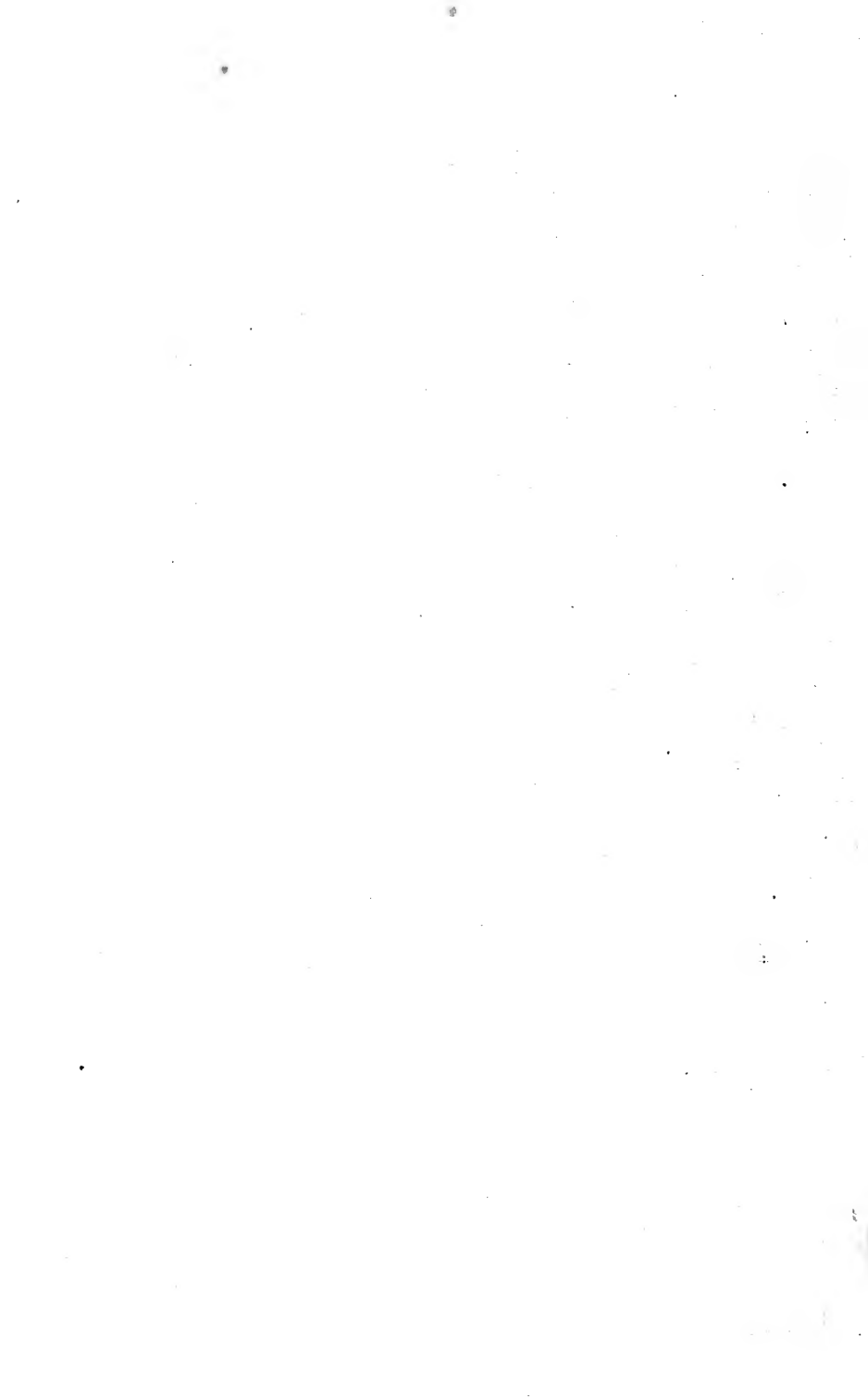
	Collective Totals.
Brought forward	2,213
Preserve and Confectionery Works .....Shieldhall	184
Tobacco Factory	93
Hosiery „	59
Slop „	73
Mantle „	Glasgow 42
Shirt „	Shieldhall 139
Coffee Essence Factory	„ 13
Drug Department	„ 39
Mechanical Department	„ 30
Tinware Factory	„ 34
Pickle Work	„ 30
Cartwright	„ 1
	— 737

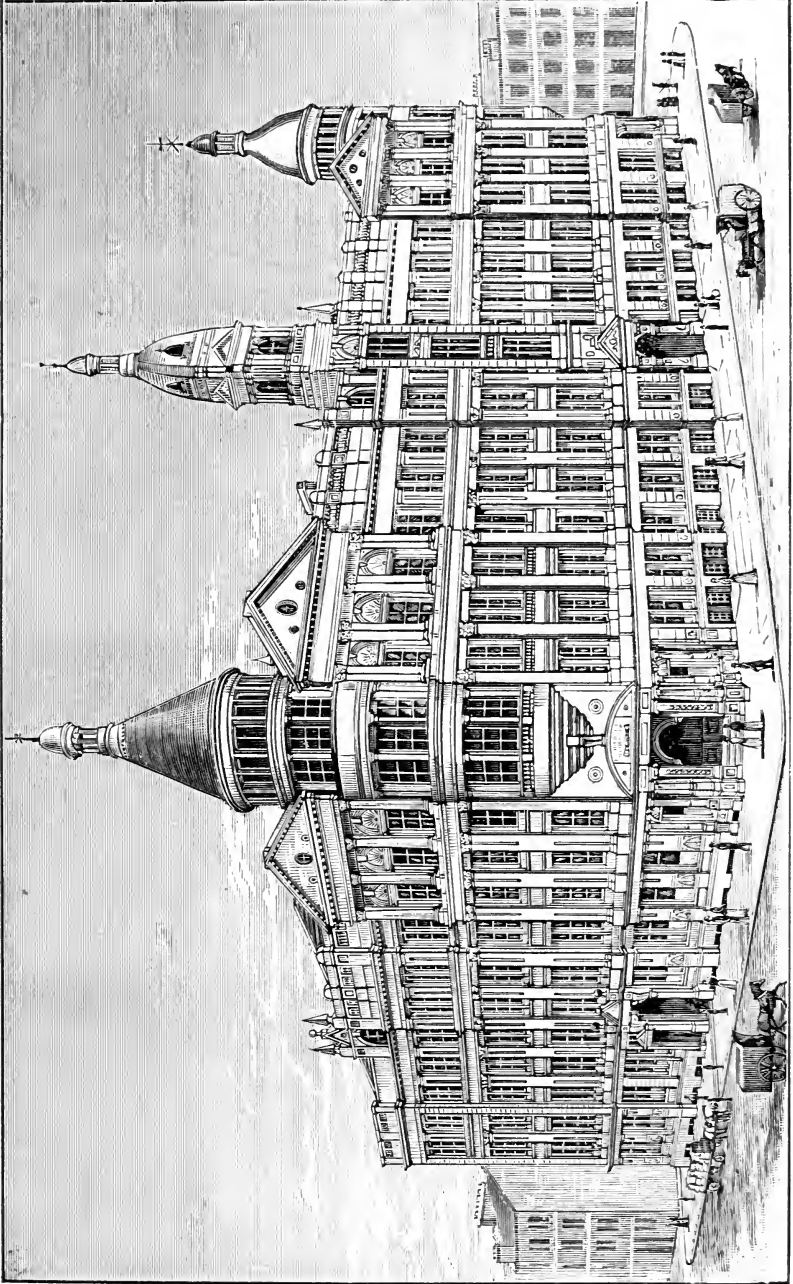
BUILDING DEPARTMENT.

GLASGOW—Joiners	26	
Builders	10	
Bricklayers	10	
Hewers	71	
Labourers	52	
Cooper	1	
Slater	1	
Carvers	5	
Plumbers	5	
Painters	18	
Management	4	
	—	203
LEITH—Joiners	2	
Builders	3	
Labourers	2	
Painter	1	
Plumber	1	
	—	9
FARM—Carbrook Mains		16
FLOUR MILLS—Chancelot, Edinburgh		74
		—
Total		3,252

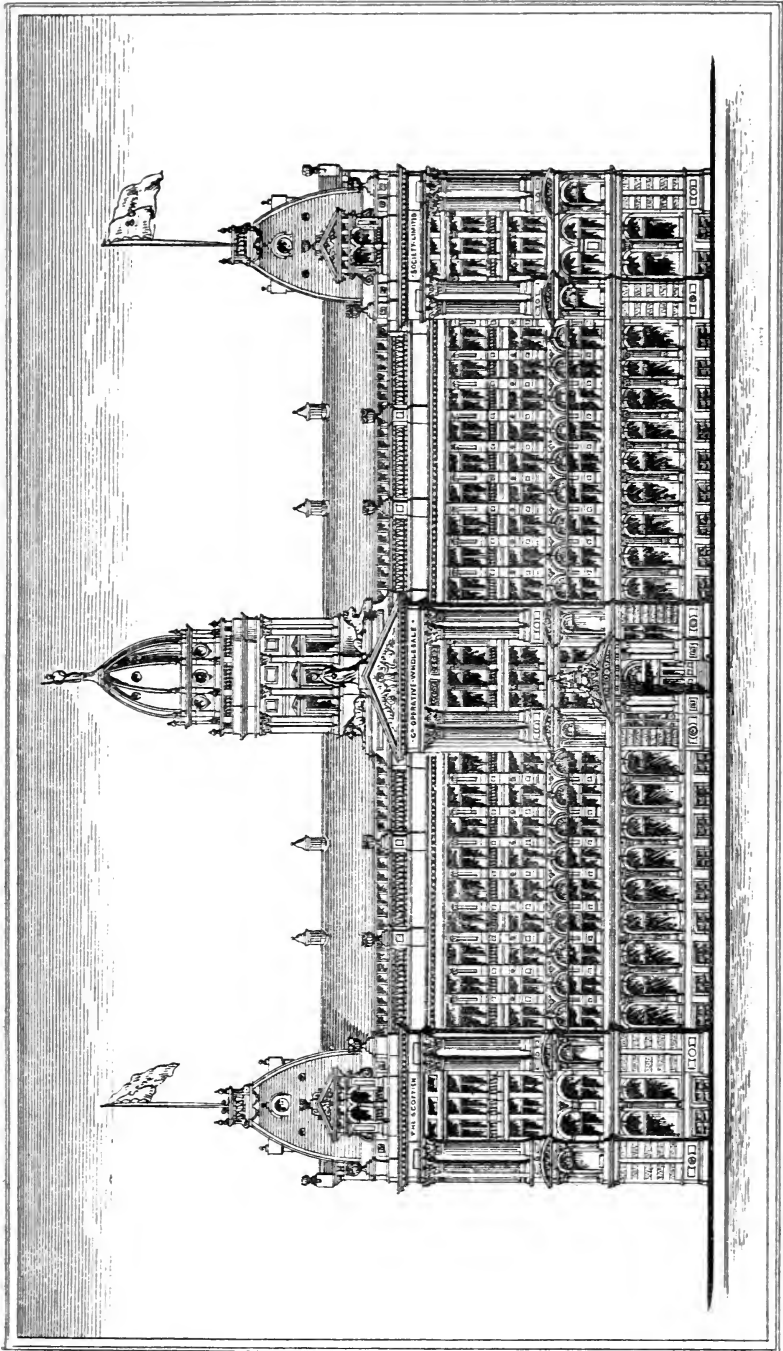


REGISTERED OFFICE, GROCERY AND PROVISION WAREHOUSES, 119 PAISLEY ROAD, GLASGOW.



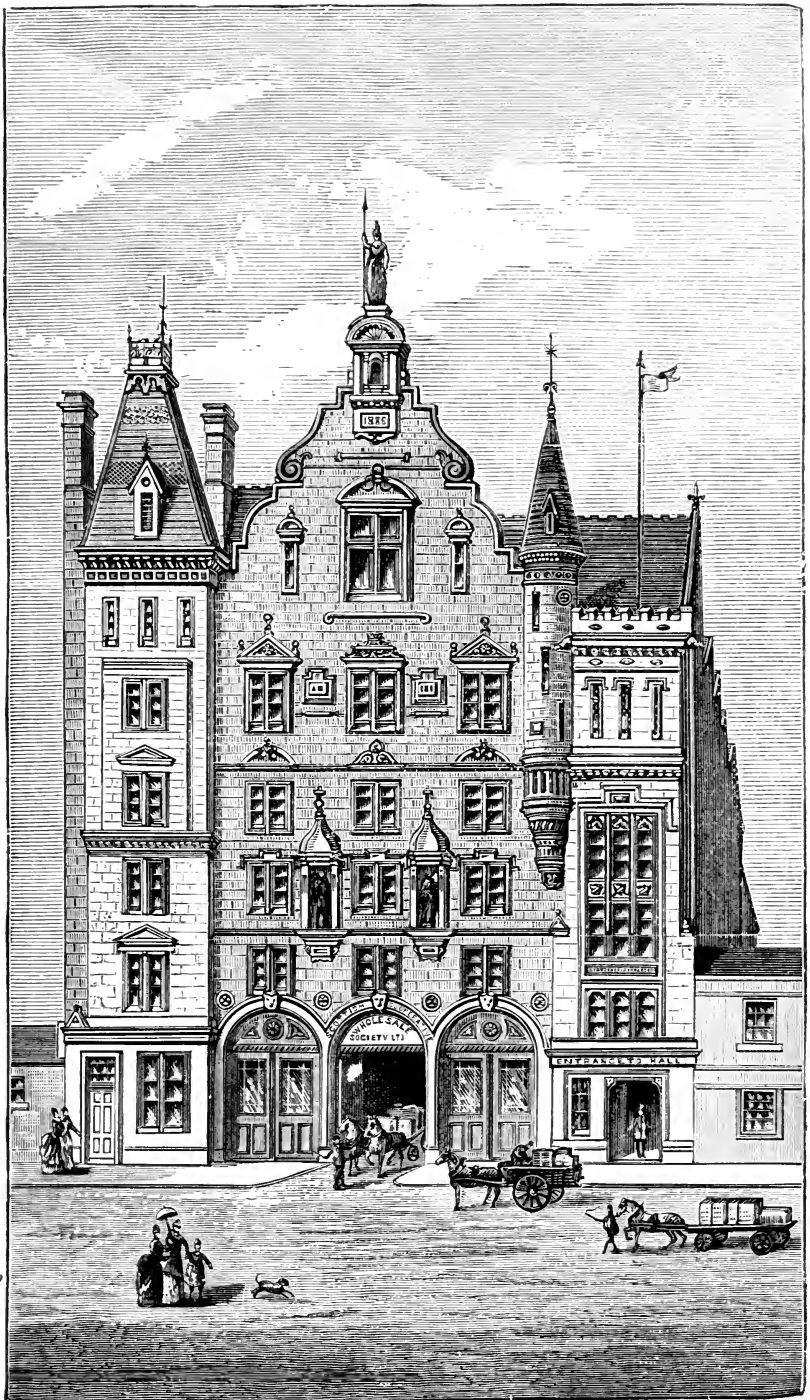


GLASGOW DRAPERY, BOOT AND SHOE, AND FURNITURE WAREHOUSES, DUNDAS STREET.

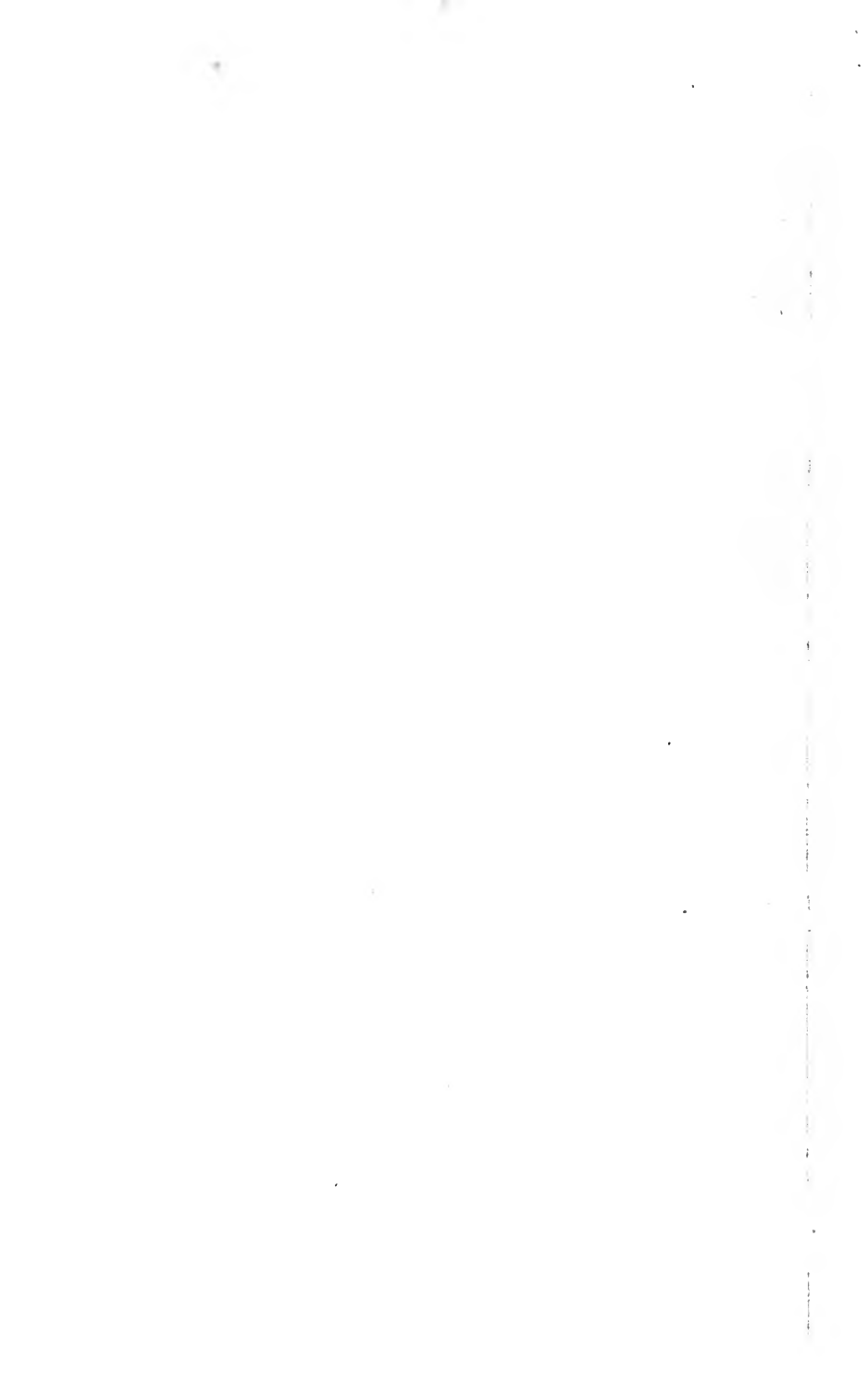


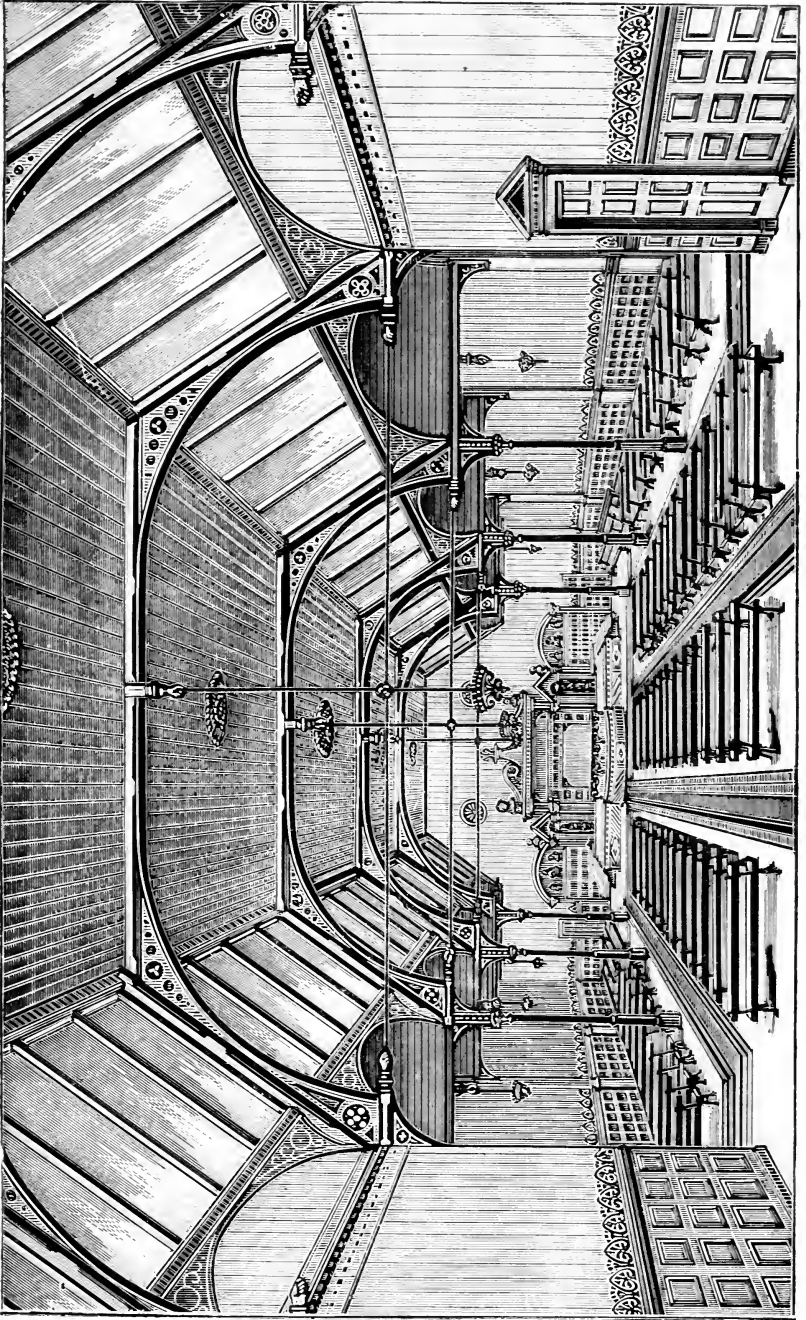
NEW CENTRAL OFFICES, MORRISON STREET, GLASGOW.



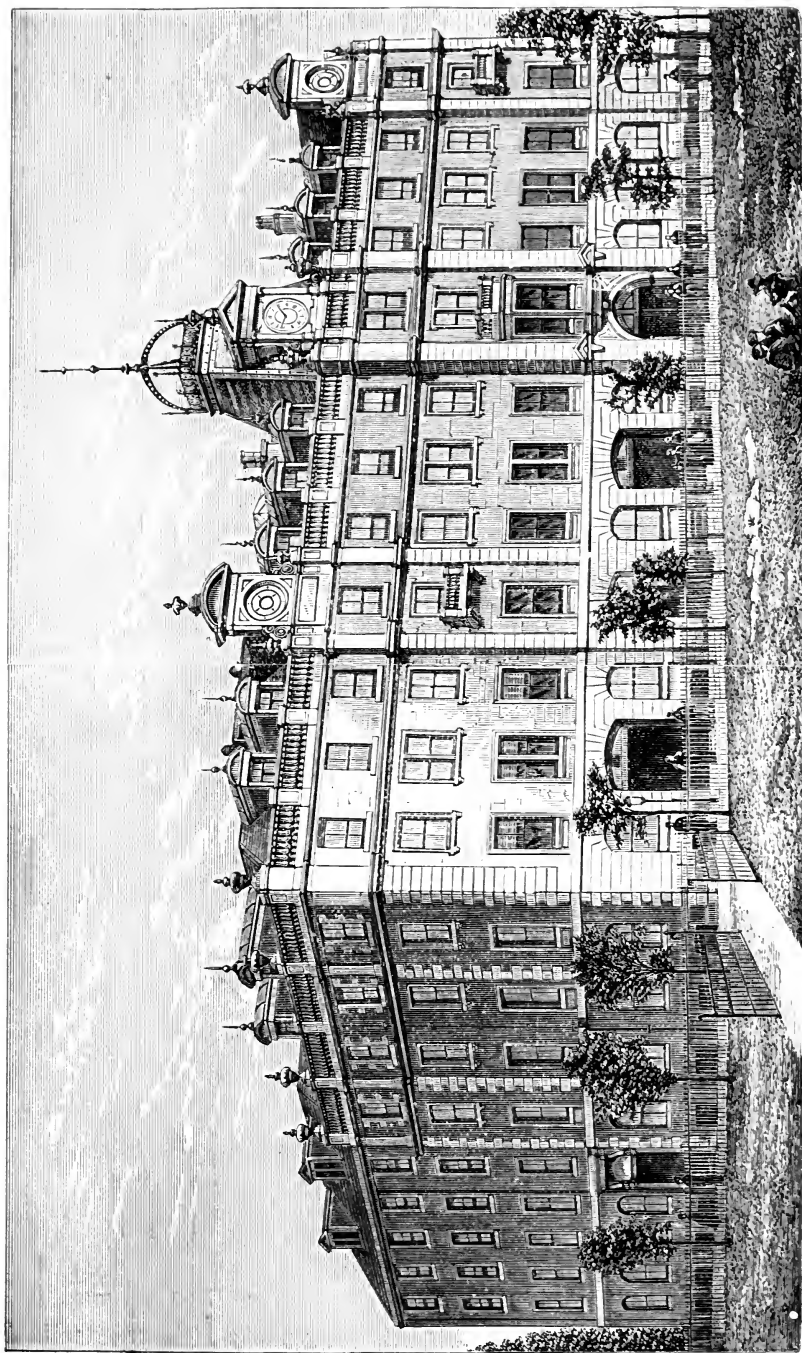


GLASGOW GROCERY AND PROVISION WAREHOUSE AND HALL,
CLARENCE STREET.

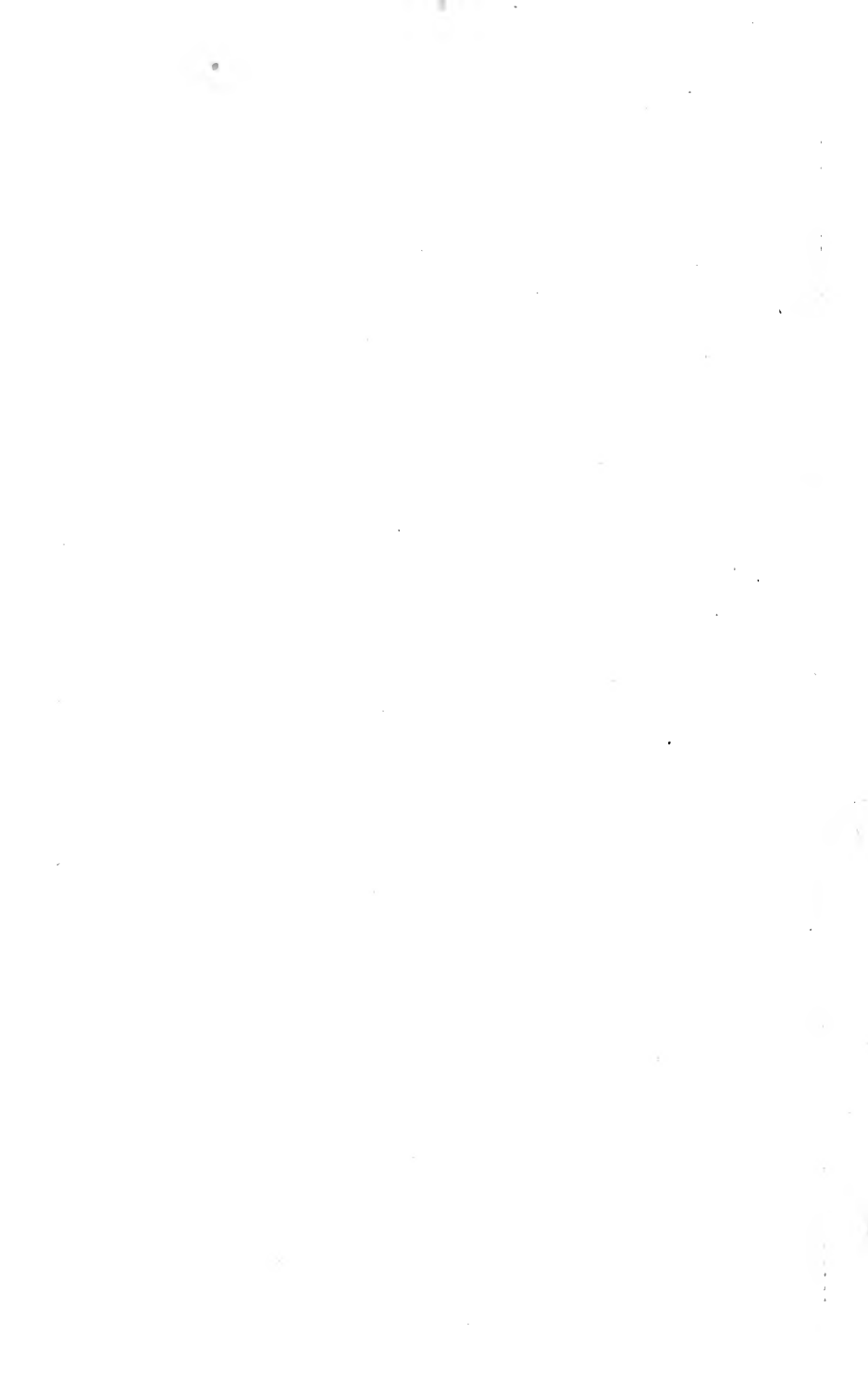


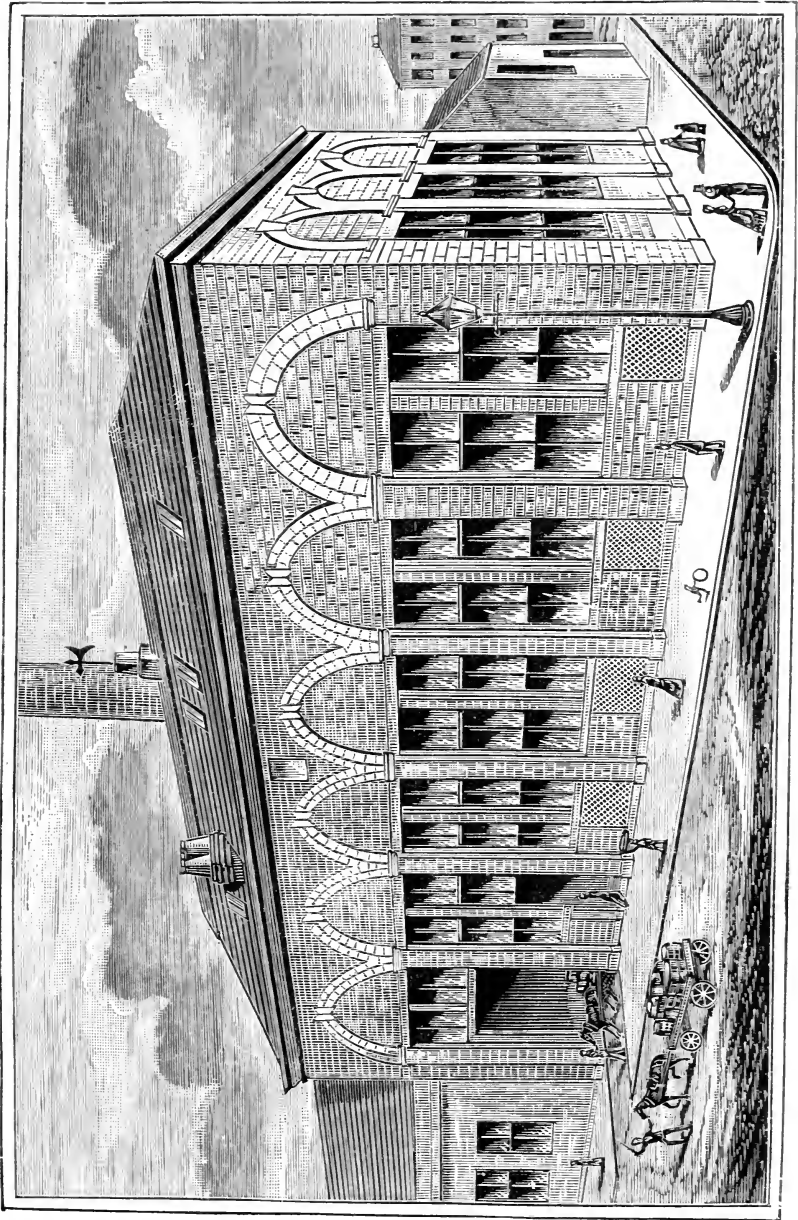


INTERIOR OF CO-OPERATIVE HALL, CLARENCE STREET, GLASGOW.

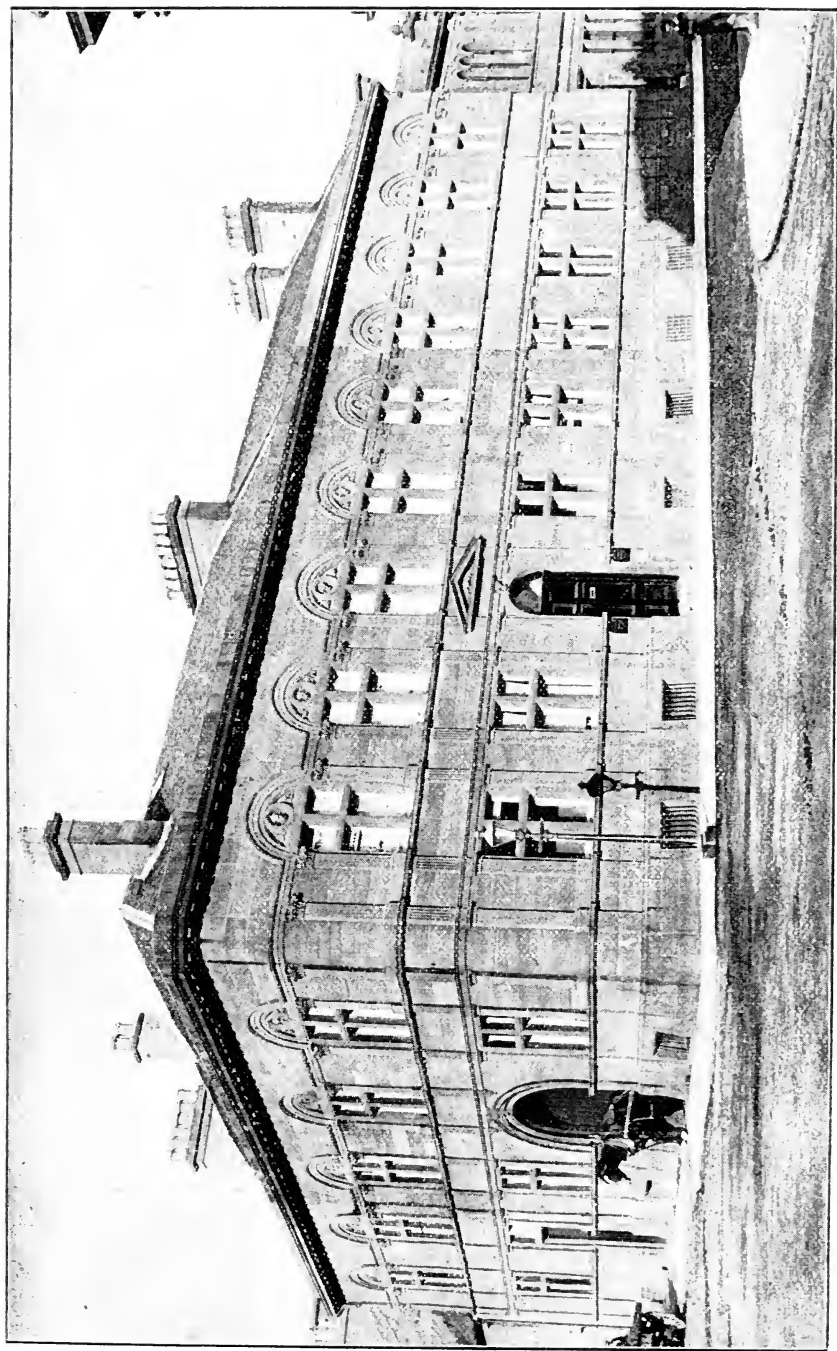


LEITH GROCERY AND PROVISION WAREHOUSE LINKS PLACE.

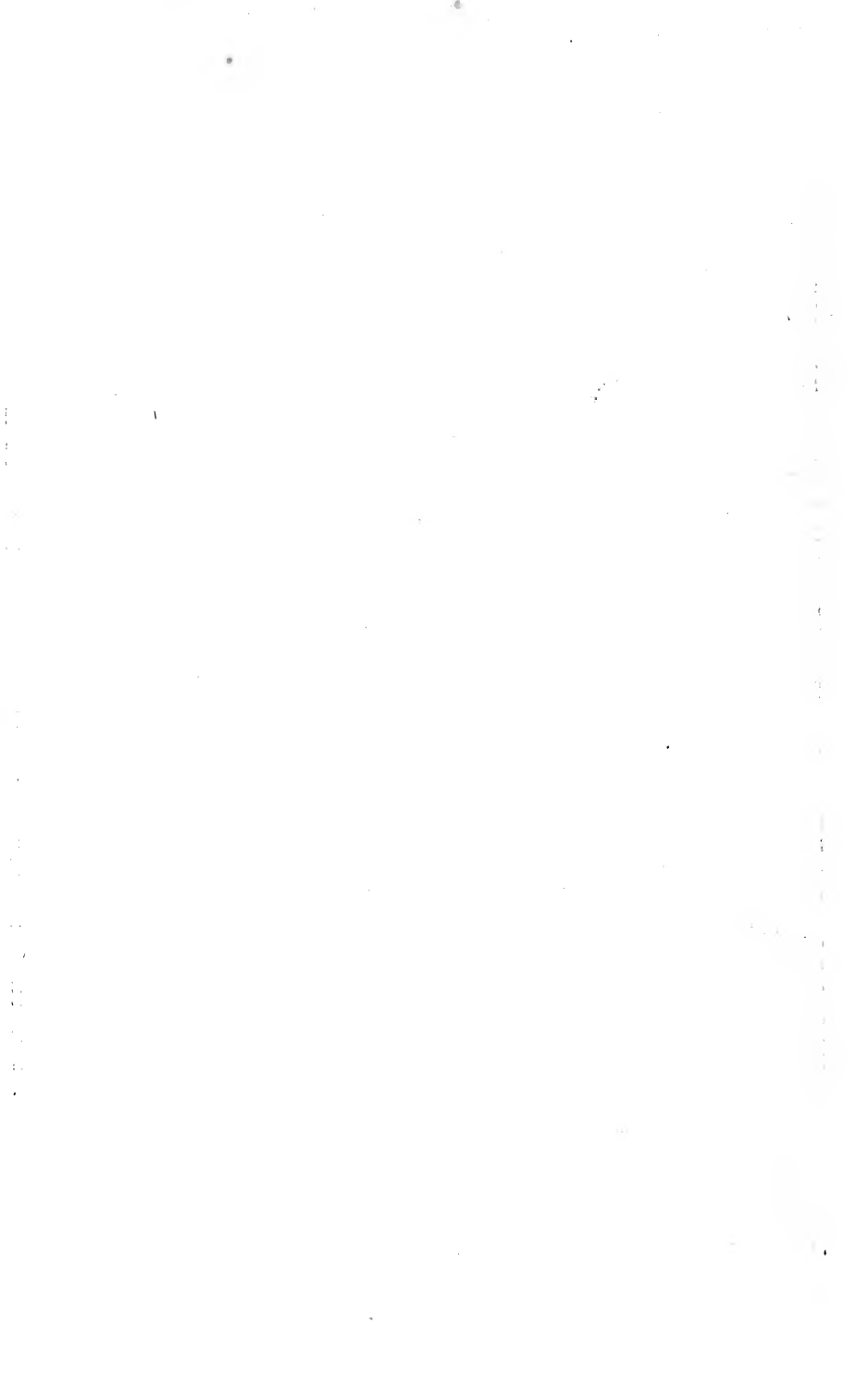


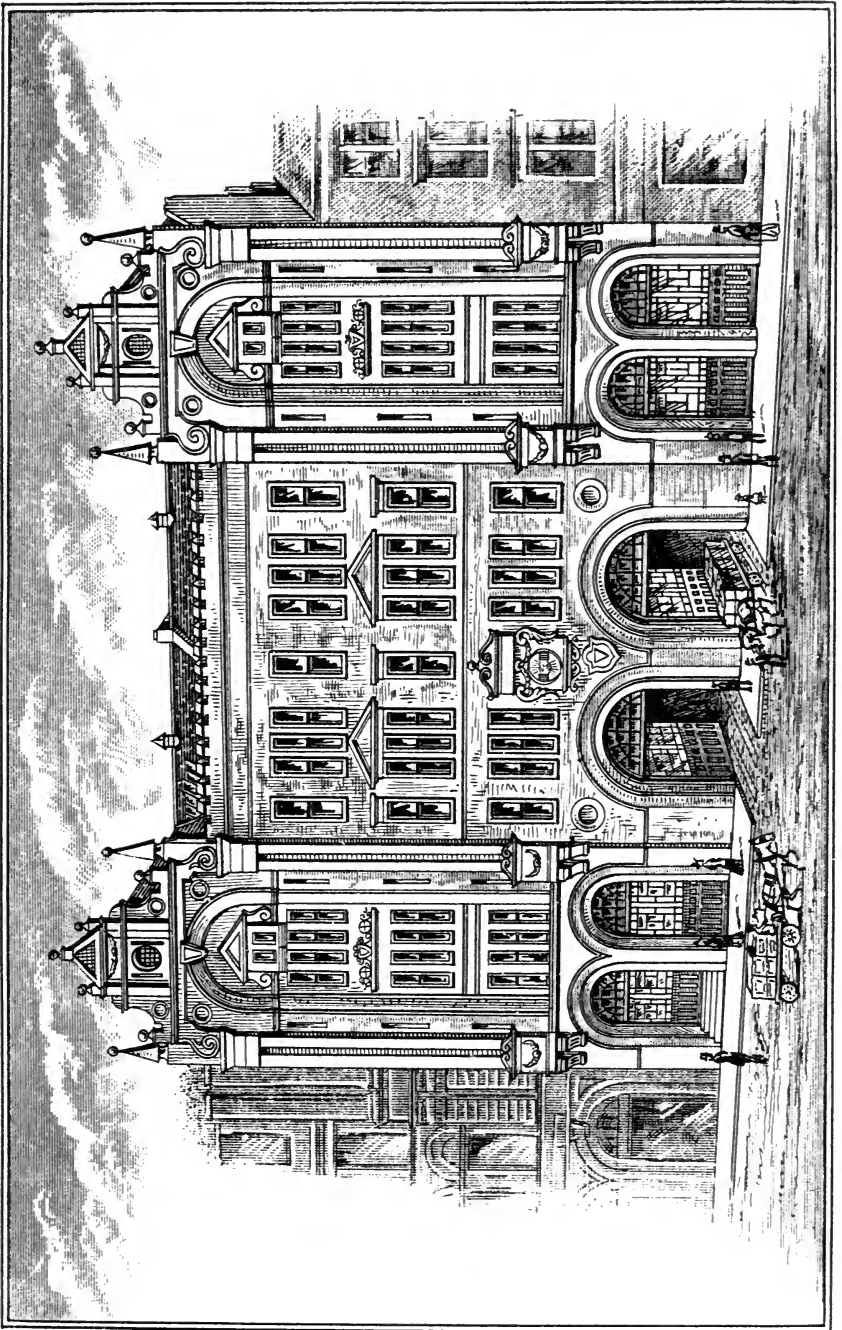


DUNDEE GROCERY AND PROVISION WAREHOUSE, TRADES LANE.



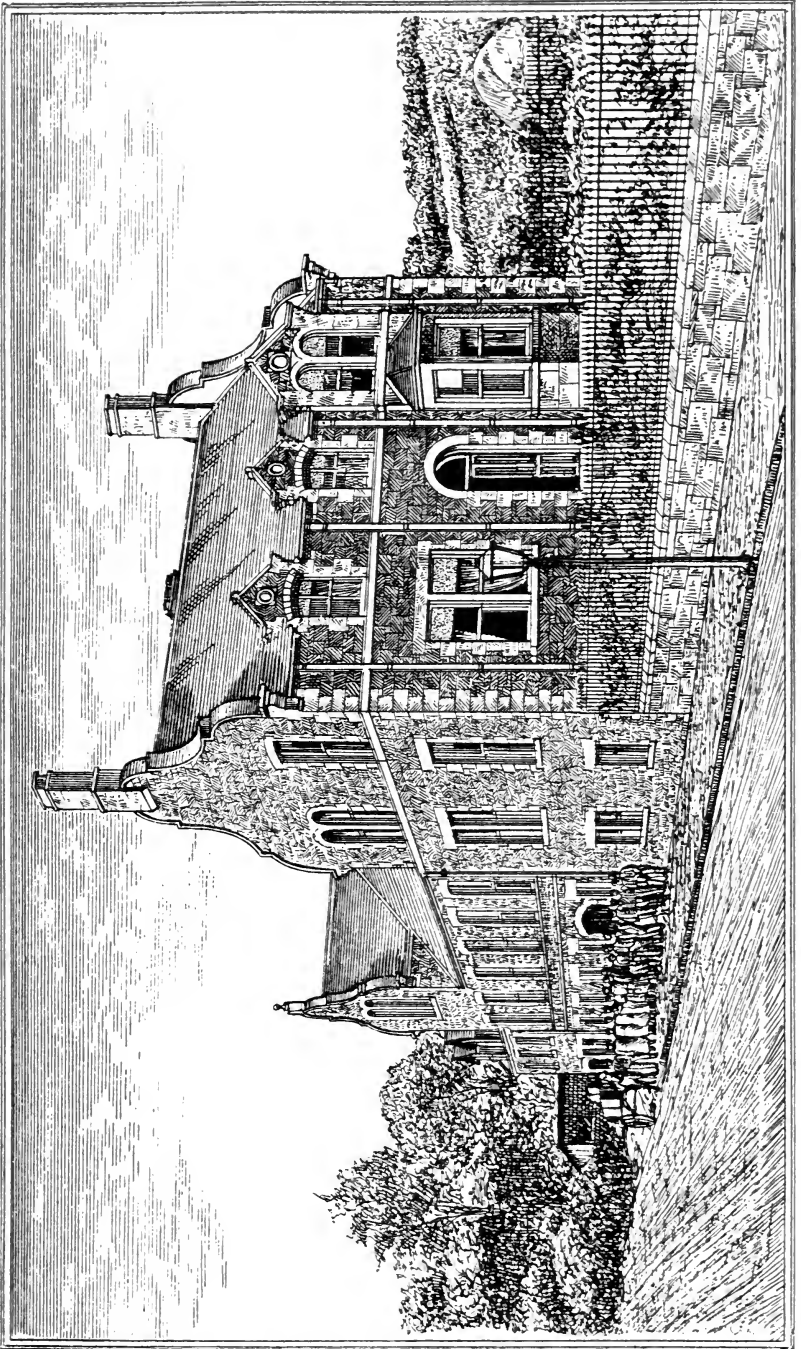
KILMARNOCK GROCERY AND PROVISION WAREHOUSE, GRANGE PLACE.



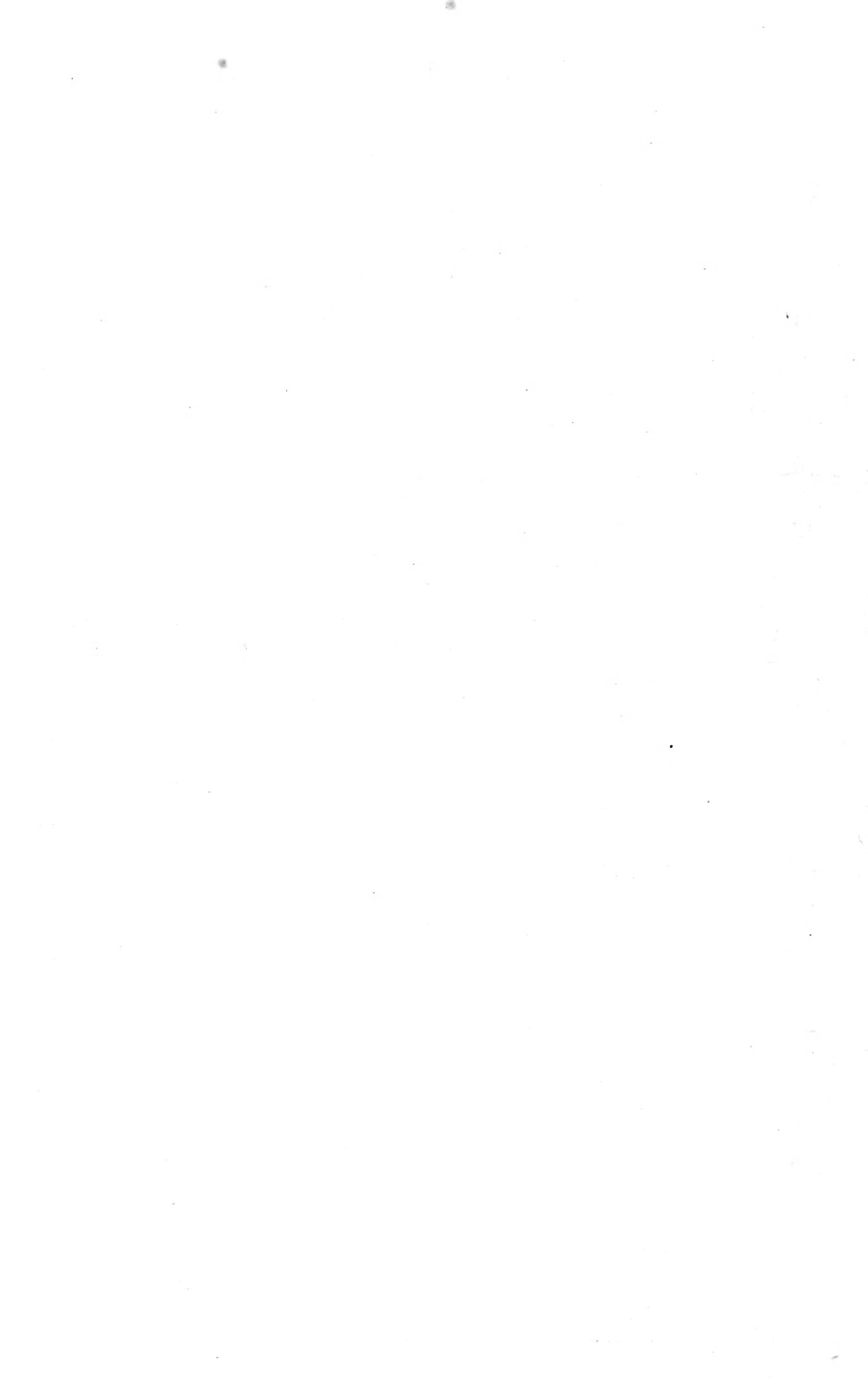


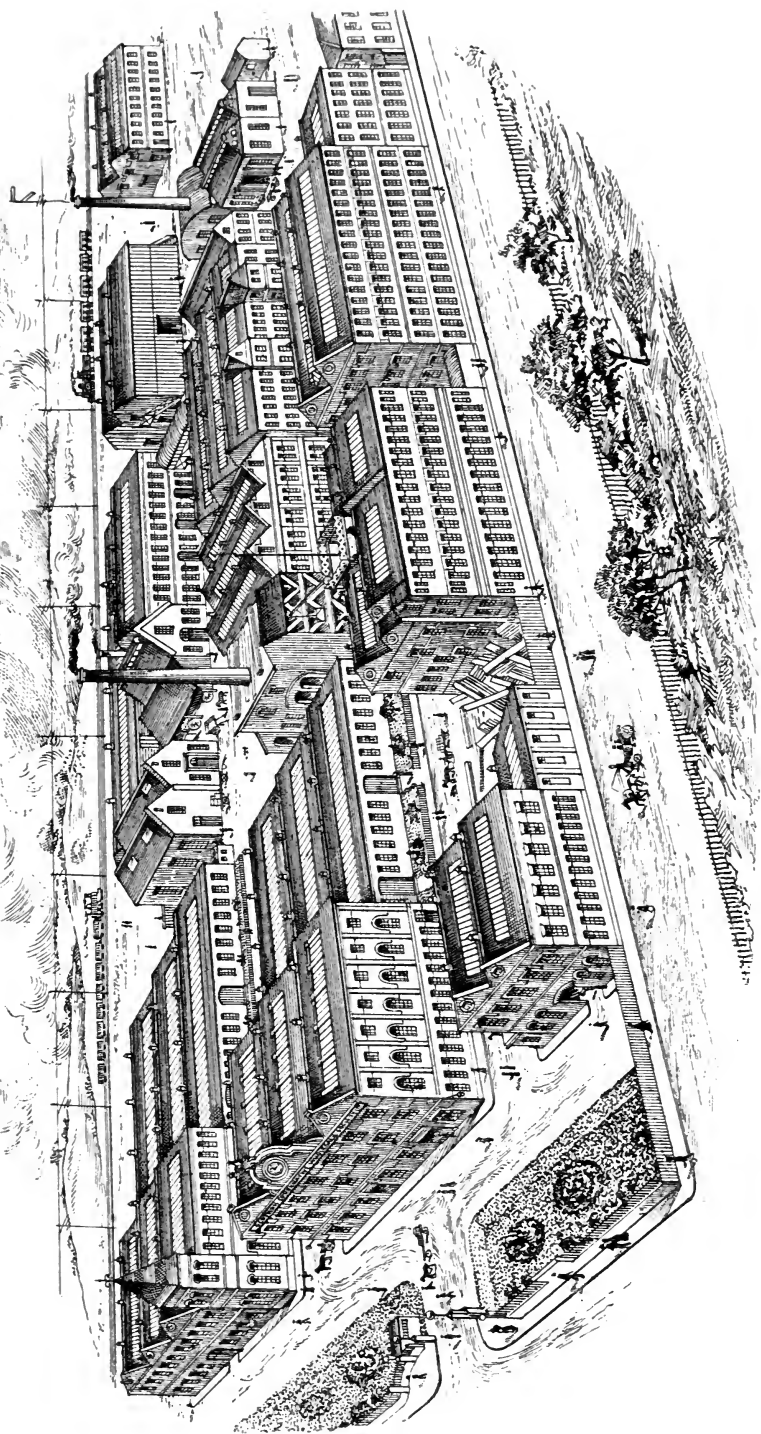
GROCERY, &c., CROOKSTON STREET, GLASGOW.





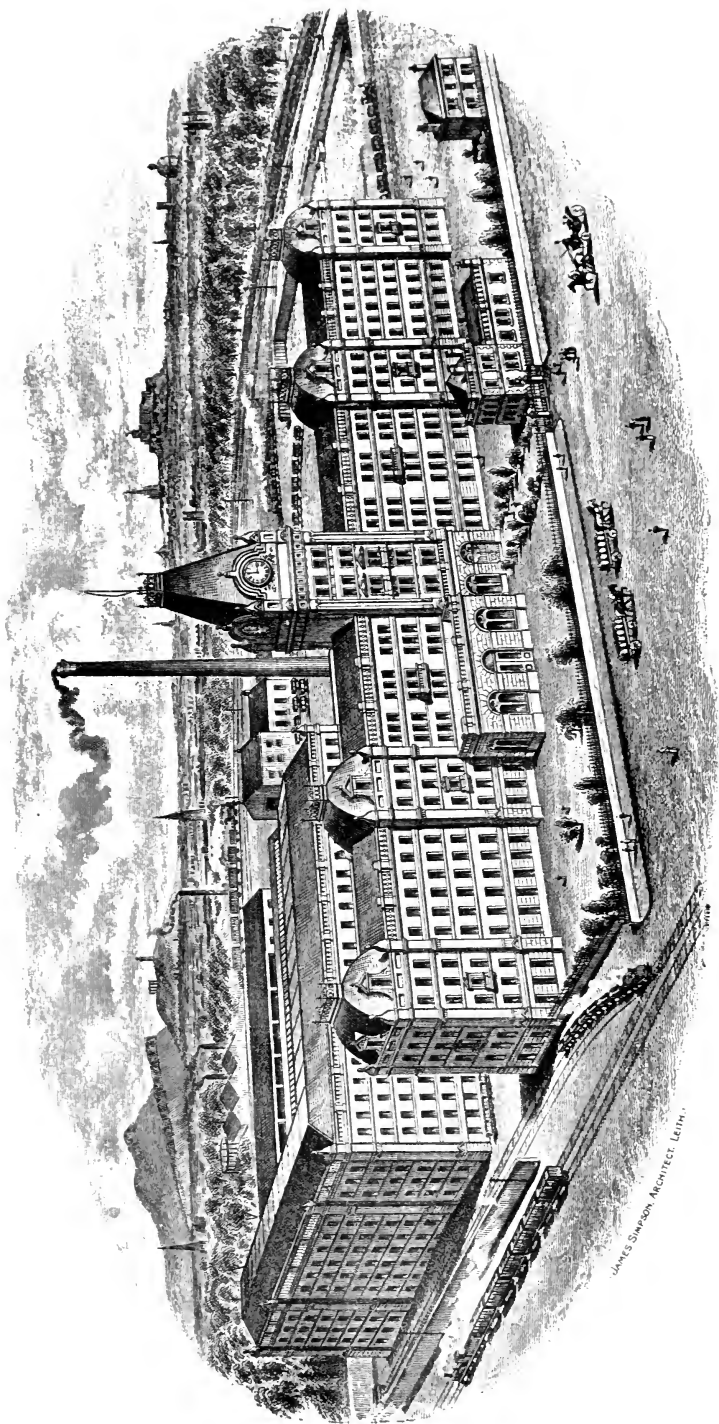
ENNISKILLEN DEPOT — BUTTER, EGGS, AND BACON.





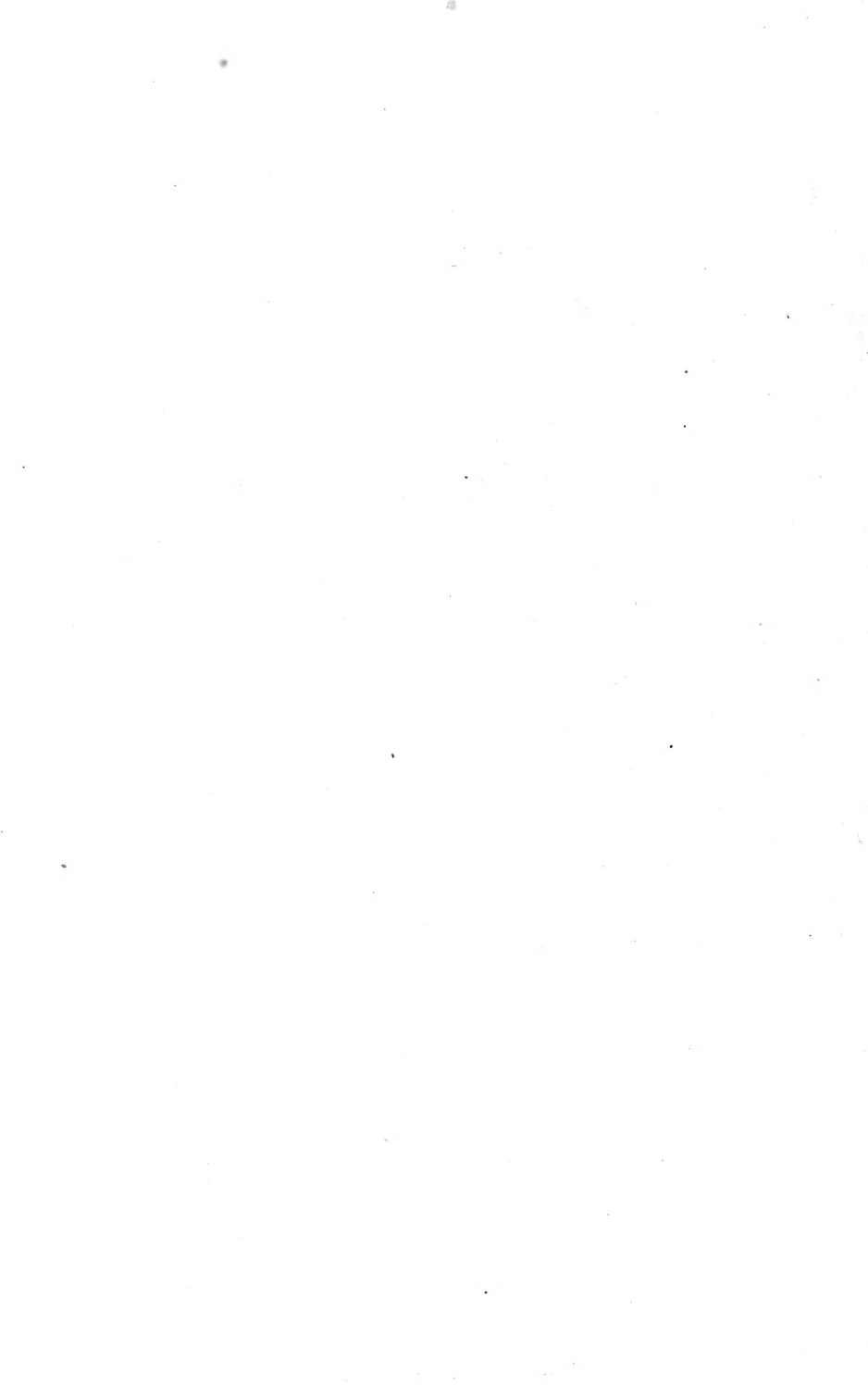
PRODUCTIVE WORKS, SHIELDHALL, GOVAN, NEAR GLASGOW.





· CHANCELOT ROLLER FLOUR MILLS · EDINBURGH · 1891 ·

JAMES SIMPSON, ARCHITECT, LEITH.



Twenty-seven Years' Wholesale Distribution in Scotland.



Scottish Co-operative Wholesale Society Ltd.

YEARS.	CAPITAL.	SALES.	PROFITS.	YEARS.
1868, 13 weeks	£1,795	£9,697	£48	13 weeks, 1868
1869, 52 "	5,175	81,094	1,304	52 " 1869
1870, 50 "	12,543	105,249	2,419	50 " 1870
1871, 52 "	18,009	162,658	4,131	52 " 1871
1872, 52 "	30,931	262,530	5,435	52 " 1872
1873, 52 "	50,433	384,489	7,446	52 " 1873
1874, 52 "	48,982	409,947	7,553	52 " 1874
1875, 52 "	56,751	430,169	8,233	52 " 1875
1876, 51 "	67,219	457,529	8,836	51 " 1876
1877, 52 "	72,568	589,221	10,925	52 " 1877
1878, 52 "	83,174	600,590	11,969	52 " 1878
1879, 52 "	93,077	630,097	14,989	52 " 1879
1880, 52 "	110,179	845,221	21,685	52 " 1880
1881, 54 "	135,713	986,646	23,981	54 " 1881
1882, 52 "	169,429	1,100,588	23,220	52 " 1882
1883, 52 "	195,396	1,253,154	28,366	52 " 1883
1884, 52 "	244,186	1,300,331	29,435	52 " 1884
1885, 52 "	288,946	1,438,220	39,641	52 " 1885
1886, 60 "	333,653	1,857,152	50,398	60 " 1886
1887, 53 "	367,309	1,810,015	47,278	53 " 1887
1888, 52 "	409,668	1,963,853	53,538	52 " 1888
1889, 52 "	480,622	2,273,782	61,756	52 " 1889
1890, 52 "	575,322	2,475,601	76,545	52 " 1890
1891, 52 "	671,108	2,823,036	89,090	52 " 1891
1892, 53 "	778,494	3,104,768	96,027	53 " 1892
1893, 52 "	869,756	3,135,562	89,116	52 " 1893
1894, 52 "	940,835	3,056,582	88,452	52 " 1894
1895, 26 "	1,067,448	1,624,188	57,837	26 " 1895
TOTALS.	1,067,448	35,176,982	959,657	TOTALS.

Commenced September, 1868.





Bonus to Labour.

THE payment of bonus, since its institution in 1870, has taken three different forms. Till 1884 employés received on wages earned double the rate per £ allocated as dividend on members' purchases. This arrangement was then replaced by one which set aside the double claim of the employé, and, recognising a difference between workers in the distributive and productive departments, established a differential rate. The distributive employés received the same rate of bonus as was the rate of dividend on members' purchases, and the rate of bonus to productive workers was determined by the net aggregate profit made in the manufacturing departments only. This arrangement continued till 1892, when the system of bonus payment was again revised. Hitherto the whole bonus allocated had been paid over; but the present system, which allows a uniform rate to both distributive and productive departments, requires that one-half of each worker's bonus be retained and put to his credit, forming a special fund called the Bonus Loan Fund. This capital bears interest at the rate of four per cent per annum, and is only withdrawable when the employé leaves the service of the society.

EMPLOYÉ—SHAREHOLDERS.

Simultaneously with the introduction of the present scheme of bonus, arrangements were made to permit of employés becoming shareholders in the society. The number of shares held by one individual may range from five to fifty of twenty shillings each, and the paid-up capital bears interest at the rate of five per cent per annum. By the rules of the society, the shareholding employés are entitled to send one representative to the quarterly meeting, and one for every 150 employés who become shareholders. At the present time 186 employés hold 2,819 shares, entitling them to send two representatives to the business meetings of the society.

The following statements show the amount of bonus paid each year from 1870 to date, and the total amount thus paid to employes, also the Bonus Loan Fund at date, and the Employé-Shareholders' Fund at 29th June, 1895:—

FIRST BONUS SCHEME.

	Amount.	Average	
		Rate per £.	
	£ s. d.	s. d.	
Quarter ending November 19, 1870.....	5 11 0	0	8
Year " " 18, 1871.....	40 10 0	0	10½
" " " 16, 1872.....	52 7 0	0	9½
" " " 15, 1873.....	90 1 8	0	9½
" " " 14, 1874.....	116 9 0	0	8½
" " " 13, 1875.....	109 15 4	0	8
" " " 4, 1876.....	108 13 4	0	8
" " " 3, 1877.....	121 10 0	0	8
" " " 2, 1878.....	147 17 0	0	8
" " " 2, 1879.....	203 3 0	0	9½
" " October 30, 1880.....	322 9 3	1	1
" " November 5, 1881.....	368 3 8	1	0
" " " 4, 1882.....	453 9 1	0	11
" " " 3, 1883.....	542 3 0	0	11½
" " " 1, 1884.....	484 2 6	0	9½

SECOND BONUS SCHEME.

Year Ending	Distributive Amount.			Rate per £.	Productive Amount.			Rate per £.
	£	s.	d.		£	s.	d.	
Oct. 31, 1885	483	13	1	0 6½	.....	.....	.....	..
Dec. 25, 1886	873	0	6	0 6½	.....	.....	.....	..
" 31, 1887	603	0	2	0 6½	.....	315 2 1	.....	0 4
" 29, 1888	683	12	1	0 6½	.....	628 11 7	.....	0 7
" 28, 1889	833	16	10	0 6½	.....	1,016 14 10	.....	0 8½
" 27, 1890	1,139	6	10	0 7	.....	1,752 10 6	.....	0 11
" 26, 1891	1,208	9	3	0 6¾	.....	1,802 14 9	.....	0 9
" 31, 1892	1,813	8	3	0 6½	.....	2,320 11 4	.....	0 9

PRESENT BONUS SCHEME.

	£	s.	d.	Rate per £.
				s. d.
Year ending December 30, 1893	3,775	15	0	0 6½
" " " 29, 1894	3,563	18	9	0 6
Half year ending June 29, 1895	2,049	6	10	0 6½

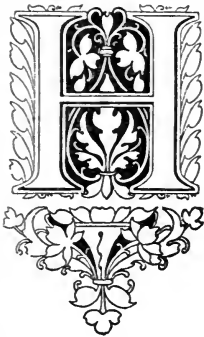
Total amount paid as bonus to 29th June, 1895 £28,029 17 6
 Amount of Bonus Loan Fund at 29th June, 1895..... 2,921 5 5
 Employé-Shareholders' Fund at 29th June, 1895—186 employes holding
 2,819 shares, with £1,710. 8s. 1d. paid up.

THE FOOD OF THE PEOPLE :

A RETROSPECT AND PROSPECT.

BY THOMAS OLIVER, M.A., M.D., F.R.C.P.,

PHYSICIAN TO THE ROYAL INFIRMARY, NEWCASTLE-UPON-TYNE.



OW we shall be fed is a question the importance of which cannot be over-stated. The character of our food is intimately associated with the nature of the mechanical or mental work we are engaged in, and our means of living. Two important facts at once engage our attention, and these are the rapid increase of the population causing an enlarged demand for food not only in Great Britain and Europe, but in those countries which have hitherto been regarded as the granaries of Europe, and the other is the migration of the agricultural labourers into the towns. The continued depletion of our rural districts is a circumstance to be regretted, but as this is occurring equally in other countries in Europe as well as in America, it cannot be due to the operation of Free Trade to which some have attributed it, nor to insufficient capital, excessive rent, and insecure tenure, though these may not be without their influence. Within the last ten years it is estimated that in Britain alone not less than 2,000,000 of the rural population have left their native villages and made their way to already over-congested mining, manufacturing, and commercial centres. Verinder* states that the percentage of the population engaged in or supported by agriculture in England and Wales in 1851 was 23·7; in 1861, 20·9; in 1871, 16·5; and in 1881, 13·2. There has, therefore, been a steady diminution of farmers, agricultural labourers, and shepherds. Albert Shaw † reminds us that

* "Workers on their Industries."—*Verinder*.

† "Municipal Government."—*Shaw*.

THE FOOD OF THE PEOPLE : A RETROSPECT AND PROSPECT.

English urban life is now almost equal to three-fourths of the whole population ; that in Scotland there are three townspeople for every one in the country ; that in France, though the tidal movement has been less marked owing to the low birth-rate, the urban population is equal to 40 per cent of the whole ; and that in Germany and Holland the stream of human life has been townwards. Large tracts of land that formerly used to grow wheat are passing out of cultivation ; and whilst this is taking place there is an annually increasing number of mouths to be fed. It is several years since Britain attempted to feed her own population—to-day she would find it difficult to do so for more than a very limited period. In 1854 our growth of wheat was 140,000,000 bushels ; in 1894 it was only 61,000,000 bushels—in other words, a smaller amount was grown to supply a population of 38,000,000, or two-thirds larger than it was in 1850. The population of the whole of Western Europe is growing at a greater pace than formerly. How it is to be fed is becoming a difficult problem. Food and men have for years been travelling in opposite directions. The stream of European migration has been westwards ; the direction of flour and food-stuffs eastwards. In 1840 Europe produced 80 per cent of the wheat of the world ; at present she produces 56 per cent. In the interval the United States and colonies have quintupled their production.

According to Parkes,* one pound of bread per head is consumed per day by the European races. This is equal to an annual consumption of nearly $5\frac{1}{2}$ bushels of wheat. A bushel of wheat, roughly speaking, weighs 60lbs. ; this yields four-fifths of its weight of flour, and 100lbs. of flour make 140lbs. of bread. If, therefore, five bushels of wheat are required by each individual per annum, and the average crop is thirty bushels to the acre, each acre of corn land will be capable of supporting six people. Hitherto we have depended largely upon the United States for our wheat, but already most of the best land in the States has been absorbed, and in order to meet by wheat alone the requirements of its yearly increasing population, which is equal to 1,250,000, it is necessary to bring annually under the plough 208,000 acres of land—an extent of surface equal to our county of Huntingdon. But as all this cannot be land devoted only to the growth of wheat, probably double would be required, say 400,000 acres, an extent of surface equal to 625 square miles.

To the serious consequences of an increasing number of corn-growing counties of England going out of cultivation and an increasing population in the United Kingdom must be added the rapid stride of the population in the United States, and the deficient yield per acre of that country's soil, which is only 13 bushels

* "Manual Practical Hygiene."—Parkes.

THE FOOD OF THE PEOPLE : A RETROSPECT AND PROSPECT.

instead of 30 to the acre as mentioned previously.* Five to six hundred square miles of fertile land will produce sufficient wheat to support each million of the population, but since the yield per acre in the United States is only 13 as against 30 bushels, we must therefore double the figure so as to allow 1,000 square miles for the support of each million. At first sight these numbers appear extravagant, and yet when we consider such an old country as France, with its well-tilled fields and its industrious peasantry, we find a population of 38,000,000 unable to find sustenance on its 204,092 square miles, and obliged to import more food in the form of grain and flour than it exports as wine, fruit, vegetables, &c. In France 5,000 square miles of soil are required for each million of the population. If, therefore, the annual increase of the population in the United States is 1,200,000, and the yearly addition to the population of Western Europe is admitted to be 1,400,000, then in these two parts of the world alone we have two and three-quarter millions of new mouths to be fed annually, and all this in the face of such a circumstance as the continued exodus of the rural population into the towns. Back to the land, but on more equitable terms, is the cry heard in our own country, and with work there awaiting willing hands the industrial tension in our large commercial centres would be somewhat lessened. The agricultural capabilities of our land have never yet been tested to the full, and whilst to many the rapid increase of the world's population is appalling—a growth proceeding not in an arithmetical progression, or equal increments in equal times, but geometrically, like compound interest, so that larger and larger numbers are added in each successive period—there need be no immediate fear, for the resources of the American wheat fields, though not without limit, have never yet been reached, there still remaining, according to reliable authorities, in the United States alone 660,000,000 acres (1,000,000 square miles) awaiting cultivation, and in Canada 200,000,000 acres of uncultivated land.

The rapid growth of population in the United States, with its increased consumption of food, obliges us to turn naturally to Canada. It is unwise that Britain should feel herself dependent for food-stuffs upon the United States. Controlling the market, as the States necessarily would, she could force this country to submit to terms not altogether agreeable or acceptable. On the other hand, the value of American produce depends upon her export; competition by Canada therefore favours cheap flour. Parkin† shows to what an extent Canada may yet be relied upon for wheat

* "Studies in Statistics."—*Longstaffe*.

† "The Great Dominion."—*Parkin*.

THE FOOD OF THE PEOPLE : A RETROSPECT AND PROSPECT.

and farm produce. In the far North-West there are signs of great agricultural activity. For 30 or 40 cents a bushel of wheat can be carried to Liverpool. The market for Canada is England, and not the United States. Canada has room for 1,000,000 more agriculturists on its soil—there being in Manitoba alone 360,000 square miles, or 230,000,000 acres, of which only 1,000,000 is under cultivation. With all this possibility for fuller agricultural development there need be, at present, no alarm as regards the growth of food for our increasing population. Atkinson* makes it the theme of his book that while consumption by man as regards the means of subsistence is limited, the power of material production, or the power of mankind to direct the forces of nature to the purpose of sustaining human life in comfort and welfare, is practically unlimited. The anxiety of the disciples of Malthus is not yet confirmed by facts. During this century the food of civilised nations has rather increased than diminished, and that too at a rate faster than the increase of population—an indication that in this particular respect the material welfare of mankind has certainly advanced.

With such an outlet as Canada and the United States for our overgrown populations, the question naturally arises—why don't more of our sons and daughters go there—why don't they return even to our own rural districts? The present century has witnessed a great change in our social and industrial life. It is the age of contrasts—enormous wealth and absolute poverty; a feverish race for gold, and the dullest apathy through loss of heart—asserting individualism and militant socialism. Personal discontent and social unrest are abroad to-day. The verities of the economic doctrines of the older schools are being questioned, and are sought to be supplanted by theories based upon sentiment rather than experience, upon what might be than upon what would be if our social conditions were completely reorganised. The hard life of the toiler, the long hours of the artisan, his insufficient wage and imperfect food, and the general unhealthy conditions under which too often the labourer is forced to live, form a group of facts which, when strongly presented to him and contrasted with the luxuries enjoyed by those whose wealth he is said to have created, tend to rob labour of its dignity and reward, and cause toil to be regarded as slavery. Rural life, with all its natural beauties, has ceased to have attractions for men and women who have once come under the feverish spell of the social life of the towns of to-day. It is too quiet for such. The village heart beats too slow, and is not in touch with the rapid pulse of the towns. In spite of the fact that life can be

* "Industrial Progress of the Nation."—*Atkinson*.

lived under healthier conditions, the purchasing power of money and the means of maintaining life greater in our villages, the tendency is still for the stream of rural life to flow onwards to the towns. Some day there will have to be a pulling-up and a social reorganisation. New values will have to be assigned, the standard of which must not be measured by wealth. Greater simplicity of life will become a necessity, and personal ability and noble character the first step in the ladder of social life. Industrial competition is blamed as the cause of depression in trade through over-production, and is regarded by the labourer as the cause of his small wages; yet competition pervades all classes, and exists through all phases of human life. It is this element in our social life which, creating a feeling of aspiration, urges the individual to larger effort, and ends by evolving bad as well as good traits of character. It makes a man unhappy in his quiet village home. He sees others socially surpassing him in the race of life; he, too, must therefore venture into the city, and rise into affluence with the ebbing tide, or sink into obscurity with its fall. In spite of all these circumstances there are yet many for whom rural life has attractions, and who, provided work can be got, labour fairly remunerated, suitable house accommodation found, and an interest given them in the land they cultivate, are wishful to again become sons of the soil.

Whilst agriculture has declined, it yet occupies a prominent place in the affairs of the nation. It is our oldest industry. The conditions under which it has been carried on for centuries and the social life of the peasantry have formed the groundwork of many a page in history. Agriculture is the most important industry of mankind, for, without counting India and China, it gives employment to 80,000,000 people, represents capital to the extent of £23,000,000, and produces annually £4,000,000,000. It is from the peasantry, therefore, that we learn something of the evolution of feeding, for in our diet, just as in our moral, industrial, and social life, there has been a gradual transition from the lower to the higher—from the coarser food of our ancestors to the refined and delicate meals of to-day. It is impossible to say definitely what was the diet of primitive man, but in all probability it was vegetable food and fruit, as these were within his reach, and would not require cooking. On the other hand, infants then, as now, would be brought up at the breast. Milk would therefore form an important item in the dietary of the primeval child. In the Bible we are told of Abel being a keeper of sheep, and Cain a tiller of the ground, so that to vegetarianism at this period must have been added the consumption of animal food. Certain kinds of grain have been found in the tombs in Egypt, also wheat in mummy-cases, and olive oil, still liquid, in sealed vases at Thebes, facts which allow us to infer as to the kind

of food used by the Egyptians. The discovery of loaves of bread, blackened through the separation of their carbon, amongst the ruins of Pompeii, still retaining their shape, and bearing inscriptions as to the method of their manufacture, give us some insight into the food of the Romans, further details of which exist in the literature of the period and in the pictorial representations on the walls of the wealthy Pompeians. The presence of the bones of the deer and the pig, of oyster and mussel shells at the Chesters, a Roman camp near Hexham, on the banks of the Tyne, indicate that the soldiers of the Roman garrison knew the value of animal food, and had a variety of it. In the kitchen-middens of Scandinavia, and in the waste heaps beside the lake dwellings of Switzerland and Savoy, are the *débris* of bones, oyster shells, fish hooks, also fruits and grains in excellent preservation, all of which bear testimony to the mixed character of the food of an age long gone. From the peat around the lake dwellings of Pfaffikon, in the canton of Zurich, there is considerable evidence that animal food was largely used. These dwellings were built on piles covered with planks, and as no metal was used by the builders they are of great antiquity, for they belong to the stone age anterior to the bronze or iron period, and therefore of considerable interest.

In our own country, so far as the feeding of the people is concerned, we need scarcely go beyond the years of the first agrarian rebellion, which shook feudalism and weakened the relationship of landlord and villein. The legislature at this period still recognised as just the "Law of Settlement," whereby the peasantry were tied to a particular district and could not wander without consent. The State had undertaken to establish a wages tariff, so that a money equivalent might exist for services rendered. At this period of mediæval peasant life 13s. 3d. and a suit of clothes formed the annual remuneration of a bailiff in husbandry, and a shepherd received 10s. Having determined the wages, it became necessary for the State to regulate the price of corn, and with this the size of the labourer's loaf of bread. A sliding scale was in operation at the time of Henry the Third (1216-72), which regulated the price of bread; but at this period the food of the common people was coarse and wanting in variety. Wheaten bread was not always within the reach of the labouring classes. Garnier* says that it was composed of a mixture of oats and tares, or oats and peas, of wheat and rye, or of oats and barley. The wealthier classes were able to procure wheaten bread. As a result of this coarse but wholesome food our mediæval rustics were men of excellent physique, looked upon with admiration by warlike kings as forming splendid fighting material, and so long as

* "Annals of the British Peasantry."—Garnier.

the supply of labour did not exceed the demand, and seasons were favourable and epidemic disease absent, prosperity reigned amongst the toilers. A hundred years after the Black Death (1349), the purchasing power of an English labourer's wages were twice what it was in Edward the Third's reign (1327-77). Along with this financial prosperity came a repugnance towards the coarse food of a day gone by—a tendency to regard with contempt "penny ale and bacon," and a claim for fresh meat and fish. The "golden age" of the agricultural labourer was about to dawn—a period marked in history as the fifteenth century and the first quarter of the sixteenth—when, according to Thorold Rogers, "food was so abundant and cheap that it was no great matter to throw it in with the wages." The fact that our mediæval forefathers were in receipt of 4d. a day as wages, conveys no idea of their prosperity. At this period a man was capable of maintaining himself upon 6d. to 8d. a week. The agricultural labourer purchased many of the necessaries of life at one-twelfth the price of the seventeenth century and bread at one-eighth. When wheat, barley, and rye became scarce through wet seasons, peas, beans, tares, and lentils became substitutes for human food. Where a family was thrifty the housewife generally had salted meat in the bacon rack. For the meal at noontide a hot rasher of salted meat, with cabbage—rather a scarce vegetable at this period—an onion, or a leek, was usually cooked. It was washed down by a swill of ale, for few contented themselves with the teetotal beverage of the age, composed of water, honey, and spice, and known as swish-swash. The long course of salted food throughout the winter, with an insufficiency of green vegetables, too frequently told upon the health of the peasantry, so that with the advent of spring there also came scurvy. Poor as was the dietary of the English peasant at this period, it compared most favourably with that of the French rustic, whose food was apples, brown bread made of rye, no animal food but a little lard, occasionally the entrails of animals slaughtered for the nobles, and their drink water. So heavy was the taxation and so arduous the labour of our Gallic neighbours that they became bent at an early age and feeble; they lived in extreme poverty and misery, unable to defend themselves against disease or national foes; all of which, be it noted, occurred in a realm the most fertile in Europe.

The work of the English peasantry has always been hard, and their hours of toil long, particularly in the seventeenth century, when men began work at four a.m. and were not free to retire until nearly nine o'clock at night.

Towards the end of last century wheat was gradually becoming the food of the people, but to more than one-half of the population it was still inaccessible. Two-thirds of the food in the northern

THE FOOD OF THE PEOPLE : A RETROSPECT AND PROSPECT.

counties was composed of rye and oats, whilst barley was the food of the majority of the people in Wales. In Leeds and the surrounding districts oats were the substitutes for wheat, and in Newcastle-upon-Tyne rye; in Alnwick, Rothbury, and Belford a mixture of barley and peas; whilst in other districts it was barley, rye, peas, and beans. The favourite English dishes were crowdie, peas kail, skilling—so called from skilling or shelling of the oats—and clap bread, from all of which wheat was absent, and yet, poor as this dietary was, it was still superior to that of the French peasantry, who in the poorer districts were living upon roots, cabbages, and chestnuts. Oaten cake at this period formed a conspicuous part of the dietary of the Scotch. The meal was made into bannocks, so called from the Gaelic word “bonn,” meaning a round piece of money, or into clap bread, because it was clapped or beaten out with the hand when in the condition of dough into large round cakes on a board like the “fladbrod” met with in Norwegian cottages to-day, and then placed upon the girdle, still a homely utensil in all Scotch cottages. The Scotch housewife took greater pains with the cooking of food, was much less extravagant than her English sister, and she succeeded in converting cereals into various kinds of cakes, thus earning for her country the title of “the land o’ cakes.” If there was any fault to find with the English labourers in the early part of the last century, it was that their daughters, then as now, were not taught to cook. They could not bake, nor were the farmers’ wives and daughters in England adepts at butter or cheese making.

A hundred years ago the seasons had been above the average, prices were high, but wages were abnormally low. The poor rate was heavy, but in all other respects the prospects were favourable. At this time commenced the Corn Law agitation, by which the attention of the authorities was drawn to the possible relationship between the price of bread and that of labour. The price of bread had increased one-third, whilst labour had only advanced one-seventh. Attempts were made to force Parliament to pass a Bill regulating a minimum wage in accordance with the price of bread, but again and again the Bills were thrown out. The public mind had become imbued with the idea that the prosperity of the labourer depended upon the cheapness of corn, hence the repeal of the Corn Laws became only a matter of time. Once, however, this scale allowance system was adopted in a parish, the people who were idle shared equally with the industrious. This squandering of the public money was not remedied until 1834. At this period bacon, beer, and white bread were within the reach of the English labourer, and unless he got these he was discontented; but in Scotland oatmeal and milk supplied the wants of the cottar. One circumstance which was regarded as favourable to the Scottish peasantry was the fact that

THE FOOD OF THE PEOPLE : A RETROSPECT AND PROSPECT.

they were largely paid in kind. It contributed to sobriety and frugality. This method of payment still lingers in certain parts of Northumberland, in Ayrshire, and other parts in the south of Scotland. It frequently includes permission to keep a pig, cow, or fowls, and to cultivate a piece of ground for potatoes and other vegetables, all of which whilst tending to promote domesticated habits become an additional source of profit to the individual. Improvements in agriculture, however, have only been slowly brought about in Scotland. Potatoes, for example, which were cultivated in gardens, were not planted in the fields until 1740. In the Highlands there was great antipathy shown to their use as articles of diet, and it was not until prejudice was overcome by starvation that our northern countrymen began to eat the starchy tuber. Turnips, which were introduced into England in 1716, began to be cultivated in Scotland in 1739, and then not broadcast as now. They were used in Edinburgh first at dessert. In the seventeenth century agricultural Scotland was not at all in a prosperous condition.* The peasantry were badly fed, seldom tasting animal food. Oats, barley, meal, and kail were their principal food, and fermented whey their drink. Nearly all my readers are familiar with the definition of oats given by Dr. Johnson, viz., "A grain which in England is given to horses, but in Scotland supports the people"—a statement which drew from Lord Elibank the retort, "But where will you find such horses and such men?"—a remark clearly indicating, apart from its patriotic feeling, the nutritive value assigned to oats by his lordship. Agricultural improvements were gradually adopted all over Scotland, and added to the prosperity of the nation. Contented with their lot, and their children enjoying the blessings of an excellent education supplied by the Church schools, the Scottish peasantry gradually became consolidated as a class whose sons have never ceased to play an important part in the welfare of the nation. The same remark applies, but in a less degree, to England. From some of the poor cottages in England men have arisen, like Cobbett, who have played an important part in public life.

Increased wages, cheaper commodities, and the comparative ease with which the necessaries of life are obtainable, have improved the dietaries of the working classes; trade-unionism and the stimulus to industrial activity having also tended to the consolidation and improvement of the social status of the artisan class. Whilst the introduction of machinery has increased production and diminished prices, and given employment to larger numbers of the people, it has broken up our home life by utilising female labour and by abolishing

* *Scottish Review*, January, 1895.—H. G. Graham.

household industries. Improved machinery has also cheapened the price of bread ; it has refined the quality, but not improved the nutritive value of wheat flour. It is a long leap from the simple hand-mill of early Biblical times, such as the two circular flat stones of the ancient Egyptians to the modern system of milling by iron rollers of to-day. The Egyptians of a later period, while owning mills driven by bondsmen, possessed water-mills as well ; and it is known that on the banks of the canals that conveyed water into Rome flour mills were located. At this period slave labour was largely employed. Animals, too, were utilised, but both of these were subsequently replaced by obtaining motive-power from water or wind, the first windmills being erected by the Venetians. For the utilisation of water as the driving power of the corn mills in this country we are indebted to the Romans. The same principle or method runs through the milling of all nations—the Egyptians, Greeks, and Romans, down to our own day—so far as stone mills are concerned. It is impossible to state with perfect accuracy the date at which steam began to be used in corn mills, but it is believed that it was towards the end of last century. Within our own day a great change has come over milling. In 1863, in Buda-Pesth, in Hungary—now the greatest milling centre in Europe, if not in the world—iron rollers were substituted for millstones ; and although the change was gradual and practically unnoticed at the time, this supercession of the millstones by the new method, which compresses the wheat between steel and porcelain crushers, has completely revolutionised the industry. The doom of the millstone was thenceforth sounded, and forthwith flour roller-mills began to be built in England, Germany, France, and America. Now came the opportunity of the capitalist to launch out into schemes requiring foresight, boldness, and money, and thus was dealt a damaging blow to the prosperity of the old corn mills of this country. Palatial mills have been erected here and there, fitted with costly machinery, so that the art of milling has become a science. A visit to the splendid Co-operative Flour Mills at Dunston-on-Tyne quite opened the eyes of the writer to the enormous strides made in this industry. Workmen under the new *régime*, though perhaps no better paid for their services, yet follow their avocation under healthier conditions. Although there is still a considerable degree of flour dust, there is much less of it than formerly, so that the liability to pulmonary diseases on the part of the modern flour miller cannot be so great as it was in the case of millers a few generations ago. The improved methods of milling have given us a flour particularly pleasing to the eye. It is beautifully white, but because it has removed the layer of nitrogenous cells which lie underneath the bran—that part which is richest in albumen, and most capable, therefore, of reproducing all

the tissues of the body—and given us proportionally more of the starchy material useful only for evolving muscle-force and developing fat, it is to that extent less nutritious and poorer generally than the wheaten flour of five to six decades ago. America, Hungary, Egypt, India, and the colonies supply us with large quantities of wheat, but the grain from these sources does not necessarily make better bread than that obtained from English soils. The most nutritious flour, in my opinion, is that which is still met with in some of our rural districts, obtained from British wheat and ground in local mills. It is darker than the American and less pleasing to the eye, but it is better fitted for feeding the labourer. This statement may be disputed, but I know of no facts which force me to think otherwise. In "Mulhall's Dictionary of Statistics" the nutritive value of the United States flour is placed at 145 as compared to the English reckoned at 100. The same authority is responsible for the statement that 7lbs. of American flour are equal to 8lbs. of English flour as regards bread-making. English wheat is not inferior to the American grain. A blow, however, has been struck by improved flour milling at what is the greatest necessary of life by having reduced the nutritive value of flour—a circumstance the importance of which is not sufficiently realised in these days of cheap bread.

The present price of milk and potatoes is not such that they are quite beyond the reach of the poorer working classes, but in many a home animal food is still a luxury. Whilst flesh meat is beyond the range of the very poor, it is eaten largely by the well-paid artisan classes, by many of whom, however, its true value is not sufficiently appreciated. There is undoubtedly greater waste of animal food amongst the labouring classes than there ought to be, a circumstance for which the wives and daughters are largely responsible. The art of cooking is as yet unknown in many a working man's family, whose daughters, considering the opportunities now afforded them of attending cooking classes in our large industrial centres, are blind to their own personal interests and advance in life by refusing to learn this homely duty. Preferring to remain ignorant, they subsequently make the homes of our working men unattractive, and their meals not only uninviting but expensive. There is no doubt, and this word of advice is offered for the serious consideration of those daughters of our working men whose circumstances may be such as to oblige them to enter domestic service, that as time goes on women who are good cooks will receive larger and larger salaries. They will become, as they ought, the best paid of all domestic servants. It is interesting to know, as regards animal food, that its consumption has increased in England. In 1840, 87lbs. per inhabitant were consumed; but in 1888 the amount had risen to

THE FOOD OF THE PEOPLE: A RETROSPECT AND PROSPECT.

109; whilst in France, during the same year, the number of pounds weight were 43 and 77 respectively; in Germany, 60 and 64; whereas in Russia there was a declension, the numbers being 67 and 51 respectively.

A healthy man requires, according to Kelet, per annum—

	Lbs. Food.	Containing lbs. of Albumen.
Man	1,600	100
Woman	1,200	75
Child	900	50

and the man's food is made up thus:—

	Lbs. Food.	Lbs. Albumen.
Animal food	290	28
Vegetable	1,310	72

A man's daily food should contain at least $\frac{3}{4}$ oz. of nitrogen and 11ozs. of carbon, the proportion of which contained in the food of certain classes is as follows:—

	Per Week.	
	Nitrogen (ounces).	Carbon (ounces).
English peasant	7·7	120
Irish „	4·	168
French „	·6	150

whilst of flesh meat, of the total quantity of food taken the

Irish peasant consumes	1 per cent.
French „ „	7 „
French sailor „	25 „
English navy „	28 „

The proportions of nitrogen and carbon contained in bread and meat are—

	Nitrogen.	Carbon.
Bread	1	30
Meat	3	10

The people in this country are the best fed in Europe, a circumstance largely due to the importation of food and cattle from foreign countries and the cheap rate of freights. Not only is the food better and more varied, but it is also cheaper. The Americans in this respect, however, are still in advance of us. Whatever may be the price of other commodities, the American working man has the pull over us as regards the price of his food. Food of all kinds, including fruit, is plentiful and cheap in the States and Canada. Whilst as a nation we are the best fed in Europe, the Americans are the best fed in the world. Their consumption of food is enormous, yet in spite of this so great are their resources that the United States still produce 30 per cent of the grain and 33 per cent of the meat of the world.

THE FOOD OF THE PEOPLE: A RETROSPECT AND PROSPECT.

The cost of a workman's food in various countries in 1880 was, approximately—

	Shillings per Week.		Percentage of
	Food.	Wages.	Food Cost.
Great Britain	14	31	45
France	12	21	57
Germany	10	16	62
Belgium.....	12	20	60
Italy	9	15	60
Spain	10	16	62
United States	16	48	33
Australia	11	40	28

Whilst the quantity and quality of food that an individual eats is regulated by the amount of money he can afford to spend upon it—that is, by the wages he receives—and its variety is ruled by this circumstance and proximity to the markets, there are certain definite lines upon which a dietary should be constructed so as to meet the wear and tear of the body—a dietary which must in all respects be ample. The subject naturally divides itself into (1) what is the best food for the infant, (2) the growing boy, (3) early manhood, and (4) the hard-working and fully-developed man. The ignorance exhibited by the wives of the poorer working classes as regards the feeding of infants and youths is notorious. It is partly the explanation of the large infantile mortality of our industrial centres and of the reduced stamina of the people in after years. The effects of imperfect feeding upon our youths are not so apparent when we casually meet individuals in the street. It is when they come to a hospital in ill-health, or when they are examined for the army and navy, that we observe them. Newcastle-upon-Tyne is a large recruiting centre. Discussing the subject of recruit acceptances and failures for the army with one of the surgeons at the barracks a few months ago, I learned some interesting facts bearing upon the physical development of the young men of this locality. The recruits are rejected to the extent of 56 per cent. They have weak chests, are undersized, and generally speaking are delicate, owing to the ill effects of overcrowding and bad feeding. This is a high percentage of failures, and compares unfavourably with some other districts. The surgeon in charge of the Maryhill Barracks at Glasgow informs me that the rejections there are 21 per cent, and at York Barracks the rejections are 56 per cent for the army and 54 for the militia. At Preston, Lancashire, 28 per cent of the recruits are rejected. The army surgeons at all these centres are unanimous in their opinion in regard to the causes of the failures. They are due to imperfect development of chest and limbs, and are consequent upon want of nourishment when young. Of the recruits rejected, 43 per cent in some places and 29 per cent in Newcastle owe their failure

to such physical defects as under chest measurement, height, and weight. Early loss of the teeth is in some centres a noteworthy defect. Surgeon-Major Macneece, of York, considers that the excessive smoking and early chewing of tobacco in factories contributes to the malnutrition of the recruit. The results of recruit examinations convey fairly accurate information as to the feeding of the poorer working classes. All army surgeons are agreed that the best recruits are still obtained from agricultural districts. As children they may have been more coarsely fed, but they are well nourished, have a better physique, are more plastic, and have better moral fibre than the youths brought up about town. From the iron-making districts, where wages are high and food plentiful, good recruits are obtained, provided they are not too old, and have therefore not been too long at work for the hard labour to have told upon their heart. Parliamentarians who plead for an eight hours day in certain laborious occupations, and particularly for restricting child labour, could scarcely find better support for their arguments than the fact that the recruits drawn from the coal-mining districts are very many of them rejected, especially in early adolescence, owing to their having been put too early to work in the pit, and kept there too long daily. Once, however, they have reached the age of twenty and have been receiving for a time good wages, and thus been able to procure sufficient food, fewer of them fail as recruits. It is an interesting and notable fact, no matter where recruits have been drawn from, that once they are drafted into the army and come under the influence of regular hours, stated meal times, and good food, they increase in weight rapidly.

The feeding of young infants is a subject of the greatest importance. It cannot be too strongly stated that *milk is the natural food of the infant*, and that if the mother is in good health, and comes from a family free from the taint of consumption, and possibly can nurse her child, she ought to do so at least for a few months. Should she be unable to do this, then cow's milk, diluted with two-thirds of water in the early days of infancy—gradually adding more milk and less water as the child grows older, with a teaspoonful or two of lime water, scrupulous attention being paid to keeping the feeding bottles clean—will be a good substitute for the mother's milk. It is the greatest cruelty to young infants to give them bread, or bread and tea, or starchy food of any kind. The digestion of starchy food begins in the mouth where the spittle or saliva by a peculiar ferment action converts starch into sugar, which is assimilable and useful to the body, but the infant has no saliva containing this ferment, nor in the other portions of the alimentary tract are there those juices which are capable of dealing with such starchy foods as "boiley," &c. The fact that these ferments are in the early weeks of infantile life

absent in the alimentary canal is a clear proof that nature not only never intended starchy foods should be taken, for they cannot be digested, but that they are harmful and become a menace to life by causing convulsions. After the sixth or seventh month the objection to them becomes lessened, for nature is slowly developing the ability on the part of the child to deal with stronger food.

As for the schoolboy, the plainest but wholesome food, and plenty of it, should be given, and at regular intervals. Oatmeal porridge, bread, large quantities of milk, animal food once a day, potatoes, rice, &c., and plenty of sugar should be given. It is a mistake to deprive children of the use of sugar and of pure sweets, for sugar is a muscle-force producer. The secret visits of the schoolboy to the toffee shop is a craving of nature which should be gratified within limits. The likes and dislikes of children as regards their food should certainly be considered, for their physical development at this particular time is one of the most important affairs of their life. Upon the foundation laid at this period the superstructure has to be reared. No child, for example, should be obliged to prepare lessons in the early morning, particularly in winter, without first receiving a light breakfast or a tumblerful of warm milk and a piece of bread. These remarks apply with even greater force to the feeding of girls than boys, for they, particularly at the latter term of girlhood, develop quicker than boys, and ultimately upon them is placed the greater share in the burden of reproduction. The development of the system at this age should be met by plenty of easily-digested and assimilable animal food, not less than four ounces daily, and by a sufficiency of well-cooked vegetables, farinaceous and fatty material.

What is food for the boy and girl will suffice for early manhood, only more of it will be required generally, greater variety, and more animal food particularly. Growth stimulates the appetite, and this must be met. Leaving the subject of the feeding of young men, I shall say a few words on behalf of the girls. At the age of fourteen, in this country, or thereabouts, nature imposes a tax upon their constitutional resources which, while it marks their entrance into womanhood with all the possibilities that the name implies, is on the other hand a function, the proper performance of which is not only consistent with health but is accompanied by increased development. The menstrual discharge is under any circumstances an impost. It makes its appearance at a time of life when girls go to service, to the factory, or become shop assistants, at a time of their life, therefore, when the greatest attention should be paid to their food and the nature of their employment. At the menstrual epoch nature demands rest for the individual, yet at this particular period girls employed in factories and shops are obliged to stand the whole day through, breathing too often a vitiated atmosphere. Small

THE FOOD OF THE PEOPLE : A RETROSPECT AND PROSPECT.

wonder that so many of them become pale and anæmic, owing to their blood becoming thin, watery, and deficient in colouring matter. Greater consideration should be shown at these periods to girls.

Hitherto we have been dealing with young people to whom food is necessary for growth and development. When we come to consider food in its relation to men who are fully developed and have practically ceased growing, but whose occupation is laborious, a new question presents itself, viz., what is the function of food and what purpose is served by it in the economy? As the tissues are fully grown, food can only be necessary for the maintenance of the body weight, for replacing the waste caused by wear and tear, for the production of muscle-force, and the maintenance of heat. Food is fuel for the engine, only the human engine, unlike the physical machine, is continually integrating or building up as well as disintegrating or breaking down. The principal destiny of food within our system is the liberation of force. Our diet is composed (1) of proteid or nitrogenous substances, such as meat, milk, eggs, and bread; (2) of carbohydrates, like potatoes, rice, bread, peas, &c.; and (3) of hydrocarbons, or fats, such as butter, oil, &c. Years ago the German chemist Liebig attempted the solution of the relation of food to heat and mechanical work. He regarded nitrogenous foods as muscle-force producers, and carbohydrates and fats as heat producing and respiratory. For a period his views were accepted, but there has gradually been growing amongst physiologists the opinion that Liebig's teaching was too exclusive, and that the carbohydrates of our food probably play a larger part in the liberation of muscle-force than do proteids; and that proteids, like carbohydrates, may be oxidised and consumed in the system without having ever entered into combination with the tissues. Proteid is found in the system in two forms—(1) as fixed, and forming an integral part of the tissues; and (2) as fluid, and circulating in the blood, and therefore capable of being used up without any effort on the part of the body. Setting aside water, which is so essential to all vital phenomena, and which constitutes 75 per cent by weight of the body, and the influence of saline material such as common salt, we shall deal with the question of nitrogenous, proteid, or albuminous foods. Our muscles contain a large quantity of nitrogenous material. It was Liebig's opinion that when work was done the nitrogenous material of muscle underwent combustion—that it was destroyed, in fact—the waste being thrown off by the kidneys in the form of a chemical substance called urea, the quantity of which in the urine might be taken as a measure of the disintegration of muscle. If this were the case, the daily elimination of urea would be increased by muscular exercise, but experiment proves that this is not the case. Laborious muscular

THE FOOD OF THE PEOPLE: A RETROSPECT AND PROSPECT.

work may even be accomplished upon food not rich in nitrogen, so that whilst we admit that it is necessary for all who are engaged in hard manual labour to take animal food, it would appear as if the oxidation of carbohydrates and fats in the system was the source of the muscle-energy liberated. Parkes, in his experiments upon young soldiers, demonstrated that muscular work, for a short time at least, could be accomplished without nitrogenous diet. That muscle wastes during work there is no doubt, and the probability is that if albuminous foods are withheld the muscle substance disintegrates. Labour that is prolonged and severe in its strain upon the muscular system can only be done well for a very few days upon a non-nitrogenous diet. It is admitted that muscular force is largely the outcome of the oxidation of carbohydrates and fats in our food, and does not simply come from the oxidation of the nitrogenous elements in muscle, and yet if animals are kept upon a pure carbohydrate diet they rapidly lose weight and die from breaking up of their tissues. Two pounds of bread per day will supply sufficient nitrogen for the needs of the economy, but it will not maintain life without the occasional addition of animal food. All the world over the cravings of the human race are only satisfied by nitrogenous food, and the amount of nitrogen consumed stands in relation to the amount and character of the labour performed. It is said that carnivorous animals are stronger and have greater enduring powers than herbivora, and that they are fiercer in disposition. Playfair tells us that the bears of India and America which feed upon acorns are mild and tractable, whilst those of the polar regions that consume flesh are savage and untameable. The Peruvians whom Pizarro found in the country at its conquest were gentle and inoffensive. They subsisted chiefly upon vegetable food, whilst their brethren in Mexico, when first observed by Cortes, were a fierce and warlike race, feeding mostly upon animal diet. The Hindoo navvies employed in making the Bhoze Ghat Railway found it impossible, owing to their laborious work, to maintain their health upon a vegetable diet. Freeing themselves from the influence of caste, they ate the common food of the English navvies, and were thus enabled to work with vigour. It is owing to the rich nitrogenous and fatty diet of the English navy that he is superior to the Frenchman, and it is owing to the absence of it that the Irish peasant is inferior to the Scotch. In order to build up our muscular system nitrogenous foods are a necessity, but for the liberation of muscle-force, carbohydrates. To this subject, however, we shall return. All we need say here is that in the formation of our dietaries we act wisely by selecting a combination of the three classes of foods, for they aid each other in their digestion, absorption, and oxidation in the body.

THE FOOD OF THE PEOPLE : A RETROSPECT AND PROSPECT.

Careful determination of the heat production values of different foods have been made. Fatty substances like butter and cheese stand highest as calorific foods. Then come oatmeal and wheat flour, followed at no great distance by peas and sugar. Lean beef and ham have only one-fourth the heat-producing power of butter and cheese. The human body seldom expends in muscular force the full equivalent of that capable of being evolved from its food. It is estimated by Helmholtz that the actual labour of a man is one-fifth of the mechanical force of his digested food, an interesting fact when compared with Lord Armstrong's calculation of the steam engine, in which only one-tenth part of the actual power of the fuel is realised as work.

A working man's dietary is influenced by the amount of money he can spend upon it, and his proximity to the markets. The food he eats should be so framed as to sufficiently replace the nitrogen and carbon which he loses daily from his system. A man engaged in hard physical labour necessarily requires more and stronger food than the clerk or the recluse. Two pounds of dry solid food, with a liberal quantity of water, are required daily. Upon a prison punishment diet of 1lb. of bread per day, with water, a man will lose in three days 3lbs. in weight—just a pound a day—and he will look pinched. This quantity of bread represents 1·3oz. of nitrogenous matter and 8·8 of carbonaceous, or 88 grains of nitrogen and 1,975 of carbon. This is a hard diet, and seldom resorted to beyond just a few days, and yet many a poor sempstress goes on toiling all day long, plying her needle to keep body and soul together, upon 1½lbs. of bread and a little dripping or a scrap of bacon. A man's food should contain daily not less than 4,300 grains of carbon and 200 of nitrogen, and a woman's at least 3,900 and 180 grains respectively; and these are represented by 22ozs. of carbonaceous and 2·97ozs. of nitrogenous food. The dietary of women is one-tenth less than that of men engaged in indoor occupations, and one-third to one-fourth less than the larger dietaries of men engaged in outdoor labour. Needlewomen are the worst fed, and their food is expensive since it consists of bread, bacon, and tea.

In the "Diet of Toil"* I give a series of diet tables of the various working classes, and on comparing them with the standard physiological requirements of Moleschott, which is 309 grains of nitrogen and 4,632 grains of carbon, I find that a diet which contains 324 grains of nitrogen and 5,190 of carbon, and is spoken of as a fundamental English diet, can be obtained for a shilling. It is composed of 1lb. bread, ½lb. meat, ¼lb. fat, 1lb. potatoes, half-pint milk, ¼lb. eggs, and ⅓lb. cheese. This may be taken as a fair average diet, one

* "Diet of Toil."—*T. Oliver*. Published by J. M. Carr, Newcastle.

THE FOOD OF THE PEOPLE: A RETROSPECT AND PROSPECT.

which all might aim at, but which from its price is still beyond many a wage-earner. Taking two English agricultural labourers in Wiltshire, whose wages, A, are 13s. 9d. a week and no children to support, I find that he gets 210 grains of nitrogen and 5,783 of carbon daily; whilst B, whose wages are 14s. with six children to support, three of whom are working, only consumes 123 of nitrogen and 5,379 of carbon. I find, too, that an Ayrshire ploughman, whose wages are 15s. a week and with five children to support, none working, eats 346 grains of nitrogen and 5,686 of carbon. Two Irish peasants similarly consumed, A, 247 grains of nitrogen and 3,387 of carbon; B, 170 of nitrogen and 4,081 of carbon.

Coalminers require good food, and they get it. One is struck by the large amount of carbon which is present in their dietary; also in that of navvies. Taking two average coalminers, A, whose wages are 55s. a fortnight, eats daily 339 grains of nitrogen and 6,071 of carbon; whilst B, with 40s. wages per fortnight, consumes 339 and 5,657 grains respectively. Iron and steel workers with wages 35s. a week consume 278 grains of nitrogen and 4,645 of carbon daily, and a steel smelter 238 and 4,544 grains respectively. Female lead workers are extremely poor, and are badly fed. Taking an average couple, whose wages are each 2s. 6d. a day when working, A consumes 49 grains of nitrogen and 2,297 of carbon, while B takes 72 of nitrogen and 2,107 of carbon. Female cotton spinners, with their regular employment and higher wages, do better, viz., 262 grains of nitrogen and 3,781 of carbon. In Bradford the male woollen workers whose wages are 18s. a week will consume 219 grains of nitrogen daily and 3,411 of carbon; whilst those with larger pay, 32s. a week, take 368 grains of nitrogen and 5,138 of carbon. Compare with these the following two starvation diets:—(1) that of a groom recently under the writer's care in the Newcastle Infirmary, whose wages were 5s. 3d. a week—his daily consumption of nitrogen was 109 grains, and of carbon 1,605; whilst (2) a poor sempstress, with 8s. a week, consumed only 46 of nitrogen and 1,760 of carbon.

In the Red Van Reports for 1893* is given the domestic budget of a country labourer in Berkshire, whose wages are 13s. a week, with a free cottage, a wife and two children to support, and whose expenditure just balances income. On looking at the items detailed, one is struck by the deficiency of meat and fat in the dietary, and the almost total absence of milk. I gladly support the Secretary of the English Land Restoration League in his condemnation of the absence of milk from the dietary of young children in *districts almost pastoral*. It is a serious defect in the domestic budgets of the agricultural labourer, and a circumstance not at all

* English Land Restoration League Reports.

THE FOOD OF THE PEOPLE : A RETROSPECT AND PROSPECT.

creditable to those living in the country and with the means of remedying it. The local wants of a rural district should receive as much consideration from the milk suppliers as the people living in the towns. The milk question is very important. In the coal-mining villages near Newcastle, many of which are practically speaking in the country, there is less milk consumed than there ought to be. There is a difficulty of getting it. In the case of the Cleveland ironstone miners, Dr. Messenger, of Saltburn, tells me that the absence of milk from the dietary of the children is woeful. Into many of the houses in this rich agricultural district not more than a pennyworth of milk, *i.e.*, half a pint, enters daily, and this is meant to supply the wants of five or six children. The consumption of Swiss condensed milk has greatly increased all over England, but however valuable it may be as a substitute, it is not meant to replace permanently cow's milk if at all obtainable.

As a country we produce a large quantity of milk. Take for example the needs of London alone, and it is estimated that 87,000 cows are required to produce the 953,000 pints of milk to feed those living in the metropolis, an amount which gives one and one-half pints daily for every family of seven, or almost one-quarter of a pint per head of the population.* The railway companies offer considerable facilities for the conveyance of milk to London, but in spite of that there are twenty-nine of the large cities of England, each with a population over 100,000, which are more easily reached by the milk vendors than London—hence the cost of carriage and distribution within them is less. For these twenty-nine towns it is estimated that 134,000 cows are required to produce the 1,204,300 pints of milk that are consumed daily. Although the amount of money we spend upon milk is enormous, yet, as a nation, we don't spend enough. It is believed that more milk is consumed in this country now than formerly. Twenty years ago, Morton, at a meeting of the Society of Arts, told the Londoners that only one-eighth of a pint was consumed per head of the population. At present it is double this, but still it is not enough where there are children—besides, its distribution is not equal. The poor people do not and cannot get a sufficiency of it.

Hard work requires good food. Bread, bacon, and cheese form the staple articles of the dietary of English rural labourers; oatmeal porridge, milk, bread, potatoes, and meat are the food of the Scottish peasantry; whilst in the dietary of the Irish, potatoes figure too largely, and were it not for the bread made of Indian meal and wheaten flour, their diet, poor as it is, would be little above starvation level. Since it is upon the nitrogenous elements in our food

* *Newcastle Daily Chronicle*, 3rd and 4th June, 1895.

THE FOOD OF THE PEOPLE : A RETROSPECT AND PROSPECT.

that value is placed as sustaining agents, and upon the carbohydrates as muscle-force producers, it is apparent that of all the agricultural labourers the Scotch are the best fed, and the Irish the worst. Unfortunately the use of oatmeal in Scotland is dying out, and the children of the peasantry to-day are not receiving the sound wholesome fare of their immediate progenitors, but are consuming too much tea and bread, alike to their own detriment individually and collectively to the physical deterioration of the race. The value of carbohydrates as muscle-force producers is seen in the dietaries of the coalminers and the English navy, and the contrast in food between the indoor workers of cotton and woollen factories with those engaged out-of-doors is striking. I have had little experience of the dietaries of fishermen. Their work, though not laborious, is hard. It makes a considerable call upon their physical endurance and their ability to withstand exposure. The Rev. Mr. Bryson, of Holy Island, has supplied me with several facts relating to their domestic life. With wages reaching from 15s. to 16s. a week, they are unable to procure butcher's meat daily. To some extent fish replaces it, and during the winter months the stock of herrings previously laid in almost entirely replaces butcher's meat. Even amongst this hardy fisher folk a change has crept in over their dietary. Formerly they consumed large quantities of brown bread and oatmeal, but these are disappearing before white bread and tea. I am not aware that the fishermen along our coasts have suffered in consequence of eating fish over lengthened periods. It is to this circumstance that the leprosy of the Norwegians is attributed; but in my visits to the Lepers' Hospital at Bergen and discussion of the subject with the physicians, and in my conversations with clergymen in some of the remote districts in that country, I found that amongst a peasantry noted for its industry, integrity, and frugality there were in operation, in addition to the consumption of dried fish for several months of the year, the influence of heredity, the effects of long-continued intermarriage, moist climate, the reducing effects of repeated wettings, and the imperfectly ventilated homes of many of the people. The disease, therefore, probably owns more than one cause.

The cheap price of bread, thanks to Free Trade, has been one of the greatest blessings to this country. With a two-pound loaf selling for 2½d., flour at 11d. to 1s. 7d. per stone, butter at 1s. and 1s. 1d. per lb., and mutton at 4d. to 10d. per lb., our people, young and old, can be well fed.* The average Englishman spends more upon his food than his fellow of other nationalities. An Englishman

* Figures kindly supplied by Mr. H. R. Bailey, Co-operative Wholesale Society, Newcastle.

THE FOOD OF THE PEOPLE : A RETROSPECT AND PROSPECT.

spends annually upon food £9. 12s.; a Frenchman, £9. 8s.; a German, £8. 8s.; a Spaniard, £6. 12s.; an Italian, £4. 16s.; and a Russian, £4. 12s. Our countrymen are the largest meat eaters in Europe. The average Englishman consumes 109lbs. of meat in the year; Frenchman, 87; German, 64; Italian, 28; and the Russian, 51. Of bread we are the smallest eaters. The Englishman's average is 380lbs. annually; Frenchman's, 540; German's, 560; Spaniard's, 480; Italian's, 400; and the Russian's, 635. We rely for our sustenance upon meat and fat, upon bread and starchy or sugary foods, the relative consumption of which, expressed in terms of carbon and nitrogen, is seen in the epitomised table of the daily diet of well-fed operatives by Playfair.*

	Carbon (grains).		Nitrogen (grains).
1. Tailors	5,136	.....	325·
2. Blacksmiths	6,864	.....	437·
3. English navy	8,295	.....	482·
4. Prize-fighter (training)	4,366	.....	690·
5. Soldiers (in peace)	5,246	.....	297
6. Soldiers (in war)	5,561	.....	381·

Our soldiers are well fed, but how fares it with those who are also State-supported in our prisons and workhouses? The position of an agricultural labourer earning his own livelihood when compared with that of the inmates of certain workhouses in the country is extremely interesting. Each male inmate of the Bradfield Union Workhouse† costs the guardians 6s. 1½d. per week, each female 5s. 6½d., and each child 5s. 1d. If adverse circumstances compelled a family—taking, for example, the one mentioned in the Red Van Reports—to remove to the workhouse, it is stated that their maintenance would cost the guardians £1. 1s. 10d. per week, whilst outside at home this has to be accomplished on 13s., the wages of the head of the family. It is natural in this democratic age for the cry to be raised that those who either from their own fault or poverty become chargeable to the ratepayers—above all, those who are in prison—should not be better fed than those who are honestly trying to make a living for themselves and their families. Apart from the parochial and financial aspect of this question, it has a moral side that cannot be ignored. Accurate information is therefore desirable. It is not the first time this subject has disturbed the public mind. A few years ago there was a greater misspending of public moneys than now, but, apart from that, dietetic conditions

* *Lethby* on "Food."

† "Red Van Reports," 1894, p. 10.

were in operation in our prisons and workhouses which acted so deleteriously upon the inmates that an investigation became necessary. The mortality was much in excess of what it ought to have been, and to Sir Edwin Chadwick* we are indebted for information upon this particular point. It was recognised then, as now, that paupers and prisoners worked less than agricultural labourers; but were they healthier for this privilege? Investigation showed that so far as health was concerned the balance of advantage was in favour of the agricultural labourer, underfed even as he was. Sixty years ago we had a prison population of 25,000, with a daily sick list of $9\frac{1}{3}$ per cent. The weekly cost varied from 1s. 2d. to 7s. per head. It was demonstrated that according to the scale of diet so were the sick and mortality rates. In the lowest series, when the cost of each prisoner was 1s. 10 $\frac{1}{4}$ d. per week, the percentage of sick was 3 per annum, and the mortality 1 in 622; in the second series, where the cost was 3s. 2d. a week, the percentage of sick was 23 $\frac{1}{2}$ per annum and the mortality 1 in 266; whilst in the intermediate series, whose cost was 2s. 4 $\frac{1}{2}$ d., the number of sick per annum was 1 in 18, and the mortality 1 in 320. It was believed that the dietaries regulated the amounts of sickness and mortality. Where the period of confinement was long and the diet low the health of the prisoners was good, and that in all cases where the diet was lowest the sickness and mortality, too, were least. At this particular period prisoners were overfed; they were receiving 50 ounces of solid food per week more than the agricultural labourers, a circumstance not only unjust to the labouring population but unfair to the public generally. Too much animal food was at this time given to a class of men and women whose lazy, indolent, and vicious habits had placed them in a position where better food was supplied to them than they could obtain at home. The pendulum has swung pretty well to the other extreme, particularly as regards the feeding, in charitable institutions, of children. So far as our gaols are concerned the dietaries have all been carefully calculated, so that on the one hand no attraction is offered to outsiders, and on the other that it is consistent with health.†

Taking the facts as relating to Newcastle Gaol, I observe as the average dietary of prisoners awaiting trial that they are allowed bread, gruel and cocoa for breakfast; bread, and potatoes and cooked meat twice a week, for dinner; and for supper, bread, gruel and cocoa—an amount which equals 2,693 grains of carbon and 138 of nitrogen daily. After conviction the prisoner, according

* "Health of the Nations," vol. i., p. 66.—*Chadwick*.

† In 1894 only nine deaths occurred in Pentonville out of 12,000 prisoners.

THE FOOD OF THE PEOPLE: A RETROSPECT AND PROSPECT.

to his term of imprisonment, is placed upon one of three sets of dietaries, the nutritive values of which may be expressed in the following terms:—

	Carbon.	Nitrogen.
No. (1) diet	2,371·5	136
No. (2) „	3,369	183
No. (3) „	4,909	217·5
No. (4) punishment diet	1,975	88

No. 3 diet is reserved for prisoners undergoing longer terms of imprisonment.

Tabulating the results of my inquiries into the feeding of the working classes and prisoners I obtain the following:—(T. OLIVER.)

	Carbon (grains)	Nitrogen (grains).
Moleschott's standard.....	4,632	309
Fundamental English diet	5,190	324
Agricultural labourer	5,783	210
„ „	5,379	123
Ayrshire ploughman	5,686	346
„ shepherd	5,200	376
Irish peasant	3,387	247
„ „	4,081	170
Coalminer	6,071	329
„	5,657	339
English navy	5,842	426
Iron and steel worker	4,645	278
Steel smelter... ..	4,544	238
Female lead worker	2,297	49
Female cotton spinner	3,781	262
Male woollen „	3,411	219
„ „ „	5,138	268
Starvation diet (a groom)	1,605	109
„ „ (sempstress)....	1,760	46
PRISONERS, NEWCASTLE GAOL:		
Awaiting trial	2,693	138
Convicted No. (1) diet.....	2,371	136
„ No. (2) „	3,369	183
„ No. (3) „	4,909	217
Convicted, illbehaved—		
No. (1) bread and water	1,975	88
No (2) improved dietary ..	2,871	138
No. (3) „ „ ..	3,455	147

The diet of the best-fed prisoners in our gaols never reaches that which may be procured by the unskilled labourer. It is superior to that obtained by some of the Irish peasantry, and much better than that procurable by female lead workers and poor sempstresses.

I have carefully investigated the effects of the various dietaries upon prisoners, and although the amounts of carbon and nitrogen seem fairly large, it should be remembered that prisoners do a certain amount of labour or task toil, most of them having been sentenced “with hard labour.” The effect of the limited dietary

and imprisonment upon them is quickly observed in the reduction in weight which almost invariably follows. It does not seem, therefore, as if there was anything extravagant in the feeding of prisoners in our time. However much an indignant public may have railed against prison mismanagement in past decades, there is at the present time no ground for complaint on the score of extravagance. Whilst the bare cost of the food of short sentence prisoners, calculated upon existing contract rates, without preparation, and subject to the fluctuations of the markets, ranges from 8d. to 1s. 0¼d. per head per week, the cost of the inmates of workhouses is nearly 5s. per head. This, however, includes not only the price of food, but a percentage charge upon buildings, clothing, &c. The average cost per head of our paupers in the workhouses varies from 3s. 4d. upwards, an amount which exceeds that capable of being spent by agricultural or town labourers upon their family. It seems to me that there is still room for economy in the feeding of our workhouse populations without necessarily reducing the nutritive value of the food supplied. Our Boards of Guardians might take a leaf out of the book of the Peoples' Kitchens of Vienna,* and our working men engaged in large factories might also learn how very cheaply they could be supplied with an excellent mid-day meal of three courses, if they would only amalgamate as has been done in Vienna, Bradford, and Liverpool. It is unnecessary to tell the story of the philanthropic efforts of Dr. Josef Kühn to establish restaurants in Vienna, at a time of great industrial depression, wherein food might be sold at the lowest prices possible to be self-supporting, and the admirable manner in which he has succeeded. School children there are not less carefully catered for than the sons of toil. Each dinner hour sees the restaurants filled with men and women of all classes—the pale-faced clerk and the begrimed artisan, the actor whose popularity is on the wane, the broken-down solicitor and the struggling student, the factory girl and her better-dressed sister of the shop—all alike being equally served and similarly waited upon. The pocket as well as the palate of consumers is respected, the dinners varying in price from six kreutzers (1½d.) to twenty-five (6¼d.). Nor need we be in any sense of the word slavish imitators of our American cousins, yet there are many things we may learn from them. In the United States they have what are called the Peoples' Exchanges, institutions to which are sent every morning nicely-cooked dishes suitable for invalids. There must be many gentlewomen in our own country, upon whom reverse of fortune has told, who by their delicacy of taste and natural gifts, improved by a few lessons in

* "Peoples' Kitchens in Vienna." *Nineteenth Century*, November, 1894.
Edith Sellars.

cooking, might be able to add considerably to their income as well as confer a boon upon the sick of the lower middle classes did Exchanges of a similar character exist in England, and to which they could send specially-prepared soups, jellies, and other dietetic preparations. It is a movement which would be warmly supported by the medical profession, and which would benefit alike contributor and receiver.

The food of the working classes is necessarily determined by the wages of the bread-winners. In the "Diet of Toil," it is shown how the smaller the wage the greater is the amount spent upon food. The means of subsistence hits the poor the hardest. Engel* tabulates the expenditure of the labouring classes in Germany, and shows that a workman whose annual income is from £45 to £60 spends 62 per cent of his wages on food; that a workman with £90 to £120 spends 55 per cent upon food; whilst a middle-class person with an income of £150 to £200 spends 50 per cent. Meinert also states that in Germany, where the wages are from 15s. 6d. to 21s. a week, 60 per cent goes for food; and that where the wages are 29s. per week 50 per cent, or 14s. 6d., is spent on the necessaries of life. In my own cases I find that coalminers spend a very large part of their income upon food, that as much as from 60 to 70 per cent thus disappears; and that a navy will spend 53 per cent. My experience of the toiling classes is that they spend from 50 to 80 per cent of their wages upon food, and that as the wages of the classes rise there is less spent proportionately upon food and more upon accessories, luxuries, &c. The poorer working classes cannot always spend 70 per cent of their wages thus, and ill-feeding is the consequence. The future of the toiling, as indeed of all classes of the community and of nations, is largely one of feeding. With an open market regulating supply and demand, and therefore influencing the wages of the producers, national supremacy in commerce becomes largely a question of physical fitness and mental superiority on the part of the industrial classes; and when we know how cheaply certain races of mankind, *e.g.*, the Hindoos and Chinese, can be fed and are capable of great endurance, there will arise considerable cause for uneasiness should British markets diminish through other countries developing industries that replace ours, and with decreasing agricultural returns in our own country. The Chinese, as a social and economic force, for example, will thus have to be reckoned with in the future. The cheapest rice forms a large part of their dietary, but as a people they are capable of eating almost anything, from a herring or a rat upwards; hence, when transplanted to other countries, they are capable of thriving upon

*"Returns of Expenditure of Working Men." Eyre and Spottiswoode.

THE FOOD OF THE PEOPLE : A RETROSPECT AND PROSPECT.

food which other nationalities cast away. The negroes of Basutoland are muscular men, capable of performing hard work. Their food consists principally of ground maize made into a paste, and they seldom eat meat unless when a sheep dies. They drink fermented milk freely. Compared to the English who are resident in Basutoland, they are capable of performing hard work, have considerable enduring powers, and yet their wages are only 15s. a month. How much it takes to feed an individual is only part of the larger question of how much it takes to feed a nation. National expenditure is limited by income, which depends upon production and commercial exchange. We are of those who believe that the better an individual is fed the better work he will accomplish; but there are breakers ahead. As we may not be always commercially supreme, it might be well for us as a nation were the art of cooking better understood, so that there was less waste and a return to simpler and less expensive meals undertaken.

By food we mean anything which when ingested directly or indirectly helps the growth, tends to repair the body, or evolve energy. All diet should aim at presenting to the individual substances containing proportional quantities of carbon and nitrogen. This is best accomplished by an admixture of proteids, carbohydrates, and fats. We are not disposed to re-open here at any length the question of vegetarianism. My own opinion is that for an Englishman a mixed diet is best, that animal food taken in excess overloads the system with waste material, and also that an exclusive vegetable diet is not suitable for most people. There is an individual idiosyncrasy as regards food, hence the verity of the remark, "One man's food is another man's poison." Those men are best who make use of a mixed diet. Certainly in temper, forbearance with the faults and weaknesses of others, and in breadth of disposition they are far and away superior to the pure vegetarian, who is too frequently bigoted and intolerable of the habits and tastes of those of his fellow-men who do not happen to agree with him upon his particular fad. It has been maintained that carnivorous animals are superior to herbivora in rapidity of movement and endurance, the swift spring of the tiger being compared with the slow movements of the cow. Admitting that the character of the food influences the disposition of individuals, we must be careful in our conclusions as to the superior muscularity of one animal over another. Is the horse, for example, a slow animal, or is the deer wanting in fleetness of foot? Animal food probably gives greater enduring powers. Vegetables have to be taken in larger quantity than flesh meat, but there is little to show once the carbon and nitrogenous elements have been absorbed into the system that their potential energy is less quickly evolved than is that derived from animal food. In the contraction of muscle, physiologists

THE FOOD OF THE PEOPLE: A RETROSPECT AND PROSPECT.

recognise that it is not the nitrogenous elements in the muscles that are destroyed in the liberation of force but the carbohydrates, hence it is that while the ill-nourished Hindoo who has been principally fed upon rice has small muscle-force and little staying-power, his well-fed countryman nourished upon corn and peas is in the performance of laborious work little if at all inferior to the meat eater. There is no race of men who on their mountain sides at home, or on the battlefield abroad, have attracted more attention or have contributed more to the making and maintaining of the reputation of Britain than the Highlanders and the peasantry of Scotland, and yet they were principally brought up on oatmeal and milk. It is not, therefore, simply a question of the superiority of flesh over vegetables, but, to a large extent, the character of the vegetables eaten. The natives of Chili and Peru, who live principally upon succulent and watery fruits such as melons, &c., are a loose-fibred, easily knocked-up set of men; but this is not to be wondered at when their food is compared with such cereals as wheat, corn, and peas, which are all extremely rich in nitrogen. It depends, therefore, upon the nitrogenous values of the vegetables that are eaten. Vegetarians frequently say how much their health has improved since giving up animal food, but I have known strict vegetarians of some years' standing who have been obliged to give up their restricted dietary on account of feeling physically unfit for prolonged exertion and on account of general debility and anæmia.

It is the function of animal food and of all nitrogenous substances in vegetables to contribute to the making and repairing of the muscular parts of our body, but we cannot support Liebig in his generalisation that the mechanical force of the human body is entirely derived from its own combustion. It probably comes more from the oxidation of the various substances absorbed from the food, and circulating in the system, without having ever become integral parts of the tissues. In performing work the muscles are destroyed, hence the need of nitrogenous food and of increasing it when labour becomes harder. The individual may fall back upon the stored-up nitrogen in his tissues for a time, but exhaustion soon makes itself felt and a general unfitness is experienced, clearly indicating that, in addition to constructing and repairing the tissues, nitrogenous foods perform additional functions in the economy, *e.g.*, accumulative or force producing. When we speak of nitrogenous foods we mean such things as meat, bread, oatmeal, peas, &c. Wheaten bread, oatmeal, and peas contain large quantities of nitrogen and carbon, and are nutritive. Milk is a perfect food, especially for the young, since it contains all the elements necessary for their nutrition. The drawback to cereals is that they do not contain sufficient fat, hence the Scotchman adds milk to his

THE FOOD OF THE PEOPLE : A RETROSPECT AND PROSPECT.

porridge. Oatmeal is rich in phosphates, which are useful in forming bone ; it is therefore good for young children. If there is one circumstance that is indicative of race degeneration, due to want of proper feeding in childhood and the insufficient administration of bone-forming foods, it is the early decay of the teeth in the children of to-day. Too much tea and white bread are exercising an injurious influence. This is recognised by dentists in Newcastle, particularly in the case of girls who come from some of the country districts of Northumberland. A few years ago, when the food was coarser but still nutritious, their teeth were good ; but now, owing to the altered habits of our northern peasantry, the teeth decay early, and compare most unfavourably with those of girls hailing from Scottish homes where porridge and milk yet reign supreme.

From bread, oatmeal, peas, lentils, eggs, and milk, the working classes can obtain without great cost all that is necessary for their sustenance ; they ought to add to these, occasionally, animal food and fat. Fat undergoes rapid combustion within the system. It thus maintains the temperature of the body, and, like carbohydrates, it is a source of muscular energy. The bacon and beans of the English peasant form a substantial and wholesome meal. Potatoes are poor food. To some extent they have been a curse to Ireland.

Rice is a useful carbohydrate, but it is poor in nitrogen and fat. It forms too exclusively the food of the poorer classes in India. The Chinese cook it with other things. Rice has of late been received by the German army with considerable favour. All carbohydrates within the system become converted into sugar. It is upon this fact that their utility depends. In the disease known as diabetes people pass in the urine large quantities of sugar. From 4,000 to 10,000 grains of sugar may thus be eliminated daily, accompanied by a feeling of great muscular weakness and general prostration. Thus it is that all starchy foods, such as white bread, potatoes, &c., are interdicted to diabetics. These substances, practically speaking, feed the disease. By careful dieting we can reduce the amount of sugar eliminated. In India the effects of excessive carbohydrate consumption and imperfect dieting are very noticeable. One is struck by the prevalence of diabetes amongst the most promising men, intellectually, in that country. The educated and highly-refined Indians are not flesh eaters, hence this class suffers most severely, there being scarcely a family amongst the wealthier people in Calcutta and Ceylon but has lost one member from diabetes.

Since the ultimate form into which starchy food is converted in the body is sugar, it might be interesting to know what is the value of sugar itself as a nutrient. Sugar improves muscular work by

THE FOOD OF THE PEOPLE: A RETROSPECT AND PROSPECT.

from 6 to 39 per cent.* In human blood there is about 1 per cent of sugar, but when the muscles are in a condition of activity it disappears from the blood four times more quickly than when they are inactive. This indicates that during activity sugar is used up. When it is added to food, men are capable of performing harder work. The coalminers in the North of England long ago found out its value as a muscle-force producer. They eat large quantities of it. All over the country the consumption of sugar has increased. When Ed. Smith wrote upon foods thirty years ago he estimated that 1,420,000 tons of sugar were consumed annually by the Anglo-Saxon population of England and America, giving an average of 41·4lbs. per head. Mr. Barber, of the Leeward Islands, in a recent paper,† states that in 1892 the world's production of sugar was close upon 50,000,000 hundredweight—that of this quantity half was obtained from the sugar cane grown in the tropics, and half from the beetroot of the temperate regions. At the present time the inhabitants of Great Britain and Ireland consume annually 72lbs. per head; those of the United States, 52lbs.; and those of Germany, 17lbs. Sugar is, therefore, a conspicuous article in our dietary. I have alluded to the coalminer's partiality for sugar, and the harder work he is capable of doing upon it. At schools it has been demonstrated that if several ounces of sugar are added to the food of the boys they are found to be capable of performing a greater amount of muscular exercise. However weak and starved negroes are when they begin to cut the sugar canes upon West Indian plantations, towards the end of crop time, as the result of the unlimited amount of cane juice they receive, and in spite of their hard labour, they are observed to be sleek and well fed. It is only within the last 100 years that beetroot has become a source of sugar supply. The cane was known in India long before the Christian era. The Sanscrit name sarkura, and the Arab sukhar, suggest its local habitat. I regard sugar as one of the most useful articles of diet. From its cheapness it ought to form an important item in the food of all classes, but particularly of those who are engaged in laborious muscular work. In support of my views upon sugar, expressed in the *Fortnightly Review*, October, 1894, Mrs. Main (formerly Burnaby), a well-known Alpine climber and authoress, wrote to me from Switzerland confirming the opinion I had given, and reminding me that Swiss guides are in the habit of taking with them on their long ascents jellies and chocolate. Since then I have discussed this question with several of the active members of the

* "Diet of Toil."—*Oliver*.

† "Knowledge," July, 1895. — *Barber*, Supt. of Agriculture, Leeward Islands.

Alpine Club, in London, and they, too, tell me that during their long climbs they always carry with them jellies, raisins, and occasionally chocolate. Sugar has only about one-half the calorific and motor power of fat, but it is more palatable, and can be easily carried. I am not in a position to speak as to the superiority of one form of sugar over another. Theoretically, the order of merit is probably grape, cane, and beetroot sugar, but to settle this question numerous experiments would have to be undertaken and carried out over a lengthened period.

Upon the breakfast table of all classes tea, coffee, or cocoa is found. These are not foods in the proper sense, but accessories or beverages, which serve a useful but as yet unexplained physiological function, though probably acting as stimulants. The active principles of tea and coffee are theine and caffeine—alkaloids which are closely related in their composition to nervous tissue, hence their suitability for the repair and renovation of the exhausted brain. They certainly retard the waste of the tissues of the body, and we all know the pleasant and exhilarating effects they produce when we are tired. But there is a tendency nowadays to look upon tea as a food. With some people it replaces food. Easily infused, and when there is little appetite, sedentary, lazy, or thriftless people are apt to make tea, bread, and butter act as a substitute for a more sustaining meal. However useful as an adjunct to our dietary tea may be, the practice of taking tea five or six times a day is reprehensible. This vicious habit, though largely met with amongst the working classes, is by no means confined to them. I know of no practice that carries its own condemnation, or is fraught with greater risk to the development of the body, than that pursued in industrial centres where female labour is largely employed, *e.g.*, Lancashire, of bringing up young infants upon tea and bread. Malnutrition and a large infant mortality rate are the consequences.

Into the question of coffee and cocoa we need hardly enter.

To-day there is plenty of cheap food and a great variety of it within the reach of all except the very poor. The cheapest foods are by no means the least nutritious. Amongst the unskilled labouring classes small wages necessitate the greatest economy, and if the family is large proper food can scarcely be procured. Domestic circumstances therefore force children to work earlier than they otherwise would, and with physical frame and muscular powers scarcely equal sometimes to the task imposed. Wholesome and sufficient food is thus withheld at an age when it is most required. Small wonder, therefore, that with the burdens of maternity imposed upon them in addition, the wives of working men so frequently break down in health, thus adding to the discomfort of home and contributing to the improper feeding of the children. It

is only occasionally that the details of a death from starvation come before the public, but there are thousands of men and women in this "Merrie England" of ours eking out an existence upon starvation diets, their wages only allowing them to procure sufficient to keep body and soul together. In investigating these cases I have been struck by the fact that life can be maintained for a long time, and apparently without great harm, upon the barest subsistence diet. It is the very young and the aged who feel the deprivation of food most. When starvation has once passed over a people it is years before the effects are removed. When a student in the hospitals in Paris, shortly after the Franco-German war, my attention was frequently drawn to the large number of cases of consumption, general debility, and anæmia in young men and women, consequent upon the cellar-life and deprivation of food imposed upon the population during the siege. The history of Ireland, too, affords an illustration of the effects of prolonged deficiency of food. Pestilence walks in the trail of starvation. The potato famine in Ireland was followed by relapsing fever, an epidemic which more than decimated the nation, and was as severe a scourge as any of the epidemics of the middle ages.

At what hours of the day we should take our food, of what character it should be and what quantity we should eat, are questions of individual idiosyncrasy, wealth, and appetite. The appetite is certainly a guide, but it is a fallible one. Whilst it deceives people who live too freely by allowing them to gorge themselves, its absence, on the other hand, allows dish after dish of nutritious food to pass without being tasted. There is an old precept attributed to the School of Salerno, that we should rise from the table with still some appetite left. Under no circumstances should people eat to repletion. It is astonishing the amount of food some people eat compared to others who appear to be just as well nourished and quite as healthy, a circumstance which suggests that the average man consumes more than he requires, and that so far as this particular question is concerned each individual must settle it for himself. In the savage state man eats with great irregularity and to excess. His pleasures lie in eating, drinking, and sleeping. His habits are gluttonous. It is when civilisation advances and man becomes engaged in occupation that he finds it necessary to eat at stated times, and that whilst he becomes the bread-winner of the family, woman becomes the cook.

The feeding of the people is an important problem, and one of increasing difficulty as time goes on and the population keeps increasing. It is only necessary to visit large cities, such as Glasgow, Manchester, and London, to observe the prominent part the eating-house, the restaurant, and hotel play in the social life of

to-day. Cooking in some places has become one of the fine arts of the period, and a cultivation of the palate one of the refinements of modern society. These, with the use of expensive wines, have always gone hand in hand with national prosperity. When Rome was at the height of her grandeur the great meal of the day, the supper or coena, corresponding to our dinner, was one upon which the wealthy families exhausted all the resources of art and luxury. The sums of money expended upon their public banquets were something fabulous. Nothing which money could procure was left unbought. The shores of the Mediterranean, the coasts of Spain and Britain, and the fringes of Libya were searched for dainties to supply the table. A public banquet is known to have cost £40,350. Doubtless the wealth of Rome was great, but it was equalled by the extravagant and luxurious tastes of the people. It is strange how every nation, as it has become wealthy, has imitated in this respect the luxurious habits of the Romans. Is there no resemblance in the national prosperity, the vices and vanity of England of to-day, to the mistress of the world when at the summit of her greatness? The hand of time may not be stayed nor the progress of evolution delayed, but it was plain food, simple habits and simple pleasures, with their physical and moral correlates, that created Great Britain and gave her healthy sons and daughters. Upon their offspring now rests the obligation of upholding the reputation of the mother country, and of maintaining her in the high position she has held amongst the nations as a great social, commercial, and economic power.



FACTORY LEGISLATION IN THE UNITED STATES.

BY EDWARD PORRITT.

THEORETICALLY the Labour Laws of the United States touch the people at an infinitely larger number of points than those of England touch the English working classes. To an Englishman at all familiar with the history and the vigorous and uniform administration of labour laws in his own country, the number and variety of the labour laws of America are not their only outstanding features. Other points which impress themselves are the influence that English labour laws have had in the United States; the comparatively recent dates at which most of the American laws came into existence; and the lack of uniformity as concerns the laws and their administration. This lack of uniformity is inevitable under the American political system. It is easily understood when it is remembered that there are now almost as many States in the Federal Union as there are counties in England; that most of the States are larger than England; and that each State adopts its own labour laws, as it adopts its own marriage, divorce, and probate laws.

Including Congress, there are now forty-six legislative bodies in the United States. Each of these representative bodies, with its Senate and its Lower House, is in session at least once in every two years; so that one year with another there are somewhere about twenty-three Legislatures in session, each passing new laws and amending or repealing old ones.* Only the measures passed by Congress are general in their application. Those concerning labour passed at Washington are few; and, except as concerns immigration, affect only a small number of people outside the Federal service. Congress legislates for the territories, for those remaining sections of the country which are not yet organised into States; but little importance now attaches to labour legislation for the territories, as their population is exceedingly sparse, and mostly engaged in agriculture.

The beginnings of modern labour legislation were at Washington. In the forties, during the presidency of Van Buren, the ten hours day was established in connection with the Federal dockyards and arsenals, and its adoption by the Government soon led to a similar

* It is calculated that from 4,000 to 8,000 laws are enacted in America every year.

FACTORY LEGISLATION IN THE UNITED STATES.

working day in many of the American industries. Thirty years later, when General Grant was President, the working day in the dockyards was reduced to eight hours. Later on, eight hours was fixed by Congress as the working day for letter carriers and letter sorters in the large cities, and for all Government servants at Washington. Congress also passed laws excluding Chinese immigrants and contract labourers. These laws, which had their beginning in 1881, were directly in the interest of American labour. They are part of the American protective system, and have had their influence on labour in all the industrial States. But although modern labour legislation thus had its beginnings at Washington, and the newer spirit towards labour found its expression in Acts passed by Congress, it was not at Washington that the American codes of factory and labour laws which compare in any way with our own had their beginning. These codes were adopted by the different State Legislatures, and at different times, nearly all of them since 1870, many of them since 1880; and the code of each State is the embodiment of a separate movement on the part of the industrial classes and their political and industrial leaders.

The origin and development of these laws was much in the same order as the origin and development of our labour laws, and the influence of our laws is easily traceable in most of them. The American laws are seldom as thorough-going as our own, and the machinery for carrying them out is never as strong. The earliest of the modern American laws is in connection with the textile industries. Later on come the mining codes, and soon after them, laws protecting working people in their financial relationships with their employers, giving a legal status to trade unions, protecting trade union labels, and dealing with the liability of employers for accidents to their workpeople.

New England is the original home of the cotton industry of America, and it is in the laws of the States forming the New England group that the code applicable to the cotton trade is to be found. Until within the last ten or fifteen years, New England enjoyed a monopoly of cotton manufacturing as complete and as undisputed as that Lancashire has so long enjoyed in England. Massachusetts, Rhode Island, New Hampshire, and Connecticut are the cotton manufacturing States of New England, and in these States the systems of factory laws have been furthest developed. Massachusetts is in the lead. Georgia, the Carolinas, Alabama, and Tennessee, among the Southern States, are now largely and increasingly engaged in the cotton trade. The industry in these States has grown enormously in the last five years; but as yet none of them has a system of factory laws of much practical value. Georgia and South Carolina each have laws recently passed limiting

FACTORY LEGISLATION IN THE UNITED STATES.

the working day to eleven hours. These laws, however, are loosely administered; and in the South, so far as factory legislation is concerned, the cotton industry is where it was in England until 1833, and in New England until 1870.

The extreme backwardness in factory legislation in New England is at first sight surprising. In England Parliament had passed half a dozen Acts affecting children, young persons, and women engaged in the textile industry, and was almost on the eve of the great consolidating measure of 1878 before the Legislature of Massachusetts passed an Act restricting the working week of women and children to sixty-six hours. A little examination of the history of the cotton trade in America, however, affords some explanation for this delay, and accounts in a measure for the late period at which public opinion was strong enough to carry restrictive factory laws through the State Legislatures.

The cotton factory in New England is at least one generation younger than the cotton factory in Lancashire. In America it was about 1820 before the spinning and weaving of cotton in factories was established on a paying basis.* As early as 1787 manufacturing on the factory system was attempted in Massachusetts. A little later mills were also started in Rhode Island. To aid these endeavours money was contributed out of the State treasuries. All of them failed, not so much for want of capital, or want of enterprise, but because as yet superior machinery and the practical experience of the Lancashire cotton manufacturers defied all rivalry, and because, moreover, the exportation of machinery from England was then forbidden. These are the reasons Americans now give in explanation of the fact that it was not until after Slater established himself in Rhode Island, about 1812, that cotton manufacturing obtained a foothold in New England. With Slater's establishment success came; other industries sprang up, and soon New England became the great manufacturing region of the United States.

The beginnings of the cotton industry in Massachusetts were different in several respects from the beginnings of the industry in Lancashire. In Lancashire, cotton mills in the early days were generally in the hands of individual owners. In New England, from the first, the industry has been in the hands of what Americans call corporations; what we in England call limited liability companies. In Lancashire, the era of cheap labour and the squalid and sordid stage came first. In Massachusetts, the sordid stage was in the

* In 1821, Mr. William Blackburn, of Manchester, went to be Superintendent of the Cotton Mill, at Dover, New Hampshire.—*Axon's* "Annals of Manchester," page 164.

FACTORY LEGISLATION IN THE UNITED STATES.

middle period. There is little that is pleasant or wholesome in Dr. Aiken's or the other contemporary pictures of the Lancashire cotton factory system, as it existed in the closing years of last century. It was squalid in the extreme. On the other hand, in the contemporary descriptions of the New England cotton industry, as it flourished between 1820 and 1840, there was no squalor and much that looks pleasant and wholesome, at least in the retrospect.

When the cotton mills began to be established at Lowell, the demand for labour was greater than the supply. The stream of immigration to America was then but small; little of it went to New England; and mill superintendents had to rely almost solely on people living in the neighbouring towns and villages. Wages were high, and with one exception the working conditions were excellent. The exception was the length of the working day. It was from sunrise to sunset. But the well-paid and contented New England workpeople, full of interest in the new industry, were not disposed to quarrel with this condition. To them, in those days, it was simply the adaptation of the custom of the farm and the small workshop to the cotton factory. They accepted the long day without demur, as people of much the same class now at work in the cotton mills in the South cheerfully accept a working day of similar length. In those early days in New England, men, women, and children worked from five o'clock in the morning until seven o'clock in the evening.

Of the working conditions of that period, of the class of people who were the pioneers in the new industry, and of the atmosphere of the cotton mill and the boarding houses, a vivid description has been written by Mrs. Harriet H. Robinson, and embodied in one of the early reports of the Massachusetts Labour Bureau. Mrs. Robinson worked at Lowell between 1820 and 1840, before the New England workpeople had given place to new comers from Ireland, and to the French Canadians who now so largely monopolise the cotton industry in the New England States. Reports as to the condition of the cotton factory workpeople of Lancashire had reached New England before the cotton industry was developed there. They had raised a prejudice against cotton mill work as employment for women, to overcome which the superintendents of the Massachusetts mills were compelled to offer high wages, and excellent home conditions in the boarding houses.

At first only a few women came into Lowell; others followed, and then, according to Mrs. Robinson—

In a short time the prejudice against factory labour wore away, and the New England mills became filled with blooming and energetic New England women. They were naturally intelligent, had mother wit, and fell easily into the ways of their new life. They soon began to associate with those who

FACTORY LEGISLATION IN THE UNITED STATES.

formed the community in which they had come to live, and were invited to their homes. They went to the same church, and sometimes perhaps married into some of the best families, or if they returned to their secluded homes, instead of being looked down upon as factory girls they were more often welcomed as coming from the metropolis, bringing new fashions, new books, and new ideas with them. The early mill girls were of different ages. Some were not over ten years old; a few were in middle life; but the majority were between the ages of sixteen and twenty-five. The working hours of all the girls extended from five o'clock in the morning until seven in the evening, with one half-hour each for breakfast and dinner. Even the doffers were forced to be on duty nearly fourteen hours a day. This was the greatest hardship in the lives of these children. Those of the mill girls who had homes generally worked from eight to ten months in the year; the rest of the time was spent with parents or friends. A few taught school during the summer months. Life in the factory was made pleasant. There was no need of advocating the doctrine of the proper relation between employer and employed. Help was too valuable to be ill-treated. If these early agents or overseers had been disposed to exercise undue authority, the moral strength of the operatives and the fact that so many of them were women would have prevented it.

Except in rare instances the rights of the mill girls were secure. According to Mrs. Robinson—

They were subject to no extortion, and if they did extra work they were always paid in full. Their own account of labour done by the piece was always accepted. They kept the figures, and were paid accordingly. Though their hours of labour were long, yet they were not overworked. They were obliged to tend no more looms and frames than they could easily take care of, and they had plenty of time to sit and rest. I have known a girl to sit twenty or thirty minutes at a time. They were not driven. They took their work-a-day life easy. They were treated with consideration by their employers, and there was a feeling of respectful equality between them. The most favoured of the girls were sometimes invited to the houses of the dignitaries of the mills, and thus the line of social division was not rigidly maintained. The feeling that the agents and overseers took an interest in their welfare caused the girls in turn to feel an interest in the work for which their employers were responsible. The conscientious among them took as much pride in spinning a smooth thread, drawing in a perfect web, or in making good cloth as they would have done if the materials had been for their own wearing. And thus was practised long before it was preached that principle of true political economy—the just relation, the mutual interest, that ought to exist between employers and employed.

As was the case in the early days of the Lancashire cotton industry, the millowners of Lowell and Fall River provided homes for many of their workpeople. There is, however, a wide difference between the descriptions of the squalor and overcrowding in the old boarding houses for cotton mill pauper apprentices in the Lancashire mills and the picture of cotton mill boarding-house life at Lowell in the twenties and thirties, as described by Mrs. Robinson. She writes—

Life in the boarding houses was very agreeable. These houses belonged to the corporations, and were usually kept by widows, mothers of some of the mill girls, who were often the friends and advisers of their boarders. Each house was a community in itself. There fifty or sixty young women from different parts of New England met and lived together. When not at work they sat in groups

FACTORY LEGISLATION IN THE UNITED STATES.

in their chambers, or in a corner of the large dining-room, busy at some agreeable employment. They wrote letters, read, studied, or sewed, for as a rule they were their own seamstresses and dressmakers. There was a certain class feeling among these households; any advantage secured to one of the number was usually shared by others belonging to her set or group. They stood by each other in the mills. When one wanted to be absent half-a-day, two or three others would tend an extra loom or frame apiece, so that the absent one might not lose her pay. At this time the mule or spinning jenny had not been introduced, and two or three looms or spinning frames were as much as one girl was required to attend.

These early New England mill girls, according to Mrs. Robinson, "were religious by nature and by Puritan inheritance. On entering the mill each was obliged to sign a paper which required her to attend regularly some place of public worship." In the ten years from 1826 to 1836 Lowell increased from a village of two thousand inhabitants to a town of seventeen thousand. Mrs. Robinson attributes much of this growth to "the successful operation of the early factory system, managed by men who were wise enough to consider the physical, mental, and moral needs of those who were the source of their wealth."

Lowell had its first strike before the incoming of the Irish immigrants and the French Canadians. It occurred in 1836, and was against a reduction of wages. Mrs. Robinson writes—

The mills were shut down, and the girls went from their several corporations in procession to the Grove, on Chapel Hill, and listened to incendiary speeches from some early labour reformers. One of the girls stood on a pump and gave vent to the feelings of her companions. This was the first time that a woman had spoken in public in Lowell, and the event caused surprise and consternation among her audience.

Up to this time, and for many years later, there was no effective interference on the part of the State with the hours of work in the cotton mills of Massachusetts. After 1840, when President Van Buren's proclamation established a working day of ten hours in the Government dockyards, the ten hours day gradually became general in many industries. But the movement made no progress in the cotton trade. Women and children still worked the long hours already stated. As late as the sixties, when some of the mills were working two shifts, children were employed at night. Their hours were from a quarter to seven until six o'clock in the morning, with stoppages of forty-five minutes for meals, eaten in the factory. The Massachusetts Labour Bureau, from its inception in 1869, has possessed the power of subpoenaing witnesses and examining them on oath. A mill superintendent, who gave evidence in one of its inquiries about 1872, stated that the children who worked in the night shift were often so drowsy and sleepy that he had known them fall asleep standing at their work, and that he had had to sprinkle water in their faces to arouse them.

FACTORY LEGISLATION IN THE UNITED STATES.

The labour reformers of whom Mrs. Robinson speaks had made their appearance in the State a little earlier than the strike at Lowell in 1836. In 1834 a general trade union was formed in Boston, one of the aims of which was a shorter working day. The movement received little popular support, and was frowned upon by the civic authorities and the churches. The union proposed to hold a meeting on the Fourth of July, 1834, and sought the use of a church hall. Applications were made to twenty-two church associations in Boston. Every one of them was refused. The next year an application was made to the Municipal Council for the use of one of the city halls. This was also refused, because of the connection of the union with the ten hours movement. With here and there an exception, the churches in New England held aloof from any of the movements in behalf of better factory laws. Soon after the Massachusetts Labour Bureau was established, efforts were made to collect information as to child labour. There were then 342 school boards in the State. Information was sought from each. Only 206 replied, and the information received from them was practically worthless. In the following year, to quote the report of the Bureau for 1876—

A schedule of simple, easily answered inquiries was sent to 1,530 clergymen, who were deemed, for many reasons, better qualified to answer official inquiries than men in almost any other position in life. Only 554, or 35 per cent, answered. Some so far forgot the courtesies of letter writing as to anonymously assert that the information desired was none of the Bureau's business.

Between 1830 and about 1880 it was uphill work obtaining labour legislation from the State Legislatures of New England. America was expanding enormously during that period, and when the native-born New Englanders found the conditions of the cotton industry too hard for them, they quickly turned to other work near at hand, or went West, and left work in the mills to the Irish, who were then coming into the country in large numbers. Had there not been these other openings for the American-born workpeople, and had it not been for the characteristic disinclination of Americans to regard themselves as tied for life to any one means of getting a livelihood, and had the great issues of the Civil War not convulsed the country for twenty years, it is more than probable that the working day from sunrise to sunset would not have survived in the New England cotton trade until 1870. Nor would the truck system and the system of long and irregular intervals between paydays have survived as long as they did. Weekly paydays, instituted by law, are very modern innovations in New England. In some States, as for instance in Connecticut, they date no further back than 1888.

In New England, the store system in its worst form did not long survive the Civil War. Labour was in demand in the sixties, and

FACTORY LEGISLATION IN THE UNITED STATES.

employers in the cotton trade and other industries were compelled to pay in cash, and abandon the system of tickets on the stores which had grown up in the early middle period in the cotton industry. Nowadays in New England there are State laws against truck, and the system is practically dead. But elsewhere, especially in the cotton and mining industries in the South and West, the corporation store still survives. In some States there are no laws against it. In others there are laws, but the system survives in spite of enactments of the State Legislatures. In the isolated mill centres in the South, where there are practically no labour laws, and in many of the remote mining villages, in States such as Ohio and Kansas, the workpeople never see money from one year's end to another. They are paid with orders on stores, and the usual mode of procedure is for the mine or mill owners to redeem the store orders, or the scrip, as it is locally called, at a discount. Wages in these communities are always lower than elsewhere, and even from the rates which prevail the employers effect a reduction of 10 or 15 per cent by their dealings with the storekeepers. Where the discount system does not prevail the employers generally own the stores, and charge practically what prices they please, for if the workpeople are not actually compelled to deal at the corporation store they are so remote from other markets that they have no option.

There was no shortening of the working day in the New England factories until 1870. Previous to this there had been measures passed by the State Legislature of Massachusetts with a view to restricting child labour. Agitation for them began about 1847. In 1866 a law was passed prohibiting the employment of children under ten years of age, and providing that no child between ten and fourteen years of age should be employed unless in the year previous to going into the mill it had attended school for six months. In 1867 there was passed another law compelling children between ten and fourteen, who were engaged in the factories, to attend school on at least sixty days in the year, or on one hundred and twenty half-days. Under this law a curious half-time system was introduced in connection with several of the mills in Massachusetts. The children went to the mill in the forenoon, and attended school in the afternoon. School commenced at one o'clock and was closed at four, when the children returned to the mill and worked on until six or seven in the evening. This plan of work, school, and work had its origin at the Indian Orchard Mills about 1868. I have come across no statement as to how the children regarded these long, full, and busy days. But the plan evidently suited the mill superintendents who tried it. The superintendent of the Indian Orchard Mills wrote—

FACTORY LEGISLATION IN THE UNITED STATES.

We find that the amount earned by the half-time children on job work is nearly and in many cases quite as much as formerly earned in full time, and it can be easily explained. Take, for instance, spooling. We stop these frames at noon, and the yarn is allowed to accumulate. When the children return from school they take hold in earnest, under the incentive of attending school and an ambition to earn as much as possible. We find that before noon of the next day the work is all up. It may be asked if it is not too much for them to do in eight hours what was formerly considered a day's work? I answer that before the establishment of half-time the children, from sickness and other causes, were absent from their work from one to four days per month, while now we seldom have an absence reported. The children attending school, who work by the day or week, are now paid for three-quarter time for each and every day they attend school, and in no case have we yet had a complaint for this reduction, but are constantly receiving applications from families for work, simply because their children can attend school and at the same time be earning something. This brings a much better class of help to our mills, and this fact alone would pay us for all the trouble.

The system of work, school, and work, notwithstanding its success at the Indian Orchard Mills, never became general. About 1870, the English plan of half a day at work and half a day at school was introduced, and was continued until 1888 when the half-time system was abolished, and the age at which children could go to work in factories, workshops, and mercantile establishments was fixed at thirteen. Sixty or seventy years elapsed between the introduction of the cotton industry into New England and the passage of a law in Massachusetts which effectually restricted child labour. The earlier laws had that intent. They were, however, dead letters; and it is on record that, up to 1870, children under ten were employed in factories all over Massachusetts for eleven or twelve hours a day.

These early laws against child labour failed in New England for the same reason that our factory laws up to 1833 were largely inoperative. In England it was left to the local magistrates to administer the Act of 1802, which prohibited children from working longer than twelve hours a day. The Act of 1819, fixing the age of child labour at nine years, and the Act of 1825, limiting the working day of children to nine hours, were also administered by the local authorities, and it was not until after the Act of 1833 placed the factory laws in charge of the Home Office that the laws were administered in England with vigour and uniformity. English precedents are traceable all through the labour laws of New England, as they are in the mining laws of States such as Pennsylvania and Ohio. In the early laws dealing with child labour, however, the New England Legislatures did not follow the later example of the English Parliament. They left the administration of the laws to the town councils. The councils appointed the truant officers, who were supposed to see that the child labour laws were obeyed. The councils in nearly all the mill towns and cities

FACTORY LEGISLATION IN THE UNITED STATES.

in one way or another were under the influence of the mill corporations and the mill superintendents. The truant officers in their turn took their cue from the councils, and as a result, children were practically no better off for the laws passed by the Legislatures.

The same lack of vigorous administration of the labour laws still prevails in most of the States of America. There is no lack of labour legislation, but many of the statutes are drawn up in an exceedingly slipshod fashion. In some of the laws, the loopholes are glaringly obvious. In none of the States, so far as I can learn, is there anything of the vigour and uniformity in administering the laws that of recent years has characterised the administration of labour legislation in England. Nor, speaking generally, is there any continuity of policy in the administration of the labour laws. In many of the States not only is the force of inspectors inadequate, but in all of them officers have no security of tenure, and are changed with each outgoing Administration. It is the same with the Commissioners of the Labour Statistics Departments. Although their work is of a scientific character, most of the men who are engaged in it owe their places to partisan services, and retire from office when the political party which placed them there comes to an end of its tenure at the State Capitol. Hundreds of thousands of dollars have been spent by the various States on the Labour Departments. A large proportion of this money has been utterly wasted owing to the partisan system under which the Commissioners are appointed and enjoy their tenure. No matter how well a Commissioner may have discharged his duties, if his political party is defeated in the State elections he steps out of office, simply because the new Administration desires his place as a reward for some lawyer or journalist who is conceived to have established a claim for recognition upon the party which has come into possession at the State Capitol.

Loyalty to work, to the laws which have to be administered, and to the people for whose protection and advantage they were supposedly adopted, is impossible under such a system. Civil Service Reform, in spite of many obstacles, traditional and practical, has made much headway in the last ten years in connection with the Federal service. Sooner or later, the movement must reach the State and the Municipal services. When it does, no class of people will receive greater direct advantages from the official permanence and stability which will come with Civil Service reform than those whom the factory and labour laws are intended to protect. Wherever there is any vigour in the administration of the labour laws, it may be traced to the vigilance and strength of the local labour unions.

FACTORY LEGISLATION IN THE UNITED STATES.

For twenty years the law restricting the working hours of young persons and women in Massachusetts to sixty-six hours a week was agitated for, counting only from the time when petitions first began to be presented to the State Legislature in its favour. The first petition was in 1845. It was referred to a committee which reported against any legislation. In their report the committee gave expression to their opinion that factory labour is no more injurious to health than any other kind of work; that wages would necessarily have to be reduced if an eleven hours day law were passed; that other States would out-distance Massachusetts in the markets of the world if Massachusetts adopted a shorter day; and finally, to quote the report of the committee, "such a law would close the gate of every mill in the State." In 1850 the subject was again before the Legislature. Once more it went to a committee, and again any interference on the part of the Legislature was declared to be inexpedient. This time, however, some little progress was made. There was a minority report in favour of the eleven hours day. In 1852 an effort was made to make ten hours the legal day in the absence of special agreements to the contrary, and in all cases to prohibit children under fifteen from working more than ten hours. This measure failed. So did another measure brought forward in the same year which would have reduced the working day at once to twelve hours, later on to eleven, and finally by July 4th, 1853, to ten hours.

About 1869 the politicians began to get a little uneasy about the labour vote, and in order to do something to conciliate the movement they established the Labour Bureau at the State Capitol. The bureau was organised with fairly large powers. At first it was conducted on crude and unscientific lines; but the Massachusetts Legislature had built better than it knew when it established the bureau. The labour bureau idea became popular. Other States soon followed the example of Massachusetts, and the work of education began. It was largely through the activities of these labour departments that American journalists, labour leaders, and politicians were familiarised with what the English Parliament had done in the way of labour legislation. The English labour laws were reprinted, and the methods of their administration were described in the reports of the State Labour Departments; and although the English laws were occasionally characterised as ponderous, scores of the laws now on the statute books of the various States were modelled after those of England.

The eleven hours day law of Massachusetts was passed in 1870, and then for the next three or four years there was a combat over a ten hours day law. On two occasions a ten hours day law was passed by the lower house of the State Legislature at Boston, and

FACTORY LEGISLATION IN THE UNITED STATES.

thrown out by the Senate. This contest came to an end in 1874, when an Act was passed which, by its restrictions on the working hours of young persons and women, practically reduced the working day in the cotton factory to ten hours. There was great opposition to this measure. In the Legislature it came as before from the Senate, which in all the American Legislatures is most sensitive to the interest of capital. At one stage of the bill's progress it was saved only by the casting vote of the president of the Senate. In 1888 there was a further reduction in the working hours in the Massachusetts factories. The week was then fixed at fifty-eight hours, an hour and a half longer than the working week in the cotton industry in England, and it now stands at that figure.

The other cotton manufacturing States in New England soon followed the lead of Massachusetts in reducing hours; but they did not go so far. In Rhode Island, New Hampshire, and Connecticut, sixty hours a week is now the limit for women and minors. There is some irritation among the cotton mill superintendents in Massachusetts that there is still this lack of uniformity in the factory laws in neighbouring States; and frequent expression has been given to this feeling since the new competition of the South became a recognised factor in the cotton industry of the United States. As yet, however, the other New England States show no signs of following the example of Massachusetts in reducing the hours below sixty a week. The irritation is all the stronger by reason of the fact that in Massachusetts the unions in the cotton trade are powerful enough to see that the factory laws are fairly well enforced.

The textile trades in New England retained the long working day longer than most other industries; and similarly and for the same reasons monthly payments survived longer in the cotton trade than elsewhere. Until the law interfered, monthly payments, long hours, and child labour seem to have gone hand in hand in New England. Massachusetts led the way in establishing weekly paydays, as it had done in shortening working hours for women and children. By an Act passed in 1886, corporations are compelled to pay their workpeople weekly and within six days of the money becoming due. If they fail, it is open to the workpeople who are aggrieved to make complaint to the department of the State Government responsible for the administration of the factory laws, which will then proceed against the employers in the local courts. In New Hampshire a law to the same intent was passed in 1887, and in Connecticut in 1888.

It was not without difficulty that these laws were got from the State Legislatures. Many of the manufacturers strenuously opposed them. They had been accustomed to making up accounts with

FACTORY LEGISLATION IN THE UNITED STATES.

their workpeople by the month, and allowing two weeks or more to elapse before wages were paid. One result of this system was that the workpeople were compelled to apply for advances. They were usually granted, subject to a discount of 10 per cent. If a man to whom five or six weeks' wages were due, applied for ten dollars within a day or two of the day on which his employers usually paid their monthly labour bills, he was granted nine dollars and charged with ten. The dollar, which was thus withheld, was supposed to cover the extra clerical work entailed by making advances. In some of the manufacturing communities, this system of discounting wages was so common that manufacturers made no secret of the fact that these discounts usually covered all the expenses connected with their offices. As another consequence of this system, the credit of the workpeople with the storekeepers was poor; and, as monthly pay was as old as the manufacturing system, the State Legislatures had passed laws under which the storekeepers could factorise the wages of their creditors very readily, and at no expense to themselves. Side by side with the system, also, there had grown up a system under which workpeople gave powers of attorney for the collection of wages due to them. Under the system of monthly pay, with its attendant laws for the factorising of wages, and the custom of voluntarily giving creditors the power to collect wages, the workpeople usually handled as little of their wages in coin as they now do in the States in which wages are paid in orders on stores.

When the Legislatures set about making these infrequent and irregular paydays illegal, there was great opposition from the manufacturers. They insisted that an Act for the weekly payment of wages would be unconstitutional. It would interfere with freedom of contract. When that objection was set aside, it was next objected that weekly payments were impracticable. Next, that the change was not demanded in the interests of the best class of workpeople, and that as regarded the more improvident it was better for them that the existing system should continue. It was not expedient, it was contended, to trust such people with their wages as often as once a week. They would spend them in drink, and otherwise waste them. It was further objected that the American silver dollar did not lend itself to weekly payments by reason of its weight; that the manufacturers themselves were obliged to give long credit; and finally that the additional cost of making up wages once a week was more than the industry could stand, and that if the measure were passed many of the weaker concerns would be compelled to go out of business.

At this time, however, there was considerable life and movement among the labour unions. The Knights of Labour, who are now little

FACTORY LEGISLATION IN THE UNITED STATES.

prominent, were in the ascendancy in the eighties, and had made themselves strongly felt in politics, and the demand for weekly payments was strong enough to carry measures through the Legislatures of three out of four of the cotton manufacturing States of New England, breaking down a corrupt and demoralising system which was as old as the factory industry in America. In the larger cities weekly payments had been common long before the question came before the Legislatures. It was in the smaller and more isolated communities that the older system had survived. Public opinion is exceedingly slow in reaching these places, and nothing short of legislative enactments and the wholesome stirring of public opinion, which the agitation for these enactments brought about, would have served to uproot it.

With the adoption of these laws for weekly payment of wages there was no longer any real need for the enactments which had found their way on to the statute books for the factorising of wages. These were in the interest of the storekeepers, and were intended to help them to get an easy hold of the wages of workpeople who were in their debt. The laws for the factorising of wages have not been repealed; but by amendments recently passed by some of the State Legislatures the amount of money exempt from the operation of the law has been increased, and, as employers now no longer hold four or five weeks' wages in hand, the laws have become practically inoperative. Formerly a creditor who had obtained a sheriff's order could factorise up to within ten dollars in the case of unmarried men, and twenty-five dollars in the case of married men. The sum now exempt by law is fifty dollars, and with weekly payments an employer seldom holds so large a sum of money belonging to any of his workpeople.

The general factory laws of Massachusetts, those concerning the fencing of machinery, hours for meals, ventilation, sanitation, fines, and bills of particulars, are not in the main unlike those of England. They are not so detailed nor so stringent; nor is there the same alertness and zeal in connection with their administration as there is in England. The laws of Massachusetts are more numerous than those of the other cotton manufacturing States in New England, and, on the whole, they are much better enforced. Their administration is in the hands of the Department of State Police, which corresponds to the English Home Office. In examining the more recent history of factory legislation of Massachusetts, one does not as repeatedly come across the admission, often made in official reports of the States of Connecticut and Rhode Island, that this or that factory law is disregarded or is inoperative. These admissions are frequently made in respect of the factory laws of Rhode Island and Connecticut, and they make it apparent that employers do not

FACTORY LEGISLATION IN THE UNITED STATES.

hesitate to evade the laws when it suits their purpose to do so. In the early days of the ten hours law of Connecticut, some of the millowners posted up notices that ten hours would be the rule in their establishments for women and children except when otherwise ordered. A year or two ago the Legislature of Massachusetts passed a law similar to the Weavers' Particulars Act in England. It provided that weavers who were paid by measurement should receive written particulars, enabling them correctly to charge their work. The last I heard of this law was that a number of the mill superintendents of Fall River had evaded it by establishing a system under which weavers were paid by weight and not by measurement.

Many of the laws applicable to workpeople in New England would seem strange to English people accustomed to our labour laws. One of these relates to the giving of notices; another to the protection of workpeople in the exercise of their rights as voters. Rhode Island and Massachusetts each have a law compelling every employer who demands notice of intention to leave his employment to give similar notices to his workpeople when he desires to dispense with their services. In many industries in New England, and, in fact, all over the United States, notices to leave are neither given nor required. These enactments are intended to establish an equality between employers and employed in this matter. The Massachusetts law for the protection of workpeople as voters is a good example of similar laws which exist in almost every State. It prohibits any interference with a voter by an employer, either by threat or persuasion, in the exercise of the franchise, and obliges employers to excuse their workpeople for two hours on the morning of election day.

Another labour law peculiar to America concerns alien contract labour. Federal laws passed in 1885 make it an offence to import labourers from beyond the sea. In Massachusetts there is a State enactment which provides that any corporation bringing labourers from another State shall give a bond of three hundred dollars to the Commonwealth for each labourer that "neither such person nor any one legally dependent on him for support shall within two years become a city, town, or State charge." One of the most peculiar of the Massachusetts laws empowers an employer to serve a notice on a saloon keeper not to supply liquors to persons in his service. It applies only in the case of a person who has the habit of drinking intoxicating liquors to excess, and the employer who has filed a notice of this kind cannot recover damages unless he is injured in his person or property by the action of the person in respect of whom he has given notice.

Among the laws common to the more progressive States other than the States in which textiles are the principal industry, there

FACTORY LEGISLATION IN THE UNITED STATES.

are many which give expression to the new spirit towards labour. This expression is sometimes embodied in the State constitutions. In some of the constitutions recognition is given to trade unions. In others there are clauses declaring it unconstitutional to import contract labourers, or to give employment to Chinese. Some of the constitutions also make it impossible for the State authorities to permit any goods manufactured in convict establishments to come into competition with goods made by free labour. New York is the last State to embody this labour clause in its constitution. The constitution was revised in 1894, and among the new clauses then introduced was one which makes it unconstitutional for the wardens of the State prisons to make any goods except those intended for use in the asylums and hospitals maintained at the expense of the State.

It is regarded as an advantage to labour to get such clauses embodied in the State constitutions, as the constitutions define the limits within which the State Legislatures can act. Laws passed by the Legislatures are frequently held by the courts to be at variance with the State constitutions. When this happens the laws become inoperative, and there can be no further legislation to the same end until the constitution has been amended. In 1894, a law passed by the State Legislature of Illinois, limiting the hours of women in factories, was declared by the Supreme Court of the State to be unconstitutional. As a result of this decision Illinois must remain without legislative restrictions on hours of labour until its constitution is revised or amended.

Many of the new laws and additions or amendments to the State constitutions are landmarks of the trade union movement in America, and are intended to remedy some grievance of which the trade-unionists complain, or some obstacle in the way of trade union organisation and development. One of these is the laws against black-listing. Nearly a dozen States have these enactments. Their purpose is to protect workmen against systematic discrimination in consequence of their connection with a trade union or a strike. These laws are evidences of the difficulty experienced by the trade unions in obtaining recognition from employers in America. In the cotton trade this recognition came with much less grace and goodwill, and at a much later period, than in England. When the Massachusetts Labour Bureau was conducting its investigations in the seventies, it frequently took evidence from cotton mill workpeople from Lancashire who had settled in Lowell or Fall River. These Lancashire witnesses, in explaining the factory conditions prevailing in England, often emphasised the fact that unions were recognised in England and that connection with a trade union movement was seldom to a man's disadvantage, while little or no recognition was given to the

FACTORY LEGISLATION IN THE UNITED STATES

unions in Massachusetts, where the men who were active in trade union movements were frequently black-listed. The numerous inquiries conducted by the Bureau leave no doubt that black-listing was common, and that workpeople who for any reason got into the ill-graces of their employers had little hope of getting other work in their own neighbourhoods. As a mill superintendent, called before the Bureau in one of its inquiries, expressed it, "when persons are discharged from our mill for misconduct we notify the other mills in town, and also refuse them a honourable certificate of discharge." It is the intention of the numerous enactments against black-listing to make such actions illegal. Most of the laws are drastic in their prohibition of the use of the black-list. They are, however, usually qualified with the clause setting out that nothing contained in the enactment shall be so construed as to prevent any corporation from giving in writing any other corporation to whom a discharged person has applied for employment a truthful statement of the reasons for such discharge. In Indiana, and in several other States, there is a section in the black-listing law compelling an employer to furnish a discharged workman with a full, succinct, and complete statement in writing of the cause or causes of discharge.

New York has a law which makes it a misdemeanor for any employer to coerce a workman to sign an agreement not to join a labour union, or to discontinue his connection with a union. When the Knights of Labour movement was at its height, and boycotts on non-union made cigars, clothing, hats, and beer were of frequent occurrence, the unions developed the idea of labels to be affixed to union made goods. These labels came into general use, and as a consequence New York, Ohio, Minnesota, California, and several other States have laws protecting them, much as trademarks and trade-designs are protected.

An interesting point about the American mining laws is the extent to which the checkweighman has become recognised. Like the Particulars Act in the factory laws of Massachusetts, the checkweighman is an institution taken from England. As yet, however, he is not so firmly fixed on the pithead as in England, where it needs an appeal to the local magistrates to bring about his removal. In most of the States where a system of mining laws is well developed, the law, as in England, requires two shafts, and imposes many regulations as to ventilation and managers' certificates.

Nearly twenty of the American States compel employers to provide seats for female employés. This law applies particularly to retail establishments; but is not well enforced owing to difficulties connected with inspection.

There are some labour laws in America of which there can never be any need in England. One set is a relic of the War. Another

FACTORY LEGISLATION IN THE UNITED STATES.

is due to the immigration which is always pouring into the country, and to the policy of making citizens and voters as soon as possible of all the new comers. In nearly all the Northern States the law provides that when any work is to be done at the public expense, preference is to be given to men who fought on the side of the Union in the War of 1861-65. The Old Soldier is a great and active force in American politics; and in addition to costing the country over £28,000,000 a year in pensions, paid by the Federal Government, he has also got his hands on much of the work done at the expense of the Federal, State, and Municipal treasuries.

The enactments which provide that preference shall be given to American citizens are largely the work of the political managers, or to use the American phrase, the political bosses. The bosses are always on hand when any work is to be done at the public expense. In one way or another, they get their pickings out of every State or municipal undertaking. They all owe their existence to the influence they are supposed to have with voters. When a new reservoir or a main sewer is under construction, almost every man who handles a spade or a pick owes his place to the goodwill of a boss, and in return for the employment thus found him, votes as the boss directs.

The policy of excluding non-citizens from public works was carried to its furthest point during the later years of Tammany's control of the New York City government, and of the New York State Legislature. For six or seven years, prior to November, 1894, Tammany Hall was supreme in both these departments of New York public life, and as one of its many methods of entrenching itself and maintaining its supremacy, it carried through the Legislature a measure providing that no man should be employed by the City, even as a scavenger, unless he were an American citizen. As long as Tammany controlled New York this law was acted upon; for Tammany needed every vote it could in any way manipulate. Thousands of Italians were hurried through the naturalisation courts solely that they might work for the street cleaning department, and vote for Tammany candidates at elections. At the election in November, 1894, Tammany was defeated, and in the succeeding winter the difficulty of getting the streets of New York cleared of snow was so great that as soon as the new Legislature met at Albany, in January, the law was repealed. With it also went another labour law, which for some years had prevented the City of New York from using stone which had been dressed elsewhere than on the site of the building or work for which it was intended.

The industrial system of the United States has hardly developed a grievance on the part of the working classes, which, within the last fifteen years, has not been met in some State or another by a legislative enactment. But the number of labour laws, even in the

FACTORY LEGISLATION IN THE UNITED STATES.

most advanced State, is no measure of the actual legal protection afforded to labour. English working people are touched at fewer points by the law, notwithstanding the progress in this matter during the last few years. But the laws which are in existence are enforced. People know that they were passed with the intention of being enforced; that it is the duty of a great State Department, standing completely apart from either of the political parties to enforce them; and consequently the direct advantages accruing from labour legislation in England are incomparably greater than those accruing to the working people from the American laws. And this advantage must continue on the side of the English laws, until the attitude of Americans towards law, law-makers, and administrators is radically changed.



RETAIL

CO-OPERATION AND THE RELATIONS BETWEEN THE INDIVIDUAL AND THE STORE.

—
BY B. J., L. B.
—

READERS of this "Annual" are of a very mixed character. Some have little knowledge of co-operation, some are saturated with it, and some have none at all. Others know it as a big thing in their own town, while others know it as a little thing in their own village, or, it may be even, in their own city. In either of these two latter cases, their knowledge often ends with the operations of their local store, and often does not reach so far.

This variety of readers is my apology to those who may think that I have gone into too great detail in trying to elucidate the relationship that exists, or ought to exist, between the individual and the co-operative store. Those who are saturated with the knowledge of co-operative principles and practices, can easily pass by these pages; while those who have little or no information on the subject will, I trust, find here exactly what they require.

There is a great contrast between such societies as Raglan in Monmouthshire, with its ten members, or Cwm Avon in Glamorganshire, with its thirteen members, and Leeds Society with its 32,273 members, or Bolton Society with its premier position among the retail stores as the possessor of a share capital of over £420,000. The contrast is equally great between the huge sales of the great stores, with their equally huge dividends, and the tiny sales with the still tinier profits of such stores as Granboro' in Bucks, Buckland in Herts, or Elgin in N.B. These latter carry on their little businesses of grocers in the smallest of premises with the smallest of results; while the former carry on an almost inexhaustible series of trades, that can be best summed up under the well-known and well-worn term of Universal Providers. Yet the inception, the formation, and the conduct of all the stores, whether of great, medium, or small dimensions, have been actuated by one and the same main guiding principle, which principle can, perhaps, be best described as the democratic organisation of the people for the purpose of obtaining justice.

In a dim, groping, twilight sort of way, the people in all ages have been continually seeking for justice. Sometimes they have thought to find it by adopting a state of, as far as possible, complete individual liberty, where each man, in scriptural language, did what was right in his own eyes. But this very often meant what was wrong in other people's eyes. It led to the rule of the strongest, of might being considered equivalent to right; to the weakest going to the wall, and to the general adoption of the policy indicated in the well-known lines—

They shall take who have the power,
And they shall keep who can.

Then, in despair, the people have tried to find justice under the shelter of one man, who, through circumstances, had acquired power over his fellows. To this man they submitted themselves, their wives, their families, and their properties, in the hope that his exactions would be compensated for by the protection he would give against the maltreatment and oppression of others. But this submission only led to a gradually increasing tyranny and despotism, which were barely tempered by the necessity felt by the despots of not killing the geese that laid the golden eggs.

Hence arose among the people a class of men who began to think of other methods, and who tried to put their thoughts into practice, with a view to obtaining for themselves and their fellow men that justice which they had demanded in vain from those responsible for the then existing order of society. Failure after failure did not daunt them. A heaven-sent conviction of the truth sustained army after army of social regenerators, and each successive wave of enthusiastic devotees at the shrine of the people's cause reaped a benefit from the exertions of those who had gone before. Thus arose—confining ourselves to our own country—the Peasants' Revolt of 1381, under Jack Straw and Wat Tyler, when John Ball, the Mad Priest of Kent, as he was called, declared that "things will never go well in England so long as goods be not held in common," and who asked the very pertinent question—

When Adam dived and Eve span,
Who was then the gentleman?

A little later, Thomas More showed the world the way to a state of justice in his "Utopia;" but, because of the omnipotent power of the existing agents of injustice, More lost his head, his efforts were unsuccessful, and they remained simply as a beacon and a stimulus to succeeding generations. Of his own time More said—and it is more or less true even of the present time—"the rich devise every means by which they may in the first place secure to themselves what they have amassed by wrong, and then take to their own use

BETWEEN THE INDIVIDUAL AND THE STORE.

and profit at the lowest possible price the work and labour of the poor, and so soon as the rich decide on adopting these devices in the name of the public then they become law."

Then, among others, we had the Levellers of Oliver Cromwell's time, who tried to live in the style of the primitive Christians, but who were summarily dispersed to the four winds of heaven by the horse soldiers of the Protector; and, coming down to our own century, we have had the steady growth of trade-unionism, of friendly societies, and of co-operation, together with the more convulsive and less successful movements of Owenite socialism, chartism, and democratic socialism, all of them being based on the honest rule of the majority and the equally honest submission of the minority to the decisions of the greater number. Of the people engaged in these efforts, and in many others which have never been chronicled and probably never will be, it can be truly said, in the words of William Mort, the Lancashire poet—

No princely names possess they,
 Their mission to support;
 They have not sued to coronets,
 Nor bowed and cringed at court.
 Yet firm are they in purpose
 From thralldom to be freed;
 They have sworn a mighty oath to God,
 To battle for their creed.

Probably, justice in perfection will never be secured; but the numerous experiments made by successive generations have led men to believe that they have obtained the very best instrument for securing justice when they have adopted such an organisation of society as will afford every human unit within its pale a full, equal opportunity of obtaining all things—whether they be power, profits, or products—with every other human unit; and the existing co-operative system is the result of the steady development of this growing conviction among millions of our fellow men, not only in Great Britain but also in her colonies and in many other portions of the globe. Hence, in our retail co-operative societies we not only recognise manhood suffrage, but adult suffrage, women as well as men being eligible for membership in all of them. Capital is democratised and its powers limited; because, in the past, capital has had excessive power and has abused its opportunities. On the other hand, labour has been treated generously; because, in the past, it has been treated harshly, and as nearly all co-operators are also workers, they have felt a fellow feeling. They have suffered from the grievous yokes on their necks, and have desired to be relieved from the burden so far as a relief could with justice be obtained. In addition, the whole co-operative store system is based upon a foundation that is believed to equitably bear up all

RETAIL CO-OPERATION, AND THE RELATIONS

interests, because all interests are of necessity part and parcel of the foundation. This foundation is the consumer. When consumption is made the basis of membership, all interests are reconciled; for, whether a human being works for wages or does not work for wages, he is from the very conditions of his existence a consumer, and as such he is, or can be, interested in the welfare and success of a co-operative store. But as a capitalist, a person has interests antagonistic to all other people, whether they be classed as workers or classed as consumers. His interests lie in getting the most he can for the use of his capital, and they end with that object also. Again, as a worker a person's interests are opposed to those of others, because he wants the highest wages he can get regardless of the wages paid to others. But, as consumers, both capitalists and workers have the same interests, for they are alike equally concerned in obtaining goods at the cost of production plus the necessary expenses of distribution.

It will help us to better understand things if a brief glimpse is given of the development of retail co-operation, so far as it is now known. Many interesting points have gone down into oblivion owing to the extreme modesty of early pioneers who were content to work without leaving any records of their actions, and lack of knowledge on these points may prevent one, at the present day, obtaining a thoroughly accurate view of the past. But sufficient is known to enable us to see, fairly clearly, the line of ascension, and by that means to see, with an equally fair approach to accuracy, the line along which we shall have to continue our march, if we wish to secure the best possible results; or, in the words of Jeremy Bentham, to obtain "the greatest good to the greatest number of our fellow human beings."

The little work entitled "Working Men Co-operators," which is published by the Co-operative Union, gives on page 23, among other old co-operative societies, a list of some old retail stores. The oldest that has yet been discovered is that of Govan, which was formed in 1777. This, as well as others that were formed at the end of the last century or the beginning of this century, originated through the excessive exactions to which the poor working class were subjected at the hands of the tradespeople. Shopkeeping in those days was a most primitive affair compared to what it is now, and the purchases from a grocer of that time by a working class household were mainly confined to oatmeal, flour, bacon, cheese, and an occasional bit of butter. The many luxuries and dainties in the way of tea, sugar, foreign green fruits, dried and tinned fruits, tinned salmon, lobster, and sardines, and the thousand and one articles kept by a modern grocer, were at that time almost unknown, and were almost undreamt of as articles for the consumption of working

BETWEEN THE INDIVIDUAL AND THE STORE.

people. Hence, we find that the most frequent causes of complaints were the excessive prices for meal and flour, and the abominable adulterations that were practised on those articles.

It was with the advent of the Owenite movement that we began to have something like an approach to systematic theory and practice in the conduct of our co-operative efforts, in place of the more spasmodic and rule-of-thumb efforts of earlier times. The Owenite ideal was that of a self-supporting community where everything required for a comfortable livelihood should be produced in abundance, and where

Each should work according to his abilities,
And consume according to his necessities.

The efforts to start these communities, in a fully organised and fully equipped condition, failed owing to the two-fold impossibility of procuring the necessary capital and of securing exactly the right type of people, in exactly the proper proportions of the different trades and occupations, to produce the required results. The first difficulty was quickly recognised, but the second was probably never recognised by those who took part in promoting the experiments. The altered conditions of society, owing to the introduction of railways, steamships, telegraphs, and telephones, the almost universal use of machinery for all the purposes of life, the greater sub-division of labour, and the consequent necessarily greater extension of markets, have made the realisation of self-supporting communities of the Owenite type an utter impossibility. We may have Associated Homes, we may even have Communistic Associations, but the Owenite ideal cannot now ever be realised.

But out of this effort to secure perfection at a jump came a strong and practical feeling, which expressed itself in the inquiry— if we cannot do all we want at once, why not try to do it bit by bit? This feeling spread rapidly over the country; hundreds of co-operative associations were formed for various purposes, and the practical idea that was stimulating these efforts was admirably expounded by the Brighton co-operators, in the little magazine published by them in 1828. The teachings in this magazine cannot be too often brought before the co-operators of the present day. They might well be termed the New Testament of Co-operation, and they ought to become as familiar as "Household Words;" for we can all work more successfully when we clearly comprehend the source of our inspiration, and the goal to which that inspiration leads. Hence, it must be beneficial for all of us to grasp the fact that these teachings are the bed-rock foundation of our present co-operative system.

Speaking of the apparently hopeless condition of most working men, the Brighton co-operators frankly admitted that "it is capital we want," and then went on to say—

RETAIL CO-OPERATION, AND THE RELATIONS

Now let us consider how this capital is to be raised by even the poorest amongst us! Their confident opinion was that "a man wants nothing but his wages and an honest companion to begin." But, "if a number of working men were to join together, they might do greater things. They might have a shop of their own where they might deal for everything they wanted. Their shop would enter into competition with other shops. As the business increased, the profits and the capital would increase. . . . In less than a year you will be asking, what shall we do with our surplus capital? The answer will be, employ one of your members to manufacture shoes or clothes, &c., &c., for the rest. . . . In this way they will proceed, as the capital increases, to employ one member after another, either to manufacture articles consumed by the members or by the public. Beginning to manufacture for the members, the sale is sure. When the capital is able to produce more goods than the members can consume, they must manufacture those articles which are in demand by the public at large."

From these teachings have grown the magnificent crop of co-operative stores which exist at the present day. It is quite true that many members only go to their store because it is more profitable to go there than it is to go to a private shop. But this is the great and crowning triumph of co-operation, that while it ever keeps in mind its grand humanising mission, it is able to successfully defy all forms of competition; and it has succeeded in proving to be true in practice what has often been considered to be an unsound paradox—that economics and morality are interchangeable terms meaning one and the same thing, and that, after all, the moral teachings of Christ, which some still think are best for use on Sundays and best left alone on weekdays, can be carried into everyday use, and are actually put into constant practice by co-operators. So, we find that co-operation is the one sole means of practising Christianity in common life. By no other means can we effectually love our neighbours as ourselves, and do unto others as we should like others to do unto us.

If the foregoing be true, and most readers at the least will agree that it is, we shall have to concur with those prophets who foretell a glorious future for co-operation, if only we can get each individual member to be loyal to his cause. There ought to be little difficulty in securing loyalty, for all the best interests of every member are involved in securing increased prosperity to his store. There would be no difficulty at all if members could only be adequately taught the true meaning of co-operation. What would be thought of a man who, being occupied during his working hours as a policeman trying to catch thieves, practised as a thief during his hours of leisure? What would be thought of a coast-guardsmen who, having spent his hours on duty in helping to prevent smuggling, should spend his hours off duty in running cargoes of contraband? No punishment would seem to be too heavy for such conduct, because it is a mingling of wrongdoing and treachery, which is abhorrent to every well constituted mind. Yet, is not this conduct something akin,

BETWEEN THE INDIVIDUAL AND THE STORE.

something similar, to the conduct of those members of co-operative stores who only partially support and only partially buy from their own shops and purchase the remainder of their requirements from private stores or firms? By their conduct they are keeping the common enemy alive and vigorous, while at the same time they are making the task of the store harder, and delaying the ultimate success of a complete system of co-operation.

Of the logical necessity for complete co-operation there can be no doubt. If it is wise to co-operate for the mutual supply of bread and cheese, it is wise to do so for the mutual supply of beef, boots, coal, and calico. If it is wise to co-operate for these, it is wise to co-operate for the supply of cottages, furniture, and physic, for the occupation and purchase of farms and allotments, for investments in factories, mines, and railways, and for the better enjoyment of our holidays or hours of leisure. And if it is wise to do all these things, it is surely wise also to co-operate not only for *supply* and for *investment*, but also for *production*, until the whole round of our wants and desires are satisfied by co-operative methods instead of by methods of competition and contention.

It is worth while to consider for a moment the increased benefits to each individual by the addition of each successive ring of co-operative growth or enterprise. This can well be done by noting first the benefits derived from the elementary operations of a small store like Great Yarmouth, which in 1894 had 82 members, made sales during the year to the amount of £830, and reaped a profit on these sales of £17. Then note the benefits derived from the extensive operations of a society like the one at Bury, Lancashire, which, with its 10,405 members, made sales in 1894 to the extent of £276,310, and realised a profit on these sales of £44,732. In the first case, the Great Yarmouth Society was only able to benefit 82 people, and through being small in numbers it could only benefit them by a comparatively imperfect supply of groceries and provisions. All the other wants of its 82 members had to be supplied from competitive channels, while a trail of profit had to be left behind for the benefit of the competitive trade, to the detriment of the 82 co-operators. Hence the members only purchased during the year to the extent of £10 per head, and only made profits during the same period to the extent of 4s. each. But in the case of the Bury Society, the members could obtain from the stores almost everything they required. The society, being on such a large scale, could be worked more economically and efficiently, and in consequence each of its 10,405 members purchased on the average during the year £27 worth of goods, and made profits to the extent of £4. 8s. per head, which was twenty-two times more per member than was done by the small society at Yarmouth.

RETAIL CO-OPERATION, AND THE RELATIONS

The advantages in other directions, beside the advantages derived as a consumer, of being complete co-operators instead of only half-and-half such or worse, are very considerable. First, there are the opportunities of profitably employing the savings of the individual members, or, in other words, being your own capitalists and taking the profits thereof, instead of depending upon the capital of others. The more trades, businesses, manufactures, or investments that a society can safely enter into, the more capital can it employ. The more capital it can employ and the better it is for all thrifty and prudent co-operators; for they are then more independent of the freaks of fortune, which are sure to come at some time of life or other, whether it be in the shape of lockouts and strikes, sickness in the family, accidents to the bread-winners, loss of employment by dislocations in trade, or by the inevitable creeping on of the universal enemy and the universal vanquisher, old age. In any case, the funds invested in the co-operative store come in the nick of time to ensure comfort and happiness in families, when otherwise these blessings would vanish; and to scare away the great bugbears of all honest working people, the shadow of the workhouse, and the scandal of a pauper's grave. It should always be borne in mind that the more capital working people can accumulate and use themselves for their own benefit, the less need will there be for them to depend on the capital of the rich, and therefore the less risk will there be of the rich being able to exercise undue power over the workers or to deal unjustly by them. Further, so long as the workers can obtain repayment of their capital when required to tide them over a time of distress, or to make a comfortable provision for old age, it matters very little to them how low the interest on capital becomes, or even if interest disappears altogether. For, if they do not get interest, they will receive larger wages for the same amount and quality of work to a greater extent than the interest would amount to; since not only do they lose the interest, but those people lose it also who possess capital in abundance, and who were once classed by Mr. Chamberlain as those who toil not, neither do they spin. During the last 40 or 50 years the remuneration, or interest, to capital has, on the average, decreased by 40 or 50 per cent; and it should never be forgotten that this reduction has meant greater benefits to working people in the shape of higher wages, shorter hours of labour, and lower prices for nearly all kinds of food and clothing.

Secondly, the more the action of co-operation can be extended the more people can co-operators employ, and the more power can co-operators exert in effecting a universal improvement in the condition of all labour. If co-operators treat their employes better than other employers treat theirs, and this is usually the case, it has

BETWEEN THE INDIVIDUAL AND THE STORE.

a tendency to bring other employers up to the same level, owing both to the influence of example and to the economic influence of the law of supply and demand. For the best workpeople naturally gravitate into co-operative employment, because they there meet with the best conditions of service; and hence the co-operative movement is rendered better able to fight a successful battle against the ordinary system of competitive trading. The employers in the competitive world are then compelled in self-defence to try to retain their best workpeople by improving their conditions, and so the scale of improvement is steadily, if slowly, raised. For example, the practice of giving store employés a weekly half-holiday is now generally followed by shopkeepers throughout the country; and the action of some of the Northumberland and Durham stores in giving their employés an eight hours day is having a very stimulating effect upon the universal adoption of shorter hours.

We cannot but glory in the triumph of our democratic business system over the autocratic system of private shopkeeping, and we cannot but perceive from what has been already done, that wherever and whenever the people acquire power they almost invariably use it so as to do to others as they would like others to do to them. When, therefore, we consider the immense possibilities for good, and the vast opportunities for promoting the happiness of each other and of the people at large, which are involved in the development of co-operation, all of us ought to be stimulated to become thorough in our principles and still more thorough in our practice. Our stores ought to be extended in every possible way until every want of every kind in every household is supplied, from the most minute detail of matches, pins, or needles, to the biggest items of lands and houses. Where, in the nature of things, through sparseness of population or other causes, it is impossible for a store to do all by its own unaided strength, help should be sought through the excellent device of federation with other stores; and even the strongest and most prosperous stores will find in federation a means of successful co-operation for objects which could not otherwise be attained. It is thus we may hope to see the world become

One great human family, born of one Power,
 Each claiming humanity's thought—
 We should let our best sympathies flow like a dower,
 And give and receive as we ought.

Before concluding, it may be well to notice several points of what may be called the duties of the stores to their members, and the duties of the members to their stores. It cannot be too strongly emphasised that the store is only another name for the individuals who are members of it. The collective action of these individual members becomes the individual action of the store. When acting

RETAIL CO-OPERATION, AND THE RELATIONS, ETC.

as a member the individual should think least of his own individual interests and most of the collective interest involved by the prosperity of the store, so that the latter may be strengthened and consolidated. The more a store is strengthened by reserve funds, depreciation of property, the establishment of educational departments, the organisation of branches of the Women's Guild, the formation of recreative societies, &c., the greater hold it will have on the thoughts and the affections of its members, and the greater will be its prosperity and success even when considered only as a money-making machine. A store's educational funds cannot be better employed than in disseminating views on these subjects, and above all others in directing attention to the great problems of industrial and social life, together with the possibility of satisfactorily solving them by means of the application of democratic organisation and administration. Good teaching makes good members, and good members invariably make successful stores.

To obtain the best possible staff of employés, whether it be for a knowledge of its duties, for enthusiasm and ardour in its work, or above all for its devotion and fidelity to the co-operative cause, is another most important and, indeed, most vital point. Loyalty to the co-operative cause is often lacking among co-operative employés. Whenever and wherever it is so, it generally induces a corresponding lack of loyalty on the part of the members. The two defects act and react on one another until, as has frequently happened, want of loyalty has brought about the destruction of what had previously been a most flourishing society. Members cannot too much insist upon co-operative fidelity being observed by their employés, and all actions showing a disregard of the principles which govern the co-operative cause should be sternly discountenanced and rigorously repressed. If co-operative employés were to be converted to the practice of thorough loyalty, the co-operative movement would soon be doubled in size and importance, and while the benefits to each individual co-operator would be correspondingly increased, a vastly increased number of converts would have joined our ranks and reaped equally great advantages. Becoming a co-operative employé is a privilege that ought to be highly esteemed, and it should carry with it a moral obligation to become familiar with all the details of co-operative principles and practice, to be faithful to these principles in every detail, and to use one's knowledge and influence to diffuse co-operative light and to win new adherents to the cause which we hope to make universal throughout the world.

THE CO-OPERATIVE WHOLESALE SOCIETIES AND THEIR RELATIONS TO THE RETAIL CO-OPERATIVE SOCIETIES.

—
BY B. J., L. B.
—

LORD ROSEBERRY made a statement at the Glasgow Congress, in 1890, that is now historical, and has become a very popular saying among co-operators. The statement made by his lordship was as follows:—

The number of your members, the extent of your capital, and the great principle of the union of interests which guides the movement, in my opinion, constitutes nothing less than a State within a State.

What a contrast we have here from the year 1828, when the *Brighton Co-operator* was raising a beacon light to guide the numerically small band of anxious but earnest pioneers, from the loathsome Egyptian bondage of competitive industries to the promised land of equitable co-operation. Then the pioneers were encouraged by being told that all things were possible, and that "a man wants nothing but his wages and an honest companion to begin." At present, if we have not realised the old conception of a self-supporting communistic association, we have done much better; we have succeeded in wedding the natural and healthy individualistic instincts of the solitary man to the necessary associated efforts of the gregarious human being; and the result is that over one-seventh of the population of Great Britain are now enrolled in the co-operative ranks.

This stupendous result has been achieved by following out the teachings of the early co-operators that "if you cannot do all you wish, you should do all that is possible; and you should adapt yourselves to circumstances if you find that you cannot control them." Continual experiment, continual learning from experiment, both when there is failure and when there is success, have brought the co-operative movement to its present prosperity; and, if we wish to progress, we must continue to experiment, we must continue to reject when our experiments fail, and we must continue to accept when our experiments succeed. Theories that will not bear

the test of being put into practice must be rejected. They may be beautiful in a social science museum, to show the evolutions of the human mind, but they will be deadly if used in actual life; for, however perfect these theories may appear to the eye, they must have fatal flaws in their construction, since they fail in practice to produce the results that their advocates have prophesied for them. In such circumstances, as men of business, co-operators may well refuse to spend their time in searching for the flaws. It is sufficient for them that they exist, and they can fairly say to the men of theory: "Here is a beneficial division of labour: It is your duty, as theorists, to find out the flaws in these theories, and, if possible, to remove them. We are men of action, and as such, if we find that an instrument will not do the work we require from it, our duty is simply to throw it down and pick up another that will."

A similar division of labour would be equally beneficial in those cases where business co-operators have successfully carried out certain methods of doing their required work. For the business men, it is sufficient to know that these methods succeed; but the theorist may well consider it to be his duty to ascertain the reason why they succeed. The theoretical co-operator must, as a matter of sound logic and of common sense, recognise that success is a fact; and, however incredible the practice may appear in the light of preconceived opinions and theories, as a fact it ought to be reducible to a principle. The work of reduction is the proper work of theorists; and when it has been done, the value of their scientific labours will show itself by the power they give to apply, in the future, when suitable occasions present themselves, the principle which has thus been deduced from the successful practical research of those co-operators who are only men of action; and so save these latter the trouble, toil, and risk, of having to experiment with every development, instead of only when an entirely new line has to be entered upon.

If Lord Rosebery was right in describing the co-operative movement as a "State within a State," and I think that nobody will doubt it, the Co-operative Wholesale Societies may well be described as the Boards of Trade of the movement; for they are so universally representative of co-operators, they have so completely acquired co-operative confidence, they have so wonderfully and successfully organised the co-operative trade, they have become such great reservoirs of co-operative capital, and they are so universally expected to initiate and develop new forms of co-operative business action, that no other title is wide enough to adequately describe their functions or the scope of their operations. Even this title is scarcely wide enough; because, while the Wholesale Societies perform most of the functions for co-operators that the Board of Trade

RELATIONS TO THE RETAIL CO-OPERATIVE SOCIETIES.

performs for the nation at large, they also seem to engross in themselves, so far as co-operators are concerned, the businesses of merchant princes and the functions of a Bank of England.

It is difficult to realise that thirty-four years ago, not only were these Wholesale Societies non-existent, but the law of the land at that time actually prevented such beneficent institutions being founded. Yet such is the fact. Jealousy and distrust, by the governing classes of the working classes, were at the bottom of this prohibition; and when Mr. Sotheron-Estcourt, in 1862, at the request of the co-operators, introduced the Bill which, on becoming law, gave the required power, he had to express a hope that the "scruple or jealousy which might have existed in 1852 had been swept away."

The successful removal of these legal barriers to co-operative extension has led to wonderful results. At the beginning of 1862, there were said to be in existence 150 retail co-operative societies, with 48,184 members, owning a capital of £336,290, and doing a business of £1,512,117 a year. At the beginning of 1895, there were in existence 1,484 retail societies, 175 productive societies, and two wholesale societies, with 1,343,518 members, a capital of £19,391,347, yearly sales of £49,985,065, and yearly profits amounting to £4,911,299 without reckoning interest on the capital. In thirty-three years, the number of members has been multiplied 28 times, the amount of trade 33 times, and the amount of capital 57 times; while the annual profits now are three times greater than the total sales in 1862, and 15 times greater than the total capital at the same period.

But the grandest achievements of the period have undoubtedly been the foundation and development of the two Wholesale Societies. Their business lives have not yet seen 32 years; but their present position is a monument to the wisdom, foresight, energy, and constructive ability of working men such as the world has never before witnessed. The constitutions of the two societies have been built, altered, adapted, and readapted, so as to successfully meet the ever-varying requirements of changing years and altered circumstances. The businesses of wholesale grocers and provision dealers that were first undertaken have been extended to dimensions greater than those of any other British firm; drapery, boots, furnishing, and almost all other branches of wholesale distributive trade have been successfully added. Middleman after middleman have been eliminated by the establishment of branches, both at home and abroad, for the supply of goods direct from the producer; and in many cases, such as butter from Ireland, New Zealand, Denmark, Sweden, and Germany, bacon from Denmark, cheese from Canada and the United States, and currants from Greece; a semi-circle of co-operative organisation has been built up, from the hands of the co-operative producers to the

THE CO-OPERATIVE WHOLESALE SOCIETIES AND THEIR

mouths and bodies of the co-operative consumers, without the intervention of a single profit-making intermediary of any kind or class whatever. In addition, banking has been entered upon to facilitate the financial operations of co-operative organisations, and numerous manufacturing enterprises have been successfully founded in obedience to the wise maxims of the co-operators of 1828. Thus we have the Scottish Wholesale Society's corn mill at Chancelot and the Co-operative Wholesale Society's corn mill at Dunston-on-Tyne; the magnificent aggregation of factories and workshops at Shieldhall; the largest and most perfectly-equipped boot factory in Great Britain at Leicester; and the many other enterprises, including soapworks, jam and biscuit factories, cabinet, brush, and bedding works, woollen cloth and ready-made clothing factories, &c., &c.; and finally, we have the courageous and persistent enterprise of the Co-operative Wholesale Society, in maintaining a fleet of six steamers, running from the English coasts to different ports on the Continent.

The following figures give the joint statistics of the two Wholesale Societies for the year 1894. For 1895 they will be still more extensive. Twelve hundred and ninety-six co-operative societies out of a total of 1,484 distributive societies are shareholders, while nearly every one of the few outside societies deal with the two "Wholesales" as non-members. The share capital is £755,709, the loan capital is £1,683,797, the reserved and insurance funds are £431,008, the yearly sales are £12,500,519, and the yearly production of their mills, workshops, and factories, £1,105,072.

But, wonderful as has been the development of the two Wholesale Societies, it is as nothing compared to the extension and development that they are likely to undergo in the future; for their constitutions are at one and the same time on so solid a foundation, yet so elastic and capable of adaptation, that the societies can successfully grapple with any, or all, of the business problems that the co-operative body may set them to solve; and if we will take the trouble to note the salient points in the history of co-operative wholesale efforts, we shall probably discover ample indications of the lines upon which future extensions will be conducted.

In trying to note these salient points, one is struck by the fact that, notwithstanding the state of the law which did not then permit of the incorporation of co-operative societies, the need for a Wholesale Society, to meet the requirements of the hundreds of retailing societies then existing, was so great that one was formed as early as 1832. It failed, principally through the legal barriers that then impeded the free action of all co-operative societies. Another was formed in London in 1850, at the personal risk of Joseph Woodin, Lloyd Jones, E. V. Neale, and others, and these gentlemen suffered severe financial losses in consequence. But the efforts of the

RELATIONS TO THE RETAIL CO-OPERATIVE SOCIETIES.

Rochdale Pioneers' Society, in 1855, to open and work a wholesale department, for the benefit of other retail stores, may fairly be said to mark the beginning of the present two Wholesale Societies. This effort was made by the Pioneers at the request of other societies; and it failed, owing to want of confidence engendered by the necessarily imperfect method of organisation which had to be adopted, seeing that it was worked as an adjunct of one retail distributive society. From the two earlier efforts, the lesson was learnt that legal facilities were absolutely necessary for success; and from the experiment of the Pioneers, the further lesson was learnt that, to ensure the success of a wholesale enterprise, it must be founded upon equality of representation and equality of responsibility.

The Co-operative Wholesale Society was the first of the two great federations to be founded. Immediately after the alteration of the law, a conference of co-operative representatives, held at Oldham at Christmas, 1862, decided to establish this parent organisation on the following basis :—

An office to be opened at Liverpool or Manchester; none but co-operative societies to be allowed to become shareholders or purchasers; the business to be conducted for ready money; goods to be bought only to order, and to be invoiced at cost price, a small commission to be charged to defray the working expenses; societies to pay their own carriage; the capital to be raised by every society taking up shares in proportion to the number of its members.

The new venture was registered in August, 1863, under the title of the North of England Co-operative Wholesale Industrial and Provident Society Limited, and business was begun in Manchester in 1864.

The fundamental basis of the society has always been, and still remains, as sketched out at the Oldham conference, so far as capital and control are concerned. Societies only, and not individuals, are allowed to be shareholders. The poorest societies are on an equal footing with the richest; all have equal responsibilities with equal privileges. All subscribe share capital in proportion to the number of their members; all possess voting power in the same proportion; and all share in the profits according to the amounts of their purchases.

But within six months from the commencement of business, the Wholesale Society had to discard the agency principle of charging cost price plus a small commission. The theory seemed perfect; but in practice, it could not be carried out successfully. Its advocates had, like plenty of good men before them, forgotten that human nature was imperfect, and that human nature was a most important element in all social organisations. But being, in this instance, men

THE CO-OPERATIVE WHOLESALE SOCIETIES AND THEIR

of business as well as theorists, they soon remembered this great factor, and they recognised that it was fatal to the agency idea. They therefore threw the theory overboard, and adopted a plan that proved at once successful, and has continued successful ever since.

The explanations of the failure of the agency idea are simple in the extreme. It was found that to aggregate the daily orders from societies and buy exactly the required quantity of each article, was a business impossibility. Sometimes the custom of the trade necessitated taking a larger quantity; sometimes goods could only be obtained at a sufficiently low price by buying in stated fixed quantities; and often other reasons occurred to make it advisable to buy goods, even if there were no orders on hand for them. Keeping a stock, therefore, became a necessity. Unfortunately for stock-keeping, markets fluctuate. Sometimes the prices go up and sometimes they go down. In the case of the first few months of the Wholesale Society's business career, when prices went up, there was no difficulty whatever in finding store buyers willing to take the stock on hand, at the cost price plus the fixed commission. In fact, the difficulty was the other way. There were too many buyers wanting the goods; and the unsuccessful ones were dissatisfied, because other buyers had secured the prizes they coveted. When prices went down, however, no buyers would look at the goods in stock; but insisted upon fresh goods being bought, at the current market prices, to meet their orders. Hence the Wholesale Society was compelled to sell its stock at reduced prices. As this, though unavoidable, was inequitable, it led to the agency practice being discontinued, and the ordinary retail store practice, of selling at or under market prices, being adopted instead. This new departure involved the equally necessary arrangement of dividing profits on purchases, again in imitation of the practice of the retail stores. Continued success may fairly be said to have justified the change, whether theory will support the practice or not.

Another point may be just noticed. The original number of directors was only seven. This was quickly increased to nine. The constitution has been repeatedly altered in this respect, until now the number is 32. There is no valid reason why there should not, some day, be as many directors as there are members of the House of Commons, or even more, if the growth of its various businesses should make the guidance of this number essential for success; and this power of adaptation may well be taken as typical of every point in the constitutions of the two Wholesale Societies.

The first half-yearly meeting of the Co-operative Wholesale Society was held at Manchester, on Whit Saturday, 1864. In the report submitted to that meeting, the committee expounded the objects for

RELATIONS TO THE RETAIL CO-OPERATIVE SOCIETIES.

which the society had been founded; and for the light it throws upon the history of the movement, I give a copious extract, as follows:—

At the various co-operative conferences which have been held in Lancashire during the past four years the question of wholesale buying was constantly pressed upon the attention of the delegates, until it was found necessary to convene a conference specially for the discussion of the subject. At this conference almost all the societies in the North of England were represented, and the deliberations resulted in a unanimous decision to form this society.

The object sought to be attained was to bring the producer and the consumer into more immediate contact, and thus enhance the profits of co-operation by diminishing the cost of distribution. This, we believe, can be done with the least possible risk by aggregating the purchases of the whole or part of the societies in the North of England, and buying the commodities required with ready money, in quantities sufficiently large to command the best markets. By securing societies against imposition in the days of their infancy and inexperience, and enabling them to purchase on more advantageous terms than the largest societies have hitherto done, we shall ensure the healthy extension and consolidation of our movement.

Seven weeks (the period that has elapsed since we commenced business) is not a very long time in which to test the soundness or probable future of our enterprise; it has, however, been sufficiently long to develop the dangers to be avoided and the obstacles to be overcome. We are happy in being able to state that our chief difficulty is capable of an easy and immediate remedy, as it lies within ourselves. By referring to the balance sheet it will be seen that fifty societies have joined our federation. These societies represent a constituency of 17,545 members, and are doing an aggregate weekly business of £9,500. At least £5,000 of this sum is expended in the purchase of commodities in which we deal, and yet we have only been favoured with a business of £5,900 in seven weeks. How is this? Is it because the members of the various societies are opposed or indifferent to our enterprise? That cannot be, as it is the creation of their own delegates, and they have also found the capital to enable it to operate. Is it the fault of the committee? By no means, as they can have no interest in allowing their capital to be frittered away in making good the deficiency in our working expenses. Where the chief obstacle lies, therefore, is plain; and it is for the members of societies to say how long success shall be postponed. Many societies have already testified to the advantages they have derived from our operations. Still greater benefits are in store if we are only true to ourselves, and are determined that the general interests of co-operation shall not be sacrificed to the prejudice or antagonism of individuals.

According to this argumentative and eloquent report, the Wholesale Society's committee were evidently of opinion that the chief obstacle to the success of their cherished enterprise was "the prejudice or antagonism of individuals," and that these individuals were not the ordinary members of the retail societies, nor the members of the committees, nor the delegates from these committees and societies to the meetings of the Wholesale. That it did not rest with the delegates was clearly seen, because at this first meeting they passed unanimously the following resolution:—

The delegates present, impressed with the great advantages that have and are likely to accrue from the Wholesale Agency, hereby pledge themselves to use every legitimate influence with their respective societies to secure for it their entire support.

THE CO-OPERATIVE WHOLESALE SOCIETIES AND THEIR

Among the delegates to the above-mentioned meeting was the manager of one of the largest retail societies. This gentleman wrote to *The Co-operator* an account of the meeting; and from it, I give an extract which throws some light upon "the chief obstacle" alluded to in the committee's report:—

Being one of the delegates, I beg to offer a few remarks. Although the financial results were not very satisfactory, yet the open and straightforward manner in which questions were answered by the committee and auditors tended to confirm the good opinion previously formed of the efficiency of the officers to carry to a successful issue the objects of the society. Much disappointment was evinced at the small amount of business done through the agency by some of the larger societies, especially those who had taken a prominent part in the formation of the society. Various reasons were assigned why the agency had not been better supported, the most prominent being that managers and storekeepers had a great objection to encourage the agency, being under the impression that if successful it would eventually supersede and render their services unnecessary. This idea, however, was dispelled by various speakers, who demonstrated pretty clearly that buyers need be under no apprehension in that respect, as the time spent in visiting the markets and purchasing could be profitably employed in organising and superintending the various departments in connection with their stores. . . . On the question "as to the best means of increasing the business of the agency," various opinions were expressed. It was urged by some members that committees ought to take the matter into their own hands, and compel their buyers to send their orders to the agency; and from the remarks of representatives from some of the societies this course would be adopted provided their buyers did not at once fall in with their views and support them in their endeavours to make the scheme a success.

The gigantic success of the two Wholesale Societies is a positive proof that co-operators have not allowed the "prejudice or antagonism of individuals" to remain as a permanent obstacle in their path. As a matter of necessity, it was brushed aside; and as a matter of necessity, it always must be so. Fortunately, the short-sighted individuals who tried to block the way were, like a great many more, wrong in their theory; and experience has proved that the true moral duty of carrying out the legitimate wishes of the co-operators who employed and paid them, was also the way to promote their own personal profit and aggrandisement. Never were co-operative managers so trusted, so respected, so powerful, and so well paid as they are now; and this has been largely brought about by the action of the two Wholesale Societies. Whenever they wished to add specially qualified men to their staff, they have had, as a matter of necessity, to offer larger salaries to managers to relinquish their positions and take employment in the Wholesale Societies. Sometimes a retail society would not let their man go, and gave him still more money to stay. But if this did not happen, the competition thus set up for good managers caused salaries to rise and managers' positions generally to be very much improved. Short-sighted individuals, therefore, may take to heart the lessons of experience, and treasure the axiom that it is better to promote the general well-

RELATIONS TO THE RETAIL CO-OPERATIVE SOCIETIES.

being, even at a temporary disadvantage to oneself, than to practice the old-world maxim of "Every one for himself, and the d— take the hindmost."

In 1868 the Scottish Wholesale Society was founded. There would have been only one Wholesale Society, if the English co-operators had seen their way to accept the invitation given by their Scottish brethren to establish a branch in Glasgow. But those were the days, not far distant yet in a sense very far off, for it seems hard to realise how few years have slipped away since then, when co-operators thought it to be a very great undertaking to make a journey to London. They had not yet grown out of their local surroundings. They were timid at the thought of such rapid and wide extension. They had not yet accustomed themselves to the idea of practically working out a world-reaching scheme; and the thought of a branch at Glasgow, created more dismay than the thought of a score of branches in all parts of the world, from Greenland's icy mountains to the land of Timbuctoo, would cause at the present day. Therefore the Scottish proposals for a branch were declined, and they were recommended to start a separate Wholesale Society.

The experience of the Co-operative Wholesale Society was utilised by the Scottish Wholesale Society; and, if there was not a legal union of the two bodies, there was then formed a union of hearts and heads, that has continued to grow stronger and stronger as time has rolled on. The English helped the Scotch, and the latter generously recognised the help so given, the *Scottish Co-operator* saying:—

The Scottish Wholesale Society will commence business with advantages which the North of England had not; for, in a truly co-operative spirit and unselfish disinterestedness, the directors of the "North of England Society" have kindly offered to instruct us by giving us the benefit of their experience in management and in buying, a boon the value of which no true estimate can be formed, and which ought to produce among societies an amount of faith in the working out of our proposed society sufficient to make its inauguration a successful reality.

It is worth noting the difference between the somewhat jealous and short-sighted action of some of the co-operative buyers, at the commencement of the Co-operative Wholesale Society in 1864, in withholding their business support, and the splendid co-operative spirit in which the two Wholesale Societies have recognised the cardinal principles of their movement, by uniting together for mutual benefit, on every possible occasion. In consequence of the prevalence of this spirit, they are, for very many purposes, practically one society, although legally they are two. This "Annual" itself is a minor but very good instance of joint enterprise. The tea, coffee, and cocoa departments in London, the butter and egg buying branches in Ireland, Germany, Sweden, and Denmark, and the branches at New York and Montreal, are all worked quite as much in the

THE CO-OPERATIVE WHOLESALE SOCIETIES AND THEIR

interest, and for the benefit, of the Scottish Wholesale Society, as they are for the interest and benefit of the Co-operative Wholesale Society, to whom they legally belong. Both societies are benefited by the combination. The expenses are thereby reduced to a minimum, while the absence of the competition which separate establishments would produce, secures the purchase of goods at the lowest practicable prices. These benefits descend through the Wholesale Societies to every retail society in the United Kingdom. In this connection, the words of William Cooper, first secretary of the Rochdale Pioneers, secretary of the Lancashire and Yorkshire Co-operative Conference Committee, and an earnest champion of wholesale co-operative effort, will strike everybody with their force and wisdom. They were written to the editor of *The Co-operator* in 1864, and referred to the difficulties the Co-operative Wholesale Society had to overcome in the ranks of co-operators themselves:—

When a store is newly established, some members do very little trade with it, and so it has a struggle to maintain its existence; but after a time the members begin to think better of it, and do better to it, and it then begins to prosper. Such will be the history of the Wholesale Society, I think. Many people imagine they can do without co-operation; but time teaches that they can do better with it, and so they come in at last. So it is with the purchasers for stores; they think they can do very well without the Wholesale Society. This may be attributed to their ambition, their shortsightedness, or their not being imbued with the true co-operative spirit. Time will teach most of these. But the wonder is that, having experienced the benefits of combined action, they hesitate to extend the principle. On a small scale the benefits of co operation are small; extend it and the advantages and gains multiply.

One of the points insisted upon at the commencement of the "wholesale" movement was, as it was so well expressed in 1864 by the Wholesale Society's first committee, "securing societies against imposition in the days of their infancy and inexperience, and enabling them to purchase on more advantageous terms than the largest societies have hitherto done; and so ensure the healthy extension and consolidation of our movement."

This point has been most carefully worked out. While the Wholesale Societies originally were the offspring of the retail societies, they have now become, by virtue of their gigantic strength, position, and opportunities, the natural protectors and guides, in conjunction with the Co-operative Union, of all new efforts, and also of all societies that get into business difficulties. The care, tenderness, and sympathy that is exhibited towards an infant society, both during and after its birth, or to a crippled one in its time of need, are, to ordinary business minds, most extraordinary in their thoroughness; and it is now a well-known fact that if a body of working men are desirous of forming a retail co-operative society, all they have to do, to avoid failure and ensure success, is to implicitly follow the advice and counsels, of the Wholesale Societies so far as relates

RELATIONS TO THE RETAIL CO-OPERATIVE SOCIETIES.

to business arrangements, and of the Co-operative Union in what relates to propaganda. Whether the prospective society is to be located in a rural district, or in a large town, makes no difference. Suitable efforts are equally put forth, in each case, to promote success; and the existence of the "Practical Propaganda Committee" at Manchester, together with the existence of the "Co-operation in London Committee" in the great metropolis, testify to the determined and disinterested efforts of the Wholesale Societies, to ensure the healthy "extension and consolidation of our movement," as preached in 1864, and practised ever since.

The establishment of accountant and audit departments by the Wholesale Societies, to help to ensure the accurate keeping of the books of the retail societies, as well as the rendering of accurate balance sheets, is another example of the efforts after consolidation. The fact that many scores of societies have, quietly and without ostentation, availed themselves of the facilities afforded them, is a proof of the wisdom of providing these facilities; and it does not need a very keen power of second-sight, to be able to foretell a considerable development of these departments in the future. Their power for good, in promoting prosperity, is so great that the use of them must commend themselves for adoption, to those thoughtful co-operators upon whom the success, and management, of retail societies usually depend.

Another object named in the noteworthy report of 1864—that of bringing "the producer and the consumer into more immediate contact, and thus enhance the profits of co-operation" to the largest as well as to the smallest of the retail societies, and to the largest as well as to the smallest of the individual members of these retail societies—has always been kept clearly in view.

The Irish butter trade gives us a splendid illustration of the clear-headedness, the perseverance, the tenacity, and the versatility of the management of the Wholesale Societies, in carrying out the above-named idea. For the first two years of the existence of the "wholesale" movement, scarcely anything but Irish butter was sold in those parts of the country where co-operative associations existed. During this period, the butter was bought from Irish export houses. In 1866, however, a butter branch was opened at Tipperary and a buyer placed there; the committee telling the delegates to the Wholesale Society's meeting, that they were "convinced it is a step in the right direction."

Other steps were necessarily taken in this "right direction," a most important one being the opening of a branch at Cork. At different times, English firms had tried to establish themselves in the Cork butter market, but had always failed to do so, owing to the combined opposition of the Irish butter receivers and exporters in

THE CO-OPERATIVE WHOLESALE SOCIETIES AND THEIR

that city. This opposition was exerted against the Wholesale Societies, but without success. Co-operation was too strong; and, in the course of a few years, not only were the Wholesale Societies firmly established in their branch at Cork, but they had succeeded in altering the methods of doing business in that market; with the result, that they secured the greatest possible facilities for the efficient conduct of their butter trade.

Again, for over twenty years past the Wholesale Societies have been drawing the attention of the Irish farmers, to the serious danger they ran of losing the British butter trade, owing to the superior methods of the Danish and French producers; and, principally through the Limerick branch, they were untiring in their efforts to induce the farmers to form co-operative creameries, after the example of those so successfully organised in Denmark, &c. But, owing largely to the unfortunate political disturbances of unhappy Ireland, and largely also to the want of security for improvements, that was felt by the Irish farmers during the earlier portion of this period, little attention was paid to the repeated and urgent representations of the Wholesale Societies, until the farmers found themselves suffering severely from the successful competition of continental producers. Then they began to accept the suggestions of the Wholesale Societies, and a number of co-operative creameries were organised and worked; the greater portion of their produce being taken by the Wholesale Societies and consumed by co-operators.

Also, for the benefit of small butter producers, the Wholesale Societies established factories on the French system at Armagh, Enniskillen, and Tralee; and these factories have materially helped to resuscitate the prosperity of the Irish butter industry.

The most recent steps have been instigated by the slowness, or inability, of the Irish farmers to develop the creamery system, while the demand from co-operators for creamery butter, stimulated by the sympathy which the British working classes have long manifested to Ireland, was greater than the existing creameries could supply. Therefore, when political dissension, among the shareholders of the Castlemahon Creamery, threatened to cause either its dissolution or its transfer into private hands, the Wholesale, at the desire of the shareholders, stepped in, worked the business to the satisfaction of the farmers and to the profit of co-operation, and have since purchased the creamery.

The purchase of Castlemahon has been followed by the construction of another creamery, and by the selection of sites for about half-a-dozen more. The fear among the farmers of similar political dissensions to what prevailed at Castlemahon, the want of funds, and other causes, have contributed to this action of the Wholesale Societies. Both Irish landlords and Irish farmers have solicited

RELATIONS TO THE RETAIL CO-OPERATIVE SOCIETIES.

them to come in; and wherever sites have been selected, the co-operators have been promised the hearty and willing support of the local dairy interest.

I suppose that there always must be a point at which individual effort should cease and co-operative effort should begin; and I should suppose that there always may be a difference of opinion, as to where this point should be marked or fixed. But, wherever it may be fixed, I should think that it must always be placed at a particular spot, on the basis of this spot being the most practicable or the most convenient; and that this question of practicability, is the only principle that can be involved in the decision. For instance, it cannot be a question of co-operative principle whether an Irish farmer sells milk, instead of butter, to the Wholesale Societies; or whether the latter buys butter, in preference to buying milk and afterwards separating the butter from it. The co-operative principle, which is "democratic organisation for ensuring justice," can equally well begin at one point as at the other, so long as there is no intermediary or middleman. If there is a middleman, then the co-operative principle insists upon his elimination. But, whether the farmer and his family shall stop his work at the milking of the cows, or at the churning of the milk, cannot but be a pure question of convenience and business efficiency, as between him and his co-operative customers.

In the case of the creameries established, or being established, by the Wholesale Societies, the question seems to be fairly settled by the hearty concurrence of both parties. On the one side, the farmers, having full confidence in the Wholesale Societies, have preferred to sell their milk to them rather than go to the trouble of making butter, because they are now educated in the superiority of the creamery system, yet, through various causes, are unable to initiate the system on their own responsibility. On the other side, the Wholesale Societies have not been able to get sufficient creamery butter, although they are by far the largest buyers of the article. They have, therefore, accepted the invitation of the farmers to erect and work creameries; and have been stimulated to do so, by the knowledge that they could thereby uniformly secure the most perfect quality of butter, through having the sole control of its manufacture; and through knowing exactly the nature of the article demanded by the individual co-operators who will consume the butter. Time will tell whether these views are right or wrong; but, judging by the past, if they are wrong, the Wholesale Societies will have no sooner discovered the fact, than they will relinquish the practice in favour of something better. In the meantime, everything seems to point in favour of the present policy proving very successful.

THE CO-OPERATIVE WHOLESALE SOCIETIES AND THEIR

The various extensions into foreign countries, where we have gradually developed until, sometimes, there is not a single middleman left to intervene between the Wholesale Societies and the producers, need not be entered into in any detail; because, the excellent example afforded by the gradual adaptation and development of the work in Ireland, clearly illustrates the methods and indicates the results. It will be sufficient to note, that all thoughtful co-operators are agreed on the impossibility of even the largest retail society doing these things for itself, so successfully and efficiently as it is able to do them, in conjunction with other societies, through the "Wholesale" organisations, for the joint benefit of both great, medium, and small societies. Even if large societies had not been able to benefit directly from the working of the "Wholesales," they could, and ought to, still join in building up these great federations, for the sake of the indirect benefits they enjoy, and for the sake of co-operation as a whole; and in these indirect benefits, the large societies may have possibly reaped more advantages than from the enormous direct benefits received by them. Through their wise concerted action with nearly all their co-operative brethren, they have built up the greatest working-class institution in the world; and the general prosperity and growth of the co-operative movement have been built up around, and upon, these two federations. No one can measure the extent to which the success of these federations has promoted the success of the retail co-operative movement; but, of its enormous influence in this direction, there is not the slightest doubt. As it is equally free from doubt that the prosperity of co-operation in one place acts in favour of promoting its prosperity in another, it follows that the prosperity of all societies, from the smallest to the largest, has, from this one fact alone, been largely promoted by the success of the Wholesale Societies.

The importance of thorough-going support of the Wholesale federations, by the largest as well as by the smallest societies, is emphasised and made imperative when co-operation is looked at from its original standpoint, as a means of ensuring justice being done to everybody. The Wholesale Societies are simply the retail societies put into another form, or dress, for general convenience or benefit. The retail societies, similarly, are only the embodiment of the individual co-operator for the common benefit of all. Hence, the just interest of the individual, is not only the interest of the retail societies, but the interest of the Wholesale Societies also; and the whole series of co-operative edifices have been erected, for the sole purpose of working out the grand, but intensely complicated, problem of promoting human happiness, by "doing unto others as you would like others to do unto you." To have a voice in ensuring the enforcement of this ideal, ought to be a sufficient inducement to

RELATIONS TO THE RETAIL CO-OPERATIVE SOCIETIES.

every person to be a co-operator, for every society to become a part of the two Wholesale federations, and for these two to continue their policy of bringing closer together the consumer and the producer, until their unity shall be so well established that all efforts to identify one from the other shall be expended in vain. But when, as is actually the fact, this much-sought-after moral ideal can be attained at the same time that vast pecuniary and other benefits can be secured—when, in fact, the maxim that “honesty is the best policy” is found to have a high commercial value, there are no grounds for wonderment at the people flocking so rapidly to the co-operative standard, for the purpose of marching on, as Mr. Maxwell has so well put it, to secure the “brotherhood of man.”

It is useless to ignore the repeated discussions on the wisdom, or otherwise, of the Wholesale Societies entering into productive enterprises. But it is equally useless, at this date, to enter into such a discussion. Both in Scotland and in England, the delegates from the shareholding societies appear to have gradually settled down to the decision, that whenever it is advisable to attempt to produce co-operatively the goods that have to be supplied by the Wholesale Societies, these bodies shall be the mediums through which the productive enterprises shall be worked, for the general benefit of co-operators.

This proceeding, and this decision, are based upon the teachings of the “co-operators” of 1828, to apply the profits of storekeeping in setting the members to work to produce those articles needed by co-operators. The retail stores have carried out this maxim so well, that the annual value of, what is usually termed, the domestic production of the stores amounts to over three and a half millions of pounds sterling; and this sum does not include the corn mills, whether owned by individual stores or by federations.

But there are many articles that, owing to the vast developments of machinery, can be most economically produced in very large quantities; and this being so, even the largest retail store cannot successfully undertake the enterprise solely for the manufacture of goods for the use of its own members.

This undoubted fact, like the equally undoubted fact of the impossibility of even the largest retail society efficiently undertaking the establishment of foreign import agencies for its sole benefit and use, has logically led to the Wholesale Societies being instructed, by their shareholders, to take up the manufacture of such articles for the common benefit of the stores. Dr. John Watts, in 1871, in his celebrated series of articles on “What is Co-operation?” laid great stress upon this point. He said “the members of the stores must become proprietors of manufactories for the produce of all articles needed by them,” and the ownership of these factories

THE CO-OPERATIVE WHOLESALE SOCIETIES AND THEIR

must be "through the central organisation as branches of the Wholesale" Societies. He concluded: "Every extension which is demanded by an already established distributive trade, and which is entered upon under the advice of practical and successful men in their various departments, and with capital supplied by the stores which are to be customers for the commodities produced, will stand the best possible chances of permanence and profit, because they will be really and truly co-operative."

The year 1872 saw the above teachings put into practice by the purchase and working of the Crumpsall Sweets and Biscuit Factory, as well as by the decision to commence a Boot and Shoe Works. Co-operative opinion on the subject, at the time, will be gathered from the following extract from the *Co-operative News*:—

Few meetings have yet been held which seem to us likely to be regarded as more eventful to the co-operative movement than the Wholesale gathering of Saturday. In more respects than one that meeting was a moral triumph. . . . At last, some of our enthusiastic correspondents will say, at last a new step in co-operative progress is about to be realised by the commencement of manufacturing processes on behalf of the whole of the federated stores. Our more timid friends, who have listened from time to time to orations by leaders of society, in which co-operation has been gently patted on the back as a very good thing for working people so long as it is kept to the work of distribution, will hold their breath at the announcement that the representatives of 264 stores have resolved to try to produce some of the various goods which they keep in stock. For ourselves, whilst advocating the slow and sure line of policy, we have always plainly declared the fact that the substitution of stores for the establishments of individual shopkeepers, useful and important as it is for economy, for education, and morality, is still only one side of co-operation, and we incline to think that there has been ample time and experience to make safe the foundation which is to bear the whole superstructure, and that it is now time to commence the building.

The statistics in this "Annual" will show to what a large extent the "building" of these manufacturing departments has grown since the above was written.

The Scottish Wholesale Society began their manufacturing operations ten years later by the establishment, in 1882, of tailoring and shirt factories. These were followed by the Glasgow Boot Works, and afterwards by the purchase of Shieldhall and the remarkable development of the numerous productive departments now in existence in that well-known co-operative industrial settlement.

One successful venture breeds others, and it is interesting to notice how the efforts of the two Wholesale Societies, in productive enterprises, have acted and re-acted backwards and forwards. For instance, the tailoring and shirt factories at Shieldhall, have been followed by similar departments in the Co-operative Wholesale Society at Leeds, Manchester, and Newcastle. No sooner was Dunston Corn Mill got into good working order than the Chancelot

RELATIONS TO THE RETAIL CO-OPERATIVE SOCIETIES.

Corn Mill at Edinburgh was undertaken; and now, the co-operators in the South of England are agitating for corn mills on the banks of the Thames and of the Severn.

Similarly, the Co-operative Wholesale Society's Boot Works at West End (Leicester), Knighton Fields (Leicester), Enderby, and Heckmondwike, were followed by the Scottish Wholesale Society's Boot Works at Glasgow, and Shieldhall; and, while the Scottish have, at present, a monopoly of federal tobacco manufacturing, they are now setting to work to start soap making in Scotland in friendly emulation of the Durham and Irlam Soap Works in England. On the other hand, the Co-operative Wholesale Society has started a printing works in succession to the one already existing at Shieldhall.

Another feature in which the Wholesale Societies have extended their original foundation, for the benefit of the co-operative movement in general, is that of finance. Surplus capital has long been, and still remains, the difficulty of co-operative officials; and, so long as this difficult problem remains unsolved, we can scarcely look upon the business training of co-operators as being complete.

Co-operative banking was discussed at the Congresses of 1869, 1870, 1871, and 1872. The result was the founding, in 1872, of the banking department of the Co-operative Wholesale Society to collect and utilise the surplus capital of the movement, as well as to afford ordinary banking facilities to societies while reaping for them the profits accruing from a banking business.

This development marked an era in the history of the Wholesale Societies, since it, for the first time, asserted that the federated principle should be applied to other purposes, as well as to that of wholesale distribution.

In the near future, the banking department will make immense strides, and will develop in a manner that will probably surprise those who may not have thought out the gigantic possibilities that lie in co-operative finance, for easing the path of the worker, and for enabling him to obtain an equitable share of the wealth of the world.

It must not be forgotten by the reader that the writer is simply expressing his personal views, and that, although this is the Wholesale Societies' "Annual," the committees of the two institutions do not in any way control, accept, or reject, the views expressed herein. That being understood, the writer has no hesitation in taking the responsibility of suggesting, that the banking of the movement will probably have to be developed into a banking for the working classes, and for those most nearly allied to them. Some day, probably, we shall see arrangements made by which trades unions, friendly societies, and building societies, as well as the retail co-operative societies, shall do all their banking with the co-operative bank; and when this comes about, the retail

THE CO-OPERATIVE WHOLESALE SOCIETIES AND THEIR

societies will probably be utilised to accommodate local branches of the bank. The matter is as easy and as simple as the opening of local post-offices by the Government; and the financial lever obtained by the aggregation of so many millions (probably many scores of millions) in the hands of the representatives of the working classes, would give a power for securing the just demands of labour, so great and overwhelming, that it can with difficulty be imagined until it has been realised.

It is, however, not enough to collect the money into the co-operative reservoir. When it has got there, it has to be again diffused, or it is useless; and it has to be diffused in accordance with the recognised principles that have been deduced from a long and sound banking practice. No bank can make profits unless it uses the funds entrusted to it. Yet it has to provide for the payment of any of the funds whenever called upon. Hence has arisen, from experience, the practice—(1) of a bank keeping in hand sufficient cash to meet all the ordinary everyday requirements of its customers; (2) of keeping a large proportion of its funds invested in securities such as Consols, corporation stocks, &c., that can be sold at a moment's notice, and which, in consequence of this great facility of sale, realise a very low rate of interest; and (3) investing the remaining portion of the funds in the soundest and most profitable way possible, since the likelihood of this portion of the funds being required is exceedingly remote, and is only contingently possible in the case of a universal panic.

The Wholesale Society's Bank has hitherto not had sufficient outlets of a satisfactory character for its accumulated funds; but the latest departure of the delegates in authorising the committee to invest £500,000 to the best advantage, is a step in the right direction, and will probably lead to more rapid progress. It has always struck me as rather peculiar, that while the buyers of the two Wholesale Societies have always been allowed a remarkable degree of freedom in their purchasing powers, the manager of the bank department has never had the same freedom extended to him in dealing with the commodity entrusted to his charge. Money is only a commodity, just as sugar and tea are; and the bank manager, subject of course to the control of his committee, should have the same power of dealing that is possessed by the heads of the trading and productive departments, and such as is possessed by the managers of ordinary banking companies. The writer is aware of the serious losses sustained in a period of enthusiasm about twenty years ago; but he thinks that all the evidence goes to show that it was the wave of feeling among the societies in favour of generous lending that caused the losses, and not through any giving of judicious liberty to the bank manager and to the directors. The fact that so very many

RELATIONS TO THE RETAIL CO-OPERATIVE SOCIETIES.

retail societies suffered similar losses is a strong proof of the existence of this wave of enthusiasm. Increased knowledge, based upon sad experience, is a guarantee against such losses in the future ; and our caution ought not to extend so far as to prevent, or even materially retard, the development of co-operative financial enterprise.

The question may now be fairly asked, in what manner, and how, may the Wholesale Societies be expected to grow, develop, and extend in the future? Their function is clear, and is well recognised. Just as it is the function of the retail co-operative society to do for its individual members everything that the individuals cannot do so well for themselves, so it is the function of the Wholesale Societies to do everything for the retail co-operative societies that can be better done by means of federation, than by the unaided and isolated efforts of each society.

In the realm of wholesale distribution, the path is very distinct and well made. We have to go on and on, supplying every article, from the smallest to the greatest, and eliminating every middleman in every department of distribution, whether export, shipping, or import, until the producer and the consumer are united together in a common interest, for the common good, by the humanitarian links of co-operation.

In the realm of finance, the path ought to be equally clear. The Wholesale Societies ought to be able to devise ways and means of becoming gigantic reservoirs for the reception of the whole of the capital and savings of the working classes, and to use these funds safely, yet profitably, for the realisation of the grand ideal of universal co-operation.

From the inevitable necessities of these two problems, spring the inevitable necessity of a steady development of the productive and manufacturing departments of the Wholesale Societies. We cannot have a complete circle of co-operation without this development ; but the exact point at which it shall stop, and individual enterprise shall begin, is one that can only be determined by experience, and by the circumstances of each particular case.

For example, the farmers of New Zealand and Victoria are organised into co-operative associations for the production of butter and its shipment to Great Britain. The Wholesale Societies act as consignees for some of this butter, so that from the farmers to the consumers, there is an unbroken link of co-operative communication. The farmers, as co-operative producers, carry their operations on up to the consignment of the butter to the Wholesale Societies ; and the co-operative consumers of Great Britain then take up the task, and carry it on to completion. In this case, the convenience of both parties is equally well met, and both are equally well satisfied.

THE CO-OPERATIVE WHOLESALE SOCIETIES AND THEIR

But in the United States, Canada, Denmark, Sweden, and Germany, where co-operative associations of farmers for the production of butter, cheese, and bacon, exist in profusion, the British co-operative consumers have found it advisable to place branches, for the express purpose of buying, at the doors of the co-operative producers. This is one step more numerous for the consumer, and one step less numerous for the co-operative producer. Both are satisfied; and no question is involved except that of mutual convenience, since, in all these cases, just as in the case of New Zealand, all middlemen are eliminated, and the co-operative producer is linked directly, through the wholesale and retail societies, to the co-operative consumer.

When we get to Ireland, the Wholesale Societies not only have their buying branches for butter, but, at the wish of the farmers, who have not always cared to go so far in co-operation, both butter factories and creameries have been started; which operations carry the co-operative consumers a step further than in the case of Denmark, &c., and two steps further than in the case of New Zealand. But, here again, the co-operative link is fairly complete; unless we, as co-operative consumers, deem it advisable to buy the land, stock it with cattle, and employ the labour necessary to secure the growth and manufacture of the required produce.

There is no doubt, judging by the past history of the movement, that, as co-operators organised on the basis of consumption, we can, and should, go on co-operating until a perfect circle of co-operation is produced. But the exact point of the circle at which we shall begin, or continue, our efforts is, I think, quite immaterial so long as we work with a determination to ultimately complete the circle. To co-operate is the great thing; and if we begin anywhere on the circle, we shall surely complete the circuit if we only persevere. We must imitate the action of the tide on the sea-shore. It does not stop its action because it cannot surmount all at once a mound of sand, or a craggy rock, that may happen to be in its direct path. It simply runs round the obstacle, seeks out the easiest gradients, pushes onwards, steadily rises, and at last drowns both sand-mound and rock under its triumphant waters.

We may take notes from the past, and from them gain wisdom for the future. The large boot works erected at Knighton Fields, Leicester, employ about 2,000 persons. The demand for dwellings for these employés has doubled and even quadrupled the value of the land in the district. But, although the action of co-operators caused this increase in value, they have not reaped the benefit, because they did not own the land; and individual landed proprietors have reaped this enormous unearned increment, while the co-operators who created the value have got nothing.

RELATIONS TO THE RETAIL CO-OPERATIVE SOCIETIES.

This should, and could, easily be avoided in future. The veteran co-operative prophet, Dr. John Watts, clearly foresaw the natural action of co-operative enterprise; and, in 1871, he wrote as follows:—

The value of land in any given neighbourhood depends very much upon the density of population, so that if any circumstance leads to the concentration of people on any spot the value of land immediately rises, it may be from £50 to £1,000 an acre. And all this increase of value, which means simply a fine upon the increase of population (since it makes living more difficult), goes to the land-owners, who literally do nothing for the increase of value which they entirely monopolise.

Why should not the Wholesale Societies—as an investment, at a reasonable rate of interest, of their ever-increasing and vast surplus funds—buy an estate of 8,000 or 10,000 acres of land? Land is now exceedingly cheap in some localities, and, with the rapidly-increasing production of gold, we are likely to soon see a rise in the value of land, as well as in almost all other things. On such an estate, the Wholesale Societies could locate some of the manufacturing and productive enterprises that are certain to be started in the future. More surplus capital and more co-operative labour could be employed in the construction of dwellings, and even towns, in which the workers in the factories could live. The very fact of this population being introduced, would cause a great local demand for agricultural produce, which would at one and the same time multiply the value of the land, as indicated by Dr. Watts, and cause a considerable amount of additional labour to be required in cultivating it. So the Wholesale Societies could go on developing the estate, on co-operative lines, for the general benefit of co-operators, until they had completed the circle of co-operation between the individual, as a producer, and the individual, as a consumer. Getting hold of the land and developing it, side by side, in conjunction with the development of manufacturing enterprises, ought to be rigidly resolved upon by the co-operative body.

Another branch of federal enterprise, which, in its turn, can be divided into two sections, relates to our foreign trade. We already have extensive foreign connections for the import of goods to Great Britain; but, with the exception of bran from the two federal mills, these foreign connections have not hitherto been utilised, for the export of goods from Great Britain to foreign countries. Yet, if we are to faithfully carry out the practical teachings of the co-operators of 1828, to go on co-operating until every would-be co-operator is in co-operative employ, something must be attempted, and done, in this direction.

Again I shall quote Dr. John Watts. He said: “Leaving the acquisition of land by purchase to a time when the co-operative societies are, like some of our millionaires, well enough off to

THE CO-OPERATIVE WHOLESALE SOCIETIES AND THEIR

contemplate calmly the investment of money at 3 per cent per annum," which time has now arrived, the doctor advocated a number of successive measures, most of which have been carried out, and also advocated that "direct importation of commodities be resorted to when an already established trade in foreign produce proves that the chartering, purchasing, or building a vessel or vessels will be profitable; and when it may also be advisable to send out cargoes of home manufactures, and especially of co-operative manufactures."

Every student of economics knows that, in the end, all trade is a species of exchange of one class of commodities for other classes; although the practice of buying and selling for what is termed money, tends to conceal the real character of business transactions. Unless we exported goods from Great Britain, we should not have many goods imported here; and our immense population would then have to choose between starvation, or emigration to countries where food, &c., could be procured.

The tremendous foreign trade of Great Britain must be participated in by co-operators, or they must consent for the movement to remain in an imperfect and incomplete condition. The Wholesale Societies could easily add exportation to their import business. The same offices, the same staff, with comparatively slight additions, could do the work; and the profits now made by shippers in Great Britain, importers abroad, and bankers on both sides of the water, could be secured for the benefit of the co-operative movement.

Whether the goods exported should be manufactured, by working class joint-stock companies such as prevail so extensively in Lancashire, by the organisations usually termed productive societies, in workshops owned by the Wholesale Societies, or in workshops owned by retail societies, are questions that can well be left to time to solve. But, that the Wholesale Societies are eminently well qualified, and specially adapted, to create and develop a series of export businesses, for the benefit of the co-operative movement, cannot be doubted by any co-operator, who has investigated or thought over the question.

The second division of the foreign question is the development, by means of co-operative capital, brains, and sinews, of those trades or industries abroad that have to depend upon British enterprise, because native enterprise is too slothful, or is otherwise incapable of taking it up. A good illustration is the Indian and Ceylon tea gardens, and I will take this example as typical of the rest.

Some years ago, the Bury Society moved a resolution, at the Co-operative Wholesale Society's meeting, in favour of that federation growing some of the tea sold by it. The motion was lost, Bury being before its time, like many other people have been. But Bury was

RELATIONS TO THE RETAIL CO-OPERATIVE SOCIETIES.

on the right track. Here is an industry which is almost exclusively in the hands of British capitalists, and is almost exclusively managed by natives of Great Britain. It is also an industry that has been most profitable in the past, and bids fair to continue profitable in the future. The Wholesale Societies sell somewhere about £500,000 worth of tea annually, and the production of this quantity would afford room for the employment of a large amount of co-operative capital, while offering comfortable positions as superintendents, &c., of tea gardens, to a number of intelligent co-operators. Through the Wholesale Societies having a ready market for these teas, they would not only make the net profits now made by existing owners of tea gardens, but they would also save the vast expenses incurred by private owners in putting their teas on the London markets; which would at least double, and might treble, the ordinary net profits above mentioned.

Such are some of the possible developments of federal enterprise through the Wholesale Societies, and they may be summed up as—

(1) Developing the distributive departments, until everything is supplied to the retail societies that they do not produce for themselves.

(2) Becoming the reservoirs for all the working-class capital in the country, and utilising this capital, not only for pecuniary profit, but for the elevation and emancipation of labour.

(3) Producing and manufacturing everything possible for the retail societies, that the retail societies cannot, or do not, produce for themselves.

(4) Extending our foreign co-operative trade, until we receive all the foreign goods we require, exclusively from our co-operative brethren abroad; and until we export sufficient goods, to keep all co-operators engaged in producing articles for export, fully and completely occupied in co-operative channels.

There is no valid reason why this programme should not be completely carried out. It is, at present, much less visionary than was, thirty years ago, the prospect of the two Wholesale Societies doing a distributive trade of twelve millions a year. And we can well lay to heart, for our encouragement, the old scriptural promise, that if we will have faith, only as a grain of mustard seed, we shall have power to move mountains.



TAXATION: HOW RAISED AND HOW EXPENDED.

BY GEORGE HOWELL, F.S.S.

(1) INTRODUCTORY.

THE space allotted to this article leaves no margin for descriptive reflections, and but little for historical outline or other purposes, except what is absolutely essential for a clear statement of the case under the several heads into which the subject is naturally and officially divided. Brevity is necessary in order to be able to present an outline of the whole financial system of the country, all tracery and ornament must be left to the individual reader. One or two explanations will perhaps suffice as directions in the perusal of the pages which follow. (1) The figures in the head lines of income and expenditure in each case are the estimates for the year 1895-96; they may be exceeded, or be less in the final result. (2) In all other cases, unless otherwise stated, the figures given are the totals paid into or out of the Exchequer in each year. (3) The financial year now ends on the 31st of March in each year. (4) Some changes have taken place in this respect; up to 1854 the financial year ended on January 5th, when there were only three quarters in 1854; the first quarter in 1854 and then the usual financial year from April 1st, 1854, to March 31st, 1855, inclusive. (5) The Exchequers of England and Ireland were united in 1817, prior to which there were some different entries. But these are arranged in the tables given so that they accord with all subsequent figures of later dates. (6) Some changes have also taken place as regards contributions and charges, that is, some items were formerly included which are now excluded, so that the gross revenue and the gross expenditure are even greater than the annual finance accounts show. Where practicable, and the matter is important, these changes will be noted. It only remains to be added that from 1745 to 1854 elaborate inquiries, by Select Committees of the House of Commons and by Royal Commissions, were instituted into the Finance Accounts of the United Kingdom, on the subject of revenue, customs, excise, land, stamps, and other

TAXATION : HOW RAISED AND HOW EXPENDED.

matters, and also as regards expenditure and establishments. The reports and recommendations emanating from these inquiries led to a complete reform of the old wasteful and fraudulent system, and ultimately paved the way for subsequent fiscal reforms.

(2) GENERAL DIVISION OF THE SUBJECT.

THE National Balance Sheet may be roughly divided into two parts, as follows: (a) Revenue, from all sources. (b) Expenditure of all kinds. These will be dealt with, each under its proper head. Revenue is provided under five general heads: (1) Customs; (2) Inland Revenue; (3, 4, and 5) Post-office. The Revenue Estimates for 1895-6 (No. 98-I.) are contained in a folio book of 142 pages, in which all details are given. The Expenditure is broadly divided into four general heads: (1) National Debt; (2) Civil Service; (3) Army; (4) Navy. The Civil Service Estimates for 1895-96 (No. 98) fill a large folio book of 532 pages, filled with details. The Army Estimates for 1895-96 (No. 73) fill a large folio of 242 pages. The Navy Estimates for 1895-96 (No. 61) fill a large folio of 274 pages. Here then is a total of 1,190 pages, irrespective of Supplementary Estimates and of "Explanatory Statements." Then comes the "Appropriation Accounts," showing how the money was expended, both under the head of Revenue, for the establishment and other charges, and for the Civil Service. The "Accounts" for last year, including the reports of the "Comptroller and Auditor-General," fill over 600 pages (No. 38). The Army Accounts, also inclusive of reports, fill 168 pages (No. 52). The Navy Accounts, also inclusive of reports, fill 168 pages (No. 47); and the Victualling Yard Accounts (No. 116), 26 pages. In addition to which there are the Navy Dockyard Expense Accounts (No. 60), 210 pages. The Army Clothing Factory (No. 60), 140 pages; the Ordnance Factories (No. 99), 270 pages. Total 1,574 pages. In the above list there is an aggregate of 2,772 pages. But these are only the more important "papers;" there are a number of "returns" and of smaller "papers" which need not be particularised, but which have to be examined before a complete and thorough knowledge of the National Balance Sheet can be obtained. To all these must be added some knowledge of the voluminous Reports of Select Committees, and of Royal Commissions, some of which have extended to thousands of pages. The preceding summary indicates the sources of information, and furnishes a guide to the official accounts of our National Revenue and Expenditure. It must be remembered that our revenue has now considerably exceeded *one hundred millions sterling*, and that very elaborate accounts are required to arrange and adjust the items. That the work is well done we may be sure, for the Public

TAXATION : HOW RAISED AND HOW EXPENDED.

Accounts Committee and the Comptroller and Auditor-General constitute a check upon irregular expenditure. But neither the auditor nor the committee can call in question matters of policy.

(3) GROWTH OF PUBLIC INCOME AND EXPENDITURE OF THE UNITED KINGDOM.

WITH the view of impressing the reader more deeply as regards the growth of our National Expenditure, the yearly averages for the last 95 years are given in two forms—for ten years and for five years respectively. To appreciate the full force of the figures the aggregates also should be given, which alone can give an adequate idea of the vast increase in each decade, but the reader can multiply by ten.

(a) The Average Yearly Income and Expenditure in each Decade.

Average of each Decade.	Yearly Average. Income.	Yearly Average. Expenditure.	Yearly Average. Surplus+ Deficit—
	£	£	£
1801-10	52,834,189	67,442,647	14,608,458—
1811-20	69,049,887	83,237,879	14,187,992—
1821-30	57,962,265	55,640,820	2,321,444+
1831-40	51,339,407	52,703,819	1,364,412—
1841-50	55,786,540	55,560,658	225,882+
1851-60	65,574,783	67,485,364	1,910,581—
1861-70	70,625,388	70,028,262	597,126+
1871-80	82,720,343	83,348,930	628,587—
1881-90	88,204,976	87,699,059	505,917+
1891-95(fiveyears)	92,345,055	91,587,199	151,571+

The figures in the preceding, and also in the table following, give the gross income and expenditure for the first 80 years of this century, including the Army and Navy extra receipts, and also the contributions by India on account of military charges. These were included in the accounts up to 1882, and a balance of arrears in 1883; in 1884 they were wholly excluded, and have been since that date. But in order to make the tables uniform, as far as possible, they are deducted from the accounts from the year 1880, so as to correspond for the purposes of comparison. From 1801 to 1815 war was almost continuous, and expenditure was heavy. For the next 20 years the surplus went to the War Debt. From 1836 to 1840 we paid nearly £21,000,000 for slave emancipation. The Russian War, 1853-56, added to our War Debt £41,041,000, besides current outlay.

TAXATION : HOW RAISED AND HOW EXPENDED.

(b) The Quinquennial Average of Income and Expenditure.

Five Years' Averages.	Average Income. Each Five Years.	Average Expenditure. Each Five Years.	Yearly Surplus + " Deficit—
	£	£	£
1801-5.....	42,207,926	59,472,047	17,264,120—
1806-10	63,460,451	75,413,246	11,952,795—
1811-15	73,389,682	97,552,531	24,162,848—
1816-20	64,710,092	68,923,228	4,213,136—
1821-25	59,952,010	56,622,057	3,329,953+
1826-30	55,972,120	54,659,584	1,312,536+
1831-35	51,412,983	50,339,429	1,073,554+
1836-40	51,265,832	55,068,210	3,802,378—
1841-45	54,028,878	54,572,307	534,429—
1846-50	57,544,202	56,549,010	995,192+
1851-55	61,536,093	60,597,367	938,726+
1856-60	69,613,473	74,373,361	4,759,888—
1861-65	70,276,111	70,095,337	180,774+
1866-70	70,974,664	69,961,187	1,013,477+
1871-75	74,703,967	72,509,511	2,194,456+
1876-80	79,968,211	81,332,807	1,364,596—
1881-85	86,823,264	86,715,841	107,423+
1886-90	89,582,688	88,682,277	900,411+
1891-95	92,345,055	91,587,199	151,571+
1895-6 (estimates)	95,662,000	95,981,000	310,000+

The Abyssinian War cost over £4,500,000; the Alabama Claims nearly £3,200,000; there has been some local relief by subventions; the War Debt has been decreased; and increased expenditure has been incurred by some of the measures of social reform, by inspection of mines, factories and workshops, and mercantile marine. But the heaviest increase has been in connection with the Army and Navy, especially the latter in recent years; and there is no disposition on the part of anybody to reduce that expenditure, especially not on the part of either party when in power.

(4) ORIGIN AND GROWTH OF REVENUE.

ORIGINALLY the revenues of this country, as indeed of most countries, were derived from the land. (1) The land was held from the Crown, the landholders giving service, men and arms, for the defence of the kingdom. (2) In case of foreign war the same service was given, but the men-at-arms shared the booty and plunder, while the Crown annexed the province, or exacted tribute.

TAXATION : HOW RAISED AND HOW EXPENDED.

(3) The Royal Household and expenses were provided out of Crown lands, often of considerable extent. (4) The Crown was further enriched by subsidies and confiscations, the latter being great at certain periods. (5) In case of emergency calls were made for grants in aid; ostensibly these were often supposed to be voluntary, and indeed sometimes were, but refusal to give had to bear its own consequences. (6) In course of time subsidies, grants, and contributions were regarded as lawful, however exacted, and ultimately became the basis of what is now taxation. A land tax of 4s. in the £ was levied at the date of the Revolution, at which it nominally still remains.

The growth of trade and commerce, and of personal property consequent thereupon, led to other modes of contribution. (1) A poll tax was one form. (2) Another was a tax upon titles, from dukes to the lesser titles, according to rank. (3) Then there was a personal tax such as that on bachelors, &c. (4) Monopolies formed a source of revenue, and perhaps laid the foundation for a tax on commodities. (5) Taxes on commodities began with customs duties, and then came excise duties at a later date. Customs duties were doubtless regarded as a set-off to taxes and burdens on land, and developed into protective duties of later times. Excise duties were levied on home produce, and these too grew, extended, and were augmented to provide for wars, and for the increase of monarchical expenditure and other forms of administrative government under the head of Civil Service. The chief causes of increased expenditure were the expansion of the Empire and foreign wars; the latter were often caused by the former, but the greatest wars of modern times were those which arose in connection with the restless attempt of the French people, Napoleon Bonaparte at their head, to found a great Latin Empire in Europe and the East.

(5) EXTENT OF TAXATION.

THE vast growth of expenditure and the piling up of a huge National Debt necessitated increased taxation, and the inventive genius of statesmen was employed in discovering methods whereby the revenue could be increased so as to cover expenditure, and pay the interest on the accumulated debt. And it must be admitted that they were successful in finding taxable objects, although not wisely levied at all times, nor founded upon any very just principles. The extent of taxation is so admirably and humorously described by the Rev. Sydney Smith, in the "Edinburgh Review" (1820), that it is here quoted. He says that there were "taxes upon every article which enters into the mouth, or covers the back, or is placed under the foot; taxes upon everything which it is pleasant to see, hear, smell, or taste; taxes upon warmth, light, and

TAXATION : HOW RAISED AND HOW EXPENDED.

locomotion; taxes on everything on the earth, and the waters under the earth; on everything that comes from abroad, or is grown at home; taxes on the raw material; taxes on every fresh value that is added to it by the industry of man; taxes on the sauce which pampers man's appetite, and the drug that restores him to health; on the ermine which decorates the judge, and the rope which hangs the criminal; on the poor man's salt, and the rich man's spice; on the brass nails of a coffin, and the ribbons of the bride—at bed or board, couchant or levant, we must pay. The schoolboy whips his taxed top, the beardless youth manages his taxed horse, with a taxed bridle, on a taxed road; and the dying Englishman, pouring his medicine, which has paid 7 per cent, into a spoon which has paid 15 per cent, flings himself back upon his chintz bed, which has paid 22 per cent, and expires in the arms of the apothecary, who has paid a license of £100 for the privilege of putting him to death. His whole property is then immediately taxed from 2 to 10 per cent. Besides the probate duty, large fees are demanded for burying him in the chancel; and his virtues are handed down to posterity on taxed marble; he is then gathered to his fathers—to be taxed no more." The habit of dealing with large amounts made governments avaricious and profuse; there were both extravagance and fraud; the system bred spies and informers, and fed political tools and retainers whose only object was to share the patronage and spoils. Corruption was rife, and the nation was plundered to satisfy the greedy crew.

(6) OBJECTS AND METHODS OF TAXATION, AND CHANGES IN SYSTEM.

PRESUMABLY all taxation was originally intended for revenue purposes, being purely fiscal in object and character. But it is easy to see how the sale of monopolies can be readily converted into protective duties; and how customs duties superinduced excise duties, the whole growing into a huge system of tariffs and home duties. Money was required and the main question was how to get it, by whatever means. Methods were devised imposing burdens where there was least resistance at first, and extending at last in all directions, one set of complainers being played off against another, until the whole property, trade, commerce, industry, and commodities of the country were laid under tribute. The first note of reform did not come from the economist, or political philosopher, or statesman, it came from dire necessity, and was the outcome of the inherent weakness of the system. Smuggling was carried on to such an extent that a searching inquiry was instituted respecting it in 1745. Inquiry into the public expenditure was instituted in 1763; and into frauds on the revenue in 1783. Numerous other searching inquiries were made by Select Committees, and by Royal Commissions

TAXATION : HOW RAISED AND HOW EXPENDED.

from those dates to 1840, every department of the revenue and expenditure being examined, abuses were laid bare, and reforms were proposed, some of which were successfully carried out. Frauds, abuses, and extravagances were everywhere, and every department tried its best to perpetuate the existing state of things.

In the year 1776 Adam Smith published his "Wealth of Nations," and amongst other matters dealt with taxation. His work directed attention thereto and paved the way for systematic reform. He laid down these four propositions:—(1) That taxation ought to be in proportion to the income enjoyed under the protection of the State. (2) The taxes paid ought to be clear and certain, not arbitrary. (3) Every tax ought to be levied, as to time and manner, in the way best suited to the taxpayer. (4) Taxes should be so contrived as to cost as little as possible in collection, so as not to materially reduce the actual amount paid into the Exchequer. Our system violated every one of those principles, and it took nearly a century to get rid of the last taxes on actual food, for the corn, meal, and flour tax was only finally repealed in 1870, when the last duty paid was £897,931 on the food of the people.

(7) THE NATION'S BALANCE SHEET, 1894-5.

BEFORE describing the several items which compose the Nation's Balance Sheet it is advisable to give at one view the income and expenditure under the several heads as presented by the Chancellor of the Exchequer, together with the estimates for 1895-6. The two sets of figures will show where we are, and where we are drifting.

(a) *Revenue of the United Kingdom, 1894-5, and Estimate, 1895-6.*

Heads of the Revenue as given.	Revenue, 1894-5.	Estimated, 1895-6.
	£	£
1. Customs.....	20,115,000	20,240,000
2. Excise	26,050,000	25,450,000
3. Stamps	14,440,000	15,800,000
4. Land Tax	1,015,000	1,020,000
5. House Duty	1,435,000	1,450,000
6. Income Tax	15,600,000	15,530,000
7. Post-office	10,760,000	10,900,000
8. Telegraph Service.....	2,580,000	2,620,000
9. Miscellaneous	2,689,000	2,652,000
Total Amount	94,684,000	95,662,000

TAXATION : HOW RAISED AND HOW EXPENDED.

(b) *Expenditure of the United Kingdom, 1894-5, and Estimate, 1895-6.*

Heads of Expenditure, 1894-5.	Expenditure, 1894-5.	Estimated, 1895-6.
	£	£
I. Consolidated Fund: <i>a.</i> National Debt.	25,000,000	25,000,000
<i>b.</i> Other Services on Fund	1,642,000	1,625,000
Total on Consolidated Fund...	26,642,421	26,625,000
II. Supply Services:—		
<i>a.</i> Army	17,900,000	17,984,000
<i>b.</i> Navy	17,545,000	18,701,000
<i>c.</i> Civil Service	18,915,000	19,298,000
<i>d.</i> Customs and Inland Revenue...	2,646,000	2,702,412
<i>e.</i> Post-office	6,869,000	7,134,000
<i>f.</i> Telegraph Service	2,674,000	2,805,000
<i>g.</i> Packet Service	727,000	732,000
Total Expenditure.....	93,918,421	95,981,412

I.—IMPERIAL REVENUE.

(Total estimated for 1895-6, £95,662,000.)

THE sources of Revenue are given under nine separate heads, some of which have many sub-heads. Space will only permit of the briefest possible reference to each separate subject.

(1) THE CUSTOMS.

(£20,240,000, estimated for 1895-6.)

THESE are duties levied upon foreign produce or manufactures imported into this country. Formerly nearly every article imported for use or wear was taxed either to a definite amount or at an *ad valorem* duty. Now the chief articles so taxed are wine, spirits, beer, &c., and tobacco, tea, coffee, and fruits. The net revenue of the chief sources of income are, in round figures, about £15,750,000 on wines, spirits, tobacco, and other items in this class; about £3,500,000 from tea; about £321,000 from coffee, cocoa, and chicory; and £365,100 from fruits, &c. Thus in round figures three-fourths of the Customs' Revenue come from luxuries, as they

TAXATION : HOW RAISED AND HOW EXPENDED.

are called, and one-fourth from the necessaries of life. The latter are included in the demand for what is called the "Free Breakfast Table." From the year 1300 to 1671 the revenue from Customs was "farmed out" for a definite amount, on terms, of course, disadvantageous to the country, to some Court favourite, or money-lender to the monarch. In 1329 the Bardi of Florence farmed the entire Customs of England for £6,260, or about £20 per diem. In 1400 Henry IV. let out the Customs for £8,000. In the reign of Elizabeth, Sir Thomas Smith rented the whole at from £14,000 to £50,000 per annum as the value went up. In 1671 this system was abolished, the collection being transferred to a Board of Customs' Commissioners. At that date every article imported had to yield a certain revenue to the King or the State. The total number of articles so taxed some 200 years ago was 1,630. In the year 1787 they had been reduced to 1,425; in 1826 to 1,280; in 1841 to 1,052; in 1849 to 515; in 1853 to 466; and in 1860 to 19 only. Now there are about a dozen articles in all the classes. The duties on corn, meal, and flour were only finally extinguished in 1870; the sugar duties were reduced to one-half in 1870, and finally abolished in 1874. The cost of collection is reduced to a minimum by the fewness of the articles upon which duties are levied, and not one of them is imposed for protective purposes. Raw materials and manufactured articles alike come in free of duty. The "Customs" in this country are levied for revenue purposes only and entirely, and the chief question which now arises is to what extent they can be further reduced consistently with our large and constantly increasing expenditure. Perhaps those on coffee, cocoa, and fruits could be most easily dispensed with.

(2) THE EXCISE.

(£25,450,000, estimated for 1895-6.)

THIS branch of revenue is now included under the general head of Inland Revenue. The chief items of Excise Duties are beer and spirits, the total income from which amounts to nearly £26,000,000. The railway duty is about £280,000, and chicory and coffee mixtures under £3,000. In addition to these there are licenses, about £3,750,000, inclusive of brewers, distillers, publicans, establishment, dealers in plate, and pawnbrokers, &c. All these duties are levied on British goods. The Customs seize the goods on importation, and tax them; the Excise on their manufacture or use in this country. The Excise has always been more obnoxious to the people than the Customs, from the first attempt to impose the duties, in 1626, down to the present day. In 1641 Parliament imposed duties on beer, cider, and perry; this led to riots and

bloodshed, and were only continued for about a month. It was really Charles II. who reimposed those duties, and in the reign of James II. they were largely increased. At the "Revolution" the duties were again reduced by reason of their unpopularity. In the year 1798 the total number of excise articles was 28; of these only two practically remain, in addition to the licenses, which, after all, are of the same nature, though different in form and application. The duties on locomotion are hardly defensible, either on railways or on carriages; the duties also on male servants can scarcely be defended, or as regards auctioneers and appraisers. These are in a different category to licenses on public-houses and refreshment-houses. The chief defence in some of the cases is that it is an indirect tax upon wealth in a form not covered, or supposed not to be covered, by the income tax. Licenses can be defended in all cases where supervision is required, and where it might be necessary to trace the person or persons engaged in a particular calling, by reason of the transactions in which they are engaged; and they might also be imposed for the purpose of helping to pay the cost of inspection in certain cases. But in all instances the tax or cost ought to be comparatively light or small, or it may operate in the nature of protection by limiting the number of persons who might otherwise engage in the business. It is quite as essential to have free trade in home produce, and manufacture and trade, as free ports for the importation of produce and manufactured goods.

(3) STAMPS.

(£15,800,000, estimated in 1895-6.)

THE Stamp Duties were first imposed in 1671. At first they were only intended as a temporary source of revenue, but they have continued to be levied annually without intermission down to the present time—an evidence of the fact that a tax once imposed is not easily repealed. The Stamp Duties consist of the Death Duties, last year, for the first time, "equalised" as between real estate and personal property. The term equalised must not be interpreted too literally, for even now real property has certain advantages, rendered necessary, perhaps, by some difficulties in realisation and transfer. The common term "Death Duties" is now used to cover all that was formerly included in probate, estate, legacy, and succession duties, the Budget Act of 1894 having simplified the provisions relating thereto, and placed such duties on a more intelligible and sounder basis. Besides the Death Duties there are a variety of other Stamp Duties—on deeds, bonds, foreign and colonial securities, companies' capital, receipts, drafts, &c.; contract notes, bills of exchange, bankers' notes, cards, licenses and certificates, life and

TAXATION : HOW RAISED AND HOW EXPENDED.

marine insurance, patent medicines, &c. Formerly there was a stamp duty on newspapers and advertisements, but these, after a long struggle, were abolished in 1855. The paper duty was finally abolished in 1861 by Mr. Gladstone, by a Budget or Money Bill, so that the House of Lords could not mutilate it, or interfere with it. Some writers have urged that these duties are taxes upon capital, and Baxter and others have suggested that if imposed at all they should be used only for the purpose of reducing the National Debt, so as to permanently reduce the burden of taxation. But the chief duties are not levied on the creation of capital; they are imposed upon that which is demised to another by whom it was not created. A portion of the revenue under this head is now paid to Local Taxation Account for local purposes. There is a tendency to extend this method of "subvention," though many doubt its policy and expediency. Those who support the principle generally desire that the amount of the subvention shall be applied to specific local purposes, more or less national in their character, such as public free libraries, museums, picture galleries, technical education, and the like, all of which are well within the scope of Imperial taxation, while the benefits are locally distributed. Such institutions would become our national pride and boast.

(4) THE LAND TAX.

(£1,020,000, *estimated for 1895-6.*)

THIS tax is a continually decreasing one in amount. Last year it realised £1,015,000, which was larger, but generally it tends to decrease by the Land Redemption Scheme. In all our financial policy this has been the weakest point, for it has withdrawn from the revenue a permanent and legitimate source of national income. From the most remote times land had to bear the heaviest proportion of the burdens of the State. In some form land has always been taxed for the defence of the State, and for the needs of the monarch. There are distinct traces of such a tax as early as the year 991. And at the Conquest, when William "the Conqueror" parcelled out the lands of Briton and Saxon amongst his Norman freebooters, the condition imposed was that they should supply men, arms, and money for the defence of the State. He held that land was national property; those who held property in land were simply "landholders," not owners; and he, as the head of the State, had the right to impose conditions and revoke them at pleasure. As the nation progressed, the supply of men and war material was changed into a land tax, imposed under various guises. In the reigns of Richard II. and Henry IV. the tax was merged into general subsidies. During the troublous times of Charles I., and

TAXATION: HOW RAISED AND HOW EXPENDED.

under the Commonwealth, assessments were levied of specific amounts upon the several counties. In 1692, in the reign of William III., the land tax was converted into a fixed amount, at the rate of 4s. in the £. The mode of assessment was this: each county and city assessed itself, so that the utmost irregularity prevailed in the assessment. The amount was annually voted by Parliament up to 1798, when Pitt made the impost perpetual, leaving it, however, optional with the landholder to redeem the tax, based as it was on the assessment of 1692, over one hundred years previously. In 1853 Mr. Gladstone gave further facilities for its redemption, by reducing the price $17\frac{1}{2}$ per cent. This was his greatest fiscal blunder. When the valuations were made in 1692, the total taxation of the country was only £2,001,855, of which amount the land tax yielded £1,015,472, or over one-half. Last year the amount was less, only £1,015,000. If the land tax was levied all over the country at 4s. in the £ it would yield £25,000,000 annually. The burden of taxation has been shifted from the land to other property, "an example of legal fraud scarcely surpassed even by the Corn Laws," to use the words of Mr. Cobden. Where levied, the tax is now very unequal in amount.

(5) THE HOUSE DUTY.

(£1,450,000, estimated for 1895-6.)

THE house tax, in one form or another, is of ancient origin. At the Conquest a chimney tax, called "smoke-farthings," was levied and paid to the King. That form of tax fell into disuse. It was revived as a "hearth tax" by Charles II., and was levied as "house and window tax" by William III. The "window tax" was abolished in 1851, the house tax being reimposed at 5d. in the £ on all houses of £20 rental and upwards, and 9d. in the £ on all premises used for trading purposes. It is now levied as the inhabited house duty at 9d. in the £ on all dwelling-houses at and above £20 rental. The policy of exemption is not universally endorsed as a principle, but there has been no very pronounced public opinion adverse to the present system. The amount is levied on the gross rental, with no abatement, as in the case of local rates. It is assessed, or supposed to be assessed, upon the value, whereas the rates are assessed at a lower value. This is the uniform practice.

(6) INCOME TAX.

(£15,530,000, estimated for 1895-6.)

THE income tax is now recognised as the most legitimate of all sources of revenue next to the land tax. The income tax seems to accord with Dr. Adam Smith's four essential maxims of taxation,

TAXATION : HOW RAISED AND HOW EXPENDED.

and with every principle of equity and justice. The inhabitants of a country ought to pay to the State in proportion to their income, and to the protection thereto afforded by the State. Yet the tax was for many years after its first imposition regarded as a temporary tax, for war or other extraordinary purposes. It is no longer so regarded, except as to the amount to be levied. It is a direct tax, arranged under schedules. Certain exemptions are admitted, as for example all incomes under a total of £160, with an abatement of £160 under £400, and of £100 under £500. The one fault in connection with the income tax is that all incomes are taxed alike as to amount. The man with £500 a year, subject to the exemption before referred to, pays as much in the £ as the man with £5,000 or £50,000 a year. The conviction is growing, however, in favour of a graduated tax, from a very small amount under say £1,000 a year, to a larger amount as the annual income rises to a higher level. The principle has at last been recognised in the Death Duties by last year's Finance Act, and thus the way is paved for the application of the same principle to incomes. An equitable system could be devised which would not involve hardship, and which would relieve the poorer sections of the income tax-paying classes, without injuring the richer sections really.

(7) THE POST-OFFICE.

(£10,900,000, estimated for 1895-6.)

THIS source of revenue is not a tax, but a surplus of profit over and above the cost of our excellent and cheap system of postage to all parts of the world, and on the other business transactions such as the transmission of money by post-office or postal order, &c. The transmission of letters has, in all civilised countries, formed part of the duties of the State, with a view to safety of conveyance, speed and regularity of service, and the universality of the accommodation afforded. Formerly the cost of transmission was very high; then commenced a movement in favour of uniformity of charge, followed by a large reduction in the amount. At the instance of Sir Rowland Hill and other reformers the Penny Post was established; later on the halfpenny postage for circulars and postcards was instituted.

(8) THE TELEGRAPH SERVICE.

(£2,620,000, estimated for 1895-6.)

THE Government only acquired the telegraphs of the United Kingdom in 1872. They were purchased under the Act of 1868 from the various private companies by whom the system was established, worked, and to a great extent perfected. The telephonic system is being acquired also by the State, as a department of the Post-office.

TAXATION : HOW RAISED AND HOW EXPENDED.

(9) MISCELLANEOUS.

(£2,652,000, estimated for 1895-6.)

THE revenue under this head consists of receipts from Crown lands transferred to Parliament, and settled by Statute (1 Vict., c. 2), the Crown receiving a subsidy in lieu thereof from the Consolidated Fund. The total amount is a little over half-a-million sterling a year. Other sources of income are, interest on the Suez Canal Shares; on the Sardinian Loan; profit of issue by Bank of England; and a variety of "fee stamps," and other miscellaneous items. The whole of the items under the head of "miscellaneous" are legitimate sources of revenue, not in the nature of taxation.

The preceding remarks on the several branches of revenue, together with the abstract of the accounts, show briefly how the State Revenue is raised, its several sources, and the nature and extent of the receipts. In some instances there are deductions from the gross amount, as for example, out of Crown Lands Account over £104,000 is deducted before it reaches the Exchequer. So also out of Stamps Account (par. 3) a very considerable sum is paid over to Local Taxation Account. For all general purposes, however, the foregoing statement gives a bird's-eye view of the sources of revenue and the amount, exclusive of the contributions by India and some of the colonies to the aggregate expenditure of the Government of the Empire.

 II.—IMPERIAL EXPENDITURE.

(Total estimated for 1895-6, £95,981,000.)

OUR National Expenditure is now generally given under two principal heads: (a) "Consolidated Fund Charges," and (b) "Supply Services." These are given under sub-heads in the order following:—

(a) *The Consolidated Fund.* (Total estimated for 1895-6 at £26,625,000.)

(1) THE NATIONAL DEBT.

THIS is now a fixed charge of £25,000,000. Some years ago it was fixed at £28,000,000. The surpluses, together with the terminable annuities created, go to reduce the debt, and eventually the annual charges. A considerable reduction of debt and of charges will be effected between now and the year 1908, that is within the next thirteen years, when a number of annuities fall in, having expired. The huge National Debt was mostly piled up by past wars. It was

TAXATION : HOW RAISED AND HOW EXPENDED.

created by Charles II. and James II., and was incorporated as "the King's Debt" in 1688 by William III. It then amounted to £664,264. It grew during that reign to £12,750,000, at an annual cost of £1,200,000, by the wars with France. At the death of Queen Anne, 1714, it amounted to £37,000,000—cost, £3,100,000; at the death of George I. it was £52,500,000; in 1775 it had risen to £126,000,000; by 1792 to £237,400,000; and by the year 1816 it amounted to £846,000,000, with a total charge by way of interest of £32,100,000. By 1854 it had been reduced to £769,000,000, the cost being £27,700,000 a year; at the close of the Crimean War it rose again to £808,000,000, the charges amounting to £28,550,000. Since that date the debt has been reduced by about £150,000,000, and the actual charge annually by about £12,500,000. There is also the Unfunded Debt, but this may be described as working borrowed capital for temporary purposes.

The other charges on the Consolidated Fund consist of the Civil List to the Queen; annuities and pensions to the Royal Family; and for naval and military services, for political and civil services, judges, &c.; diplomatic services and miscellaneous services; also salaries and allowances, salaries of the judges, and costs of the Lord Lieutenantcy of Ireland, Queen's colleges, &c. Some of these items evoke a good deal of criticism from time to time, but whenever they are challenged in the House of Commons the two front benches support each other as a rule, and consequently the vote is almost always in favour of the Government of the day. The total charges on the Consolidated Fund, exclusive of debt charges, amount in the estimates of the current year to £1,625,000. But there is a set-off to the total amount by some receipts in the shape of income, such as Crown lands, and items of interest, fees, &c., &c.

(b) *Supply Services*.—These are submitted to the House, in the shape of estimates for each current year, in Committee of Supply.

(2) THE ARMY AND ORDNANCE FACTORIES.

(£17,984,000, estimated for 1895–6.)

THE cost of our huge military establishment is enormous, vastly greater than that of any other military power, in proportion to the numerical strength of the army. The extravagance is mainly in the cost of officering the army, and in the almost irresponsible system of management. Royalty is powerful in this branch of the service, and is backed up by court influence, not to say intrigue. Besides which there is always a strong contingent of the representatives of this branch of the service in the House of Commons, who not only resist all reductions, but continually support largely-increased expenditure. The pay of the private soldier is inconsiderable, but the

TAXATION : HOW RAISED AND HOW EXPENDED.

cost of the War Office establishment, of the vast array of officers of all ranks, inclusive of all emoluments, and of those on the "retired list" is stupendous, out of all proportion to the total numerical strength of the army. The total increase in the number of men in 1895-6 was 56, of whom 12 were in the staff departments, but reduced by six in volunteer and militia services.

(3) THE NAVY.

(£18,701,000, estimated for 1895-6.)

THE navy is our outer line of defence. It is the establishment of all others upon which to rely in preventing the devastation of war upon British ground. The expenditure in this branch of the service is growing at an enormous rate, a newer system of special votes having been introduced in recent years, such as by the Naval Defence Act and other Acts. Something like £30,000,000 have been added to the expenditure upon this branch of the service in ten years, exclusive of the increase in the estimates in the usual way. Gigantic men-of-war are being built and equipped at a vast expense to the nation, and subventions are being given to the mercantile marine to secure service in case of need. In this branch of the service there is a continual demand for more money, backed up by representatives of the service in the House of Commons. There is an ever-readiness to increase the pay and emoluments of the staff and officers, but not equally so to improve the condition of the men—either of the blue-jackets, the engine-room staff, or of the general run of the employés of the naval dockyards.

(4) CIVIL SERVICE.

(£19,298,000, estimated for 1895-6.)

THIS branch of the public service is divided into seven classes, thus: (1) public works and buildings, including Royal palaces, parks, &c., the Houses of Parliament, government buildings, rates on government property, public works and railways in Ireland, and consular buildings abroad, &c.; (2) salaries and expenses of civil departments in England, Scotland, and Ireland, &c.; (3) law and justice, inclusive of England, Scotland, and Ireland, and including the police, other than those under purely local management, prisons, reformatories, county courts, &c.; (4) education, science, and art, in United Kingdom, now amounting to over ten millions sterling (estimated for this year £10,032,835); (5) foreign and colonial services, including the diplomatic and consular service, slave trade costs, and subsidies to telegraph companies; (6) non-effective and charitable services—superannuations, pensions, pauper lunatics in Ireland, &c.; (7) miscellaneous—temporary commissions, and several other items.

TAXATION : HOW RAISED AND HOW EXPENDED.

The total cost of the Civil Service under this vote is creeping up towards a yearly charge of twenty millions sterling, some of the departments absorbing an enormous sum, the cost of the Stationery-office alone in 1894-5 being £516,456; Board of Trade, £170,870; the Local Government Board (in England) £166,696, and in Ireland £134,945; and other departments in proportion.

(5) CUSTOMS AND INLAND REVENUE.

(£2,702,412, estimated for 1895-6.)

THE amount given is the net charges on the Exchequer, but the gross amount is £2,768,360, of which amount £65,948 represents "appropriations in aid." The services rendered under this head, and of the remaining heads, are classified under the general term of Revenue Departments, because they represent a profitable business, yielding annual income as before given under the several heads of revenue. The Customs Department costs £915,513 gross, as estimated for the current year, and the Inland Revenue, stamps, &c., £1,852,847 gross, less appropriations in aid. Whatever complaints may be made as to these departments relate rather to the higher grades of the service than to the rank and file. The higher officials are well paid, many think over-paid; but the lower grades of the service work tolerably long hours, at rates by no means exorbitant or excessive. The superannuations alone constitute a very large charge, as also may be said of the law charges. One of the stupidities in connection with the Customs is the wasteful destruction of the goods seized.

(6) THE POST-OFFICE, (7) THE TELEGRAPH SERVICE, AND (8) THE PACKET SERVICE.

(Total estimated for 1895-6, £10,671,000.)

As these three services are practically under one department, they are here classed together for brevity and convenience.

(a) The Post-office alone is estimated to cost £7,133,840 for the United Kingdom and establishments abroad. It includes all the establishments—the Post-office savings banks department, annuities and life insurances, conveyance of mails, purchase of sites and buildings, manufacture of postage and other stamps. The gross total is given as £7,215,620, of which £81,780 represent appropriations in aid. A close examination of the voluminous items in the estimates shows that, as compared with other departments of the State which yield no revenue, the salaries and allowances at the Post-office are not excessive. As regards all the lower grades it

TAXATION : HOW RAISED AND HOW EXPENDED.

is generally admitted that the employés are not well paid, but underpaid. The service yields a handsome profit annually, and therefore the employés ought not to be starved on a miserable pittance, as the postmen generally are, and especially the rural postmen. The duties increase year by year, and the position is one of great responsibility; on the whole they are well performed, and deserve a fair consideration from the public.

(b) The telegraphic service is scarcely a revenue-yielding department as yet, except that it is paying off the amount of purchase money, and it is at the same time perfecting the system and its administration. The public are already great gainers by the transfer, and probably the future development will be very great. The telegraph system could not develop so quickly in private hands as by means of the Post-office in all the villages of the kingdom. Total cost, £2,805,000.

(c) The packet service includes contracts relating to the United Kingdom and in all parts of the globe. The gross cost is set down as £934,684, of which £202,861 is contributed by appropriations in aid. The charges for Asia and Australia are the heaviest, £435,000; for America, £220,000; for the United Kingdom, £154,850; Europe, £25,000; Canada and China, £60,000; Africa, £28,400; and parcels, £10,000. The total cost of the revenue departments, with all their vast machinery for collection and administration, is estimated at, for 1895-6, £13,373,412, exclusive of appropriations in aid of these services. The foregoing paragraphs relating to expenditure represent the mode in which the taxes were expended.

III.—IMPERIAL CONTRIBUTIONS IN AID OF LOCAL RATES.

It is not here intended to deal with local taxation, as that is a very large subject, requiring separate treatment; but latterly a system has grown up of appropriating certain Imperial taxes to local purposes, and therefore to that extent the revenue so appropriated is Imperial taxation, and as such ought to be considered in this connection. "Grants in aid," or "Parliamentary subventions," appear to have been first made in 1835, and appears so to have been made because, firstly, some of the services were Imperial rather than local in their character, and secondly, because personal property was otherwise exempt from local taxation. These subventions grew in number and extent until, by the year 1888, some twenty different

TAXATION : HOW RAISED AND HOW EXPENDED.

objects were aided by subventions from the Exchequer. In the Local Government Act of 1888 certain licenses, referred to as local taxation licenses, and two-fifths of the probate duty were substituted for the grants in aid in certain cases, while in other cases annual grants are still made by Parliament. In 1890 there was a further allocation of the additional duties on beer and spirits. In 1891 the total amount so allocated was £6,008,615; in 1893-4 the total was £7,163,952. The Finance Act of 1894 did not materially alter the case, as the same proportion of probate duty is provided in the new Death Duties. In the allocation certain inequalities have been found; for example, in the county of London the receipts in aid were equal to a rate of 8d. in the £ on ratable value; in other administrative counties to 9½d. in the £, and in county boroughs to 9¼d. in the £; therefore London ought to have received £252,000 more to be equal to county boroughs, or £210,000 to be equal to administrative counties. There is a continually increasing demand for the allocation of certain taxes for purely local purposes. With this view proposals are made in Parliament and elsewhere to localise certain Excise licenses and stamps, the land tax, the inhabited house duty, and some proportion at least of the income tax. To what extent these proposals will be supported so as to admit of their being so appropriated remains to be seen. But the one source of local relief not yet granted is the taxation of "ground values," which would altogether change the aspect of local taxation, in so far as the burdens on the occupier are concerned. With the increasing expenditure for local purposes, rendered necessary by Imperial legislation, it is essential that some of the sources of Imperial revenue should be applied in relief of local rates.

IV.—SUMMARY AND REVIEW OF FINAL BALANCE SHEET.

FROM the preceding remarks, with respect to contributions from the Exchequer towards the relief of local taxation, it will be seen that a considerable amount must be added to the Budget Account in order to complete the total revenue raised by Imperial taxation. When the grants were made in the shape of subventions those sums were included in the Budget as part and parcel of the national balance sheet; now they are allocated separately by legislation, and have ceased to be regarded as taxes for Imperial purposes. Nevertheless, they are the same in character, and form no part of "local taxation" properly considered, which are raised by local rates.

TAXATION : HOW RAISED AND HOW EXPENDED.

The effect of the separation is that the gross revenue is apparently lessened, but this is not really the case. The taxes are raised as previously, but a portion is differently allocated and accounted for. The final balance sheet may therefore be put as follows :—

Total Amounts.	1893-4.	1894-5.	1895-6.
	£	£	£
Budget Account	91,302,846	94,684,000	95,981,000
Local Taxation	7,163,952	7,014,000	7,262,000
Paid out of Loans—Naval Works	877,000	.....	1,000,000
Aggregate Amount ...	99,343,798	101,698,000	105,243,000

The foregoing is exclusive of the contributions by the Indian Government, and of certain other amounts which are not received into the Exchequer. The one satisfactory feature in connection with our national expenditure is that we are not increasing our debt, as several other European States are doing, at a rapid rate. On the contrary, we are repaying temporary loans, such as those incurred by the Naval Defence Acts and other naval purposes, and otherwise, and we are at the same time reducing the National Funded Debt by Exchequer balances, and still more largely by the means of the Sinking Fund for the Redemption of Debt. The present generation is not therefore leaving a legacy of created debt to be paid off by posterity, but we are paying our way and are gradually diminishing the load of liability contracted by our forefathers and leaving substantial benefits to future generations.

V.—NET TAXATION REVENUE AND EXPENDITURE.

THERE is another aspect of our national balance sheet which must be considered, namely, the actual net taxation and net expenditure. The total revenue from taxes, exclusive of the proportion allocated to local purposes, was in 1894-5 £78,655,000; estimated for the current year, £79,490,000. The revenue from other sources was in 1894-5 £16,029,000; estimated for 1895-6, £16,172,000. The latter amounts are described as "non-tax revenue;" that is to say, the amounts are derived from the Post-office and telegraph services,

TAXATION: HOW RAISED AND HOW EXPENDED.

Crown lands, interest on shares (Suez Canal), &c., and miscellaneous receipts. All of these contribute to revenue, after payment of all outgoings on collection, administration, &c.; and in the case of the Post-office services, the nation is otherwise benefited by lower rates, extended facilities, and general convenience. It is therefore clearly right to distinguish between revenue from taxes and revenue from sources which give in return both public services and a profit on the transactions of the State in the several departments.

In the same way the net expenditure is reduced—as regards the Post-office services alone by £10,671,000, and by £2,702,000 cost of collection of the Customs and Inland Revenue. The four great spending departments which absorb the revenue, and yield little in return by way of income, are the National Debt and Consolidated Fund Services, £26,625,000; the Army, £17,984,000; the Navy, £18,701,000; and the Civil Services, £19,298,000; total, £82,608,000; or, to put the case in another way, we pay an annual amount, based on the estimates for this year, of £63,310,000 for a war debt and our naval and military establishments, less £1,625,000 out of the Consolidated Fund for “services;” and £19,298,000 for civil government and administration of all kinds, exclusive of the services which yield revenue to the State. The preceding pages give a tolerably full bird’s-eye view of our National Budget—of “taxation: how raised and how expended.” The description is necessarily brief, but each separate source of revenue and each separate branch of expenditure has been indicated in so far as space will permit. Itemised heads could only be given where important, but it is believed that no important item has been overlooked.

NOTE.—Reference having been made to the contributions from Imperial taxation to local purposes, it may be useful to give the last completed year’s account prior to the Finance Act of 1894, and which came into operation in 1894–5. The following are the intercepted payments to Local Taxation Accounts, March, 1894:—

Customs and Excise Duties Transferred to Local Taxation.	England.	Scotland.	Ireland.	Totals.
	£	£	£	£
Customs—Additional Beer Duty ..	384	54	43	481
„ Additional Spirit Duty..	157,126	21,604	17,677	196,407
Excise—Additional Beer Duty	316,863	43,293	34,522	394,678
„ Additional Spirit Duty ..	602,882	78,271	59,949	741,102
Licenses, including Penalties	3,140,518	331,735	....	3,472,253
Moiety of Probate Duty	1,888,424	261,783	208,822	2,359,029
Totals.....	6,106,197	736,740	321,013	7,163,950

ELECTRICITY: PAST, PRESENT, FUTURE.

BY VICTOR V. BRANFORD, M.A.

CHAPTER I.

THE DYNAMO AND THE ELECTRIC MOTOR:

What they Are ; What they Can do and Can't do.

THE dynamo and the electric motor are together "the boiler and steam engine" of electricity. The steam engine subdues and tames for us the natural energy called heat, and enables us to harness it to the great industrial chariot. In a general way, we may say that the dynamo and the electric motor between them do the same for the natural energy called electricity—they "humanise" it, or at least they exploit it for humanity. With the principle of the electric dynamo most people are acquainted, but with the electric motor the public is not quite so familiar. If a coil of wire be placed between the ends of a magnet, and made to revolve, there is generated in the revolving wire a current of electricity, which can be led away for electric lighting or any other purpose for which electricity is used. Such, in principle, is the dynamo. It is a machine for changing mechanical energy into electrical energy (*i.e.*, electricity).

The mechanical energy is contributed by the steam engine, gas engine, waterfall, or whatever it is that causes the coil of wire to rotate.

The electric motor, on the other hand, is a machine for converting electric energy into mechanical energy (*i.e.*, work or power). In essential construction it is the same as the dynamo. It is, as before stated, a coil of wire placed between the ends of a magnet. But the coil of wire is not made to rotate by mechanical power. A current of electricity (from some other source) is led into the coil of wire. The result is that the coil of wire begins to rotate. Now, by attaching a wheel to the rotating coil of wire, all the kinds of work performed by a steam engine can be done by the electric motor. In other words, the electric motor is a machine for changing electric energy into mechanical energy. It is thus the "reverse" of the dynamo. The dynamo and the electric motor, then, are in essential construction an extremely simple piece of machinery—nothing but a coil of wire placed between the ends of a magnet. Make the wire rotate, and the electricity is generated and the machine is called a

ELECTRICITY : PAST, PRESENT, FUTURE.

dynamo. Pass in electricity, then mechanical energy is generated and the machine is called a motor. Put in mechanical energy and you get electricity—that is the dynamo. Put in electricity and you get mechanical energy—that is the motor.

Leaving out of account life and gravitation, we may say that there are four kinds of energy in nature. These are light, electricity, heat, and chemical energy. It is the ideal of science to bring these forces into the service of man (*i.e.*, to make them do *work* for him). It is the ideal of the mechanician to make a machine which shall be able at the pleasure of the operator to change each of these forces from one form into another, and, above all, to change each and all of them into the form of mechanical energy or work.

We may represent the ideal machine by a diagram in the form of a pyramid with a square base. Heat, light, electricity, and chemical energy are represented at each angle of the square base and work at the top of the pyramid. Then we may join each of the corners of the square with a double arrow, and also each corner to the apex with a double arrow. The double arrow may be taken to represent in each case the ability of the machine to transform any kind of energy into any other kind, or into work, or transform work into any kind of energy. Such, then, is the ideal machine. (See *Fig. 1.*) Now compare with this the steam engine (*Fig. 2.*) The initial energy of the steam engine we may, broadly speaking, say is derived from the light of the sun associated with the growth of vegetable substances (hence the saying that coal is “bottled sunshine”). This initial energy, derived mainly from light, undergoes in the furnace of the steam engine chemical changes, accompanied by the evolution of heat, and ultimately is changed into the work which is done by the engine. The dotted lines are inserted in the figure for comparison with the pyramid of the ideal machine. *Figs. 2, 3, and 4* should be plainly intelligible after this. In the case of the dynamo, the initial energy is put in in the form of work (*i.e.*, the turning of the wire coil), and, becoming electricity, may at the pleasure of the operator be changed into heat and light, or heat alone (as for cooking), or chemical energy. In the case of the electric motor, the initial energy is put in in the form of electricity, and comes out in the form of work (*i.e.*, the work done by the rotating coil). Now, here is when the limitations of the dynamo and the motor become apparent and the possibilities of the future may be foreseen. In the case of the motor you need electricity to start with before any work can be done. Note that in the diagram (*Fig. 4*) the operation begins with electricity and ends with work. In the dynamo (*Fig. 3*) the operation begins with work (mechanical energy), which is turned into electricity, which again may be converted into light and heat, or into chemical energy. In either

Fig I.
Ideal Machine.

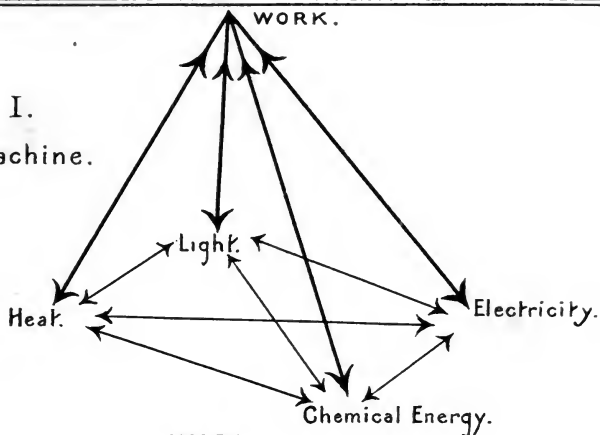


Fig II.
Steam Engine.

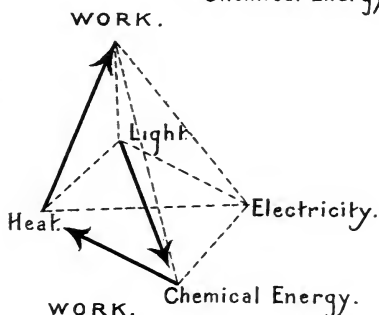


Fig III.
Electric Dynamo.

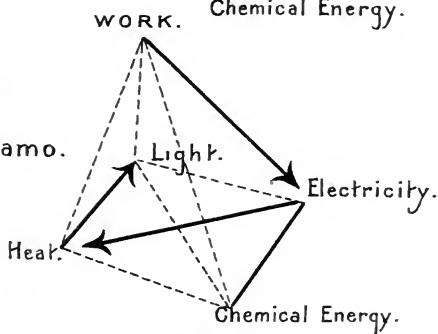
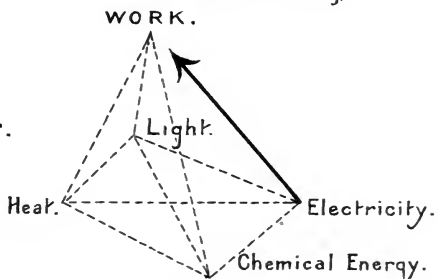


Fig IV.
Electric Motor.





ELECTRICITY: PAST, PRESENT, FUTURE.

case (*i.e.*, either with the dynamo or the motor) we must begin the operation with some form of energy of which there is no universal cheap and abundant supply available. In the one case (*Fig. 3*), the initial form of energy demanded is work. In the other (*Fig. 4*), it is electricity. Now, if we are operating with the motor we get our initial energy (electricity) from the dynamo; but where does the dynamo get its electricity from? It is got from the work that is put into it by the steam engine or other mechanical means used to turn the coil of wire. This, then, is what is meant by engineers when they say that there is no prime motor in electrical engineering, and hence the dynamo and electrical motor are in this way inferior to the steam engine, which starts itself, as it were, as soon as you put coals in the furnace and water in the boiler. But refer now to *Fig. 2*, and we shall see that the steam engine is itself only a prime motor in this sense, that it derives its initial energy from what we have broadly termed "light" energy, or the "bottled sunshine" of coal. The dynamo, though the best means we have of manufacturing electricity, thus yields its product by an extremely roundabout process. That is to say, we have first to convert the chemical energy of coal into heat, and this heat into mechanical power, and this into current electricity. At every step of the process there is loss of energy. The best dynamos convert about 97 per cent of the mechanical energy into electricity—a marvellous efficiency. But the best steam engines convert into mechanical energy less than 15 per cent of the heat developed by combustion of coal under their boilers. And then, apart from the tediousness and wastefulness of the process, its costliness would be prohibitive in any age less rich in the material elements of civilisation than our own.

It is one of the cardinal aims of science to find some cheaper and simpler commercial supply of electricity. Though the clouds and indeed the common air we breathe may be charged with electricity, so universally is it dispersed, yet there is no known natural supply of electrical energy comparable to the sun as our perennial reservoir of heat and light. If we look at the diagram of the ideal machine (*Fig. 1*), we see that the possible sources of electrical energy are:—

- (a) Mechanical energy (work).
- (b) Light.
- (c) Heat.
- (d) Chemical energy.

Now of these four forms of energy (*a*) and (*d*) are the only two which we can directly change into electricity. The dynamo supplies the secret of changing mechanical into electrical energy, and no future development can be looked for in the last stage of this process, as practical perfection has been achieved. The known methods of directly changing chemical into electrical energy are not

ELECTRICITY: PAST, PRESENT, FUTURE.

commercial, *i.e.*, it is vastly more costly than the steam engine and dynamo. But there is no reason why science should not sooner or later yield up to the commercial man the key of this vast chemical storehouse of electrical energy. In the case of heat and light even more dazzling are the possibilities of utilising by electrical means the enormous waste energy which the sun pours upon the earth. Each acre of the globe receives from the sun yearly an equivalent of nearly a million horse-power, of which a flourishing crop does not utilise more than three or four thousand horse-power. If we could persuade our electricians to trap the solar energy which is shot down on Hampstead Heath, we should be able to drive all the locomotives and machinery of the British Isles without burning a pennyworth of coal.

There is one instance in which electrical apparatus may be said to be a prime motor in a somewhat similar way to that of the steam engine. The mechanical energy latent in a waterfall, reservoir, or elevated tank, may be made by means of a waterwheel to rotate the coil of a dynamo, and so do work which can be directly changed into electricity. This seems at first sight an ideal source of electrical energy. As everyone knows, it has been successfully employed, especially in Switzerland and in America. The commercial drawbacks in Great Britain are—that the number of waterfalls, &c., is inconsiderable; that they are apt to dry up in hot weather; they belong to private individuals, who are apt to impose prohibitive charges; they are usually situated at considerable distances from industrial centres, and to convey the current to its destination, though scientifically easy enough, is commercially a difficult undertaking, partly by reason of the costliness of the transmitting plant, and partly because of the exactions of landlords for wayleave. If the waterfalls of Scotland were the property of the people, along with right of wayleave, we are told that electricity would be so cheap that the wife of the Scottish labourer would be able to give her husband a dinner cooked as well as in the Café de Paris.

The mechanical energy of raised water is not the only form of natural power that may replace the steam engine in the work of the dynamo. There are the winds and the tides. The windmill dynamo has already reached the experimental stage of industrial enterprise. Though the utilisation of the mighty tidal energy has not passed out of the domain of the scientific visionary, yet the discovery of the dynamo and the motor bring the vision many degrees nearer reality.

CHAPTER II.

HISTORICAL SUMMARY.

The Origin of the Dynamo and the Electric Motor.

THE narrative of discovery and invention is beset with grave difficulties of its own. Amongst scientists and inventors some are preternaturally modest; some are not. But in either case there are never wanting zealous partisans eager to stake their reputation for veracity on the priority of Doctor this over Doctor that. And in their arguments and declamations they are outvoiced only by the partisans who maintain the priority of Doctor that over Doctor this. Now it seldom or never happens that a transcendent genius in a camp of savages suddenly arises and says, "Go to, let us make a double-cylinder steam locomotive, with eight-foot driving wheels, or let us construct a magneto-electric dynamo of 97 per cent efficiency." The great triumphs of science and mechanics have been for the most part the slow accumulation of an indefinite number of investigators. The present spinning machinery, for instance, is supposed to be the product of 800 separate inventions. The history of the steam engine goes back at least as far as 250 B.C., about which date a Greek professor of mathematics in Alexandria invented a toy called *Æolophile*, which possessed the essential property of the steam engine. But in this long and broken record there is one date which by universal consent is allowed to mark and inaugurate the era of steam. It is the date of George Watt's first patent—1769.

The historian of applied electricity is aided by no such convenient landmark. But though the road he has to travel is not so long, it is more impeded. Where in the eighteenth century there was one investigator working at the applications of steam, there are in the nineteenth century a dozen in every capital of Europe (to say nothing of America) in pursuit of the electric current. So much the better for the nineteenth century, though not for the unlucky historian of electricity (who only escapes brain fever by inability to read Russian, Swedish, and Hungarian).

The dynamo electric generator and the electric motor are the two great industrial instruments that have introduced the new power to the service of man. In regard to the discovery of the motor it may be said that a date can be given but no name, and in regard to the dynamo a name but no date. The principle of the dynamo was discovered by Faraday, at about the end of the first quarter of the century. But another half-century almost elapses between the discovery of the principle and the full elaboration of that marvellous and perfected piece of machinery which can convert into electricity

ELECTRICITY: PAST, PRESENT, FUTURE.

about 97 per cent of the mechanical energy put into it. A score of names could be quoted of inventors—American, English, French, and German—who took part in the development and perfection of the dynamo; and scores of others who, by scientific discoveries, indirectly aided its advancement. If, then, we ascribe the invention of the dynamo to Faraday, that means that it was he who first discovered the possibility of converting mechanical energy into electricity. Who was it that discovered the possibility of converting electricity into mechanical energy—in other words, who was the inventor of the electric motor? The discovery was made in 1873—about half a century after Faraday's discovery—and this is how it came about. In that year (1873) the Gramme Electric Company exhibited two dynamos at the Vienna Exhibition. One of these machines was in motion, the other idle. A workman seeing some electric cables trailing on the ground, and thinking they belonged to the second machine, connected the cables to the terminals of the second and inactive machine. To the surprise of the astonished workman the wire coil of this machine commenced to rotate of its own accord. To realise the amazement of the workman, let anyone imagine himself a knife-cleaner, and that one fine day on the knives being pushed into the apertures of the machine the brushes commenced to turn of their own accord. Remember, it was a dynamo to which the workman had attached his cable, that is to say, it was a magnet with a wire coil, and when you rotated the coil electricity ought to have been generated in the cable. Now it happened that a current of electricity (from the first dynamo) was already passing along the cable, and as soon as this current passed into the coil of the second dynamo it began to revolve. The electric current was converted into work or mechanical energy—the dynamo had become a motor. Such was the origin and discovery of a machine destined, perhaps, to play a more important part in the drama of human life than any invention which the past has given us. For, consider what the electric motor gives us. Here is the magic wand which converts one of the most potent, fierce, destructive, and untamable forces of nature into the willing, obedient slave of rich and poor alike. Should no further advance be made in applied electricity (which is quite unimaginable), electrical engineers assure us that in the next twenty years the natural extension of the dynamo and electric motor to their legitimate uses and applications must revolutionise industrial and commercial life. (The pianoforte took 100 years from its first invention to become common.) But suppose, on the other hand, there be forthcoming some such cheap and abundant supply of electricity as is foreshadowed in the various aspects of the ideal machine figured on Plate I.; and that is a supposition which for its realisation does not demand from science a relatively

greater advance than was made by Faraday. What we are justified in anticipating is a source of commercial electricity as much more cheap and universally applicable than the dynamo method, as the dynamo method is more cheap and universally applicable than the voltaic battery (which slowly, fitfully, and painfully converts chemical energy into small quantities of electricity); and then, having got it, we ought to be happy, for the electric motor is the philosopher's stone, which, at the touch of a child's finger, will convert it into "what every subject of your Majesty wants—Power"—which are the words James Watt proudly applied to his steam engine.

CHAPTER III.

Lighting by Electricity.

ON reference to Plate III., it will be seen that the dynamo gives us light not directly, but by production of electricity which is changed first into heat then into light. The actual apparatus for changing the electricity into heat is the insertion in the path of the current of some substance which so stoutly resists the passage of the current that a part of the electricity is changed into heat; and the heat is so great as to raise the resisting substance to such a temperature that it emits a brilliant light. Yet the present stage of electrical engineering is only able to convert 5 per cent of this heat into rays of light. Electric lighting is primarily, then, a question of heating. Consequently, heating has been the most studied, and is the best understood of all the problems of applied electricity. And yet (if we exclude telegraphy and other products of small generators) lighting was the first of the electric industries to reach maturity, while heating by electricity is still in its infancy. The reason of this is probably in part that lighting offers to speculators, capitalists, and inventors more immediate and greater profits. And besides, two or three generations of custom had habituated men to the idea that light is one of those things that may be purchased from a central store, while heat, like good pastry, must be made at home. Though an upstart to-day, electric cooking is historically more venerable than electric lighting. In 1748, Benjamin Franklin invited his friends to a picnic on the banks of the Schuylkill. He regaled them on a turkey which he "killed by an electric spark, and roasted it by an electric jack before a fire kindled by the electric bottle."

The general introduction of lighting by incandescent lamps with electricity supplied from a central station we may date from about 1883. Though Humphrey Davy produced electric light with carbon

ELECTRICITY: PAST, PRESENT, FUTURE.

points as far back as 1800, yet had the days of small electric generators continued, the electric light would still be a commercial impossibility. It was not till a powerful and cheap generator, such as is the dynamo, was invented that electric lighting came within the sphere of commercial enterprise. And even then more than half a century elapses between the beginnings of the dynamo and the establishment of electric lighting as a successful industrial undertaking. Great indeed were the technical difficulties that impeded the final achievement. Astounding is the number and ingenuity of the separate inventions and patents in the various rival systems at present in vogue—none of these systems of course attaining finality. All the chief countries of Europe, at the hands of their scientists and discoverers, have contributed something to the result; but there is one man and one country of which mention cannot be omitted. It is needless to name Mr. Edison and the United States.

Though the era of the incandescent lamp may be dated from 1883, it would be more rigidly accurate to assign that date to America only. In Great Britain there were difficulties other than technical to be contended against. There were certain legislative obstacles which Parliament did not remove till 1888. Since then the electric light has invaded us with a rush, and there are few towns of importance now in which a supply is not available. At first the supply was left mainly in the hands of private companies, but during the past three or four years the local authorities have seen that the business can be made to pay, and consequently there is now great activity amongst corporations eager to make the matter a public department. At present there are 110 central stations in this country where works are in operation for the supply of electricity. About half of these belong to the local authorities, the rest being run by private companies. As regards the comparative cost of gas and electricity for illumination, it has been calculated that electricity at 6d. a unit can compete with gas at 3s. per thousand feet. At this ratio there are many places doubtless where the balance of price is against electricity; but it is a balance which is likely to be reversed everywhere before long, for the chances of decreased cost of production are immeasurably in favour of electricity. Even with the existing roundabout method of producing electricity—liable to be improved off the face of the earth any day—it has often been nothing but the blundering of officials which prevents electricity being sold at half its present price; and with the rapidly extending use of electricity not only for light, but for other purposes, the price should fall with equal rapidity. An elaborate and costly plant at the central station is at present for the most part idle during the day and used at night for producing electricity for light. The ideal arrangement is that the plant of the

ELECTRICITY : PAST, PRESENT, FUTURE.

central station should supply electricity in the day time for power (*i.e.*, driving the machinery in the workshops and the cars on the streets, and also for cooking and heating), while in the evening the same plant should be used to supply electric light. That is the arrangement for which engineers are working; but though at present difficulties of various kinds stand in the way, there is reasonable hope of its ultimate fulfilment, and in that case the price of electricity might fall—if the calculations of certain engineers be reliable—to 2d. per unit, or even less.

So much for the financial comparison of gas and electricity as illuminants. Hygienically there is no comparison between them at all. An ordinary 16 candle-power gas burner poisons the air of a room to the same extent as the respiration of sixteen persons. Other dangers and drawbacks of gas light are too well known to need mention. On the other hand the incandescent lamp is, hygienically, a perfect illuminant. It consumes no air, and gives off no noxious fumes. In 1890 it was introduced, *vice* coal gas, into the Savings Bank Department of the G.P.O.; the result was soon marked by a diminution in the amount of sick leave. The more powerful arc lamp—used for street illumination, lighthouses, photography, &c.—comes so near to sunlight that workmen whose duties keep them constantly under the rays of a 10,000 candle-power lamp allege that they actually get sunburnt! The arc lamp is certainly a fearful and wonderful piece of mechanism. An American engineer, it is said, contracted to erect a 2,000 candle-power lamp at a central point in a western town. He put up one of 500 candle-power, and when brought to book, urged that he had fulfilled his contract, for did not his lamp give altogether a light of 2,000 candle-power by throwing a 500 candle-power light down each of four streets?

The future of electric lighting, so far as at present visible, lies along two routes. There is, first, the reduction of its cost, so that it may illumine the homes of the poor; and, secondly, there is the extension of its sphere of application in directions at which science only hints—for example, in the matter of atmospheric disinfection and purification. Professor Frankland recently discovered that sunlight destroys certain noxious germs, some of which are so tenacious of life that they even resist boiling. The arc lamp, like the sun, deserves the title of the far-darting Apollo, for it is now ascertained that its rays pierce with like deadly effect the bacterial enemies of man. One of the many new applications suggested for the arc lamp on the strength of this most important discovery is the purification of the air in the drying chambers of city laundries. In some other ways also the arc lamp is found to be an efficient substitute for sunlight. A market gardener near Boston is reported

ELECTRICITY: PAST, PRESENT, FUTURE.

to have covered in his fields with glass, and to be cultivating lettuces and other crops by electric light. The results are said to strikingly illustrate the advantage of the electric light as a vegetable forcer. Simultaneously with this practical innovation, M. Gaston Bonnier, of the French Academy of Science, was experimenting scientifically, and found that the effect of the application to plants of the electric light was to produce a great development of tissues accompanied by an intense green. Plants do not seem to require sleep or periods of intermittent growth. For instance, in the far north, during the brief nightless summer, the growth of the flora is affirmed to be continuous and constant. In the same way, a conservatory lit by powerful arc lamps during night time is said to be capable of ripening fruit by forced unintermittent growth. If this be so, it is almost tantamount to the obliteration of latitude and a control over climate well-nigh comparable to the mastery which the news cable exerts over time and distance. If electricity in the hands of the gardener could give the fruit growers of England three or four months of the climate of California, the vegetarians might rejoice. An apostle of that cult recently brought forward some startling figures to prove that if the surplus nuts and fruits of the Californian orchards (which at present rot on the trees for want of a market) could be dried and imported to this country it would afford to every man, woman, and child of the British Isles a pound weight of nutritious food every day all the year round!

But these vistas of the future are determined as much by financial conditions as by scientific. Suppose peaches are at 6d. each. An enterprising market gardener finds he can grow three peaches for 7d. by electricity, but cannot afford to grow one for 6d. Now, the public would be delighted to give the enterprising market gardener 2½d. a piece for a few of his peaches, and to the unenterprising market gardener also; but the public has an idea that it would be violating the laws of political economy by giving 7d. for three peaches all in a heap, so it prefers to give 6d. for one and keep the other penny in its pocket, and the enterprising market gardener goes into the bankruptcy court. That other penny, employed to reduce his electricity bill with the corporation, would have kept him solvent—but that use of the penny, too, would have violated political economy, and, to be sure, a hundred bankruptcies (peaches or no peaches) are better than one economic desecration. Thus we get back to the fundamental problem underlying all industrial applications of electricity—that is, to cheapen the cost of its production by some means or other. One of the items that add considerably to the price of electricity is the costly copper conductors which convey the current to its destination after it is generated by the dynamos at the central station. Now, a few years ago no one would have

dreamed that amongst the possible avenues to a cheaper supply of electricity was the doing away altogether with conducting cables or wires. Nor, indeed, with the existing plant is this a possibility. Nevertheless, Tesla recently startled the scientific world by making electric light without any conducting wires. By means of currents alternating with very high frequency he succeeded in passing by induction through the glass of a lamp energy sufficient to keep a filament in a state of incandescence without the use of connecting wires. "The ideal way of lighting a room," says Professor Crooke, "is to create in it a powerful rapidly alternating electrostatic field in which a vacuum tube could be moved and put anywhere and lighted without being metallically connected with anything. Tesla has obtained such a condition by suspending, some distance apart, two sheets of metal, each connected with one of the terminals of the induction coil. If an exhausted tube be carried anywhere between these two plates it remains always luminous." This result of Tesla's—electric light without wires and (practically) without lamps—was obtained by means of high potentials and rapidly alternating currents, which is a field very little explored as yet, but which is believed to contain the germ of great possibilities. Still, however, the eye of the industrialist cannot but regard Tesla's experiment as only a scientific toy. But it is worth bearing in mind if only for its demonstration of how far we are from the end of things in electrical development.

CHAPTER IV.

Heating and Cooking by Electricity.

MUCH misconception exists in the public mind in regard to heating and cooking by electricity. This is unfortunate, and everyone who has the cause of domestic progress at heart should do all he can to dispel the misconception. If anyone is desirous of lessening the load that oppresses the overburdened housewife, of diminishing the drudgery of domestic service, and of mollifying the temper of the dyspeptic husband; if there be anyone eager to achieve these ends, then let him make known the virtues of the electric radiator and the electric oven. It is to be hoped that there are no people who think that to cook by electricity the current must in some mysterious manner be brought into contact with the food, or that to warm oneself at an electric stove is to run the risk of receiving an electric shock. In the incandescent lamp a carbon filament placed in the path of the current resists its passage, becomes white hot, and gives

ELECTRICITY : PAST, PRESENT, FUTURE.

out light. Now, for heating a room or cooking a joint we do not need so high a temperature as the carbon filament attains in the vacuum of an incandescent lamp. But whether we want to get heat (for whatever purpose) or light from electricity, the principle of the operation is the same. We place something in the path of the current which, obstructing its progress, changes a certain amount of the electricity into heat, and this heat may be used for warming a room, or for cooking. We do not need so much resistance as the carbon filament offers to the current, and so ordinary metallic wires are usually employed in which to generate the heat; and instead of making the wires red or white heat like the carbon filament of the lamp, a much lower temperature is maintained, and the heat is spread over a great length of wire. All ordinary hot wires exposed to the air would soon rust away, and so it is necessary to protect them. The resistance wires are completely surrounded by an insulating medium which attaches them to a plate which may be exposed to the air, and is called (technically) "the hot" plate. As a fact, it will be seen that the heat is not generated in this plate, but passes to it by conduction from the resistance wires. An ordinary resistance wire which becomes red hot by the passage of the current when exposed to the air does not become even dull red when carried in the insulating medium. This is owing to the fact that heat is carried off far more rapidly by conduction than by radiation. Hence we can after all, when necessary, reach and maintain a very high temperature in the wires of an electric oven and the electric stove (or radiator, as it is called); but before it reaches its destination the heat becomes spread over a large surface. The best type of electric oven is in shape something like an ordinary gas oven. It is lined inside with electric hot plates. Switches are fixed on the outside, which give control over the whole of the heating surfaces. Thus electricity can be passed to any of the plates—top, bottom, side, or back—whenever required, and independently of the rest. By this means the cook is enabled to absolutely control the heat in any part of the oven. The oven, in fact, is the slave of the cook, instead of the cook being the slave of the oven.

The Paris *Figaro* the other day issued a special illustrated supplement descriptive of electrical inventions for domestic use. The *Figaro* believes these domestic applications of electricity so important for social welfare that it took upon itself the duty of awaking the public to a sense of the good things ahead. Of the electric cooking-stove the *Figaro* said, "Is it not surprising to all how easy it is going to be able to do your cooking in your own room? Two wires attached to the lighting apparatus of the room suffice to furnish heat enough to cook victuals, which are shut up in a stove hermetically closed, and which can be moved about and put in any place

ELECTRICITY: PAST, PRESENT, FUTURE.

or in any room you like. This stove is certainly one of the most important heat applications of electricity. Could one ask for greater simplicity? Is it possible to realise a more convenient manner of cooking?" Truly it is hard to refrain from naming the electric stove the ideal oven. The heat is concentrated so that it is no longer necessary to roast the cook as well as the meat. Flame, smoke, dirt, and grime are abolished, and the odours of the kitchen are confined to the oven. At a public banquet in London the other day the cooking was all done by electricity, in a room adjacent to the dining-hall, without the guests being made aware of the fact by the agency of their olfactory nerves. It has been said that the art of cooking has made no progress since Lucullus dined with himself in Rome, some two thousand years ago. It would be truer to say that science had abandoned the kitchen.

In a paper read before the Society of Arts in April of this year, Mr. R. E. Crompton, speaking of cooking by electricity, said, "The facility for regulating the temperature to any degree of nicety which we can give with any of the electrical cooking ovens, is being highly appreciated in the higher walks of the culinary art. Most skilled cooks will tell you that it takes much experience to satisfactorily manage an ordinary oven so as to bake or brown pastry or sweetmeats, and always give a uniform result. When these skilled cooks use electrical apparatus for the first time they almost invariably say: 'A child could learn the ways of this oven in a few hours, and produce as good results with it, with absolute certainty, as I could with an ordinary oven after I had known it and learned its ways for years.'"

But since the scientist would not go to the kitchen, electricity has brought the kitchen to the scientist. As his way is, he has changed it mightily. Will the cook take back from the hands of the scientist her domain, cleaned, cooled, deodorised, and with a beneficent *génie* installed on the old hearth? Doubtless, sooner or later. But, meantime, the answer lies with the capitalist and the financier—and, alas! science is a form of labour that is perpetually at feud with capital. The question is this—is it cheaper to burn all the coal in a central station and supply heat through the instrumentality of electricity to every house, so that each family may live and eat in tolerable cleanliness and comfort; or is it cheaper to let every man burn his own coals at home, debilitate by overwork his womankind and his liver, drive his children into incipient phthisis, poison his neighbour's atmosphere, and destroy as much food as would keep a workhouse? The financier answers with the precision of the practical man. He says to the scientist: "Can you supply electricity at 2½d. a unit? Because, if you can, it is cheaper to let the people do their heating and cooking by electricity; but if you can only supply it at 2¾d.,

ELECTRICITY : PAST, PRESENT, FUTURE.

then it is cheaper to let them burn their own coals." "'Souls,' you mean!" replies the scientist (who is apt to be short-tempered). "Ah! my dear sir, that belongs to another department. Next business."

Certain local authorities and electric supply companies charge at a lower rate for electricity used for cooking, looking upon a day time supply of electricity as a species of by-product (seeing that the main purpose of the central station is to supply electricity after dark for lighting). Most of the London companies supply electricity at a reduced charge of 4d. per unit for cooking. Newcastle has brought it down as low as 2½d. for cooking. This is a wise inducement on the part of the authorities. The excellent suggestion has been made that the companies and corporations should go further and let out to consumers electric cooking and heating apparatus in the same way that gas apparatus is offered to the public for hire. It is stated that several London and provincial companies are on the point of offering to lease out electric stoves to their customers. Doubtless they will not confine themselves to the offer of cooking apparatus. The purchase price of electric ovens varies from about £7 upwards, and of course radiators for warming rooms are much cheaper, varying from £2 upwards. These radiators or house stoves can be made according to any shape or design, the favourite pattern being that of a hand-screen, and some of them are as beautiful as a Florentine bronze. The *Paris Figaro*, in its descriptive publication, which by the way was aptly headed "Queen Electricity at Home," said of these radiators: "Imagine a movable electric stove, which can be moved about from one room to another; can be placed beside the armchair where one is going to sit down for a few minutes, or wherever the heat of the chimney does not penetrate, and that without the least danger, without fire, without gas, without odour. Hitherto these advantages have been claimed only for those so-called famous movable stoves, the employment of which has, however, already occasioned so many accidents. But no one dared to dream that electricity would one day permit us to obtain all these boasted advantages, while suppressing all the disadvantages." Other apparatus, in addition to the stove and the radiator, in connection with cooking, heating, and warming, are too numerous for description. It must suffice to indicate a few by name. There are electric kettles, electric saucepans, flatirons, heat irons, curling irons, toaster, griller, frypan, foot warmers, ovens, shaving pots, hot cupboards, &c. The electric saucepan demands a moment's pause. A necessary complement of the new oven, the electric saucepan should assist in effecting a revolution in life-below-stairs—something like a change from pandemonium to parlour. It is a necessity of its use that the electric saucepan be kept absolutely clean,

ELECTRICITY : PAST, PRESENT, FUTURE.

an extremely easy matter, seeing that it never gets begrimed with smoke and soot. The advantage of being able to move it about to any part of the room or to boil it on the table is one that doubtless can only be duly appreciated by the mother of babies. The cook will have no excuse for a bad temper now it is possible to boil or stew or fry without standing in front of a hot fire and inhaling foul gases.

A final word as between the old way and the new on the ground of cheapness. Under the old method it may be said that of every £100 worth of coal consumed in the kitchen about £80 goes up the chimney (a good deal of which ultimately consumes the lungs of the inhabitants), about £10 is spent in cooking the food, and the remaining £10 is devoted to making the cook uncomfortable. On the other hand, under the new way the £100 of coal is burned at a "central" station (which, if you like, may be 50 miles from town). About £6 of this is converted into electricity, and about £5. 10s. of that again is available for cooking. You have in addition to pay for the "carriage" of the electricity, which to be sure adds very considerably to the bill. Thus, broadly speaking, the matter stands to-day, but we have to remember that to-morrow is possible the advent of economics in the generation and distribution of electricity. The above estimate, if it errs, does so on the side of generosity towards domestic coal consumption, for in the majority of houses (*i.e.*, the houses of the poor) it is not £10 out of £100 of coal that is available for cooking, but something like £2 or £3.

CHAPTER V.

Working by Electricity.

IN 1838, a Scotsman named Davidson constructed an electric car, 16 feet long, which carried a weight of six tons four miles in the hour. In 1839, Jacobi built an electric boat which carried fourteen passengers on the Neva at St. Petersburg three miles per hour. In 1840, Davenport printed by the power of an electric motor a sheet entitled "The Electro-Magnet and Mechanic's Intelligencer." These are examples of work done by electricity before the "reversibility" of the dynamo was discovered in 1873. That discovery gave us a machine for doing work by electricity which is an ideal piece of mechanism. There were electric motors before 1873, but the discovery of the "reversibility" of the dynamo gave us *the* electric motor.

ELECTRICITY : PAST, PRESENT, FUTURE.

Of all the engines invented by man as a general source of "power," the electric motor comes nearest to perfection. The simplicity of its principle enables the reader who has never seen an electric motor to picture one. You place a coil of wire between the ends of a magnet. Into the coil of wire you pass a current of electricity. The coil of wire rotates. Rotating, it is a moving force which drives 10,000 cars on 4,000 miles of line in the United States. It prints the *Pall Mall Gazette* in London. It makes screws and gloves in Switzerland. It drives the spindles in a German spinning mill. In France it carries the passengers from Paris to Trouville at sixty miles an hour. In the American cities of the "Far West" it grinds his coffee for the grocer, works her sewing machine for the sempstress, and brushes the hair of his customer for the barber.

It is important to note the points of superiority of the electric over other motors. No technical skill is required to handle the electric motor. You turn a switch (and that at any distance)—it stops or starts. It is so simple and controllable that it practically dispenses with attendance, beyond occasional oiling of the bearings. In range of power it may be designed with equal readiness to exert the pressure of a watch's mainspring or the power of the largest locomotive. It is much smaller than any other motor. As regards safety, it is so harmless that you might work it in your bedroom without being nervous. The explosions to which steam, gas, or oil engines are liable are impossible with the electric motor. It may be placed anywhere, and requires little fixing and hardly any foundation; in this respect, again, contrasting emphatically with steam, gas, or oil engines, which suggest an incipient earthquake when they begin to work. And finally—its greatest charm in the eyes alike of the housewife and the social philosopher—it is absolutely clean compared with other motors. Its freedom from vibration, noise, or dirt fits it alike for ventilating a lady's boudoir or conveying an express passenger train. One secret of its superiority lies in its motion being rotatory, not oscillatory like a piston. One of the greatest bars to the development of the steam engine was the difficulty of converting the up-and-down motion of the piston into a rotatory motion. In the electric motor you have the rotatory motion to begin with. The revolving armature is indeed the motor itself. This armature may be mounted directly on the axle itself, so that in electric trams no intermediate gearing whatever need be employed. And hence the great speed and uniformity of motion attainable. In Indianapolis there was an electric locomotive which attained 120 miles an hour. In a tug-of-war this year between an electric and steam engine on an American railway, the electric was enabled to pull the other engine not necessarily because of greater power, but because it was exerted continuously and uninterruptedly, while the steam engine,

ELECTRICITY: PAST, PRESENT, FUTURE.

from its very construction, is obliged to exert its pulling force by a series of intermittent jerks. Those who have seen the Overhead Electric Railway at Liverpool will have no difficulty in believing what has been said above about the compactness, simplicity, cleanliness, and noiselessness of electric motors. There you see the cars trailed smoothly and quietly, not by a mammoth, snorting, smoke-belching iron horse. All you see is a corner of the leading car partitioned off to hold a few levers, and a man standing by in easy unconcern. That is all that is visible. This Liverpool railway, by the way, is said to be the most perfected system of electric traction which the engineering of this or any other country has yet achieved.

If, then, the electric motor is so superior, why does it not replace all other motors? You go to a railway director or a cotton spinner and say, "The electric motor is clean and noiseless, therefore be good enough to use it instead of your filthy, shrieking steam engine." The railway director and the cotton spinner meet you with this apt and reasonable reply: "We know the public dislikes dirt and noise, but they do not evince any inclination to pay more for their shirts and their railway tickets for the sake of quiet and cleanliness. If you will show us how we can run our trains and spin our yarn at less cost by using electric motors we will consider the matter. But even in that case we can promise nothing in the immediate future, for a considerable portion of our capital is locked up in steam engines, and we cannot afford to throw it away all at once and burden ourselves with the new capital required to instal a system of electric motors." The only reply which the lips of unregenerate man can frame to meet this deadlock is—"Time is on the side of the electric motor, and so we must possess our souls in patience and smoke."

The electric motor can compete favourably on a mere basis of £ s. d. with the steam engine in the case of new commercial enterprises which are being started where there is a supply of electricity available. This is a fact which the joint-stock company promoter has grasped. The prospectus of the proposed underground railway from Shepherd's Bush to the City, in London, states that electricity will be employed as being a cheaper locomotive force than steam on short railways. The substitution of electricity for steam in our workshops and railways is doubtless a part of the coming industrial revolution. But there is another part in which electricity figures. That is in the transmission of "power." The "power" generated in the cylinder of a steam engine is transmitted to its destination by gearing, belting, and shafting. Now in a big cotton mill, for example, over 30 per cent of the gross power of the engine is absorbed in driving the various lines of shafting alone before the delivery of any power whatever for actual work. And under ordinary conditions the entire system of belting and shafting must

ELECTRICITY: PAST, PRESENT, FUTURE.

be kept in continuous operation irrespective of the number of machines in use at any given time. Hence it is apparent how wasteful and mischievous is the present system of transmitting power from the prime motor to the spot where the work is required to be done. And, moreover, there is a very narrow limit of distance over which it is possible to transmit power. An engine in one establishment may be utilised for driving the machinery in the neighbouring contiguous establishment, but that is about all—in other words, the distance over which power is transmissible is measurable by yards. Here are obstacles which exist for the sake of being overcome—by electricity. There are two ways in which the difficulties of the transmission of power are overcome by electricity. One way is by not transmitting it at all. Small electric motors are as easy, or rather easier, to make than big ones. And so, where a large amount of horse-power is needed to drive a lot of separate machinery, you can have a number of small motors, and let each of them work its own separate piece of machinery. This is a system which, for certain purposes, has great advantages over the system of having one powerful engine or motor generating all the requisite power and transmitting it to various points. With a number of small motors, each working its own separate machine, the manufacturer can practise economies (such as stopping part of his machinery without loss of power) impossible under the system of belting and shafting. But now consider the other way of overcoming the difficulties of transmitting power. Think back to the central station which supplies electricity to light the houses and streets of a town. The current is conveyed, all over the area of lighting, along copper rods laid in pipes under the pavement of the streets. Here is a supply of electricity sent along the copper rods, and if you want illumination you transform the electricity into light by the arrangement known as electric lamps. If you want to cook, you transform it into heat by the electric oven. Now, suppose you want that electricity which is despatched along the street conductors to do work, then you change it, not into light or heat, but into mechanical power. The electric motor is the simple mechanism, we know, which changes electricity into mechanical power. Therefore, what we do is to run our current from the street conductors into the armature of an electric motor. The central station, in fact, corresponds to the steam, oil, or gas engine of a manufactory, and the street conductors correspond to the shafting and belting which transmits the power from the steam engine to the various pieces of machinery which it is required to work. Here, then, instead of transmitting power wastefully over a few yards by an elaborate system of belting or shafting, you transmit it over miles of ground, and almost without loss of energy, by means of two copper rods.

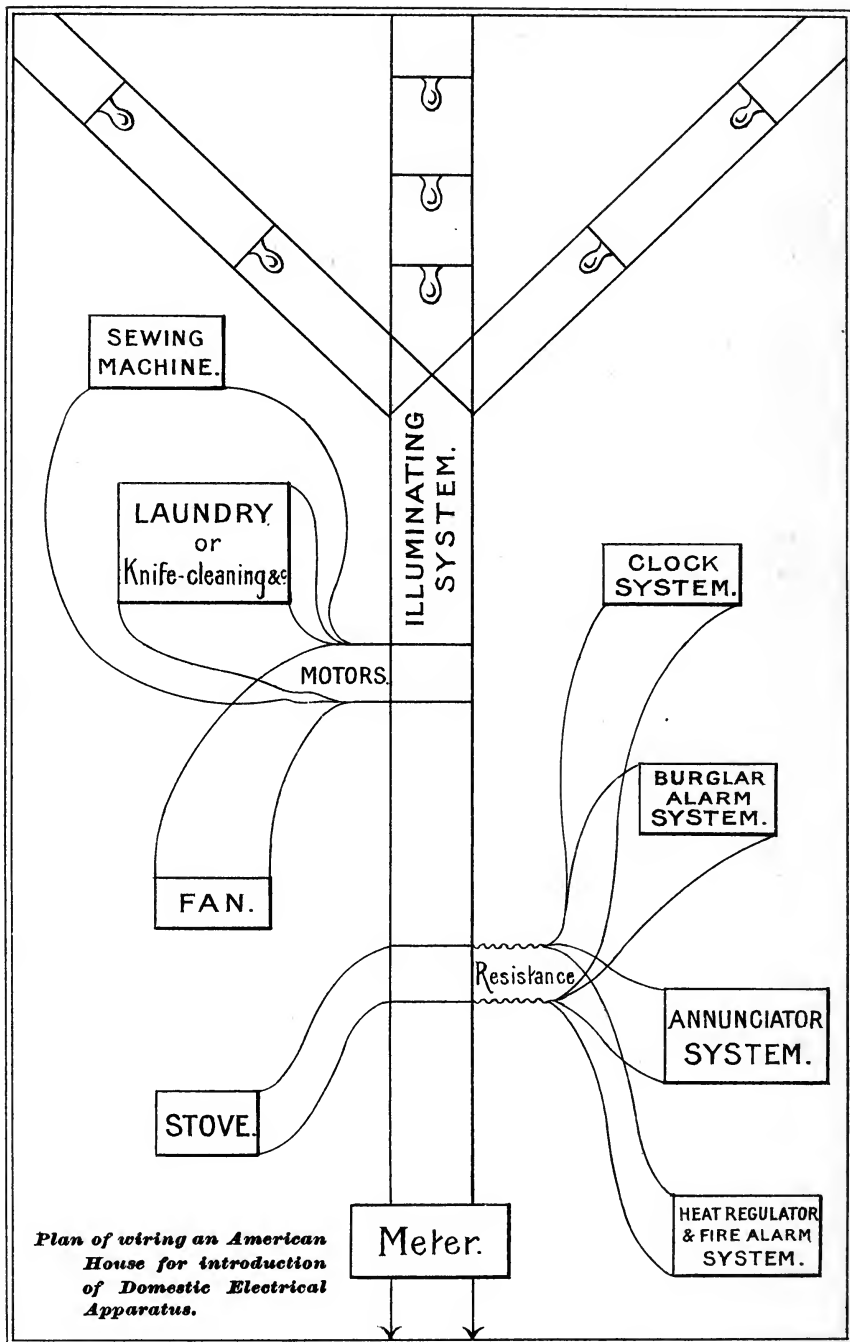
ELECTRICITY: PAST, PRESENT, FUTURE.

The electric plant in the central stations is at present very far from perfection. But it is hoped that in time the same plant may be used in the daytime for generating electricity that shall be used for driving machinery and for domestic cooking, and in the evening for generating electricity which shall be used for lighting. Historically, it was this idea which brought the electric motor into practical use. The electric motor, we have seen, was discovered in 1873. The tremendous importance of the discovery was seen at the time. Clerk Maxwell called it "one of the most important discoveries of modern times." But electrical engineering was not far advanced enough to make it of much general use for many years, and, besides, the counter attractions of lighting almost monopolised the minds of electrical engineers. By 1883 the difficulties of lighting a large area from a central station had been vanquished, and people (in America at least) soon began to think of using the lighting conductors as "power" conductors. For some years it was not thought possible to use electric motors of a strength beyond 50 horse-power, and, indeed, most of the motors for a long time in actual use were of small power, and were used for minor mechanical operations such as driving sewing machines, lathes, ventilating apparatus, and innumerable other sorts of machinery in domestic use or in the lighter class of mechanical industries. There soon arose the question—why not employ electricity for utilising for industrial purposes those vast stores of natural energy which is dissipated in the waterfalls? A head of water has been used to turn a wheel from time immemorial. We in this country are less familiar with the idea of putting waterfalls in harness since that despotic monarch, the steam engine, ordained the suppression of most water mills. But the old waterwheel has been resurrected, though now they call it a turbine. For the generation of electricity by the dynamo all that is necessary, one remembers, is that the armature should be made to revolve, with a steady, even, and continuous motion. Now a waterwheel, supposing the water never runs short, is the very ideal mechanism for this purpose, being absolutely steady and continuous in its motion. Thus the turbine or waterwheel drives the dynamo, the dynamo generates electricity, and this electricity passed into the electric motor is available as "power" to do work. Thus, by these various contrivances, a raised lake or waterfall became the industrial equivalent of an inexhaustible field of smokeless, odourless coal. This was all very fine for enterprising towns and villages that had the good sense to grow up in such localities, and where, consequently, the work of industry could be performed by employing a great number of small electric motors; and it was not surprising, therefore, that Switzerland soon took the lead (and still holds it) in this branch of electrical engineering. Many of the languishing industries of Switzerland have been revived, new

ELECTRICITY: PAST, PRESENT, FUTURE.

ones have been created and developed, and the prophecy has been made that Switzerland is to be one of the great industrial nations of the future.

What, however, was to be done in cases like Niagara? Here the energy of the falls was unlimited; there were no manufactories on the spot to utilise even an infinitesimal fraction of it; and engineers were not able to transmit the energy in the form of sufficiently powerful electric currents to the cities far away. There was something like a deadlock. The story of the problem's solution is both interesting and dramatic, but is too long to be told here. How very recently acquired has been the ability of engineers to transmit currents of high tension over long distances may be inferred from the fact that in 1879 the largest firm of electrical engineers in Europe could not be induced to tender for transmitting power over ten miles in India. Twenty years ago engineers had scarcely dreamed of including electrical conductors among the various methods of transmitting power over a distance. Fifteen years ago the electrical transmission of power had not passed beyond the stage of theoretical discussion. The year 1891 marked an era in the struggle with the difficulties of transmitting powerful currents over great distances. There was an International Electrical Exhibition at Frankfort in 1891, and a crucial experiment had been arranged for testing long distance transmission. There is a waterfall on the river Neckar, 109 miles away from Frankfort, and apparatus had been devised for utilising the energy of the falls to make electricity and transmit it over the 109 miles between the Lauffen falls and the Exhibition grounds. The experiment was altogether successful, and at noon on August 25th a current of about 100 horse-power in strength, generated at Lauffen, flew along the 100 miles of conductors and instantaneously lit the lamps in the Exhibition grounds. Elsewhere, of course, they had been grappling with the problem also, and so rapid has been progress that to-day an American company has practically completed the works at Niagara which are to utilise 100,000 horse-power of the energy of the falls. The abstraction of this will not be appreciable to the eye of the spectator, for the total power of the falls is, roughly, seventy times greater than this, *i.e.*, about 7,000,000 horse-power, or twice the whole steam and water power at present working all the manufactories of the United States. The company is arranging to sell and transmit the power to all customers within a radius of 200 miles from the falls. This is a feat electrically possible, but whether the company will be able to offer its electric power on terms favourable enough to compete with steam at the greater distances yet remains to be proved. The stupendous difficulties in connection with the Niagara project caused most practical men to pooh-pooh the scheme for a long time. And reason seemed to be on the side of the scoffers



Plan of wiring an American House for introduction of Domestic Electrical Apparatus.

when a commission of European experts, including Lord Kelvin, after sitting on the matter for more than a year broke up without accomplishing tangible results. But the dauntless ingenuity and unflinching perseverance of Professor Forbes surmounted all obstacles, and so it happens that to a Scotsman is chiefly due the success, electrically speaking, of this remarkable attempt to put Nature directly within the traces of the industrial chariot.

CHAPTER VI.

Some Miscellaneous Uses of Electricity.

IN the brief space at disposal it is not possible to do more than briefly glance at a few of the minor and less generally known services electricity renders to man outside the great departments of light, heat, and "power." And in glancing at the varied uses, transformations, and adaptations of electrical energy, it is always necessary to bear in mind that extension and development is going on every day. And this progress proceeds along two main lines. There is, first, the region of future discovery; and there is, secondly, the development and extension of existing electrical industries. All electricians agree that "it would be quite impossible to forecast the future even for a single decade with reference to the application of electricity even though discovery were ended. The mere expansion of industries already established will give them an importance which we cannot now estimate."

In an essay contributed to an American book called "Electricity in Daily Life" (published in this country in 1891 by Kegan Paul), A. E. Kenealy gives a detailed account of the various purposes to which electricity has been put in the American household, and in the four years that have elapsed since the publication of the essay the list has doubtless grown. The accompanying diagram, adapted from one given by Mr. Kenealy, shows how they work these things in the land of Edison. The burglar alarm apparatus is a contrivance which not only sets an alarm bell in operation if a door or window is being forced, but it at the same time indicates the room where the invasion is being made. The heat regulation system controls the temperature in both summer and winter. Thermostats, or automatic thermometers, are kept in contact with supplies of heated or cooled air, so that the temperature of a room or of a house may be maintained at any given degree independently of the season and the sun. The fire alarm apparatus depends on similar automatic thermometers set for higher temperatures, that is to say, they are so adjusted that if the temperature rises to 120 degrees, say, a contact is made, a bell is rung,

ELECTRICITY: PAST, PRESENT, FUTURE.

and the room where there is danger is indicated. Similar arrangements can be made for controlling water overflow from tanks or bursting pipes. There are electric doors, by which visitors can be admitted instantly and without delay. Of electric clock systems there are many, but the best is said to be something like the following arrangement—at each hour the standard clock makes a contact completing the circuit of all the controlled clocks, a pair of arms spring from the dial at the figure xii. and meet swiftly in the centre with the minute hand tight in their embrace, and vanish the next instant behind the dial, where they await the next hourly summons. Each clock is thus mechanically corrected every hour. There are also electric “time detectors,” which register automatically the time at which visits are paid, by watchmen, for example, to any particular part of the premises. In America electric motors appear to be in common use in the household, being used to drive sewing machines, knife cleaners, laundry apparatus, lawn mowers, carpet sweepers, elevators, shoe polishers, parlour organs, pianos, and, in fact, every kind of household operation capable of being mechanically performed. The electric circular fan is a neat instance of combined ornament and use. A drawing-room decoration when not in use, the fan has a tiny motor attached, and in hot weather you can comfort yourself with a cooling breeze by placing the fan on the table beside you and setting it in motion by touching a button. The electric waiter, as described by Mr. Kenealy, consists of a miniature railroad train, which runs round the table and thence by ornamental trestle work to the wall, disappearing through a shutter. The dishes as electrically signalled for by the hostess are laid on little trucks fitted with tiny motors, and, started from the pantry to the dinner table, they stop automatically before each guest, who by pressing a button passes the dish on to his neighbour. All the above inventions and many others are said to be in actual use in great numbers of American households, and as the cost of the electric current decreases they should pass from the class of luxuries into that of necessities.

To the new applications and recent advances in telegraphy, in telephony, phonography, electro-photography, electro-metallurgy, electro-physiology, and therapeutics, &c., space does not suffice for more than a mere reference. In industrial electrolysis great activity has been manifested of late. Patents have been profuse. The manufacture of aluminium has been so accelerated and cheapened that a great extension is possible in the use of this wonderful metal, whose lightness and durability are so remarkable. The most famous of Scottish waterfalls—Foyers, in Inverness-shire—is to be harnessed to the dynamos of an aluminium manufacturing company, unless, indeed, the agitation against their alleged “desecration of Nature” proves too strong for them.

ELECTRICITY: PAST, PRESENT, FUTURE.

The phonograph we know chiefly as a toy, but it comes out as a valuable labour-saving appliance in the use to which it is being put in many business houses. Instead of dictating his letters to a shorthand writer, the chief speaks them into a phonograph, and this is handed over to the typewriter, who can adjust the rate of re-issue of the words to the speed of writing.

Professor Boys' ingenious device for photographing flying bullets by means of electricity (the spark lasts about the eleven-millionth of a second) is worth mentioning as an instance of the extreme delicacy of adjustment possible in electrical apparatus—apparatus not wanting in strength also, seeing that it can abstract and carry away a force of half-a-million horse-power from Niagara.

CHAPTER VII.

Some Possibilities of Electricity.

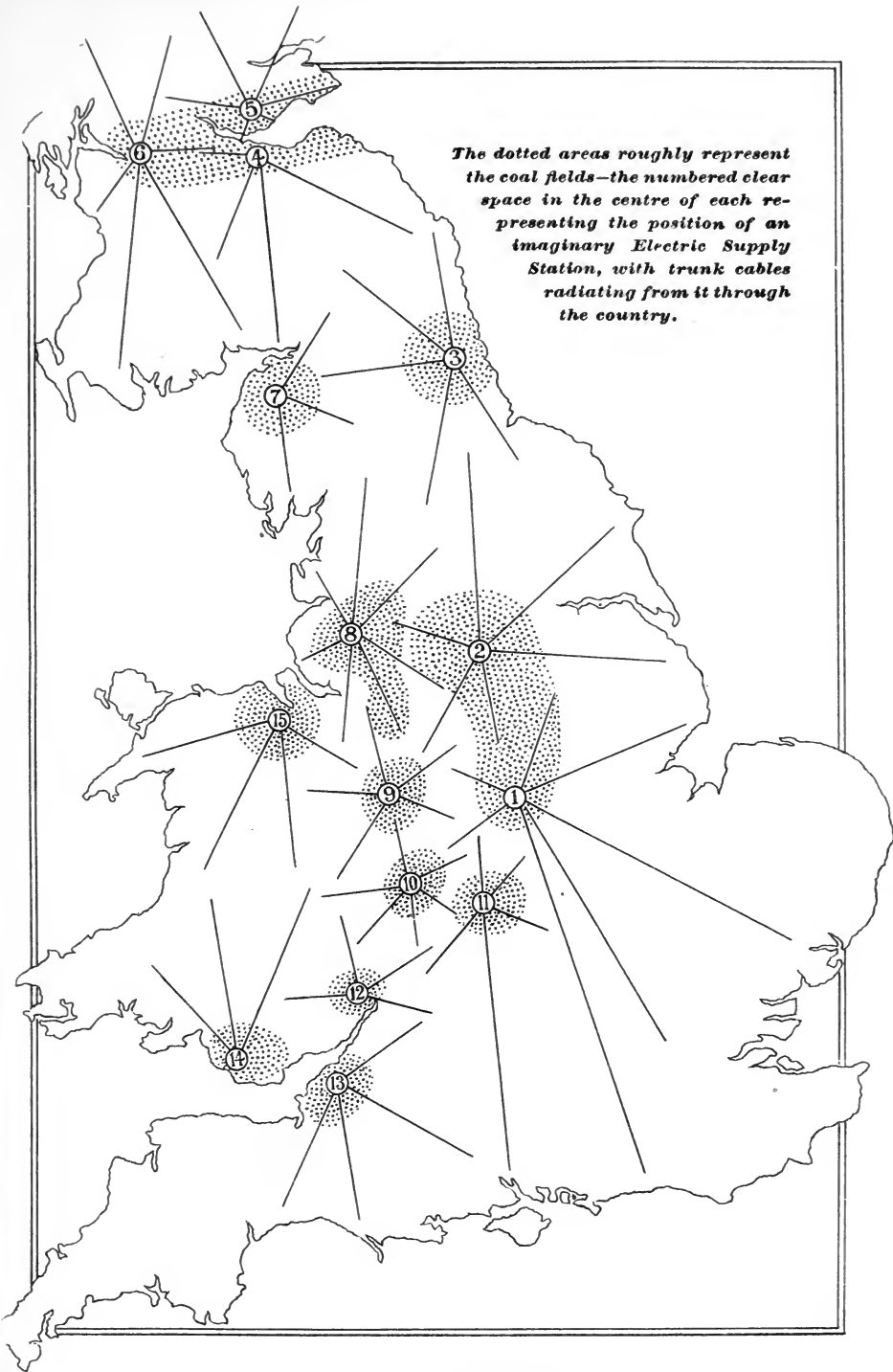
IN an article in the *Nineteenth Century* for December, 1894, Mr. Thwaite wrote (in reference to the utilisation of water-power in Europe and America):—"When the natural forces of gravity are being drawn upon by our industrial rivals, the pertinent question for us is—Do we in England utilise our own natural resources in a manner such as to command the satisfaction of the progressive engineer? And again—Do we utilise to the full the advantages that electrical phenomena have revealed to us? To both these questions only one answer can truly be given, and that answer is a negative one." Mr. Thwaite then proceeds to define and elaborate his project for bringing our belated industrial practices into line with modern progressive engineering. It is quite an anachronism, he maintains, for us to go on carting coal away from the pit mouth and conveying it for combustion to every corner of the land. And it is an anachronism, moreover, which is likely to cost us dear in the international struggle of commerce unless we rapidly amend our ways. What we ought to do is to burn all the coal we need at the pit mouth. This is what electricity commands us through the mouths of its prophets (who in English are called engineers). With the dynamo and the electric motor at our service and the difficulties of long-distance power transmission overcome, we can make the coal do everything for us at the pit mouth which it now does when consumed in a million furnaces, grates, and stoves. And the cost to the nation as measured in £ s. d. would be considerably less, if we may rely on the figures of Mr. Thwaite. The indirect gain would

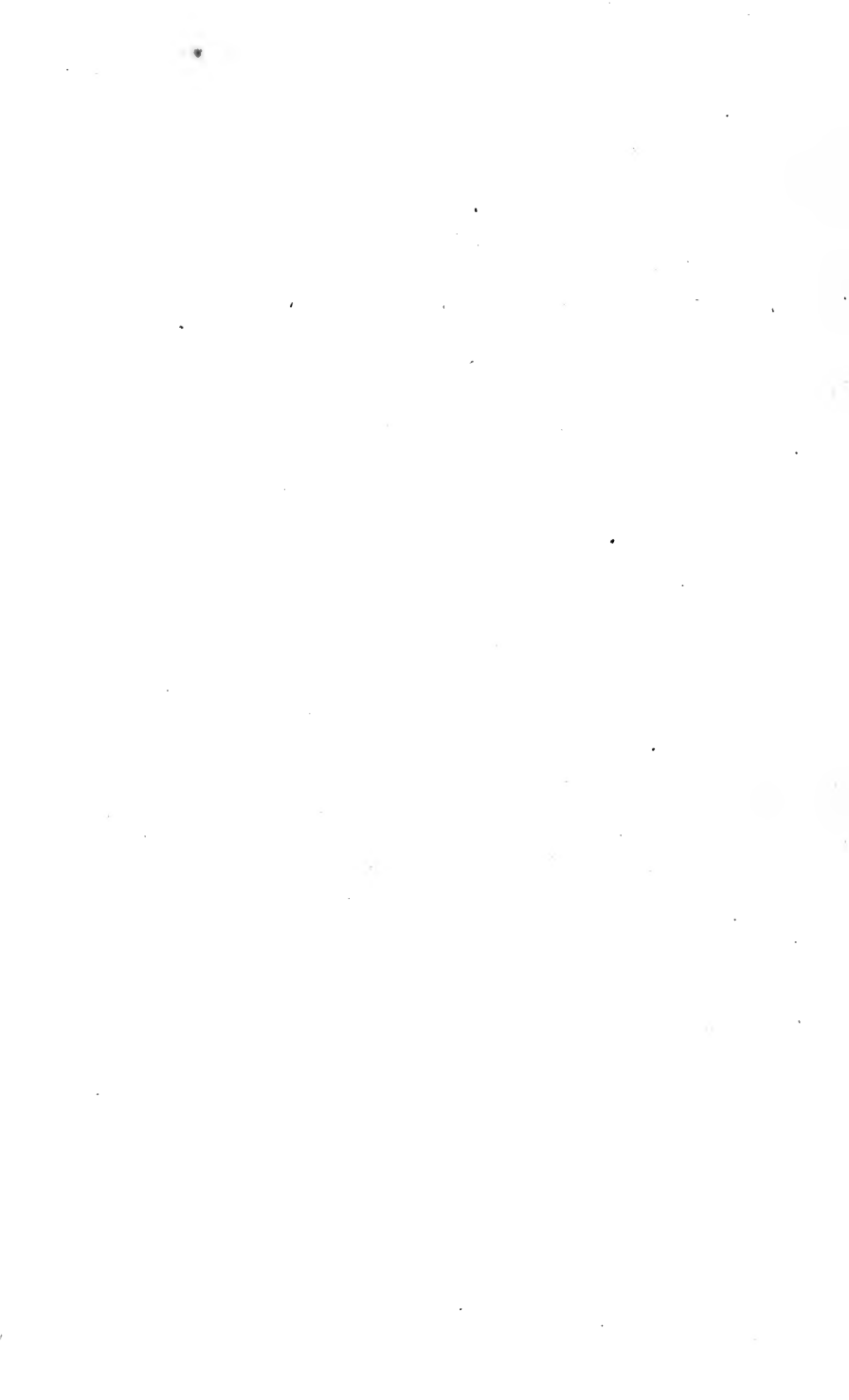
ELECTRICITY: PAST, PRESENT, FUTURE.

be beyond calculation. Coal yields us light and warmth and works our mills, factories, and locomotives at a sacrifice of pollution to land, air, and water which entails a bill of damages that might well make the (other) National Debt look insignificant. But now that we have the means, why not change the heat of the coals into electricity at the pit mouth? Let that electricity speed silently and imperceptibly along underground copper conductors to hamlet and village and city; and there, where heat, light, and "power" are wanted, let the swift and invisible transformation be made which changes the current into one or other of these. There is no need to sing again the praises of the electric lamp, the electric stove, and the electric motor. If it is the welding or annealing of bars without a forge that is wanted, then the current itself will enable the manufacturer to conveniently melt steel, iron, copper, or brass.

Many large cities, like Liverpool, Manchester, and Glasgow, obtain their water for domestic and industrial purposes from inland lakes miles away. Here, then, says Mr. Thwaite, are splendid municipal analogies for the project of distributing electric energy from the coalfields. In his own words, Mr. Thwaite's project is "to supply electric power generated in central stations built in the centres of our coalfields to our great industrial centres, and to the metropolis itself. The power-station for serving the metropolis would be erected on the Derbyshire coalfield; an auxiliary station to serve the Midlands would be erected in the Staffordshire coalfield. The electric trunk lines would serve the larger towns *en route*, including Derby, Nottingham, Birmingham, Leicester, Northampton, and Bedford. Distributing, transforming, and storing stations could be erected near the metropolis. The different metropolitan and suburban electric-light stations could be supplied with energy for general distribution. Electric railways and other power-stations could also be supplied. Large power consumers could be supplied with power direct. Each vestry not already supplied with an electric generating plant could be invited to put down a distributing system and a receiving system. The industrial centres of Lancashire, Yorkshire, and Cheshire could be supplied with electric energy generated in two coalfield stations respectively near Wigan and Barnsley."

The accompanying rough sketch map of the coalfields of England and Scotland has been drawn to illustrate and amplify the principle of Mr. Thwaite's scheme. The coal area in each case is dotted over, and a white spot in the centre of the coalfield represents the position of an imaginary electric station, from which trunk cables (represented by the lines radiating from the white spot) would convey high-pressure currents for feeding all the adjacent country with heat, light, and power. Broadly speaking, we should have fifteen or sixteen great central stations:—





ELECTRICITY: PAST, PRESENT, FUTURE.

1. Derbyshire station, for East and South-East England.
2. Yorkshire station, for North-East England.
3. Newcastle station, for North and North-East England.
4. Lothian station, for South-East Scotland.
5. Fife station, for North-East Scotland.
6. Lanarkshire station, for West Scotland.
7. Cumberland station, for North-West England.
8. Lancashire station, for Lancashire and Cheshire.
- 9, 10, and 11. North and South Staffordshire and Warwickshire stations, for the Midlands.
- 12 and 13. Forest of Dean and Somerset stations, for South-West England.

14 and 15. Welsh stations, for Wales and (perhaps) Cornwall.

There might possibly be another central station in the Leicestershire coalfield, for Leicestershire and adjacent Eastern counties.

All this, no doubt, sounds like a revolution of cardinal magnitude. And so it is. But it cannot be brushed aside by the practical man as a mere seer's vision. Surely engineers rank with builders as the most concrete and practical of men. Well, engineers tell us we must achieve this revolution sooner or later if we do not wish to get left hopelessly behind in the march of civilisation. In the race for the world's trade during the next fifty years, there are countries which have been given a long start by the handicapper. Switzerland, North Italy, Norway and Sweden, and the United States are all of them countries which in their vast natural supplies of water-power possess for the coming century an advantage over other countries similar to that which her coalfields gave England in the century passing away. It was the steam engine which enabled England to seize and use this advantage. It is the electric motor which enables Switzerland, North Italy, Norway and Sweden, and the United States to use their special advantage. But unless our engineers deceive us, we may hope to keep fairly abreast of the times if we use our coal *in situ* instead of abusing it in city. As to how the new order may be brought about, that is truly a matter to tax the wisdom of the wisest. In the face of the huge array of vested industrial interests that stand in the path of the national welfare the task looks well-nigh hopeless. But though we are a sluggish, immobile people, we have a happy knack of getting round difficult corners. And though we have been convinced during the past three hundred years that Providence has a kind eye for England, that has seldom prevented us from doing the best we could for ourselves by supplementary human means.

In the discussion of how we can make use of electrical discoveries to husband and maximise our natural resources, it has been pointed out that peat has been totally neglected as a source of electricity. Incredible as it may seem, yet it is true, that the peat areas of Great

ELECTRICITY : PAST, PRESENT, FUTURE.

Britain have never yet been surveyed. Mr. Morsey, ex-president of the Society of Engineers, has, however, made a rough estimate of their extent. He calculates that there are no fewer than 6,000,000 acres of peat in the country, capable of yielding 21,000,000,000 tons of dried fuel. This is calculated to be equivalent to something like 3,000,000,000 tons of coal, or in money value about £1,500,000,000. Nearly half the total of 6,000,000 acres of peat is found in Ireland alone, and probably more than half the remainder in the Highlands of Scotland. Thus, though the North of Scotland has no coal and Ireland little, both have in their peat beds a fuel capable of driving dynamos and generating electricity which technically, at all events, might afford the basis of industries which would bring back prosperity to these depleted and poverty-stricken districts. Whether under existing conventions of economics and government some such undertaking could be started experimentally depends apparently upon a variety of accidental circumstances. (The fact that Lord Salisbury happens to be an electrician may perhaps influence the fate of Ireland and the Highlands!) Whether the undertaking once started could be continued, and under what conditions, can of course only be determined by actual experiment and trial. A suggestion has even been made that an electric station established on the peat moor of Rannoch, similar to those Mr. Thwaite advises us to put down in the English coalfields, could supply Oban, Inverness, and even Glasgow with light, heat, and power.

Though England has comparatively little natural water-power, there is no doubt that more might be made of what she has. The city of Worcester is lighted by electricity generated by a neighbouring waterfall. At Portrush, county Antrim, the motive power of an electric railway is derived from a waterfall. This was one of the first electric lines to be laid down in the United Kingdom, and it has been so entirely successful that a similar one has been constructed to run between Newry and Bessbrook. These are examples of what might be more extensively done. In many localities there are disused and decaying mill lades and waterwheels. A hundred years ago the cutlery of Sheffield was much of it made in little domestic workshops on the borders of streams where a fall of water could be made to turn a wheel. There are three great obstacles in the way of utilising British water-power by electricity. There is, first, the difficulty in raising initial capital to finance small undertakings. Secondly, there are the (usually) exorbitant exactions of the landlords for water rights and wayleaves. And, thirdly, the natural difficulty that any head of water that does exist is liable to extreme fluctuation or even total disappearance in the drought of summer. In the Scottish Highlands there is a good deal of water-power, but for the most part inconstant and unreliable, and at great distances from industrial

ELECTRICITY : PAST, PRESENT, FUTURE.

centres. However, Professor Forbes, late consulting electrical engineer to the Niagara Cataract Company, and perhaps the highest living authority on the subject, is reported to have declared that he would undertake to run all the railways of Scotland by means of the water-power now running to waste. The utilisation of the Fall of Foyers has already been referred to, and it is said one or two other similar industrial undertakings would have been started and financed by English capital but for the prohibitive sums asked by landlords for water rights and wayleaves. In France the Government is perhaps less scrupulous in interfering where individual rights seem to encroach upon the common good. Alive to the added importance and value with which electrical discoveries have endowed elevated waters, the French Government is said to be taking steps for ensuring that individual greed does not hinder national development.

II.

PROFESSOR TESLA'S experimental production of light without heat, we have seen, *may* contain the germ of a practical method of illumination. Similarly, experiments have shown that it is possible to telegraph through space without the use of metallic connections. And herein is revealed the possibility of electric telegraphs without wires, posts, cables, or any of the existing costly material appliances. Electric vibrations of a yard or more pierce with equal ease either a wall or a fog. Experimentalists are at present able to generate electric waves of any desired wave-length from a few feet upwards, and to keep up a succession of such wave-lengths radiating into space in all directions. Enormous lens-shaped masses of pitch may be used for directing a shaft of electric rays in a given direction. An experimentalist at a distance, by means of an instrument attuned to receive a particular wave-length, and arranged in concert with a Morse code, can receive and interpret messages. Writing of such eventualities, Professor Crooke says :—" This is no mere dream of a visionary philosopher—these are all the requisites needed to bring it within the grasp of daily life, as well as within the possibilities of discovery, and any day we may expect to hear that they have emerged from the realms of speculation into those of sober fact."

Something has been said under electric lighting of the action of electricity on plant life—a field which electricians have been as yet too busy to explore. In some experiments it has been found that electric currents not only give increased vigour to the life of the higher plants, but tend also to paralyse the baneful activity of parasites. If electricity could rout out the parasitical insects and fungi which infest our crops, a loss calculated at £12,000,000 per annum

ELECTRICITY: PAST, PRESENT, FUTURE.

would be saved to the country. In India sometimes, instead of being a tenth of the harvest, it is the whole crop which is thus consumed.

Like all enthusiasts of a young movement, the practical electrician is not remarkable for the modesty of his ambitions. One of the objects at which he aims is the control of the weather. If the British climate was the finest in the world in the days of Charles I. it has sadly deteriorated, for nowadays "our summers consist of three fine days and a thunderstorm, and the only fruit that ripens is a baked apple." The real calamity of a thunderstorm is not the direct danger to life, but that it "upsets the weather." The thunderstorm is followed by a fall of temperature and a fit of rain clouds and wind which rarely lasts less than a week, and sadly interferes with the growth and ripening of grain and fruit. "Cannot," asks Professor Crooke, "the accumulations of electrical energy in the atmosphere be thwarted, dispersed, or turned to practical use? In like manner we hope to abate the fog nuisance. During a genuine London fog the air is electro-positive. What would be the effect of neutralising it would not be very difficult to show." We have reports of more or less successful rain-making in America. For this country the problem is—how can we concentrate our rain on a smaller number of days? It is difficult to see why cloudiness and rainfall occur chiefly by day and clear skies by night, for the fitness of things demands the contrary. Crops, whether of men or herbs, need the opposite distribution—clear skies by day so that the sun's rays may not be cut off, and clouds at night to prevent the earth losing by radiation the heat gained in the day. But, if only for the sake of stimulating to experiment, it may be worth believing that electricity holds the secret of this mighty problem as of so many others.

CHAPTER VIII.

Electricity as a Social Force.

I.

THE TRANSITION FROM HAND TO STEAM POWER.

THE industrial condition of England in the first half of last century was very much the same as it had been for centuries. Its type is described in the words—domestic system, *i.e.*, private production for private consumption. Its characteristic hand-labour lingers still in certain individual industries (such as lace making), and its primitive

ELECTRICITY : PAST, PRESENT, FUTURE.

form may be studied on the spot and in full bloom amidst the Western Isles of Scotland. In England generally the domestic system of industry was gradually superseded by a new order of things in the second half of last century.

In less than a century there was effected in industry the greatest revolution since the stone age, and in society the most stupendous changes since Rome was overturned. Society became established on a new technical basis—a basis of steam and machinery. Certain results of this steam and machine production have ensued, amongst which all are agreed about the following :—

(1) A section of the population has amassed colossal wealth, a faint idea of which may be gathered from the reflection that nearly a thousand million pounds sterling of British money is invested in foreign government stocks. Another section has become so poor that brothers are willing to let their sisters sew sacking twelve hours a day all the year round at less than half-a-crown a day.

(2) Building has become so facile an art and so universal an industry that the land is covered with houses, mansions, and palaces. At the same time, thousands of families have been reduced to live in a single room apiece.

(3) Manufacturing processes have become so prolific, and transport so far-reaching and swift, that the warehouses in every large town are overflowing with the necessaries, the comforts, the luxuries of life. And in every large town thousands of people go to bed every night without adequate food and shelter.

(4) Increased scientific knowledge has quadrupled the productivity of the soil, and machinery has multiplied the dexterity and power of the farmer. At the same time, farming has become a doubtfully remunerative trade, hundreds of farmers hover on the brink of bankruptcy, and land goes out of cultivation.

Similar antitheses might be cited without number. Enough has been said to show how violently the social order has been dislocated. The social disorder incidental to steam production and the factory system perhaps reached a climax in the second quarter of the present century. In 1849, 62 out of every 1,000 persons in Great Britain had to be given public relief to keep them from starvation. Since then we have had the Factory Acts and a vast amount of other industrial and social legislation. The aim of this legislation has been mainly remedial. Its object has been to dispel the social disorders incidental to the factory system and steam production. The point, for present purposes, is to note the chronological sequence. First came steam production, then the social upturning, and lastly—a long way after—comes the guidance and control exerted by public opinion and legislation. Now in the case of the coming era of electrical production we have to note a different sequence. Supervisory legislation is growing up, coincident with the growth of electrical applications.

ELECTRICITY: PAST, PRESENT, FUTURE.

II.

THE TRANSITION FROM STEAM TO ELECTRICITY.

OF electricity as a social force we know very little—the resultant action on society belongs to the future. Of steam as a social force we know a good deal. We may perhaps learn something by analogy. Like the birth of the steam engine, the dynamo motor comes as a new avatar. An assured fact it appears to be that we live to-day on the eve of a general transition from an era of steam to one of electricity. Industry is about to undergo a change in its fundamental process. Society is about to re-establish itself on a new technical basis. Will the transformation be accomplished by steps so slow, gradual, and imperceptible that the revolution will be effected without contemporary man being more than dimly conscious of it? Or will it, like the change from hand to steam power, be accompanied by wide economic displacements and grave social disorders? To the latter question one is tempted to give a qualified negative. It is undeniable that the transition from steam to electricity is an infinitely less abrupt and violent change than the transition from hand to steam power. It is, as it were, a change of degree rather than of kind in the technical basis of society. The first stage of the shifting is indeed already over. In not a few instances the dynamo has already replaced the steam engine.

In the transition from the domestic to the factory system the fundamental economic displacement arose from the fact that the new machinery could neither be purchased by the small master workman nor located and worked in the domestic workshop. The case is quite otherwise in changing from steam engine to electric motor. As soon as its financial advantage is demonstrable, the capitalist manufacturer will have every inducement to replace his steam engines by electric motors. Allusion has already been made to the technical superiorities of the electric motor—its compactness, cleanliness, mobility, and divisibility. Thus, if the capitalist manufacturers throw aside their steam engines and adopt electric motors, only a comparatively small section of the industrial world is disorganised, broken up, and thrown into idleness, namely, the makers of steam engines.

The substitution of electric for steam power, instead of being hateful to hygienists and æsthetes, as was the change from hand to steam power, is hailed by them as a step towards a manufacturing millennium. It holds forth the hope of rescuing the cities from dirt, fog, and epidemic plague—of restoring to the agriculturist the blackened wastes of Lancashire and the Midlands—even of aiding in the reunion of art and industry so ruthlessly divorced by the steam engine.

ELECTRICITY: PAST, PRESENT, FUTURE.

About half the existing electric supply stations are owned by the local authorities. In other words, the supply of electricity is to a considerable extent in the hands not of private capitalists, but in the hands of the public. To judge by the tendency of municipal activity to monopolise gas, water, tramways, &c., the electrical supply is likely to fall ultimately altogether into the hands of the local authority. Here is a profound difference between steam and electrical production. Suppose a mill is dependent upon the local authority for the motive force of its machinery, both capitalist and labourer are placed in a very different position from the economic isolation which the steam engine allows. Here, it is true, are likely to emerge problems requiring the highest statesmanship and wisdom that human ingenuity can bestow. But let the public authorities manage or mismanage electricity as they will, it is incredible that they can ever hope to cap the achievements of the individualist capitalists who played ducks and drakes with social wellbeing during the first fifty years of the steam-power era.

Seeing that "power" can be electrically divided up into such small "parcels" and transmitted so easily, and motors can be made almost as small as a thimble, some people foresee in the development of electrical engineering a partial return to the domestic system of industry. But this belongs to the *contra* side, for in the present condition of things the revival and extension of the domestic workshop would bear the appearance of economic retrogression. In the present mobile condition of capital, home products when made for sale seem inseparable from sweated work and sweated wages. The textile workers do not live in a paradise of comfort; but heaven forbid that they should descend to the condition of the tailors of Whitechapel, the sempstresses of Stepney, the shoemakers of Bethnal Green, the cabinet-makers of Shoreditch, or the chain and nail makers of the Midlands. If electricity drives workpeople to make workshops of their own homes, away from the joint responsibility and government inspection of centralised factories, that would probably plunge the workpeople themselves into greater social misery, and would cause grave economic displacements in existing industries.

Of particular interest to Lancashire is it that not only in Europe and America but in the East, too, they are beginning to survey and take stock of those natural advantages which electrical engineering has raised to such high importance as factors in the struggle of the nations for existence. A committee of experts has reported that water derivable from the Periyar Irrigation Works in India can be electrically transmitted and delivered in Madras, Madura, and Trichinopoly at an annual cost of £3, £2, and £1. 10s. respectively per horse-power. In England at the present time it is said the cost to manufacturers ranges from £10 to £20 per horse-power per annum.

ELECTRICITY : PAST, PRESENT, FUTURE.

(Mr. Thwaite calculates that if energy were generated at the pit mouth and transmitted electrically to the cities it could be delivered in London at £5 per horse-power per annum.) Of course, the electrical development of India is an entirely unknown quantity. But the figures of the Periyar Committee tend to recall the fact that the East is traditionally the home of manufactures; while the West, until the invention of the steam engine, was rather the natural seat of agriculture, hunting, and fishing. A hundred years of frantic steam production has driven from the public mind the fact that the Lancashire mills ruined the cotton industry of India and whitened the plains of Bengal with the bones of Hindoo weavers. Calcutta even now threatens Dundee with reprisals, and it would be a strange fate indeed if electricity were to become an instrument of Hindoo vengeance on Lancashire.

III.

SOME MORAL INFLUENCES.

WHEN one takes into account all the dirt and smoke generated by the complicated awkwardness of our system of lighting and feeding coal fires, it does not seem an exaggeration to say that the electric system of heating and cooking would reduce by one-half the toil of domestic service. This is a social reaction of electricity that should in time, and with wise guidance, make its moralising influence felt through every grade of society. Ruskin has pointed out that one cause of the dirt that pervades so many working-class homes is the heavy toll of female service which the rich exact of the poor. Sisters and daughters who should be scrubbing and cleaning for brothers and fathers working at mill and foundry are away dusting the multitudinous rooms and polishing the endless grates of west-end mansions. None but a very simpleton could imagine that electricity, by merely diminishing the dustiness of west-end rooms and knocking out the dirty grates altogether, could restore the daughters of the working classes to their own homes. But to lighten the drudgery of the home—other things helping—is to elevate the character of the domestic servant, and to open the way to the moralisation of domestic service. And it is not alone in the matter of heating that electricity can help towards this. From knife-cleaning and boot-blackening up to waiting at table and playing the piano there are few house handicrafts that cannot be performed advantageously by the electric motor. Next to the work of the home, the work of the farm has been least aided by mechanical motors. The very nature of the steam engine to a large extent unsuited it for both purposes. It is quite the contrary with the electric motor—clean, noiseless, movable, compact, and as

ELECTRICITY : PAST, PRESENT, FUTURE.

readily adjusted to turn a sewing machine as to lift a ton of hay. Electric lines in America already traverse many miles of principal country roads, and electric power can, it is said, be furnished to hundreds of these farms at a very low cost. "The high speed of an electric motor will," it is contended, "enable the farmer to do a vast amount of work in an hour, and a one horse-power motor is about all the power that is required on an ordinary farm for the operation of all machines with the possible exception of the threshing machine. As the farmers are managing at present they must rise before daylight and labour until dark to accomplish that which, with a comparatively small expense, could for the most part be accomplished in a few hours by electricity." Here there is a suspicion of the voice of the enthusiast with an axe to grind. Nevertheless, there is no reason to doubt that electricity opens up the possibility of applying to agricultural operations mechanical motor agencies more extensively than ever before. And if it should ever happen that the energy of the coalfields is distributed from the pit mouth to the cities by electric trunk cables ramifying through the country, then, indeed, "power" would be available at the very doors of the farmer. To paraphrase a saying of George Meredith, one might say that the last thing to be civilised by man will be the agricultural labourer. The increasing toil of the agricultural labourer all the year round, unsheltered from the weather, is no doubt hardening and bracing if not carried beyond a certain point. But once carried beyond that point, as in the past it invariably has been, then it becomes a drudgery which enfeebles the body, stupifies the intellect, and brutalises the emotions. If electricity by coming to the help of the agricultural labourer could stop his toil and exposure at the point when it ceases to become beneficial, then electricity would open the path for other influences to step in and effect the moralisation of that industry which is at the base and foundation of all other industries. If the electric motor could do that for the immutable and eternal agricultural labourer, then, indeed, the electric motor would deserve well of mankind. But it is not enough to merely introduce into agriculture labour-saving appliances. The history of steam shows how the introduction of labour-saving appliances, though a net gain to the nation, may be a curse to the individual labourer. Instead of moralising it may demoralise an industry, from the point of view of the contemporary labourer. What is wanted for the moralising effect of labour-saving appliances is that they should be introduced under wise control, and with a generous adjustment of disturbed economic relations.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

BY SIDNEY WEBB, LL.B.

*We are learning slowly, but not less surely and satisfactorily, what great things can be done by means of the rates for the promotion of the health, comfort, education, and enjoyment of the people. We have proved that these are fitting objects for the exercise of our united energies by the eminent success of our public free libraries and parks. We have proved that a municipal council is capable of managing such institutions; that local taxation is a fairly equitable basis for the incidence of the burden; that the advantages to be derived are limited only by the capacity of the individual to avail himself of them; and that the sense of individual possession guarantees the safety of the public property which is provided for the use of each and all . . . Fortified by this experience we now essay a new departure . . . We are weary of the too costly luxuries of the policeman and the inspecting officer. We have a strong longing coming over us to have something to see for our money when we have spent it. Wickedness, ugliness, and dirtiness offend us now more than they used to do. We groan under these burdens, and are determined to free ourselves from the load by a united effort, by means of the effective and equitable money-raising power of the city rate.**

IF in future ages historians continue to mark time by reigns, the Victorian epoch may possibly come to be known as that in which took place the first great development of municipal socialism. To-day, when we have in the United Kingdom nearly 40,000 separate local governing bodies, all spending for the common good money compulsorily levied by taxation, it seems almost incredible that practically the whole of this vast network should have grown up in sixty years. Yet, with the exception of the corporation of the City of London, and half-a-dozen insignificant municipal survivals, together with a few archaic commissioners of sewers and trustees under local acts, all the 40,000 local authorities have come into existence since 1834. Exact statistics of local expenditure before that date do not exist. But it seems probable that, leaving on one side the money raised for the relief of the poor, the total annual expenditure on what may be called municipal purposes, whether by the unreformed corporations, the justices in quarter sessions, the churchwardens, overseers and vestries of

* Speech of the Mayor of Manchester (Alderman Hopkinson) on opening the Manchester Municipal Art Gallery, 1883.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

parishes, or any of the "commissioners" or "trustees" who here and there carried out municipal duties, did not in 1834 exceed a couple of millions sterling for a population of twenty-five millions. To-day, for a population not nearly twice as great, it is over sixty millions. The capital value of the property owned or administered by the local authorities in 1834 was infinitesimal; to-day it must reach at least four hundred millions sterling, and it is easy to see that we are still only at the beginning of the movement. During the four years ended 31st March, 1893* (the latest date for which official statistics are available), the expenditure of local governing bodies in England and Wales increased by more than 19 per cent, or five times as fast as the population. Alike in annual expenditure, in capital outlay, and in the increase in these respects over any previous period, the year 1892-3 (the latest for which the statistics are published) stands far in advance of any former record. Since that date, moreover, we have had many thousands of parish councils established, and hundreds of local boards turned into district councils, with a considerable quickening of corporate activity, and consequent increase of corporate expenditure in every direction.

To co-operators of the store and wholesale type—to those, that is, who believe in associations of consumers—this development of municipal socialism must be of peculiar interest. In bad times and good, amid the wreck of other forms of association, they have clung fast to the faith that profit-making, whether by individual producers or by associations of these, was not an essential basis of civilised society; that associations of consumers, served by salaried officers, were capable of supplying their own needs without the intervention of any enterprising middleman, whether individual or joint-stock; and that the best hope for the future of an industrial society lay in the deliberate regulation of production according to the known consumption of the community to be served, instead of leaving the adjustment to the blind workings of an anarchic competition. Especially during the last twenty years have they seen the communities of ratepayers in which they live, steadily taking step after step in the same direction, supplying for themselves in their corporate

* The statistics used in this article are mainly derived from the "Annual Local Taxation Returns" for 1892-3, published by the Local Government Board (England and Wales). C. 295 (7 parts); the Board of Trade's "Annual Returns of Gasworks," H.C. No. 286 and H.C. No. 287; and of "Tramways," H.C. No. 270; the "London County Council Return of Corporation Waterworks," March, 1895; and the reports and accounts of some of the places referred to. Other authorities are referred to where cited, see, in particular, *How Edinburgh is Governed*, by J. W. Gulland (Edinburgh: 1891); *Facts for Bristol* (Fabian Society, London); and *An Historical Record of Some Recent Enterprises of the City of Manchester* (Manchester: 1894).

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

capacity services which had not previously existed at all, or had hitherto been furnished by private enterprise, eliminating, wherever practicable, the contractor or other middleman; and in every possible way replacing profit-making competition by a deliberate provision for the recognised needs of the community. When a town council, acting on behalf of its constituent ratepayers, itself undertakes to supply water and gas for the use of the citizens, to run tram cars, to maintain schools and libraries, or to provide an art gallery and bands of music for the public recreation, we have a clear adoption of co-operative principles. The municipality passes from a merely regulating and controlling authority into an association of consumers co-operating for the actual supply of their common needs. The contractor, middleman, or profit-making capitalist is eliminated, and the standard of success becomes, not (as in private business) the amount of profit or excess over cost that can be extracted from the consumer, but (as in co-operative enterprise) the excellence with which the consumers' wants are supplied.

Co-operators are still apt to look a little askance at this municipal co-operation, and to ask why its services should not fall within the sphere of the voluntary association of consumers—why, in fact, the town council should not be swallowed up by the store. But a short examination of some of the leading classes of municipal work will make it clear that much of this could not possibly be performed by any voluntary association of consumers, whilst for the rest it will be easy to show that the town council is a more appropriate unit of government than the store.

Let us, to begin with, take the supply of water, the largest and most costly of the businesses yet undertaken by our public authorities, absorbing, at the present time, at least sixty millions sterling of municipal capital. Here the consumers are the entire community in each place. There being, in almost every large town, no other important source of pure water than that brought at great expense from a distance, it follows that every inhabitant must necessarily use this indispensable supply. In some towns, such as London and Bristol, the water supply, like the bread supply, is still owned by private capitalists, who carry on a lucrative business in the sale of water for their own private profit, measuring their success, not by the amount and purity of the water supplied, but by the extent of their dividends. When this state of things becomes intolerable, the supply of water is not transferred to any co-operative society, because no voluntary association can ever count on including every person in the community, and the members of a store which supplied water to the whole town would, like the capitalists, find themselves in flagrant contradiction of their co-operative principles, making a profit out of the non-participating consumers. Here we

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

have the first ground for municipal socialism rather than voluntary co-operation. *Where consumption is compulsory, co-operation, to be true to itself, has necessarily to be compulsory also, and must thus pass into municipal socialism.*

We shall see this even more clearly if we consider another class of municipal services, which has absorbed probably as much municipal capital as the water supply; that is, the making, maintaining, paving, cleaning, and lighting of our streets and roads. Here "consumption" is just as clearly universal, and, indeed, compulsory upon every person who lives in the community as in the case of the water supply. Moreover, though capitalists were formerly allowed to provide turnpike roads for their private profit, it has never been found possible to make a general charge to the users of the ordinary thoroughfares for the costly conveniences which they enjoy. Hence a co-operative store, comprising a portion only of the inhabitants, would find it an expensive piece of philanthropy to provide or maintain the streets for the common use. Still less profitable would any co-operative society find it to undertake the construction and maintenance of the town's sewers. *Where the service to be supplied, though productive of advantage to the whole community, yields no pecuniary return, the business is one for municipal socialism.*

There are some public services which can be made to bring in a pecuniary return, but which the public good requires to be conducted on other than the most profitable lines. It is, for instance, quite possible to make large profits by keeping a school, provided that either high fees are charged, or that a "cheap and nasty" education is supplied. At present education is supplied as a matter of public concern, either gratuitously or at fees which do not cover the cost. The public capital employed in education, amounting to between thirty and forty millions sterling, yields no dividend in cash. The Leeds Co-operative Society, for instance, would find it a very unprofitable speculation to take over, without compulsory rating powers, the work of the Leeds School Board. *Where the public good requires that any service should be conducted irrespective of cost of production, and supplied below cost price, that service can be undertaken only by municipal socialism.*

Closely allied to the last class are the cases in which it is positively to the public interest that the consumption or use should be as great and as universal as possible. Take, for instance, the provision of hospitals. Here, no doubt, a charge might be made. In London and some other large towns there exist, in fact, paying hospitals run for private profit. But it is so much to the advantage of the whole community that the fullest possible use should be made of hospitals by those who need them—whether in order to

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

prevent the spread of infection, or to restore the patient as quickly as possible to productive labour—that all civilised communities now provide absolutely gratuitous hospitals and infirmaries, and in every way encourage, when they do not compel, the sick to come in. *Where the public interest of the whole community is best served by the utmost possible consumption, even if this is confined to particular classes, municipal socialism is the most advantageous form of co-operation.*

Paradoxically enough, the same conclusion follows in the converse case. There are some commodities—ardent spirits, for instance—of which it is certainly desirable, in the interests of the whole community, that the consumption should be reduced, and kept strictly down to the minimum that may be considered to be necessary or useful. If the supply of these articles is made a matter of private business, the temptation to make profit will inevitably lead to encouragement of sales. And equally, if co-operative stores took to supplying alcoholic drink, it is not easy to see how we could prevent the motives that make the other departments strive for increasing returns from having a similar result in the drink department. If ardent spirits are needed at all, there is much to be said for entrusting this business to a public authority, independent of pecuniary profit, and able persistently to strive rather to reduce than to increase consumption. The Birmingham Town Council is acting upon this principle at the present moment. At Rhayader, in Wales, where the new waterworks for the supply of the midland capital are under construction, there is in the municipal service a small army of workmen of all kinds who are, to say the least of it, not strict teetotallers. It would have been easy to have allowed them to become the prey of local tavern-keepers “tied” to some enterprising brewer. But the Birmingham water committee, desiring to discourage the excessive drinking which would have inevitably resulted from individual enterprise, “resolved that a canteen should be established in the village” by the Birmingham Town Council itself, and “that the person managing it shall have no interest whatever in the quantity sold.”* *Where it is to the public interest of the whole community that the consumption should be reduced to a minimum, the service is one for municipal socialism.*

We come next to another class of public services which can quite easily be supplied by private enterprise, but as to which there is now a general consensus of opinion in favour of municipal action. Where any service necessarily and inevitably becomes a monopoly

* Report of the Water Committee to the Town Council (Birmingham), presented February 6th, 1894.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

in the hands of a single owner, the consumer loses the protection which is usually afforded by competition, and finds himself at the mercy of the monopolist. This does not mean that the price of the commodity will be run up without limit. It is to the interest even of the most absolute monopolist not to place his price so high as to encourage unduly the use of some alternative process; thus the greed of a local gas company is tempered by the fear of petroleum, or the electric light. It will pay the monopolist, moreover, not to choke off consumption by prices so high that people prefer to do without his commodity; thus the toll charged by the owner of a ferry or a bridge can never exceed the estimate which the public at large put on the advantage which this particular means of communication offers to them. It may even be to the monopolist's advantage to reduce his charges in order to bring about, not indeed the greatest possible consumption, but such an amount of consumption as will yield the greatest aggregate profit to himself; thus a tramway company often voluntarily reduces its fares on discovering that this so encourages the public to travel that its aggregate profits are positively increased by the reduction. But in all these cases the price of the commodity is fixed, and the extent of its use is regulated not by any consideration of the public advantage, but the judgment of the monopolist as to his own private gain. Municipal gasworks may not mean lower charges to the individual consumer, but it always allows a much more generous lighting of the public streets, a wisely prodigal illumination of the slums, and the extension of the service to the more sparsely inhabited suburbs. The outcome of this experience is an almost universal agreement that *where the service is necessarily a monopoly municipal socialism is preferable to capitalist enterprise, whether individual or co-operative.*

— Scarcely to be distinguished from the last class is that in which a monopoly is not inevitable, but where it is desirable that it should exist. A long experience of railways, docks, and waterworks has proved that it is not ultimately to the public advantage that two works or services should be constructed where one would do. It is true that the duplication may, at the outset, ensure competition between the rivals, and to some extent protect the public against the greed of either of them. But this rivalry is almost always of very brief duration. It quickly becomes apparent to both the competitors that they have each more to gain by combination than by competition, and the result is that they join forces against the public. The last state of the poor consumer is then worse than ever. He has given up every other safeguard in order to get competition, and finally fails to get even that. *Where it is to the public advantage*

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

that the whole service or the whole supply of the commodity should be under a single administration, municipal socialism is better than private enterprise.

There are other cases in which neither individual nor co-operative enterprise is convenient, because we have come to the conclusion that a free communism is the most useful and economical arrangement. There was a time, for instance, when a large proportion of the main roads of the country were paid for, penny by penny, each time they were used for horse or wheeled traffic, and sometimes even when used by foot passengers. Under this arrangement the provision of roads for the public use was often a lucrative capitalist business. Nowadays this is considered to be so irksome a method of paying for our thoroughfares that it is almost universally abandoned in favour of communism, each person making freely as much use of the road as he needs, and paying for it (as part of his rates and taxes) roughly in proportion to his ability. The old system is still in use for railways and most ferries, and even for some bridges, which are surely very nearly akin to roads. But there is a rapid growth of the more convenient idea of "communism in thoroughfares." When any public authority nowadays makes a new road or builds a bridge, it never thinks of creating a new toll.*

When the London County Council in 1889 started its new ferry across the Thames at Woolwich, no one even suggested that any toll should be charged for the use of the little flotilla of comfortably furnished, electrically-lighted steamships which perform this service. Of course the ferry, like the road, must be paid for somehow, but it is now seen to be far easier and cheaper for the whole community to pay for it, by means of municipal co-operation, at the end of the year in the form of rates, than for several millions of passengers to have to fumble for pennies every time they cross the river. This principle may be carried, it will be seen, very far. *Wherever communism is the most economical and the most convenient principle of administration, the service is one for the public authority to undertake.*

In certain cases, moreover, though the service of the public may be charged for, it can only be carried out by the use of powers and privileges which it is inconvenient to entrust to any individual or group of individuals to use for their private advantage. The continuous supply of water to dwelling-houses, for instance, almost

* Of the very large number of "Turnpike Trusts" which existed in 1840, only one now remains in England or Wales—the Anglesea portion of the Old Holyhead-road—which still collects £500 a year in tolls. The Anglesea County Council will presumably abolish this impost.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM

necessarily involves a power to insist on all taps being of a prescribed pattern; the authority to make domiciliary visits to inspect water fittings; and the right to exact a fixed water-rate, recoverable whether much or little water has been used, or even supplied at all. Such extensive powers may be entrusted without fear to a responsible public authority, whom the electors can at any moment control, but it is doubtful whether they should be given to a body of private capitalists, interested only in increasing their profits. Moreover, the supply of water, gas, electricity or hydraulic power necessarily involves occupying the public thoroughfares, interfering with the sewers, and breaking up the expensive paving laid down at the public cost. Private capitalists, for instance, in London, Liverpool, and Hull, enjoy by Act of Parliament the privilege of tearing up the pavement, and occupying the subsoil of the public roads without paying any rent to the community, for the purpose of laying down pipes conveying hydraulic power. The Manchester Town Council has steadfastly and successfully opposed this usurpation. The water committee of the corporation took up the matter in 1890, obtained an Act of Parliament in 1891, and has now constructed its own hydraulic power station, whence water under the necessary pressure can be distributed over the city, for the profit of the whole community. *Where any service or the supply of any commodity involves the exercise of exceptional and arbitrary powers over individuals or upon the public property, municipal socialism becomes the more desirable form.*

There is another extensive range of undertakings in which public authorities are embarking an increasing amount of capital, not with any object of controlling or monopolising the business, but merely in order to supply their own needs as consumers. A town council constructing sewage works, carrying on large and constant sanitary operations, supplying water and hydraulic power, manufacturing gas and electricity, providing libraries, schools, museums, art galleries and music, administering baths and washhouses, hospitals, harbours, and docks, maintaining ferries and bridges, and letting for hire artisans' dwellings and common lodging-houses, requires a constant supply of materials, stores and appliances of every description in endless and bewildering variety, from coal and iron to pictures, from timber to tuning forks. In the first instance all these requirements are bought in the open market from dealers or manufacturers who make a profit out of the public needs, just as at first all work is given out to contractors, who live by taking on themselves the responsibility and the profit of managing labour. But it soon becomes evident to town councillors, as it does to co-operators, that where the demand is extensive and constant, there is a

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

great advantage in producing for your own use as much as possible of what you require. This progressive "integration of processes," the steady tendency of consumers to produce for themselves, far from being any special socialistic or municipal heresy, is characteristic of all important private enterprises at the present day, and particularly of those which have won a reputation for specially large profits. We see it alike in railway, steamship, and gas companies; in engineering and shipbuilding; in hardware, and indeed all other manufacturing; and even in the food and clothing trades.* Co-operators will be familiar with the same policy in their own large stores, and it has for twenty years been the dominant idea of both the Wholesales. The business men who run our town councils could not remain unaffected by so universal and successful a policy. We find accordingly that local authorities now usually keep a staff of workmen in their own employment, for the execution of as many of the subsidiary processes of their work as they conveniently can. Thus the Birmingham water committee reports that its large and manifold works at Rhayader, comprising, besides dams and reservoirs, stables, stores, workshops, a public hall and recreation room, a school, two hospitals, and a public-house, are all being executed without the intervention of a contractor. "The construction of all the buildings on the works is being carried out by the workmen of the corporation, under the superintendence of the resident engineer and his assistant. The timber and other material is being purchased by tender. This method of using material supplied by contract, and constructing by the direct employés of the corporation, the committee consider, under the circumstances of the case, to be the most economical, as well as calculated to secure the best results."† The same method is employed in the other departments of the Birmingham Town Council, especially under the public works, health, and gas committees. This was the example followed by the London County Council in establishing its works committee. And to cite only two other instances, the Manchester Town Council manufactures its own bass-brooms, and the Commissioners of Sewers of the City of London manufacture their own carts, harness, and horse shoes. A beginning has even been made in the production of food, for Nottingham, Merthyr Tydvil, Aberdare, and other towns raise in the aggregate over £100,000 worth of produce every year from their own land, besides, in some instances, breeding horses on the municipal farm for the municipal service. *Where a public*

* See the instances cited in the present writer's *Economic Heresies of the London County Council*. (London: 1894.)

† Report of the Birmingham Water Committee, presented Feb. 6th, 1894.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

authority can conveniently produce the articles, or execute the works called for by its functions, without the intervention of a contractor, this "integration of processes" will, all things being taken into account, probably be found advantageous and economical.

Finally, we have one class of public services which, if they are to be performed at all, must practically be performed at the public expense. *If we want the standard of quality or of taste raised above the level of the demand of the average man, we have, perforce, to lift the subject matter out of the plane of competitive profit-making, and decide upon other considerations than those of cost and demand.* If the building of a row of workmen's cottages is in question, it is quite possible to argue with some plausibility that the desire for gain among builders, and the competition between them, will lead to the erection, at the lowest possible cost, of houses at any rate up to the level of the taste and fancy of the future tenants. Even this, however, cannot, as experience tells us, be left safely to unfettered freedom of enterprise, and complicated building regulations are made in every town, to prevent builders adopting cheap devices, which the tenants would put up with, but which public opinion condemns. Similar considerations have led the Glasgow, Edinburgh, Manchester, Liverpool, Nottingham, Huddersfield, and Dublin Town Councils, the City Commissioners of Sewers, and now the London County Council, to provide a small number of artisans' dwellings of their own, and so escape the speculating builder. Still, in the main, we leave the supply of houses to the promptings of industrial profit-making, with such results as we see in the long mean rows of workmen's streets in Leeds or Newcastle. There is, however, one class of dwellings in which competition continues, but admittedly results in the progressive degradation of the service rendered. In the provision of common lodging-houses for the homeless poor, for instance, a lengthy experience shows that competition fails to raise the standard of cleanliness, ventilation, or sanitation. The majority of the customers neither demand these advantages nor appreciate them when supplied. The result has been that in Huddersfield, Glasgow, and London common lodging-houses have been erected by the municipal authority, as the only effective means of checking the degradation, and raising the standard of life of the unfortunate men and women who have no other sleeping place than the "doss house."

From common lodging-houses to cathedrals may seem a far cry, but the principle is the same. Profit-making competition may give us St. Helens or Widnes, and cover the beautiful valleys of Lancashire with cubes of cotton mills a quarter of a mile long. But profit-making competition never produces a cathedral. We may,

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

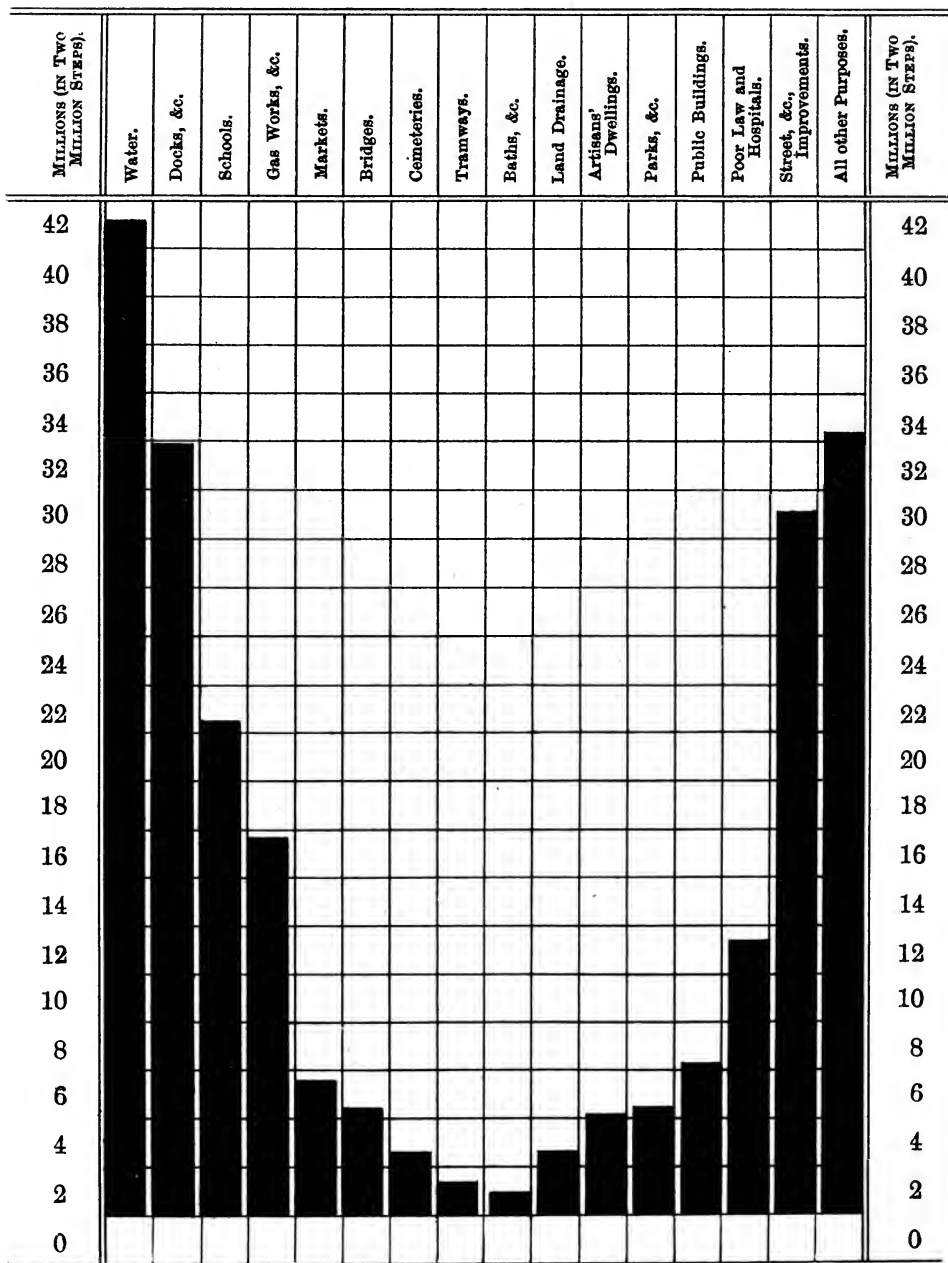
perhaps, learn why if we read a few lines of the decree of the Commune of Florence for the erection of that cathedral which is one of the treasures of the world :—

Since the highest mark of prudence in a people of noble origin is to proceed in the management of their affairs so that their magnanimity and wisdom may be evinced in their outward acts, we order Arnolfo, head master of our commune, to make a design for the renovation of Santa Reparata in a style of magnificence which neither the industry nor the power of man can surpass, that it may harmonise with the opinion of many wise persons in this city and State, who think that this commune should not engage in any enterprise unless its intention be to make the result correspond with that noblest sort of heart which is composed of the united will of many citizens.

We may not hope to endow England with anything so fine, and, in the best sense, so profitable as the cathedral at Florence, but if the citizens of St. Helens, or Widnes, Bacup, or Grimsby should ever wake up to the desire for something better than profit-making capitalism has given them, they will find their best chance of success in relying, like the Florentines of old, on "that noblest sort of heart which is composed of the united will of many citizens."

This lengthy and detailed classification of municipal functions will probably have been read with some impatience by almost all readers. Those who, like the present writer, hold the socialist faith, will believe that a sufficiently intelligent and well-organised community may one day very well provide for itself nearly every requirement, at any rate so far as home production extends, without the aid of the capitalist profit-maker. On the other hand, even the most pronounced individualist will seldom nowadays deny that municipal enterprise may properly undertake public services which are essentially monopolist in their nature. But neither the socialist nor the co-operator, neither the typical individualist nor the practical business man, usually realises how numerous and diverse are the services to which we have in the United Kingdom already harnessed the municipal driving power. There is, unfortunately, no accurate or complete account of public enterprise in the United Kingdom. We have, however, an exact statement of the purposes for which were raised those loans of the local public authorities of England and Wales which were outstanding on the 31st March, 1893. These statistics do not give the whole of the capital controlled by these authorities, as a large amount of the original loans have been paid off. Nor do they extend in equal detail to Scotland or Ireland. But as far as they go they furnish a fair indication of the direction in which municipal enterprise is working.

DIAGRAM REPRESENTING the PRINCIPAL PURPOSES for which have been INCURRED the LOANS by LOCAL AUTHORITIES in ENGLAND and WALES, OUTSTANDING 31st March, 1893:—



SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

TABLE showing the PRINCIPAL PURPOSES for which have been INCURRED the LOANS by LOCAL AUTHORITIES in ENGLAND and WALES, OUTSTANDING 31st March, 1893 :—

Purpose.	Amount.
	£
Water supply.....	41,228,464
Harbours, piers, docks, and quays.....	31,948,925
Schools	20,182,804
Gasworks and electric lighting	15,839,076
Markets	5,592,941
Bridges and ferries	4,232,631
Cemeteries and burial grounds	2,607,161
Tramways	1,295,702
Baths, wash-houses, and bathing places	1,146,652
Land drainage, embankments, river conservancy, and sea defences	2,995,227
Artisans' and labourers' dwellings improvements	4,052,114
Parks, pleasure grounds, commons, and open spaces ...	4,456,578
Public buildings (including libraries, police stations, &c.)	6,354,246
Hospitals, lunatic asylums, infirmaries, workhouses, &c.	11,535,895
Highway and street improvements	29,371,831
All other purposes.....	32,503,298
Total.....	£*215,343,545

* It may roughly be assumed that the total capital outlay by local authorities has been at least a third as much again as the balance now outstanding. We know, for instance, that the outstanding English gas debt of £15,533,605 is the balance of a total of £19,269,836 borrowed, besides capital expenditure defrayed out of income. This calculation would make the municipal capital of the local authorities of England and Wales amount to about £300,000,000, an estimate probably below the truth. To this must be added the capital administered by Scotch and Irish local authorities.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

All this has meant a development of municipal staff until, even in unincorporated London, at least 25,000 persons are directly engaged in one branch or other of the municipal service; the County Council alone had 5,439 employés in 1888, and 6,237 in 1892. At Edinburgh the municipal authorities are said to be by far the largest employers of labour in the city. Among the officials may be mentioned the City Astronomer (Edinburgh), the County Statistician (London), the Municipal Organist (Liverpool), the Civic Harmoniumist (permanently engaged to play in the Glasgow municipal common lodging-houses), the Inspector of Baby Farms (London), the Chimney-stalk Inspector (Edinburgh), and the Gymnasium Instructor (Manchester). London, Manchester, and several other towns have distinguished artists (painters, sculptors, designers) permanently in their pay, whilst there is, of course, a whole army of scientific and educational experts in the municipal service.

There is one feature which characterises all the instances. Whatever may have been the doubts, hesitations, and fears of the municipal authority before embarking on the experiment, there is never any proposal to turn back. Once the plunge is made, everyone accepts the change. No public authority in the United Kingdom which has tried the experiment of municipalisation in any department whatsoever has ever yet reverted to the profit-making capitalist. No service or industry which has ever been municipalised has ever yet been handed back to the contractor or the middleman. There are, for instance, at the present time in the United Kingdom 192 towns and villages in which the gas supply has passed into municipal ownership; some in which the experiment of a municipal gas supply is over sixty years old.* Yet in no case has the town council given up the business to private enterprise by leasing its gasworks to a contractor. There is, on the contrary, a constant tendency to increased municipalisation, the number of places deciding against private enterprise on the gas supply having risen from 148 in 1882-3 to 192 in 1893-4. At present more than half the consumers of gas in the United Kingdom co-operate, through their town or district councils, to produce their own light without the intervention of the profit-maker; excluding London, indeed, and its suburbs, the proportion is two-thirds. And municipal gasworks are increasing at the rate of four or five a year. Already there is nearly twice as much municipal capital invested in this single industry than the co-operators employ in their whole movement.

* The Manchester Police Commissioners obtained their Gas Act in 1824, and were thus the first public authority to undertake the supply of gas.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

TABLE showing for EACH of the YEARS 1882-3 to 1893-4 the PROGRESS of the MUNICIPAL GAS SUPPLY in the UNITED KINGDOM.

YEAR.	Number of Municipal Gaswrks.	Amount of Capital borrowed for Gas purposes.	Number of Consumers Supplied.	Number of Public L'imps Lighted.	Tons of Coal Carbonised.
1882-3 ...	148	£17,326,183	916,962	137,011	2,352,062
1883-4 ...	148	17,814,351	928,458	140,198	2,459,341
1884-5 ...	153	18,758,895	955,728	144,506	2,642,942
1885-6 ...	160	19,619,416	979,802	151,670	2,783,533
1886-7 ...	162	19,723,046	996,480	155,849	2,879,765
1887-8 ...	168	20,081,435	1,011,139	159,264	2,985,577
1888-9 ...	173	21,333,833	1,089,748	174,191	3,204,982
1889-0 ...	173	21,669,789	1,115,267	178,867	3,353,516
1890-1 ..	178	21,891,655	1,143,289	184,773	3,623,967
1891-2 ...	182	22,476,180	1,172,704	192,323	4,148,131
1892-3 ...	185	22,734,556	1,203,574	201,484	3,977,291
1893-4 ...	192	23,619,082	1,226,332	210,316	4,025,167

TABLE showing for the year 1893-4 the CAPITAL INVESTED, the GAS RECEIPTS, the NETT PROFIT after PAYING INTEREST and SINKING FUND, and the CONSUMERS SUPPLIED by TEN LARGE and TEN SMALL GASWORKS under PUBLIC CONTROL in the UNITED KINGDOM.

Town.	Capital.	Receipts of Gas undertakings.	Nett Profit.	Number of Consumers Supplied.
	£	£	£	
Birmingham	2,324,997	595,984	24,552	58,053
Manchester	1,370,000	569,032	30,590	81,637
Leeds	1,121,481	318,202	*470	77,000
Edinburgh and Leith	1,103,698	248,264	11,069	61,913
Glasgow	1,065,999	594,049	29,540	158,899
Nottingham.....	942,450	232,322	22,105	38,410
Leicester	771,732	167,100	20,020	25,836
Salford	665,378	155,652	14,281	28,305
Bradford	604,290	202,607	321	49,387
Bolton	562,056	133,940	29,115	29,072
Total.....	10,532,081	3,217,152	181,123	608,512

* Deficit.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

TABLE showing for the year 1893-4 the CAPITAL INVESTED, GAS RECEIPTS, &c.—continued.

Town.	Capital.	Receipts of Gas undertakings.	Number of Consumers Supplied.
	£	£	
Bethesda Improvem't Comm'rs.	3,000	404	117
Tow Law Local Board	3,400	657	130
Milton-next-Sittingbourne Improvement Commissioners ...	3,400	1,417	172
Croston Local Board	1,800	423	117
Burley-in-Wharfedale Board ...	2,269	920	350
Knaresborough Impr't Comm'rs.	3,950	2,962	537
*Silsden Local Board	3,000	1,348	378
Kilsyth Gas Commissioners.....	3,500	1,607	642
Kilrush Town Commissioners...	1,300	465	103
Tain Gas Commissioners.....	4,300	823	168
Total	29,919	11,026	2,714

The following are the principal towns which are still content to allow their main source of artificial light to remain in private hands:—

List of the principal towns in the United Kingdom in which gas is supplied by capitalist undertakings.

Accrington	Devonport	Oxford
Aldershot	Dublin	Plymouth
Ashton	Eastbourne	Portsmouth
Bacup	Folkestone	Preston
Bath	Gateshead	Rawtenstall
Bournemouth	Gravesend	Reigate
Brighton	Grimsby	Sheffield
Bristol	Hanley	Southampton
Cambridge	Hastings	Shields, North and
Canterbury	Hartlepool	South
Chatham	Hull	Sunderland
Cheltenham	Jarrow	Wakefield
Chester	Kingston-on-Thames	West Ham
Chesterfield	Liverpool	Winchester
Chorley	London and Suburbs	Wolverhampton
Cork	Newcastle	Worcester
Croydon	Northampton	Yarmouth
Derby	Norwich	York

* In this case the distribution only has been municipalised, the Local Board purchasing gas in bulk from a neighbouring private company.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

In nearly all cases the public gasworks yield a net profit, to be devoted to relief of the rates or to public improvements, even after allowing for repairs and depreciation, paying interest on capital, and providing a sinking fund for repayment of the whole capital borrowed. This, it will be observed, is equivalent to providing for depreciation twice over, a deduction from profits which characterises all municipal enterprise in this country, but which no capitalist shareholders would consider equitable or necessary. In two cases the entire cost of the gas undertaking has been already repaid out of the annual receipts. These two authorities, the Skelmersdale Local Board and the Spalding Improvement Commissioners, are now free either to reduce their charges to the gas consumers or to appropriate a larger annual profit to public purposes. But it will be unnecessary to remind co-operators that the amount of profit exacted from the consumers is no measure of the success of a municipal undertaking. Thus, the Bolton Town Council prefers to charge the unnecessarily high price of 3s. 2d. per 1,000 feet to its 29,072 gas consumers, levying on them what is virtually a tax of £1 per head to make its profit of £29,115 (in addition to the £22,280 for interest and sinking fund) on a capital of £562,056. On the other hand, the Leeds Town Council cuts its business fine, charges its 77,000 consumers only 2s. 4d. per 1,000 feet, and only barely manages to cover the interest and sinking fund on its gas debt. Any delegate to the quarterly meeting of the Co-operative Wholesale Society will at once appreciate this difference of policy. Bolton is taxing its gas consumers for the common good in order to relieve the rates; Leeds prefers rather to supply its gas at cost price and provide for the common good in the ordinary way. Moreover, a municipal gas undertaking will often enormously multiply the supply of public lamps, and light them free of charge. Thus, the little quarry village of Bethesda gets 54 public lamps lit free by its 117 private consumers; and the Wombwell Local Board 160 public lamps lit free by its 349 paying customers; whilst the town of Bradford uses up its gas profits in getting its 6,861 public lamps lit without charge.

Along with municipal gas must come municipal electric lighting, in which a certain number of public authorities have already embarked, nearly half-a-million of public capital being invested. In a few cases, including that of the London County Council, the public authority provides electric light only for its own use, whether in public buildings or in parks, thoroughfares, &c. But the Vestry of St. Pancras (London) has boldly led the way in not only lighting its main streets, but also supplying electric light and power to private consumers. Its progress and success in its first three years' working are highly encouraging.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

**Statistics relating to the Electric Lighting undertaking of the Vestry of St. Pancras, London, up to 31st December, 1894 :—*

Total capital expended on works, plant, &c.	£109,931 13 4
Number of public lamps supplied in 1894	97
Amount of electricity supplied in 1894 to public lamps	186,604
Board of Trade units to private consumers (bymeter) ...	532,880
Gross revenue (including £4,426. 1s. 1d. for public lamps).....	£16,931 16 7
Expenditure (including £5,370. 19s. 2d. interest and repayment of debt)	£15,177 18 5
Net profit	£1,753 18 2

SALES TO PRIVATE CONSUMERS.

Year.	Number	Current sold			Number of Private					
		At 3d. per unit.		At 6d. per unit.	Glow lamps.	Arc lamps.	Motors.			
		£	s.	d.	£	s.	d.			
1892	172	.....			8,167	7	8	9,990	82	11
1893	238	384	11	6	9,161	6	0	12,851	110	19
1894	349	1,236	13	9	10,819	15	9	15,532	129	22

The progress of municipal enterprise in the provision of water is still more remarkable than that of gas supply. Unfortunately no such complete statistics exist for this department, as we have been able to find, with regard to public lighting. But we know that ten years ago the outstanding loans raised for this purpose in England and Wales amounted only to £28,778,430 (1883-4); whereas in 1892-3, notwithstanding the repayment of at least eight millions sterling meanwhile, it had risen to £41,228,464. If we were to include Scotland and Ireland, it is probable that we should discover that, in the short space of ten years, at least 25 millions sterling have been laid out by local public bodies in this one enterprise of water supply, making a total during the last fifty years of at least sixty millions, or four times the aggregate capital of the whole co-operative movement. In England and Wales alone at least 168 municipal

** Statement of Accounts at 31st December, 1894, under the St Pancras (Middlesex) Electric Lighting Order, 1883. (London: 1895.)*

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

boroughs and over 500 district councils were, in 1892-3, actively engaged in the business of water supply. Including Scotland and Ireland, and those which have recently undertaken this enterprise, the total of these municipal traders must now exceed 800, as compared with an aggregate total of joint-stock companies in the United Kingdom for the supply of water of about 150.

There are comparatively few towns of any importance which still rely on capitalist enterprise for their water supply. Among the principal are :—

List of the principal towns in the United Kingdom in which water is supplied by capitalist undertakings.

Accrington	Folkestone	Rawtenstall
Aldershot	Gateshead	Reigate
Bacup	Gravesend	Shields, North and South
Bournemouth	Grimsby	Southport
Bristol	Longton	Stoke
Burslem	Hanley	Sunderland
Burton-on-Trent	Hartlepool	Swindon
Cambridge	Jarrow	Walsall
Canterbury	Kingston-on-Thames	Wednesbury
Chatham	London and Suburbs	West Bromwich
Chester	Newcastle-on-Tyne	West Ham
Chesterfield	Newcastle-under-Lyme	Winchester
Dudley	Norwich	Yarmouth
Eastbourne	Portsmouth	York

In the cases of gas and water we have unfortunately, in many towns, let slip our rights, and practically made it impossible for the local governing body to perform these essentially public services without first buying up, at great expense, the capitalist companies who have so long made a "good thing" out of the public apathy. There is, indeed, no legal monopoly, but Parliament usually refuses to allow a town council to compete with a company without providing generous compensation. In the case of the tramways the public is fortunately in a better position. By the general Tramways Act of 1870 the private company making the line is only guaranteed the privilege for twenty-one years. At the expiration of this period the local authority may take over the whole plant at its then value, without paying any compensation or allowance for past or future profits. Moreover, the local authority has in all cases the option of making the line itself, and of leasing it out to a company to work the cars. On the 30th June, 1894, the tramways open for traffic belonging to local authorities numbered 37, having 315 miles of line, constructed at a total expenditure of £3,887,534.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

List of local governing bodies in the United Kingdom owning the whole or part of the tramway lines within their districts in the year 1893-4.

Accrington	Govan	Plymouth
Astley Bridge	Gourock	Preston and Fulwood
Birkenhead	Greenock	Salford
Birmingham	Huddersfield	Sheffield
Blackburn	Kearsley	Shipley
Blackpool	Leeds	South Shields
Bootle	Liverpool	Sunderland
Bradford	Manchester	Tong
Dundee	Moss Side	Walton-on-the-Hill
Eccles	Newcastle-upon-Tyne	Wavertree
Edinburgh	Newport (Mon.)	West Derby
Farnworth	North Bierley	Wigan
Glasgow	Oldham	Withington

The lines still belonging to private capitalists number 116, with a capital expenditure of £10,501,164, and a total mileage of line of 659.

List of the principal towns in the United Kingdom in which the tramways are owned as well as worked by private capitalists :—

Aberdeen	Dewsbury	Neath
Bacup	Dublin	Northampton
Barrow	Dudley	North Shields
Batley	Exeter	Paisley
Belfast	Folkestone	Portsmouth
Brighton	Gateshead	Reading
Bristol	Gloucester	St. Helens
Burnley	Grimsby	Southampton
Bury	Hull	Southport
Cambridge	Ipswich	Stirling
Cardiff	Keighley	Stockport
Chester	Lancaster	Stockton
Chesterfield	Leicester	Swansea
Croydon	Lincoln	Wolverhampton
Coventry	London and Suburbs	Yarmouth
Derby	Middlesbrough	York

About one-fourth of the tramways of the United Kingdom have already passed into municipal ownership. Here, as in the gas supply, it is interesting to notice that Scotland leads the way, the six municipalities of Glasgow, Edinburgh, Dundee, Greenock, Govan, and Gourock owning two-thirds of the entire tramway mileage of the country. Ireland, on the other hand, has not a single municipal tramway.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

It is a comparatively new development to find public authorities working their own tramway lines, as well as owning them, but the current is now setting strongly in that direction. The Huddersfield Town Council has, indeed, worked its lines since 1882, and Black-pool, Glasgow, Leeds, and Plymouth have now followed its example, with every prospect of financial prosperity and greatly increased public convenience. The results, for instance, of the first eleven months' municipal working of the Glasgow tramways are very remarkable. The Town Council provided entirely new rolling-stock, clean and handsome cars, and properly uniformed attendants. It resolved, in the interest of public beauty, to forego all revenue from advertisements, and in the interest of humanity to work its employés only a definite limited number of hours, and to provide them with various conveniences. It reduced the fares to a halfpenny per journey, and ran cars early and late for the advantage of workmen and other special classes. The result of this enlightened and farseeing generosity has been a greatly increased revenue, and a considerable net profit carried to the credit of the "common good."

*Statistics of the working of the Glasgow Corporation tramways
for eleven months ended 1895.*

Length of line open, 30 miles 17 chains.

Capital expended by Corporation up to June 30th, 1894, £674,650.

Number of horses, 3,444; of cars, 305; of passengers carried, 57,104,647.

Average earning per mile, 10·26d.

Revenue (11 months).....	£226,414	4	3
Expenditure (including interest and repay- ment of debt)	202,209	9	2
Profit	24,204	12	2

Application of Profit :—

To Depreciation Fund	9,193	19	7
To Renewal Fund	6,750	9	1
To the common good	8,260	5	6

But the money profit is the least part of the municipal gain. The Glasgow Corporation has managed so to bring the convenience of its thirty miles of tramway within reach of the citizens, that no fewer than a million and a quarter journeys are made each week. Compare this with the statistics of cities served by companies.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

Number of passengers conveyed during the year ended June 30th, 1894, by the tramways in certain large towns.

Name of Tramway Company.	Length of line open.	Number of passengers conveyed.
	Miles.	
Birmingham (Central).....	25	27,456,647
Liverpool	42	35,980,291
Manchester Carriage and Tramway Company	80	47,138,008
Dublin United	33	19,195,517
Glasgow Corporation	30	57,104,647 (11 months only.)

Another important municipal service is that of providing harbours and docks. In 90 cases a local authority (either a borough council or a specially appointed board) controls a harbour, pier, or docks under the General Pier and Harbour Act, 1861, but in many other instances the local authority performs this service as part of its ordinary functions. Altogether some forty millions sterling of municipal capital has been embarked in this service, Liverpool accounting for one-half of the whole. This is an increase of at least 25 per cent in the last ten years. Over two millions a year are levied in tolls and dues, three-fourths of which are simply in the nature of import or export duties, charged upon practically all goods entering or leaving the ports.*

This method of raising revenue seems hardly consistent in a professedly free trade nation. But no important place has yet ventured to follow the enlightened example of the Barnstaple Town Council, which abolished its quay dues in 1886, "since when no tolls or dues have been collected on the shipping of the port," or on the goods landed there. At some places, notably Bristol and Sunderland, the public authority does not confine itself to maintaining and controlling the dock and harbour accommodation, but receives also large sums for loading and discharging vessels by means of its own staff of municipal dock labourers.

* Ramsgate, moreover, levies about £3,783 annually in coal dues; Dover, £4,264; Bognor, £661; and Sandwich, £389 from the same source. This is a mere *octroi*—a tax on the consumer of the worst possible kind.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

TABLE showing the OUTSTANDING DEBT and ANNUAL EXPENDITURE at Lady-day, 1893, of the PRINCIPAL HARBOUR, PIER, and DOCK AUTHORITIES in ENGLAND and WALES.

Port.	Expenditure for year to Lady-day, 1893.	Loans outstand- ing at Lady-day, 1893.
	£	£
Liverpool (Mersey Docks and Harbour Board)	1,447,144	17,135,754
Newcastle, &c. (Tyne River)	301,928	4,230,161
Bristol (Town Council)	201,256	2,125,592
Swansea	117,450	1,421,969
Sunderland (Wear Watch Commis- sion)	116,106	1,751,985
Tees Conservancy	62,234	889,039
Preston (Town Council).....	56,053	1,037,781

The principal ports at which the docks are in private hands are London (four companies), Hull, Cardiff (the Marquis of Bute), Southampton (London and South-Western Railway Company), and Milford Haven (Milford Docks Company).

Public markets, too, have become an important item in municipal expenditure, now absorbing seven or eight millions of municipal capital, and involving a gross annual expenditure of about £400,000.

TABLE showing for the PRINCIPAL MUNICIPAL MARKET UNDERTAKINGS in ENGLAND and WALES the EXPENDITURE for 1892-3, and the LOANS OUTSTANDING on 31st March, 1893.

Towns.	Expenditure.	Loans outstanding.
	£	£
Manchester.....	15,047	243,753
Liverpool.....	12,813	?
Bradford.....	12,750	112,234
Leicester.....	9,067	21,605
Newcastle.....	8,420	131,022
Birmingham	7,613	203,710
Leeds.....	6,048	71,465
Derby	5,449	8,642
Hull.....	3,943	68,068
Reading.....	3,839	756

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

Nor is this enterprise confined to large towns. Here is a list of twenty small places, having in every case an aggregate ratable value below £20,000, which have provided their inhabitants with comfortable market accommodation. Pontypool, it will be seen, owes for markets alone fifteen months' ratable value.

TABLE showing the RATABLE VALUE of the BOROUGH or DISTRICT, and the DEBT OUTSTANDING in 1893 for MARKET BUILDINGS, &c., in TWENTY SMALL TOWNS in ENGLAND and WALES.

Towns.	Ratable Value.	Debt outstanding for Markets.
	£	£
Ashbourne.....	9,821	2,621
Birstal.....	19,018	1,500
Bromsgrove.....	13,811	606
Cockermouth.....	14,540	1,300
Dawley (Salop).....	9,999	1,680
Ellesmere (Salop).....	5,395	1,797
Halstead (Essex).....	11,792	130
Hay.....	5,039	580
Holywell.....	6,088	3,286
Kington (Herefordshire).....	8,058	652
Knaresborough.....	10,306	780
Llangollen.....	7,825	3,130
Mexborough.....	17,801	2,883
Nantwich.....	17,040	580
Pickering.....	11,163	1,313
Pontypool.....	15,430	20,000
Sandbach.....	14,286	14,707
Spennymoor.....	10,391	401
Whitchurch.....	14,103	9,150
Wirksworth.....	15,752	951

In connection with municipal markets some other municipal enterprises may be noticed. Thus Cardiff, Edinburgh, Neath, Chesterfield, Ilkley, and many other towns have public slaughter-houses, or "abattoirs," by which the horrors of the shambles are reduced to a minimum. In England and Wales alone some £60,000 is annually received in fees for this service, whilst in the one city of Edinburgh the municipal slaughterers annually take the life of a quarter-million beasts. Spalding is an example of a small town providing a commodious Corn Exchange for the accommodation of

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

its inhabitants and visitors. Having paid off all the debt on its gasworks, it could advantageously expand in another direction. Bedford, too, has laid out about £5,000 in the same way. Edinburgh maintains five public steelyards (weighing machines) for public use.

But here again some towns are content to leave an important public function in private hands. The ownership of Covent Garden market by the Duke of Bedford, and of Spitalfields market by Sir Julian Goldsmid, M.P., is paralleled by the ownership of all the Sheffield markets by the Duke of Norfolk. Some other towns, moreover, still lag behind, and either leave the provision of markets, slaughter-houses, and weighing machines to private enterprise, or make their inhabitants go without these conveniences.

List of the principal municipal boroughs in England and Wales of which the municipal accounts for 1892-3 show no transactions relating to markets or fairs.

	Population in 1891.		Population in 1891.
Bangor	9,892	Morley	21,068
*Bootle	49,217	Ossett	10,984
Bournemouth.....	37,781	*Portsmouth	159,251
Chatham.....	31,657	Rawtenstall.....	29,507
*Croydon.....	102,695	Reigate.....	22,646
*Devonport	54,803	Richmond.....	26,875
Eastbourne	34,969	Scarborough.....	33,776
East Retford	10,603	*Sheffield	324,243
Folkestone	23,905	Taunton	18,026
*Gateshead	85,692	Torquay	25,534
Glossop.....	22,416	Tunbridge Wells...	27,895
Gravesend	23,876	Wakefield	33,146
Jarrow.....	33,675	*West Ham.....	204,903
Keighley	30,810	Worthing	16,606
Leamington	26,930		

But municipal enterprise is not confined to sanitation and street improvements, gas and water, markets and tramways, harbours and docks, electric lighting and the supply of electric or hydraulic power. The provision of baths and public laundries has become in many places an important public service, in which a capital of between one and two millions sterling is employed, and on which between £300,000 and £400,000 a year is now expended. The number and extent of these municipal baths have trebled in the last ten years. In this department of municipal enterprise, oddly enough, London

* County boroughs.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

leads the way, maintaining its twenty-seven public baths at a gross annual outlay exceeding a hundred thousand pounds, and being nearly a third of the total expenditure of the whole kingdom on this service. The principal towns in England and Wales which undertake this valuable public service are given below.

Table showing the expenditure of the principal local authorities in England and Wales upon baths, washhouses, and open bathing places for the year 1892-3.

Expenditure.		Expenditure	
London (by twenty-seven vestries, &c.)	£109,877	Chadderton	£2,095
Manchester	11,167	Rotherham.....	1,924
Liverpool	8,710	Ealing.....	1,919
Bath	7,781	Hull	1,822
Birmingham	7,664	Nottingham	1,747
Newcastle	5,541	Leamington	1,684
Bristol.....	5,088	Oldham	1,539
Salford	4,558	Croydon	1,521
Harrogate	4,181	Stockport	1,407
Sunderland	2,803	Bootle.....	1,322
Stafford	2,739	Hanley	1,307
Bradford.....	2,589	Keighley	1,251
Doncaster.....	2,431	Newport (Mon.).....	1,205
Farnworth.....	2,424	Richmond (Surrey)..	1,189
Brighton	2,245	Sheffield	1,184
Derby	2,132	Huddersfield	1,150
Leicester.....	2,110	Longton	1,137
		Halifax	1,016

There are still some important towns which have remained unaffected by this general movement in favour of increased cleanliness.

List of the principal towns in which no expenditure from public funds was made in the year 1892-3 upon baths, washhouses, or open bathing places:—

Accrington	Crewe	Nelson
Bacup	Chorley	Newcastle-under-Lyme
Barrow	Eastbourne	Norwich
Batley	Devonport	Ramsgate
Blackpool	Folkestone	Rawtenstall
Bolton	Gravesend	Southport
Bournemouth	Grimsby	Swansea
Burslem	Ipswich	Tunbridge Wells
Cambridge	Jarrow	Walsall
Congleton	Margate	West Ham
Canterbury	Morley	Widnes
Chatham	Mossley	Yarmouth

Perhaps the most rapid of all advances in municipal work in the past ten years has been in the provision of hospitals by town and

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

district councils. In 1883-4 comparatively few towns attempted to provide hospitals out of municipal funds, and the amount of loans outstanding for this service in England and Wales was only £181,683. Since that date between fifty and a hundred thousand pounds have been expended every year on capital account in building and equipping public hospitals, the total loans outstanding now reaching £821,840, and the total capital outlay to at least a million and a half. To this must be added a capital expenditure of equal amount by the Metropolitan Asylums Board, which provides London's public hospitals for infectious diseases; a corresponding outlay in Scotland and Ireland; and an enormous improvement and extension of the poor-law infirmaries and dispensaries. The total capital cost of the rate-supported hospitals in the United Kingdom cannot be less than five millions sterling. About a third of this outlay has been made by town and district councils, which, in England and Wales alone, spent £313,444 on this service in 1892-3, *nearly four times the amount of 1883-4*, when only £86,135 appeared in the accounts. There are many towns in which the municipal hospital rate amounts to sixpence in the pound; in Warrington, indeed, for 1892-3 it amounted to fourteenpence.

TABLE showing the EXPENDITURE from MUNICIPAL FUNDS upon HOSPITALS and the RATABLE VALUE in certain PRINCIPAL TOWNS of ENGLAND and WALES for the year 1892-3.

Town.	Ratable Value.	Expenditure for Hospitals.
	£	£
Liverpool	2,979,854	12,498
Manchester	2,810,005	29,689
Birmingham	1,957,798	10,611
Leeds	1,279,255	8,179
Sheffield	1,039,992	10,412
Bradford	1,034,610	4,676
Newcastle-on-Tyne.....	865,640	5,148
Nottingham.....	852,864	5,856
Salford	768,607	7,846
Cardiff	713,498	3,528
Leicester	566,000	4,232
Hull	563,975	3,202
Bath	283,263	3,066
Warrington	150,300	9,022

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

Even small district councils incur an expenditure on hospitals which amounts sometimes to a rate of sixpence in the pound on their tiny ratable value. Here are some examples:—

TABLE showing the RATABLE VALUE and EXPENDITURE for HOSPITALS in 1892-3 of certain SMALL DISTRICT COUNCILS.

Town.	Ratable Value.	Expenditure for Hospitals in 1892-3.
	£	£
Stevenage	11,817	20
Halstead	11,792	70
Tring.....	11,658	30
Northam	11,018	217
Ashby Woulds.....	10,741	355
Seaford	10,044	159
Newport (Salop).....	8,181	46
Bicester	8,095	157
Dronfield	7,856	160
Barnoldswick	6,909	147
Midgley	6,583	79
Rishworth	4,026	19

On the other hand a few important towns show no municipal expenditure on this important service, the largest being Newport (Monmouthshire) and Burslem.

List of the principal BOROUGHs in ENGLAND and WALES which, in 1892-3, expended nothing from MUNICIPAL FUNDS on HOSPITALS.

Town.	Population in 1891.	Town.	Population in 1891.
Burslem	31,999	Kingston-on-Thames	27,059
Canterbury	23,062	Luton	30,006
Chatham	31,657	Nelson	22,700
Chorley	23,087	Neath	11,113
Clitheroe	10,815	*Newport (Mon.).....	54,707
Guildford	14,316	Reigate	22,646
Harrogate	13,917	*Rochester	26,290
Heywood	23,185	Shrewsbury.....	26,967
*King's Lynn	18,360	Stalybridge	26,783

* There is a trifling hospital expenditure in these cases by the port sanitary authorities.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

With hospitals may appropriately come cemeteries, in the provision of which private speculators still occasionally make large profits. But this service has now become increasingly one for public authorities, who have invested over £3,000,000 of public capital in it, spending annually some £300,000 in England and Wales alone.

Expenditure by certain Municipal Burial Boards in England and Wales in the year 1892-3:—

	Expenditure, 1892-3
London (29 Burial Boards).....	£61,146
Liverpool	12,312
Ditto Toxteth Park.....	9,052
Ditto West Derby	5,895
Manchester	13,921
Bolton	7,071
Bradford	5,550
Birkenhead	5,095
Salford	4,551
Hull	4,382
Birmingham	3,804

Nor is it only for the needs of the body that our local authorities provide. The 2,296 School Boards in England and Wales alone spent in 1892-3 £5,866,170, have twenty millions sterling of outstanding loans, and administer a capital amounting probably to five and twenty millions of pounds. But education is not entirely left to the School Boards. The town, district, and parish councils up and down the country provide libraries and reading-rooms. Under the head of technical education the town and county councils are spending large sums on secondary schools and instruction in science and art. Sheffield and Newcastle provide museums; Edinburgh runs an astronomical observatory, and keeps a "City Astronomer," as well as carrying on a Municipal Veterinary College. Liverpool and Wolverhampton maintain expensive picture galleries; London keeps up a municipal band of 150 performers,* who give thousands of free concerts annually; Manchester and Bradford undertake gratuitous instruction in gymnastics and swimming; Edinburgh and Manchester largely endow universities; all out of the rates. Among all the 64 county boroughs in England and Wales, there were in 1892-3 only two—Grimsby and Bury (Lancashire)—in which the town and county council spent nothing on education. In only five others—Bath, Gloucester, Hull, Preston,

* The "municipal band" is not a new thing. Bristol had, in the eighteenth century, its band of musicians permanently in corporation pay.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

and Sunderland—did the council restrict itself to spending the “beer money” derived for technical education from the Exchequer contribution. The total expenditure of town and district councils in England and Wales alone, and excluding the Metropolis, on public libraries, museums, and schools of science and art, rose from £150,351 in 1888–9, to £226,802 in 1892–3, *exclusive of the technical education expenditure*, an increase in four years of over 50 per cent. To this we must add half a million expended under the head of technical education, some £58,000 spent on London public libraries, £25,000 under the Welsh Intermediate Education Act, at least a quarter of a million in poor-law schools, nearly as much more on reformatories and industrial schools, and the large outlay on education by Edinburgh and other Scottish town councils. The aggregate annual outlay on education by local authorities in Great Britain *other than School Boards* already exceeds two millions sterling, being over a third of the aggregate expenditure by the School Boards themselves. The following towns in England and Wales spend the largest sums:—

TABLE showing the EXPENDITURE from PUBLIC FUNDS on PUBLIC LIBRARIES, MUSEUMS, and SCIENCE and ART SCHOOLS in some of the principal towns of ENGLAND and WALES during the year 1892-3:—

Town.	Expenditure on Public Libraries, Museums, and Schools of Science and Art.	Expenditure on Technical Education.	Total Municipal Expenditure on Education (apart from School Boards).
	£	£	£
London (30 Vestries, &c., and County Council).....	58,101	30,000	88,101
Manchester	23,795	28,601	52,396
Birmingham	23,503	6,805	30,308
Liverpool	16,573	8,821	25,394
Nottingham	10,906	12,267	23,173
Sheffield	6,902	7,465	14,367
Leeds	5,440	6,483	11,923
Cardiff	2,709	7,762	10,471
Bristol	3,975	5,307	9,282
Bradford	4,000	4,900	8,900
Leicester	7,440	42	7,482
Carlisle	7,716	—	7,716
Croydon	1,923	4,968	6,891
Newcastle-on-Tyne	2,856	3,359	6,215
Plymouth	1,159	4,089	5,248

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

Among all the municipal boroughs in England and Wales there are only twenty having a population of 10,000 or upwards, which do not spend some of their funds on education.

List of BOROUGHs in ENGLAND and WALES, having a population exceeding 10,000, of which the ACCOUNTS for 1892-3 show absolutely no MUNICIPAL EXPENDITURE on LIBRARIES, MUSEUMS, SCHOOLS of SCIENCE and ART, or TECHNICAL EDUCATION.

Town.	Population in 1891.	Town.	Population in 1891.
*Batley	29,847	*East Retford.....	10,608
Bedford	28,023	*Grimsby	51,934
Berwick-on-Tweed...	13,377	*Guildford	14,316
Boston.....	14,593	*Hartlepool.....	21,271
*Burton-on-Trent....	46,047	Jarrow	33,675
Bury (Lancashire)...	57,212	*Margate.....	18,417
*Carmarthen.....	10,264	Neath.....	11,113
Chorley	23,087	*Pembroke	14,978
*Congleton	10,744	*Scarborough	33,776
*Durham	14,863	Wenlock	15,703

But in addition to these, Accrington, Bacup, Canterbury, Chatham, Devonport, Eastbourne, Rawtenstall, and Reigate appear to have no public library maintained from municipal funds.

It is significant to notice how the same towns come repeatedly to the front as we pass from one public service to the other. Where the principle of municipalisation has been adopted for one business, it apparently commends itself to the judgment of the citizens, for we find them generally applying it to other public services. The following towns stand out prominently as owning alike their gas and water supply, their tramway lines, and their markets, providing public baths, hospitals, and cemeteries, libraries, and technical education.

* In these cases a portion of the Exchequer contribution for technical education is handed over to the local School Board.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

List of the BOROUGHs in ENGLAND and WALES in which the WATERWORKS, GASWORKS, TRAMWAYS, MARKETS, BATHS, HOSPITALS, CEMETERIES, and LIBRARIES are under PUBLIC ADMINISTRATION.

County Borough.	Population in 1891.	LOANS OUTSTANDING FOR				Capital expended on Tramways.
		Water-works.	Gas-works.	Markets.	Libraries, Museums, &c.	
		£	£	£	£	£
Birkenhead	99,857	163,065	264,608	31,160	900	7,987
Birmingham ..	478,113	2,235,595	2,023,690	203,710	112,249	169,656
Blackburn	120,064	722,167	591,839	41,102	5,000	101,100
Bradford	216,361	2,179,421	492,143	112,234	..	94,540
Huddersfield ..	95,421	990,309	305,186	110,000	..	139,500
Leeds	367,505	1,612,382	1,122,202	?	..	139,527
Manchester....	505,368	4,773,226	670,086	243,753	27,482	190,218
Oldham	131,463	800,820	349,880	19,000	31,984	51,283
Salford	198,139	47,377	428,067	44,652	18,152	90,137
Wigan	55,013	144,390	246,134	56,214	600	32,965

To these should be added Glasgow, Edinburgh, Dundee, and Greenock, in Scotland. Moreover, if we leave out of account the tramways, of which the municipalisation is only now beginning, there are about sixty local authorities in England and Wales alone which possess their own waterworks, gasworks, and markets. Nor are these confined to the large towns. Here is a list of five small boroughs and district councils owning gas, water, and markets, and providing baths and hospitals from municipal funds.

TABLE showing the RATABLE VALUE and DEBT OUTSTANDING OF FIVE SMALL TOWNS in ENGLAND and WALES owning their WATERWORKS, GASWORKS, and MARKETS, and providing HOSPITALS and BATHS from MUNICIPAL FUNDS.

Town.	Ratable Value.	DEBT OUTSTANDING FOR			Total outstanding Debt.
		Water-works.	Gasworks.	Markets.	
	£	£	£	£	£
Leigh	78,383	39,604	90,761	?	186,016
Cleckheaton	44,892	3,952	38,010	?	63,390
Leek	38,929	3,100	5,830	5,313	33,082
Mansfield	33,813	28,305	57,500	3,100	105,735
Teignmouth	31,755	13,105	10,172	3,007	46,543

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

The following tiny places own their own waterworks, gasworks, and markets :—

TABLE showing the RATABLE VALUE, and the LOANS OUTSTANDING on the 31st of March, 1893, in FIFTEEN of the SMALLEST BOROUGHs and DISTRICT COUNCILS in ENGLAND and WALES which POSSESS their OWN WATERWORKS, GASWORKS, and MARKETS.

Towns.	Ratable Value.	LOANS OUTSTANDING FOR			Total Loans out-standing.
		Water-works.	Gasworks.	Markets.	
	£	£	£	£	£
Ulverston	35,782	20,420	35,133	8,022	79,406
Clitheroe	34,080	47,180	40,199	2,980	90,493
*Penrith	32,379	7,146	22,426	4,409	39,710
*Congleton	26,340	11,050	12,225	3,231	32,199
†Abergavenny	24,876	1,174	9,730	4,077	60,567
*Birstal	19,018	9,700	34,088	1,500	60,738
*Saffron Walden...	15,232	7,000	9,181	2,987	20,131
Haverfordwest ...	14,650	10,456	10,850	2,500	31,155
Cockermouth	14,540	6,760	19,200	1,300	36,420
Aberavon	11,581	9,305	7,042	3,207	21,844
Knaresborough ...	10,306	7,740	3,700	780	13,270

Even the Rural District Councils, which until last year were only Boards of Guardians with limited powers, have in some cases shown a creditable activity in municipal enterprise. Thus the King's Norton (Worcestershire) Rural Sanitary Authority had, in 1893, not only executed sewerage and sanitary works, but runs a hospital and a cemetery, spends a large sum on public lighting and dust removal, and something even on allotments and water supply.

On the other hand, there are a string of backward towns in which municipalisation has never been tried, either for gas or water, markets or tramways. Foremost among these is, of course, London. The Metropolis, destitute until the other day of any effective municipal government, has had perforce to rely upon private enterprise for all its public services. It is indebted for its water supply to eight capitalist companies, who admit to have expended only fifteen millions sterling upon their works and mains, but who derive an annual net profit of over a million from the consumers, and who are now seeking to obtain twice or even three times their capital outlay as the price for allowing the London County Council to provide an

* Has a municipal hospital. † Has municipal baths.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

TABLE showing with respect to all the TOWNS in ENGLAND and WALES having a population in 1891 exceeding 100,000 (excluding the Metropolis), whether the LOCAL AUTHORITY possesses WATERWORKS, GASWORKS, TRAMWAYS, MARKETS, BATHS and WASHHOUSES, HOSPITALS, or LIBRARIES respectively.

County Borough.	Population in 1891.	PUBLIC AUTHORITY POSSESSES						
		Water-works.	Gas-works.	Tramways.	Markets.	Baths.	Hospitals.	Libraries
Liverpool.....	517,980	Yes	No	Yes	Yes	Yes	Yes	Yes
Manchester.....	505,368	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Birmingham.....	478,113	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leeds.....	367,505	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sheffield.....	324,243	Yes	No	Yes	No	Yes	Yes	Yes
Bristol.....	221,578	No	No	No	Yes	Yes	Yes	Yes
Bradford.....	216,361	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Nottingham.....	213,877	Yes	Yes	No	Yes	Yes	Yes	Yes
West Ham.....	204,903	No	No	No	No	No	Yes	Yes
Hull.....	200,044	Yes	No	No	Yes	Yes	Yes	Yes
Salford.....	198,139	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Newcastle.....	186,300	No	No	Yes	Yes	Yes	Yes	Yes
Leicester.....	174,624	Yes	Yes	No	Yes	Yes	Yes	Yes
Portsmouth.....	159,251	No	No	No	No	Yes	Yes	Yes
Oldham.....	131,463	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sunderland.....	131,015	No	No	Yes	Yes	Yes	Yes	Yes
Cardiff.....	128,915	Yes	No	No	Yes	Yes	Yes	Yes
Blackburn.....	120,064	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Brighton.....	115,873	Yes	No	No	Yes	Yes	Yes	Yes
Bolton.....	115,002	Yes	Yes	No	Yes	No	Yes	Yes
Preston.....	107,573	Yes	No	Yes	Yes	Yes	Yes	Yes
Croydon.....	102,695	Yes	No	No	No	Yes	Yes	Yes
Norwich.....	100,970	No	No	No	Yes	No	Yes	Yes

efficient and pure supply. London's markets are partly in the hands of the unreformed City Corporation, partly in those of the Duke of Bedford and Sir Julian Goldsmid, M.P., who admit receiving an annual net revenue of £20,000 from Covent Garden and Spitalfields alone. London's tramways, now beginning to be acquired by the County Council, belong to a dozen different companies, with a total capital expenditure approaching four millions. London's gas is supplied by three companies, with a capital of over sixteen millions and an annual net revenue varying from half-a-million upwards, according to the prevalence of cold and fog. Finally, London's docks, upon which over twenty millions have been expended, belong to four companies, working in a single close combination. For the Metropolis to become master of its water, gas, tramways, markets,

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

and docks, and thus place itself on a level with Glasgow or Greenock, would probably involve the transformation of sixty or seventy millions of private debentures and shares into Metropolitan Consolidated Stock, to the enormous advantage to the London citizens.

But London is not the only town which leaves all its public services in private hands. The following list includes twenty-eight populous towns in which little of the spirit of municipal socialism exists.

*TABLE showing with respect to TWENTY-EIGHT TOWNS in ENGLAND and WALES, the population in 1891, and whether the LOCAL PUBLIC AUTHORITY possesses WATERWORKS, GASWORKS, TRAMWAYS, MARKETS, BATHS and WASHHOUSES, HOSPITALS, OR LIBRARIES.**

Municipal Borough. (C.B.—County Borough.)	Population, 1891.	MUNICIPAL						
		Waterworks	Gasworks.	Tramways.	Markets.	Baths and Washhouses	Hospitals.	Libraries or Museums.
Accrington	38,693	No	No	Yes	Yes	No	Yes	No
Bacup	23,498	No	No	No	Yes	No	Yes	No
Bournemouth	37,781	No	No	No	No	No	Yes	Yes
Bristol (C. B.)	221,578	No	No	No	Yes	Yes	Yes	Yes
Burslem	31,999	No	Yes	No	Yes	No	No	Yes
Cambridge	36,933	No	No	No	Yes	No	Yes	Yes
Canterbury (C. B.)...	23,062	No	No	No	Yes	No	No	No
Chatham	31,657	No	No	No	No	No	No	No
Chester (C. B.).....	37,105	No	No	No	Yes	Yes	Yes	Yes
Chesterfield.....	22,009	No	No	No	Yes	Yes	Yes	Yes
Chorley	23,087	No	Yes	No	Yes	No	No	No
Devonport (C. B.)...	54,803	No	No	No	No	No	Yes	No
Eastbourne	34,969	No	No	No	No	No	Yes	No
Folkestone	23,905	No	No	No	No	No	Yes	Yes
Gateshead (C. B.)...	85,692	No	No	No	No	Yes	Yes	Yes
Gravesend	23,876	No	No	No	No	No	Yes	Yes
Grimsby (C. B.)....	51,934	No	No	No	Yes	No	Yes	No
Hanley (C. B.)	54,946	No	No	No	Yes	Yes	Yes	Yes
Jarrow	33,675	No	No	No	No	No	Yes	No
Kingston-on-Thames	27,059	No	No	No	Yes	Yes	No	Yes
Norwich (C. B.)	100,970	No	No	No	Yes	No	Yes	Yes
Portsmouth (C. B.)..	159,251	No	No	No	No	Yes	Yes	Yes
Rawtenstall	29,507	No	No	No	No	No	Yes	No
Reigate	22,646	No	No	No	No	No	No	No
West Ham (C. B.)...	204,903	No	No	No	No	No	Yes	No
West Hartlepool....	42,710	No	No	No	Yes	Yes	Yes	No
Yarmouth (C. B.) ...	49,334	No	No	No	Yes	No	Yes	Yes
York (C. B.)	67,004	No	No	No	Yes	Yes	Yes	Yes

* It is interesting to notice that, among these towns, Bournemouth, Cambridge, Chester, Eastbourne, Kingston, and Reigate have never applied for a School Board, and thus remain without even a local educational organisation.

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

It is now time to bring this survey to a close. We have seen that, irrespective of any socialist theories, the public services which local public authorities can and do successfully perform for the community on co-operative principles are numerous and every day increasing in extent. Already these local public authorities administer in the United Kingdom 25 times as much capital as the entire co-operative movement. They add each year to their undertakings, in mere annual increase, a capital greater than those of the English and Scottish Co-operative Wholesale Societies put together. How far this constant growth will extend no man can say. The extent to which municipal enterprise can safely be extended depends, it may be affirmed, almost exclusively upon the personal character of the citizens, the competency with which they fulfil their civic duties, and the efficiency of the municipal organisation which they construct. All this varies incessantly with the amount of public education and the degree to which public opinion is turned to municipal affairs. Seventy years ago municipal enterprise was almost non-existent. Twenty years ago it was generally regarded as impossible for London to manage its own water supply. To-day the "municipalisation" of the London water companies is accepted by all parties. Very few persons would, as yet, have any confidence in a municipal milk supply. Yet who can tell whether, in a very short time, it may not become possible to substitute a single municipal delivery of pure milk for the waste of twenty rival milkmen simultaneously delivering adulterated fluids in the same street.*

Why, moreover, should not our burial boards and town councils add to the municipal cemeteries a public department of interment, if not also of cremation? Already something like one-fifth of our dead are buried at the public expense, and there are many reasons why, in any reform of the poor-law, the function of burial of the dead should, like medical attendance, hospitals, and the provision for orphanage and old age, be frankly accepted as a collective charge. The experience of the city of Paris shows how a single well-organised and definitely regulated department may be substituted for the hideous "private enterprise" of the undertaker; and we need not be afraid that "communism in funerals" will lead to any reckless demand for graves. And, turning to quite another sphere, it cannot be so very long before the business men who run our school boards and town councils get tired of paying at least a hundred thousand pounds every year in fire insurance premiums on the municipal property, when a simple co-operative league between the 40,000 different public authorities would enable even the smallest of them

* What would the postal service cost if our letters were dealt with in this anarchic way?

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

safely to become its own insurers, as the London School Board and several other large bodies have already done. When municipal property is thus mutually insured, it will one day be possible to extend this advantage to every citizen as some Swiss cantons have already done, and to include in one universal public department of fire insurance every house, whether rich or poor. And if we may look beyond our own islands, without passing outside the British Empire, we can see, for instance, Mr. Chamberlain, as Secretary of State for the Colonies, already constructing, owning, and working railways and canals (as for instance in Natal and Australia) without the intervention of any contractor whatsoever; administering extensive forests in Canada and Ceylon, and dealing in timber on a colossal scale; growing (in Jamaica) his own cinchona to supply his own Government hospitals and Government medical officers with Government quinine; becoming (on behalf of the people of Cyprus) one of the largest sellers of barley in the world; running (on behalf of the Maltese) a municipal theatre built out of Government funds; supervising (for the New Zealanders) an extensive Government life assurance department; conducting (again for Malta) a rigidly monopolist Government pawnbroking business; and manufacturing (again at Cyprus) all the salt that the island consumes. All this, and much more similar experience, cannot fail to have its effect on our governors and directors.

But the greatest expansion of municipal enterprise in this country will probably consist, for some years to come, not so much in its extension to new services as in the universal application of those already successfully undertaken in some town or another. It is interesting to inquire how much capital our local governing bodies would be administering if, without any new experiments, or further extensions of municipal activity, every town and district were immediately to do for itself all that which has been already successfully undertaken by municipalities elsewhere in the United Kingdom. This would involve taking over the 150 companies at present supplying water for profit, at an expense probably of eighty or a hundred millions sterling. It would entail the municipalisation of the 428 private gas undertakings, with an aggregate capital of forty-four millions. It would mean absorbing the 116 private tramway undertakings, the total capital of which is £11,000,000. There would be private markets to be taken over worth a million or two; private bridges and ferries to be rendered free of toll at an expense of a million or two; joint-stock cemetery speculations to be superseded by public provision for the dead; private hydraulic-power works to be united with the municipal water undertakings; and capitalistic electric lighting companies to be bought up. On the foregoing heads alone the municipal capital would be increased by at least a

SOME FACTS AND CONSIDERATIONS ABOUT MUNICIPAL SOCIALISM.

hundred and fifty millions sterling, half of which would be accounted for by London and its suburbs. But many towns and populous districts have scarcely yet begun to be supplied with the elementary conveniences of civilised social life. We cannot, of course, suppose that every rural district council will ever carry on for its constituents the same kind and extent of business as is done by the Birmingham Town Council. But if every borough were as thoroughly "municipalised" as Oldham or Bradford; if every urban district council were as energetic as that of Leek or Ulverston; if every rural district council came up even to the efficiency of that of King's Norton; if county and parish councils and school boards shared merely the same increase in activity, it would mean at least the doubling of the existing municipal capital and staff, without extending the range of public enterprise by a single new service. This would be equivalent to placing under the control of local public bodies something like one-seventh of the entire capital of the country, other than land and railways—a prospect which may, for the moment, suffice for the most ardent advocate of municipal co-operation. There would still remain, however, three extensive vistas of municipal work down which we have scarcely glanced. The demolition of the slums of our great cities, and the substitution of decent healthy dwellings for all citizens, is an enterprise with which nothing but the public power and the public wealth can cope, and from which our local authorities cannot permanently refrain. Then there is the burning problem of the liquor traffic, which, to the present writer, seems destined to fall under local public control, at any rate in the populous cities in which prohibition will be impossible. And, thirdly, we may expect to see a steady and rapid growth of the tendency for public bodies to "do their own work;" progressively to dispense with the contractor or other middleman; increasingly to carry out their functions by their own salaried staffs, and to produce for themselves more and more of the materials and plant that they require. Co-operators will not need convincing that in this direction at any rate municipal authorities have a great field before them; and it is perhaps in this sphere that they are, for some time to come, most like to impinge upon ordinary manufacturing industry.



THE SCOTTISH
CO-OPERATIVE WHOLESALE SOCIETY LIMITED,
AND ITS PRODUCTIVE DEPARTMENTS.

BY DAVID CAMPBELL, PRINTING DEPARTMENT, SHIELDHALL.

THE progress of Productive Co-operation previous to the establishment of the Scottish Wholesale's Productive Departments was marked by many failures and disappointments. Here and there attempts had been made in different industries, albeit not always wisely chosen, to carry out the principle of association in production; but the result had either been disastrous, or the societies so formed had but a feeble existence, and were languishing for lack of capital or trade. The distributive societies or individuals who were prepared to invest their savings in productive enterprise were few and far between, and the guarantees of success which its enthusiastic promoters were prepared to offer were too visionary and remote to appeal to those whose faith in the "new evangel" was as yet too slender to prompt them to give anything more tangible than good wishes.

Perhaps, too, like Robert Owen in his hapless enterprise, they were a little "too previous" in their efforts to solve the labour problem. Public opinion ripens slowly, and co-operative education in Scotland had not then advanced beyond the elementary stage. But a more potent factor still, and one that dried the stream at its source, lay in the fact that the movement was poor. Unlike their brethren in England, who were already rolling in wealth, the societies in Scotland were for the most part still in their infancy, and struggling for existence. Capital was by no means plentiful or even adequate for the development of their distributive trade, and, whereas in England the societies were casting about for profitable investments for their surplus capital, the Scotch societies were fain to be content with the scrimpest allowance of that essential commodity. They had little to spare and none to risk, and therefore we do not wonder at the extreme caution, we might almost say indifference, which they displayed towards the productive concerns which had been already floated.

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY

What little confidence had been gained was entirely quenched by the disasters which overtook the Oak Mill and the Iron Works, two of the largest and most promising attempts at production which had hitherto been made in Scotland. In the case of the Oak Mill the loss fell mainly on individuals, while by the collapse of the Iron Works the Scottish Wholesale was mulct in the sum of no less than £10,000. On the causes which led to these failures we cannot enter here. They form an interesting if somewhat sombre chapter in the history of the movement in Scotland. But of their immediate effect on the progress of Productive Co-operation there can be but one opinion. They gave it a set-back from which it took long years to recover, and may be said to have changed the current of opinion as to the best method by which production should be carried out. From this point we find the eyes of the leaders turned to the Wholesale as the only safe and practicable medium through which they hoped for success in production.

This view found favour in many quarters, and in an editorial of the *Co-operative News* about this time we read:—

As yet the Scottish Wholesale has not embarked to any great extent in productive enterprise. With characteristic prudence it has aimed at doing one thing at a time, in order to make sure of its being done well, and no doubt much of the marvellous progress it has made in recent years is due to the extreme caution of its executive in avoiding for the time the fascinating though more hazardous paths of production and speculation. But the time cannot be far distant when this new departure will be forced upon it as a necessity. The rapid accumulation of capital and the growing requirements of the movement will soon demand that the Scottish Wholesale shall assume its rightful place as a producer of those commodities which are most in demand, and in the production of which there is a minimum of risk.

This counsel was wise and opportune. It did not fall upon deaf ears. The directors of the Scottish Wholesale were fully alive to the situation, but were patiently biding their time, and the favourable opportunity was greatly accelerated by the co-operative revival which followed the Oxford Congress in 1882, where the question of Productive Co-operation occupied a prominent position and received an impetus which speedily bore fruit in the increased activity and enthusiasm of its supporters all over the country. Fortunately the next Congress was held at Edinburgh, and the interest and sympathy of Scottish co-operators was strongly aroused by the eloquent appeals which were made to them to extend their operations into the field of production.

It is evident, on glancing back over the records of that date, that a definite policy had been shaping itself in the minds of the directors.

LIMITED, AND ITS PRODUCTIVE DEPARTMENTS.

The trade of the society was assuming very large proportions, and, confidence having again been restored, the shareholding societies were pouring their surplus capital into the Wholesale in an ever-increasing stream. The necessity for providing a profitable outlet for this capital was becoming urgent, and everything pointed to the necessity for immediate action being taken. The times were ripe for a bold start on the field of production, and it was fortunate that at this juncture the destinies of the Wholesale were in able and energetic hands. The hour had come—and the men. The directors, ably led by Mr. Maxwell, the chairman, set about devising means to accomplish the end in view. With characteristic caution they proceeded slowly and tentatively. Before any great scheme could be safely launched there were obstacles to be removed and weaknesses to be repaired, and it was evident that before the Wholesale could bear the strain of any large productive undertaking an effort should be made to “lengthen her cords and strengthen her stakes.” With this end in view the directors suggested several important constitutional changes, having for their object the greater stability of the society.

At a special meeting of the shareholders, held on the 24th June, 1882, the directors submitted a proposal to increase the unit value of the shares from 10s. to 15s. In support of their proposal a statement was submitted showing the relative growth of the share and loan capital for the previous year, 1881. From this statement it appeared that while for that period the total increase of the capital in the society had been £32,292. 6s. 2d., of that sum £28,717 had been added to loan capital, while only £3,173, had gone to the credit of shares. The total share capital at the end of 1881 was £24,957, while the loan capital stood at £111,149. The nominal value of land, buildings, and fixed stock was £38,116 at the same period. The demand of the directors, therefore, that “the society should have a share capital equal at least to cover the amount sunk in land and buildings” seems so palpably reasonable and judicious that we wonder at the determined opposition it encountered. The motion failed to secure the necessary two-thirds majority, but, nothing daunted, we find the directors bringing it forward again twelve months later, and the secretary (Mr. Miller) made an urgent appeal on its behalf. “If you mean,” said he, “to enter into Productive Co-operation, and to spread the ramifications of your society, how do you consider you can do it on loan capital? I say do not speak about encouraging Productive Co-operation if you are not prepared to do this.” It was in vain. The timid ones were still as numerous as ever. Not all the eloquence of the directors could remove their doubts, and the vote was even less encouraging than the previous one. It was not till four years later, viz., 13th

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY

March, 1886, that the requisite majority was secured to alter the rule and raise the shares from 10s. to 15s. Meantime, and as a further precaution, a resolution was carried reducing the interest on loan capital from 5 to $4\frac{1}{2}$ per cent, and on private loans from 4 to $3\frac{1}{2}$ per cent. An important alteration was also made in the rule referring to the payment of bonus to employés. Till 1884 employés received on wages earned double the rate per £ allocated as dividend on members' purchases. This arrangement was then replaced by one which set aside the double claim of the employé, and, recognising a difference between workers in the distributive and productive departments, established a differential rate. The distributive employés received the same rate of bonus as was the rate of dividend on members' purchases, and the rate of bonus to productive workers was determined by the net aggregate profit made in the manufacturing departments only. This arrangement continued till 1892, when the system of bonus payment was again revised. Hitherto the whole bonus allocated had been paid over; but the present system, which allows a uniform rate to both distributive and productive departments, requires that one-half of each worker's bonus be retained and put to his credit, forming a special fund called the Bonus Loan Fund. This capital bears interest at the rate of 4 per cent per annum, and is only withdrawable when the employé leaves the service of the society.

Having thus as it were cleared the ground, the directors went boldly forward with their long cherished schemes. The experiments which had been already made in connection with the drapery department, in which they tried their "prentice hand" in such difficult and unremunerative trades as shirts and ready-made clothing, seems to have given them confidence, and on 31st March, 1883, they asked and received powers to go into the manufacture of boots and shoes on an extensive scale. No time was lost in proceeding to carry out this the first serious venture of the society on the field of production. A site was procured in the immediate vicinity of the central warehouse, at a cost of about £8,000, and after successfully overcoming many vexatious delays, caused by objecting proprietors in the neighbourhood, the factory was formally opened on the 1st of January, 1885, amidst the good wishes and congratulations of co-operators from all parts of the country. No effort or expense had been spared in the equipment of the factory, the best available skill had been secured for the management, and the enthusiasm of the delegates from the shareholding societies at the opening gave the enterprise a send off which augured well for its success, and pointed clearly to the further development of the productive departments in the near future.

LIMITED, AND ITS PRODUCTIVE DEPARTMENTS.

Rightly interpreting the feelings of the shareholders, the directors lost no time in following up this brilliant success, and in September of the same year we find them submitting a great scheme of production to the members. This was no less than the founding of a great industrial colony, in which should be concentrated all the existing productive departments, and provision made for increasing their number as opportunity might arise. The members and directors, while fully alive to the enormous liabilities and responsibilities which such an undertaking would involve, were nevertheless convinced of the necessity and expediency of so bold a step, and the proposal was adopted with the greatest unanimity. The sequel has justified their confidence; but few, we think, would then have ventured to predict that in the brief space of seven years Shieldhall should have grown to such vast proportions, giving employment to over 2,000 workers, and turning out goods to the yearly value of £350,000.

Such is a brief outline of the steps which led up to the establishment of Shieldhall, and we now proceed to give a short account of the buildings and industries carried on within its gates.

THE SITE.

It is a coincidence worth noting that the site chosen for the establishment of their great Productive Works by the Scottish Wholesale is situated on the banks of the river Clyde, about 25 miles as the crow flies from the spot on the upper reaches of the same river where Robert Owen had made his memorable experiment in social reform some 90 years earlier.

The ground, which was previously pastoral land, extends to 12 acres, and was purchased in the spring of "the year of jubilee" (1887), at a cost of £500 per acre. No time was lost in making a start, and on 23rd July of the same year the interesting ceremony of cutting the first sod was performed by Mr. Maxwell, chairman of the society, in presence of the directors and heads of departments. Pleasantly situated about one mile to the west of Govan, and about three miles from the central premises in Glasgow, the works are surrounded on three sides by green fields, while the turnpike road to Renfrew passes the entrance gate. The entire absence of buildings in the neighbourhood allows a good view of the works to be got from every side, and also from the river. A branch line of railway passes along the eastern boundary, from which it is expected that a lye will be got into the works. This item was in the original plan and would be of great service, but through want of agreement between the proprietors and prospective users it remains unfinished.

From a sanitary point of view a better site could not have been chosen. Light and fresh air are abundant, and the worker would

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY

be fastidious indeed who would wish for happier surroundings in his toil. The somewhat remote position of the works from the city was at first a drawback, necessitating the workers travelling long distances through the scarcity of house accommodation in the vicinity. This difficulty has been largely overcome through the erection of dwelling-houses in the west end of Govan, which have been rapidly taken up by the workers, while for those travelling from the city special facilities by tram and river have been provided. On this account it has not been found necessary or expedient to go in largely for the erection of workmen's houses on the estate; and these have been confined to a block of 18 houses which are fully occupied by employés, such as watchman, timekeepers, and members of the fire brigade.

THE BUILDINGS

ARE arranged in three parallel lines running north and south, and covering, roughly speaking, about three-fourths of the estate. While there has been no attempt at architectural display, they have a smart and business-like appearance, which is greatly enhanced by the neat garden enclosures and grass plots arranged in front of the factories. An ornamental parapet and gateway with clock-tower facing the public road arrests the attention of the passer by, and the trim-kept roads leading through the long lines of buildings give an air of method and orderly arrangement which is not often seen in public works. The buildings are entirely of brick, and while varying in design according to the necessities of the various industries, are all of the most substantial character. Internally they are models of utility and comfort. All roofs and floors are carried on strong iron columns, which give the buildings a graceful appearance, while allowing free access to light and air. The sanitary arrangements have throughout been made to conform with the requirements of the health authorities in every respect, and no effort or expense has been spared in fitting up the factories in order that they might be thoroughly up to date in all their details.

The general plant is of the most improved character; the motive power is mostly steam, which is conveyed to the various factories by a network of service pipes carried all round the works. The heating is also by steam, a feature of the general plan being that no open fires are allowed in any of the factories, thus minimising the risk of fire and relieving the insurance rates. There are two sets of boilers, five in all, one being of the latest tubular pattern, with two smoke stalks, each 125 feet in height. Over the central boiler-house is fitted a drying stove for the use of the cabinet factory, and a powerful destructor has been fitted up for consuming the waste material and rubbish collected over the works. The central power

LIMITED, AND ITS PRODUCTIVE DEPARTMENTS.

station is fitted with large hydraulic engine and accumulator, from which the various hoists are worked. Here also is one of Shand and Mason's stationary fire-engines, connected with underground tank, containing 30,000 gallons of water, the supply for which is drawn from an Artesian well in the immediate vicinity. The apparatus and accoutrements of the fire brigade are also kept here ready for immediate use.

All the factories are connected by telephone with the gatehouse, in which is a large switch-board through which connections with the local and trunk lines can be got. Four special wires connect the works with the city.

INDUSTRIES.

IN respect of the number and variety of the industries carried on within its gates, Shieldhall presents a somewhat unique picture, no fewer than 16 distinct trades or departments being here grouped together, each organised and treated as a separate business, having its own staff of specialists, its own hours of labour and rates of pay in conformity with the trade to which it belongs, while all are linked together by a common interest, mutually sharing the advantages which have been conceded to its workers by the great community which they serve.

Before proceeding to give a brief account of the separate departments, it may be of interest to explain the method by which the financial results of the productive departments are ascertained. Previous to the starting of these departments all the manufactured goods sold by the Wholesale were purchased either from the manufacturer direct or through agents. On the establishment of the productive departments they were each affiliated with their corresponding distributive department of the business, and the method adopted in fixing the value of the goods transferred was as follows:—The factories were only permitted to charge their distributive department the same prices as goods of the same quality could be purchased for elsewhere, or were obliged to allow the department the same rate of discount as had previously been obtained from the firms who had hitherto supplied the goods. The same rule has been made to apply to each productive department from its commencement, and as the result of this wise and equitable arrangement the Wholesale receives from its sale of manufactured goods the same rate of profit as it previously realised from these sales, and, in addition, the profit which has been made by the productive departments. The accounts of each department are balanced separately, and the results shown on the society's balance sheet, each being charged with its share of general expenses in proportion

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY

to its turnover. The transactions between the productive and distributive departments are all entered twice—once to the credit of the department that makes the charge, and also to the debit of the department against which the charge is made, and the final totals of both must agree. The transfers of each department are balanced weekly and given in a printed statement furnished to the directors, showing the comparison with the corresponding period of the previous year. It will thus be seen that not only is a complete check secured, but the progress of the business from week to week is ascertained.

BOOT FACTORY, AND TANNING AND CURRYING WORKS.

PROBABLY in no industry has there been a greater revolution in the methods of production than in that of boot and shoe making, and the ancient cordwainer would have some difficulty in recognising a fellow-craftsman in the specialists who now manufacture our footwear. A walk through an up-to-date shoe factory brings home to the observant visitor the immense strides that have been made in the adaptation of mechanical appliances to the most intricate processes of manufacture, while the rapidity with which the operations are performed, and the beauty of the finished goods, must excite his admiration. Here, too, division of labour is carried to a fine art, and the regularity and precision with which the goods pass from one operator to another, till they emerge in their finished state, is deeply interesting.

The boot and shoe factory of the Scottish Wholesale is the largest in Scotland, and is fitted up with the most modern appliances. The building measures 502 feet long by 108 feet broad, and contains a floor space of 66,672 square feet. The classes of goods produced embrace all kinds, from the heaviest to the lightest, and a specially interesting feature, as showing the wide range of the factory's resources, is that the miner's heavy pit boot may be seen passing through its various stages of manufacture side by side with the lady's elegant glove kid shoe. The quality of the goods produced has from the first been of the highest class, and the demand has steadily grown until the output now reaches the enormous total of 9,000 pairs per week, including an average of 300 pairs of special measured boots and shoes. As may be imagined, this huge turnover gives steady employment to a large number of workers, about one thousand being engaged in the productive and distributive departments, this number being about equally divided between piece and time workers. The hours are 53 per week, and the highest trade union rates are paid. Overtime is paid at the rate of time and a quarter, a concession, it may be noted, that has not yet been

LIMITED, AND ITS PRODUCTIVE DEPARTMENTS.

granted by the general trade. An auxiliary factory was established some time ago in Glasgow, where the production is chiefly boys' and girls' work and slippers. In the tanning and currying departments large quantities of upper material is prepared, and here from 30,000 to 40,000 skins are always in process of tanning and curing. Bottom stuff is imported in large quantities from abroad, but the major part of the material required is drawn from home tanneries. The fine glove glacé kids, which are used for the best classes of ladies' boots, are purchased chiefly from the Continent.

CABINET FACTORY.

THE manufacture of furniture was commenced in a very small way in the spring of 1884, the original staff numbering six individuals all told. The scope of the business was then by no means ambitious, being confined to the production of cheap kitchen and parlour furniture, a class of trade, by the way, in which the competition of the small trader is severely felt. For the first four years progress was slow and painful, and it was only when the factory was removed to Shieldhall, in 1888, that it really had a chance to show its capabilities. Here, with adequate facilities and the introduction of the most improved machinery, the business developed rapidly. New departments were added, a higher range of goods was produced, and the trade advanced by leaps and bounds until the Wholesale found itself in a position to meet the wants of the societies in every requisite of household furniture.

Within eighteen months the new factory was found too small, and had to be doubled, a step which it was found necessary to repeat two years later. The means of production have thus been quadrupled since the factory was removed to Shieldhall, an emphatic testimony to the energy with which the business has been developed and the excellence of the goods produced. Notwithstanding this enormous increase in the volume of trade, the possibilities of further expansion are almost unlimited, for as yet only a fraction of the furniture required by the co-operators of Scotland is manufactured at Shieldhall.

The building is a large and imposing block of four storeys in height, having a central tower, at the top of which is placed a reservoir, from which a service of pipes and hose is led all through the various flats. From the inflammable nature of the material in use this is a highly necessary precaution. The block is 190 feet by 75 feet, and has a floor space of 57,000 square feet. In addition there is a covered shed 60 feet by 30 feet, with an area of 5,400 square

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY

feet, for the storage of cut material, besides large timber yards for the stacking and maturing of timber in bulk. These are connected by tramway with the factory, so that the huge logs are brought to the cutting saws with the greatest facility.

The factory embraces cabinet-making in all its branches, and every kind of kitchen, parlour, dining-room, and bedroom furniture is produced. In this the factory occupies a somewhat unique position, for while in most works of this kind the production is limited to a particular class, at Shieldhall the range includes everything in the shape of furniture, from the "household gods" of the miner's cottage to the fittings of the mansion house. In the commoner classes of furniture, which constitute the major part of the trade, great improvements have been effected in the style and finish of the goods, while in the better grades work of the highest class has been turned out. As an instance of the latter, we may mention a magnificent sideboard, which was shown at the Glasgow Exhibition, and which received in the trade journals the highest praise as a genuine work of art.

As in all the other factories, here is to be seen many ingenious machines and labour-saving appliances, and hand labour is almost entirely confined to putting together the various parts, which have been previously shaped and prepared with the greatest precision in the machine shop. Much of the severe manual labour which cabinet-making and chair-making at one time entailed is thus avoided, and the result has been greatly to benefit the worker and also to cheapen the goods to the purchaser. Piecework is the principal method of payment, according to scales mutually agreed upon, and steady employment is enjoyed by the large staff engaged in the factory. The number of hands is 206, and as showing the high rate of wages earned it may be noted that although fully one-half of the workers are girls and juveniles the wage bill gives an average of £1 per week to every employé in the factory. The hours are 51 per week, overtime being paid at the rate of time-and-half, with allowance for refreshments.

In addition to the upholstering of furniture, a large trade is done in the manufacture of hair and wool mattresses and cushions. The finished goods are mostly stocked at the showrooms in Glasgow, but large quantities are also sent direct to societies from the factory.

Brushmaking was added as a department of the business in 1890, and has been highly successful notwithstanding the severe competition in this industry from foreign markets. The latest development is the addition of a cooperage, which finds steady employment in the manufacture of bakers' utensils, &c.

LIMITED, AND ITS PRODUCTIVE DEPARTMENTS.

CLOTHING FACTORY.

THE manufacture of ready-made garments was one of the first essays at production by the Scottish Wholesale, having been started as an adjunct of the drapery department in 1881. The trade in ready-mades had by that time assumed fair dimensions, although the manufacture was entirely in the hands of outside firms. The prospect of establishing a profitable business in what is undoubtedly one of the most keenly-cut branches of trade was not very promising. It was notoriously affected by the "sweater," while the conditions of labour were alleged to be among the worst of any of our public industries. The directors were therefore to be commended for their courage in selecting this particular industry as one of the first in which to make an effort to raise the condition of the worker and establish the business on a thoroughly sound social and economic basis.

As was to be expected, the early results were by no means encouraging, and for a time the net gain may be said to have been social rather than economic. By dint of strenuous effort, however, and under the fostering care of the drapery department, the factory gradually found its mission, and the trade which had hitherto been done from the outside was transferred by the society to its own workshop, to the mutual advantage of its customers and employes. The growth of the business was steady and continuous, and notwithstanding frequent extensions this was one of the first industries for which provision had to be made at Shieldhall. The factory, which had till then been located in St. James Street, Glasgow, was removed to Shieldhall in 1888, where, with ample scope and the most improved appliances, its trade rapidly assumed large dimensions, and the flow of prosperity has continued unabated until the present. In 1891 a re-arrangement took place, the manufacture of mole and serge clothing being transferred to a new factory, established for this particular class of trade; but the diminution of trade caused thereby has been more than recovered by the increase in the ready-made and bespoke departments.

The building in which the business is now carried on is of one storey throughout, being 200 feet long by 70 feet broad, with a floor space of 14,000 square feet. The trade is almost entirely confined to the manufacture of what is technically known as ready-mades, and the extent of the business may be gathered from the fact that the weekly output runs up to 6,000 garments, made up in every variety of style and finish. The great bulk of this trade is done on what is known as the factory system, in which the use of machinery and the division of labour plays a conspicuous part. About 160 sewing machines are constantly at work, many of them being of the

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY

most ingenious construction, while the garments are cut out by a steam knife at the rate of fifty suits at a time. The number of workers is 250, about one-fifth of them being time and the remainder piece workers. The hours are 44 per week, and the average earnings 18s. As four-fifths of the hands are females, this may be regarded as an indication that the rate of remuneration is good all round, while employment is steady throughout the year.

SHIRT, MOLE AND SERGE, AND HOSIERY FACTORIES.

THESE closely-allied industries occupy one large building of four storeys, having a frontage of 118 feet, with a depth of 60 feet. The SHIRT FACTORY, which occupies the two upper floors, has an area 14,160 square feet. This interesting department is not only the oldest, but is one of the most successful productive ventures of the federation. It was started in January, 1881, and the first investment in manufacturing plant made by the Wholesale, amounting to £83, was in connection with this industry, while the first week's productive wages reached the modest sum of £6. 17s. 6d. At 30th March of the present year the capital sunk in plant in the productive departments amounted to nearly £74,000, while the weekly wage bill had grown to £2,080.

As in the case of the Clothing Factory, the directors may be said to have taken a "leap in the dark" in making this their initial effort. No doubt they were influenced more or less by philanthropic motives, for surely no class of toilers stood in greater need of improved conditions of labour. It was therefore with justifiable pride that Mr. Maxwell, a few months after the start, was able to say, "The fact that we are in a position to pay fair wages to our shirtmakers and make a fair profit from this class of work clearly proves to me at least that Tom Hood's dolorous 'Song of the Shirt' has no meaning to our seamstresses. To you (the shareholders) it must be a source of gratification that while you are making a profit you are also making a large number of your fellow-beings happier and more contented than they have hitherto been."

The progress made since those early days of small things has been truly marvellous; and among the many novel sights which are presented to the visitor at Shieldhall none is more interesting or instructive than that of the bright and airy rooms of this factory, with its long rows of busy, cheerful workers—surely the very antithesis of Hood's pathetic picture. The original scope of the factory has been largely extended, and it is now divided into two departments. In the Shirt Factory the garments are made up in all kinds of material—woollen, wincey, tennis, and Oxford, many of the finer fabrics being beautifully finished. The underclothing and

LIMITED, AND ITS PRODUCTIVE DEPARTMENTS.

pinafore department is devoted to the making up of ladies' and children's underclothing, skirts, and dresses, together with pinafores in all kinds of materials, from the finest cambric to the coarsest holland, in every variety of style, specialists being kept for designing new patterns. The number of employés in the shirt department is 77, while in the underclothing section the number is 78, making a total of 155—38 being time and 117 piece workers, and the average earnings 14s. per week of 44 hours. No fewer than 117 sewing machines are kept busily employed, and two steam knives are required to cut out the material. Several of the sewing machines are of special construction, performing such intricate operations as embroidering, scolloping, making buttonholes, sewing on buttons, &c.

MOLE AND SERGE FACTORY.

THIS department is an offshoot of the Clothing Factory, being chiefly confined to what is known as the slop trade. Co-operation being essentially a working-class movement, large numbers of its members are skilled mechanics, whose special work-a-day garb it is the business of this factory to supply. The principal materials used are mole, serge, dongaree, and duck, and a large number of garments in these fabrics are here produced. The factory occupies one large flat, having a floor space of 7,080 square feet. The system of work is similar to the Clothing Factory in regard to division of labour and the cutting and finishing of the garments. The number of employés is 70, all being fully employed, and the trade steadily increasing. The hours are 44, and the rates of piecework are higher than those paid in similar factories.

THE HOSIERY FACTORY

OCCUPIES the basement of the building. This department was carried on for some time on a small scale in the drapery department in Glasgow, being chiefly confined to producing machine-knitted stockings and pants. Since its removal to Shieldhall the business has been very much extended, the most improved machinery and methods in use in the hosiery trade having been introduced. The weekly production is as follows:—Hose and half-hose, 100 dozen; shirts and pants, 40 dozen; Jerseys, 20 dozen; children's combinations, 40 dozen. These goods are all finished on the premises, and give steady employment to a staff of 53 workers, the hours being 53 per week. Perhaps no more beautiful and intricate machinery is to be seen than that occupied in this industry, which has almost supplanted the laborious hand labour of stocking knitting, and transferred it

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY

from the fireside to the factory. The average earnings of the operatives is 13s. per week, the piecework rates being the highest paid in the trade.

PRINTING DEPARTMENT.

THE proposal of the directors to start a printing department was agreed to by the shareholders at the quarterly meeting in June, 1887. No time was lost in carrying out this resolution, and by the month of August a small corner in one of the grocery flats in Clarence Street, Glasgow, had been fitted up, and business commenced. At first the trade was mostly confined to the office stationery of the Wholesale, and the original intention was to confine it mainly to this work; but ere long the societies in the federation began to avail themselves of the facilities provided, and the business grew at a tremendous rate. Within eighteen months of the start it had entirely outgrown the space at its disposal, and the situation being unsuitable for further extension, it was decided to remove the department to Shieldhall, where premises were specially built for it. Although the space allotted was many times larger than the first workshop, in a short time it had to be doubled, an operation which has had to be repeated four times in the brief history of the department. The building in which it now finds itself is 212 feet long by 70 feet in width, one-half having two floors, and the remainder being of one storey, lighted from the roof. Here the work is carried on under the best possible conditions, in large airy rooms with abundance of light, and fittings and plant of the most modern description. The business includes letterpress and lithographic printing, stationery and letterpress bookbinding, paper ruling, and paper bag making. The majority of the societies in Scotland now send their printing and bookbinding to Shieldhall, and the most of the trade is drawn from co-operative sources. Lately, however, the department has contracted for and been successful in obtaining work from public bodies and trade organisations. The number of hands employed is 150; of these only about 30 are pieceworkers, who are paid at standard rates. The hours are 50 per week, being 2½ hours per week less than the corresponding trades in the city. The highest trade union wages are paid, and throughout its existence the factory has never known a day's idleness through scarcity of work.

PRESERVES AND CONFECTION FACTORY.

THE manufacture of preserves was commenced in June, 1890, and has from the first been carried on with the greatest success. Having in the stores a wide and ready market, the aim has been to produce an article of undoubted excellence, free from any taint or

LIMITED, AND ITS PRODUCTIVE DEPARTMENTS.

suspicion of adulteration; and produced not only with the best materials, but under conditions of labour that should leave nothing to be desired. The marvellous growth of the business is a good indication that in this the society has been most successful. The production of jams and jellies in 1891 amounted to 851 tons, while in 1894 the output had grown to 1,632 tons. In marmalade the total in 1891 was 98 tons, while in 1894 the total reached was no less than 254 tons. It will thus be seen that the trade has almost doubled itself in three years.

A large proportion of the fruit used in the manufacture of these preserves is bought direct from the growers, and the day may not be far distant when the Wholesale will be able to manufacture from home-grown fruit of its own cultivation. Being a season trade the number of workers employed fluctuates considerably, but the average staff is 132. For the production of this large quantity of preserves about 960 tons of fruit and 1,200 tons of sugar are required. In addition to the manufacture of preserves a considerable trade is done in the curing of orange, lemon, and citron peel, the production in 1894 amounting to 736 cwt. The buildings extend 290 feet by 82 feet, with a floor space of 64,780 square feet.

Connected with the preserves and under the same management is the Confectionery Works, occupying a separate building, 140 feet by 68 feet, four storeys in height, and with a floor space of 22,600 square feet. This department was commenced in 1891, being at first confined to the production of what is technically known as boilings, but which has since been extended so as to embrace a full range of the finer qualities known as dry goods, such as lozenges, jubes, &c. In this department, while the progress has not been so rapid as in the preserves, a large and increasing business has been established. In 1892, the first complete year, the production amounted to 3,888 cwt., which was more than doubled by 1894, the figures for that year being 7,897 cwt. The number of hands is 45, and the hours of both factories 50 per week. The highest trade rates are paid to time and piece workers.

TOBACCO FACTORY.

ALTHOUGH this industry was among those contemplated at the inception of Shieldhall, it was not till September, 1891, that it took definite shape. The building which was prepared for it is at the extreme south-east corner of the estate, and measures 118 feet by 60 feet, being two storeys in height, with a floor space of 14,160 square feet. Compared with the premises usually devoted to this industry it is a veritable palace, its large, bright, airy rooms, with their outlook on the green fields, being in strong contrast with the dismal surroundings too often associated with similar factories elsewhere.

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY

In none of their ventures have the directors encountered greater difficulties than in their efforts to cater for the devotees of "My Lady Nicotine." Smokers are proverbially fastidious in their tastes, and while the raw material is the same in every case, of the varieties of the finished article in pungency and flavour there is no end. Every district, and indeed every class of society, affects its own particular brand of the fragrant weed; and in tackling this industry the directors were fully alive to the difficulties they would have to encounter in their attempt to capture the co-operative trade in tobacco, which amounted to something like £90,000 per year, and transfer it to Shieldhall. The sequel proved that their apprehensions were well founded. For many months after the start their patience and temper were sorely tried by the constant stream of complaints received as to the quality of their new production. Most of these, when investigated, were found to come from some irate purchaser whose palate rebelled against the new sedative. Nothing daunted, however, the factory kept pegging away, endeavouring to assimilate its productions to the tastes of its customers, and ultimately the complaints became less numerous, and the grumblers have now for the most part become reconciled to the Shieldhall brand, or have been persuaded of its excellence. The trade has grown very rapidly, as shown by the fact that the output has been doubled in the four years since the start. All kinds of tobacco are manufactured, the major part, however, being heavy tobaccos. The weekly output is 11,000lbs., representing a money value of £2,000. The trade is entirely confined to the co-operative movement in Scotland and the North of England, about £200 worth crossing the border each week. It may be of interest to note that the government duty paid by the factory for 1894 amounted to something like £65,000. The number of employés is 95—33 males and 62 females. The hours are 46½ per week, the average wage being 17s.

PICKLE, CHEMICAL, AND COFFEE WORKS.

THESE departments are all affiliated with the grocery business in Glasgow. The manufacture of what is known as proprietary articles, and the packing of miscellaneous goods in handy and attractive form, which has now become so popular, offers a wide field for co-operative enterprise. This has led to the establishment of what is termed a Sundries Department, in which a great variety of these goods are manufactured, bottled, and packed. The productions include pickles, sauces, vinegars, and fruit wines, the sales of which in 1894 amounted to £3,140. In the Chemical Packing Department a large variety of goods are handled, such as semolina, cornflour, oatflour, cod liver oil, castor oil, chemical food, and a

LIMITED, AND ITS PRODUCTIVE DEPARTMENTS.

host of medicinal sundries, while the productions include citrate of magnesia, health salt, flavouring essences, &c., and new lines are being constantly added. The turnover in this department for 1894 was £7,081, being an increase of 82 per cent over the previous year. The building set apart for these two departments measures 66 feet by 82 feet, with a floor space of 21,648 square feet.

The Coffee Essence Work is in a separate building, extending to 63 feet by 50 feet, with a floor space of 9,450 square feet. The following is a list of the goods manufactured by this department:— Pure coffee essence, coffee and chicory essence, chicory and coffee essence, dandelion coffee essence, coffee and milk, extract of malt, and golden syrup. The transfers for 1894 amounted to £5,220, being an increase of 42 per cent over the previous year. The number of employés in these two factories is 91, and the hours are 50 per week.

TINWARE DEPARTMENT.

THIS industry was established in conjunction with the mechanical department in July, 1893. It is chiefly employed in the manufacture of household tinware, shop fittings, and japanned goods; but a considerable trade is also done in tins for packing such goods as biscuits, tobacco, syrup, and chemical products. The business has shown satisfactory progress, and gives steady employment to 34 hands—21 males and 13 females. These are all time workers. The hours are 51 per week, and the average earnings £1 per week for each employé. The transfers for last year amounted to £2,598.

MISCELLANEOUS DEPARTMENTS.

IN addition to the factories described above there are at Shieldhall a number of auxiliary departments, necessary for the upkeep of the buildings and machinery. All the buildings have been erected by the society's own workmen, and a permanent staff of masons, bricklayers, joiners, plumbers, painters, and engineers are always at hand attending to the necessary repairs and extensions or alterations. The various buildings were designed and erected by and under the supervision of the Society's master of works. There is also a carting department, having a stud of 15 horses, constantly employed in the transit of goods to and from the works, with stables, harness-rooms, haylofts, and cart-sheds, while a staff of cartwrights, saddlers, and blacksmiths are kept to look after the upkeep of the rolling stock and horses. Provision has also been made for the making and storage of barrels and casks, large numbers of which are required for the potato trade.

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY

DINING AND RECREATION ROOMS.

THESE occupy a large building in a central position 92 feet by 90 feet, consisting of three large flats, and having a total floor space of 24,840 square feet. The recreation-rooms occupy the ground floor, and separate rooms are provided for male and female workers. A janitor is always in attendance, whose duty it is to keep the rooms in order, and also to show visitors over the works. Newspapers, magazines, and games are provided at the expense of the Society, and the rooms are fitted up with reading-desks, tables, and seats. A committee, elected from the workers, assists in keeping order and conveying suggestions to the directors from the workers.

The dining-rooms occupy the two upper floors. Large halls are provided for male and female workers, with special rooms for directors, managers, foremen, and clerks. There are also ladies' rooms, smoking-room, and ample lavatory accommodation. The food is cooked by steam and gas, in a large kitchen fitted up with all the latest improvements and appliances. The staff consists of a *chef*, second cook, and 12 assistants, besides a large number of auxiliary waitresses who are called on at meal hours only. Food of the best quality is supplied to the workers at cost price, the directors only desiring that the dining-rooms should pay working expenses. The *menu* ranges from a dinner of four courses to a humble cup of tea. No pressure is put on the workers to patronise the dining-rooms, and many bring their food and take it on the premises. Metallic checks are used in payment of food, these being sold to the workers at meal hours. As many as 2,000 checks are taken in one day, and the average number served with refreshment is 1,500 daily.

FIRE BRIGADE AND AMBULANCE CORPS.

THE fire brigade consists of 14 men drawn from the various factories; of this number 10 reside in the Society's houses, and are within reach of immediate call. A system of electric alarm bells connect their houses with the gatehouse, in which attendants are kept day and night. In addition to the fire engine before referred to, a number of fire-extinguishing appliances are distributed over the various factories, such as hand pumps, grenades, service pipes on stairs, and a liberal supply of buckets always filled with water. In the fire station is stored the general appliances, such as reels, ladders, and 3,500 feet of hose pipe. The brigade is regularly exercised, and have several surprise alarms each year to test their promptitude and efficiency.

LIMITED, AND ITS PRODUCTIVE DEPARTMENTS.

THE AMBULANCE CORPS

WAS the outcome of a series of lectures by a medical gentleman engaged by the Society for that purpose, and to which the workers were invited. At the close of the series an examination took place, and the corps was formed by selecting so many from each factory, whose duty it is to give "first aid" in cases of accident. Surgical appliances are kept in each factory ready for use, and a complete ambulance outfit kept in the gatehouse.

STATEMENT showing NET PROFIT MADE and BONUS ALLOCATED on WAGES in the PRODUCTIVE WORKS of the SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED, SHIELDHALL, for the Years 1888 to 1894 inclusive—*

Year.	Net Profit.	Bonus.	Ratio of Bonus to Net Profit.
	£ s. d.	£ s. d.	Per cent.
1888.....	2,521 5 3	628 11 7	24·9
1889.....	4,142 13 4	1,016 14 10	24·5
1890.....	7,504 8 11	1,752 10 6	23·3
1891.....	8,276 12 0	1,802 14 9	21·7
1892.....	12,488 13 1	2,320 11 4	18·5
1893.....	14,816 16 1	1,746 1 6	11·7
1894.....	18,662 2 11	1,944 9 9	10·4
Totals	£68,412 11 7	£11,211 14 3	16·3 average.

* 1888-1893.

Tailoring Factory.	Brush Factory.	Coffee Works.
Shirt Factory.	Boot Factory.	Chemical Department.
Slop Factory.	Printing Works.	Mechanics' Department.
Mantle Factory.	Preserve Works.	Tinware Factory.
Hosiery Factory.	Confectionery Works.	Pickle Works.
Cabinet Works.	Tobacco Works.	

1894.

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY

BONUS TO LABOUR AND SHAREHOLDING EMPLOYEES.

THE Scottish Wholesale has from the beginning recognised the principle of sharing the profits with the workers, and on the establishment of their productive departments (as noted in the early part of this paper) it was decided to continue the practice. The foregoing table shows the substantial nature of this concession so far as the workers at Shieldhall have been concerned.

In November, 1892, the constitution of the Wholesale was amended so as to admit of the workers becoming shareholders in the Society, and it was made permissible for any employé over 21 years of age to take up shares to the number of 50, of 20s. each. It was further provided that the shareholding employés should be entitled to representation at the general meetings of the society by one delegate and an additional delegate for every 150 shareholding employés, who should have the same rights and privileges as the delegates of shareholding societies. It is to be regretted that this important privilege and concession to the claims of labour has not been taken advantage of by the general body of the workers as it should have been.

As will be seen from the figures below, only a fraction of the workers have as yet become shareholders:—

	No. of Employé Shareholders.	No. of Shares (20s. each) held by them.	Share Capital Paid up.
			£ s. d.
December, 1894.....	174	2,629	1,455 17 4
June, 1895	186	2,819	1,710 8 1

CHANCELOT ROLLER FLOUR MILLS.

It is not to be wondered at that the marvellous success of Shieldhall should have stirred the enthusiasm of co-operators all over Scotland, and given rise to a feeling that it might be well not only to press further into the field of production, but to extend the sphere of operations to other districts. The democratic spirit is naturally opposed to centralisation; and while, for commercial reasons, it was well to limit the area of operations at the start, success having been assured, there was much to be said in favour of a more extended scheme of productive enterprise. It was doubtless in deference to this growing feeling that the most recent and greatest venture in production was established in Edinburgh.

The proposal to go into the business of Flour Milling was submitted to the members by Mr. Maxwell at the quarterly meeting in February, 1891, and was cordially adopted by the delegates. With characteristic energy the directors immediately set about collecting information,

LIMITED, AND ITS PRODUCTIVE-DEPARTMENTS.

and visits were paid to some of the largest flour mills in the country for the purpose of inspecting the latest improvements in buildings and machinery. Steps were also taken to secure an eligible site, and, after mature consideration, it was decided to erect the proposed mill at Bonnington, Edinburgh, three acres of land on the estate of Chancelot being feued for the purpose. Plans of an elegant and substantial building were prepared and adopted, and contracts made for the fitting up of the mill with machinery on the most improved roller principle, and January, 1892, saw the construction of the mill fairly under weigh. On 6th August of the same year the memorial stone was laid with great ceremony, and on 25th August, 1894, the machinery was set in motion by Mrs. Maxwell amid general rejoicing and congratulation. Thus in little over two years this gigantic undertaking, in which over £100,000 of co-operative capital had been sunk, was brought to completion, and the most important co-operative enterprise which Scotland has yet seen fairly launched on what we trust will be a prosperous career.

The buildings, like those at Shieldhall and in Glasgow, have been erected by the Society's own workmen. They are entirely of stone, and are among the handsomest in a district noted for its fine buildings. The design is classic, with many beautifully carved emblematic panels, and the combined simplicity and boldness of the details lend an air of elegance, repose, and beauty to the whole. The central tower, rising to a height of 185 feet, with its four clock dials, is conspicuous from every point of view.

Arranged in two parallel lines, the front or main building contains the mill, engine-house (over which is the clock tower), and silos for the storage of grain. The mill is 103 feet in length by 34 feet in width, is five storeys in height, and contains almost the whole of the machinery used in the process of milling from the time the grain is received from the wagons to the sacking of the flour and separating of the offals and by-products. The productive capacity of the mill at present is 25 sacks per hour, or 3,500 sacks per week, but provision has been made in the building to increase this to 40 bags per hour. The engine-room is the main internal decorative feature of the buildings, being 61 feet by 45 feet 4 inches, with a height of 27 feet to the ceiling. It is treated in the Roman-Corinthian order of architecture, with columns, pilasters, cornices, and mouldings, all beautifully finished in the highest decorative style. The floor is laid with coloured tiles, and even the ceiling has been decorated with a full entablature Roman cornice. The windows are filled with stained glass, having emblematic designs. The main engines are of the triple expansion horizontal tandem Corliss condensing type, having one high-pressure cylinder 15 inches diameter, one intermediate cylinder 24 inches diameter, and two low-pressure cylinders 28 inches

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY

diameter, all the cylinders having a 4 feet stroke. These engines are capable of developing 600 indicated horse-power. The power is transmitted by means of a rope pulley, 20 feet in diameter, grooved for eighteen $1\frac{3}{4}$ inch ropes. In the same room are the engines for driving the electric light installation. These are similar in design to the larger engines, having cylinders 9 inches by 18 inches diameter by 33 inches stroke. The shafting is so arranged that the dynamos may be driven either by the electric light engine or the main mill engine. Steam is supplied by two Lancashire boilers, 8 feet by 30 feet long, working at a pressure of 160lbs. per square inch. The mill is entirely lighted by electricity, having about 500 lamps of 16 candle-power each. In the engine-room four Sunbeam incandescent lamps of 200 candle-power each are provided. The main switch-board, which gives a complete command of the lighting throughout the mills, is situated in the engine-room.

As a safeguard against fire, the mills are fitted up with a very complete installation of the "Grinnell automatic sprinkler." The mill and wheat-cleaning house are protected with a total number of 772 sprinklers, while the silo-house contains 271, the latter being on the "dry-pipe system" as a preventive against the pipes freezing. There is also an automatic alarm which, in the event of fire, gives notice by sounding a gong fixed to the outside wall, and can be heard a long distance away. In addition to the sprinklers, there is a complete system of pipes and hydrants all around and within the buildings, these being connected with a tank in the central tower containing upwards of 15,000 gallons of water. These, together with several sets of fire pumps at different points, constitute an unusually complete and efficient system of fire-extinguishing appliances. The central tower extends to eight floors in height, and contains the wheat-cleaning machinery, fireproof storage, and the mechanical arrangements in connection with the clocks.

The silo granary-house continues the main range of buildings. It is 137 feet long, having a height of 70 feet to the wall heads, and in which there is no floor. It contains 56 silos, into which, if desired, as many varieties of grain can be stored. The total holding capacity of the silo-house is 15,000 quarters, and the machinery, bands, and elevators throughout are arranged for feeding, discharging, and transferring from silo to silo at the rate of 50 tons per hour. This building also contains the sack-mending room, workers' dining-rooms, and three floors of storage accommodation. Immediately adjoining are the ponds, capable of containing 1,000,000 gallons of water, which supplies the boilers, and forms the reservoir for supplying the hydrants and sprinkler installation.

The warehouse, which forms the second line of buildings, is immediately behind the mill, being connected by a fireproof bridge.

LIMITED, AND ITS PRODUCTIVE DEPARTMENTS.

The building is 189 feet long, and contains six floors, having a storage capacity of 8,000 sacks of flour on each floor, equivalent to 1,042 tons, being in all 50,000 sacks of flour, or 6,250 tons. A railway runs alongside the building, to which there are exits, with overhead tackling for raising or lowering the flour to the various flats. This railway is spanned by a strong iron girder bridge, giving access to the stables, which contain 12 stalls, fitted up with the latest improvements. To the west, and in the same line as the warehouse, is a block of buildings containing mechanics' shop, boiler-house, and fire engine-house. Here also is the chimney stalk, which rises to a height of 215 feet, 20 feet in diameter at the base, tapering to 12 feet at the top. The stalk has an elegant and massive appearance, being surmounted by a cast-iron moulded head of highly ornamental design. There are also a number of detached buildings, such as foreman's cottage (with garden plot), cart-sheds, fodder stores, &c. Garden plots are formed at various points throughout the works, greatly enhancing the general effect.

As stated above, the mill has been in active operation since August, 1894. The organisation of such a large undertaking, as was to be expected, was no easy matter. It is to be remembered that in commencing this industry the Wholesale was brought into sharp conflict with one of the most highly organised and powerful trading interests in the country, who, moreover, from the start brought all their experience and skill into direct competition with it, and who were prepared to make any sacrifice in order to tempt the stores away from their allegiance to the Wholesale, and to undersell its productions. Warned by the experience of their English brethren, the directors were prepared for many difficulties and losses before their new venture was thoroughly established; and it speaks well for their energy and business capacity, backed up by the loyalty of the societies, and ensured by the undoubted excellence of the flour produced, that already these difficulties have been largely overcome, and the mills bid fair ere long to rank as another, and that the most brilliant success which the Wholesale has achieved in production. The sales have risen steadily, and for the quarter ending June, 1895, amounted to £113,158.

FINANCIAL RESULTS.

SPACE will not permit to go into minute detail in regard to the financial results of the various productive undertakings, full particulars of which will be found in the statistical returns of the Scottish Wholesale published in this volume, but the following tables will be found to contain an interesting and instructive synopsis of the main features from a financial point of view:—

PRODUCTIVE DEPARTMENTS.

	Average Capital Employed for Year.	Interest Charged for Year on Capital.	Rate per Cent.	Depreciation of Buildings and Plant for Year.
I. PRODUCTIVE DEPARTMENTS AT SHIELDHALL APPEARING IN OUR BALANCE SHEET:—				
	£	£ s. d.		£ s. d.
1. Boot	44,375	2,054 9 3	} 4.6	1,136 5 0
2. Shirt	2,577	118 18 11		165 3 3
3. Tailoring	4,182	193 1 9		180 3 9
4. Cabinet	16,833	779 11 4		498 18 2
5. Brush	4,042	186 16 10		72 4 10
6. Printing	8,295	383 19 8		505 5 8
7. Preserves	27,147	1,250 5 3		629 15 2
8. Confections	7,757	359 11 11		387 16 11
9. Slops	2,340	107 9 10		124 6 8
10. Mantles	1,399	64 6 2		69 16 1
11. Hosiery	3,520	161 18 6		206 13 1
12. Tobacco.....	19,133	887 5 3		344 8 4
	141,600	6,547 14 8	4.6	4,320 16 11
II. OTHER DEPARTMENTS AT SHIELDHALL INCLUDED IN OUR BALANCE SHEET UNDER "GLASGOW GROCERY":—				
13. Coffee.....	2,916	134 6 4	} 4.6	141 14 8
14. Chemical	2,868	132 1 7		77 15 2
15. Mechanical	1,652	75 6 3		107 5 5
16. Tinware.....	1,356	61 4 9		74 5 5
17. Pickles	2,906	135 2 2		103 1 11
Total Capital employed at Shieldhall in above Departments	153,298	7,085 15 9	4.6	4,824 19 6

DETAILED STATEMENT FOR YEAR 1894.

Net Profit after meeting all Expenses, including Outward Carriage.			Rate per Cent on Capital Employed.	Total Rate per Cent Earned on Capital Employed.	Transfers for Year.	Wages Charged to Departments.	Bonus Allocated to each Department for Year.	Rate per £ on Wages.						
£	s.	d.			£	s.	d.	£	s.	d.				
7,431	2	5	16·7	21·3	102,723	9	4	35,363	2	11	873	16	8	} 6d.
633	14	2	24·5	29·1	4,762	11	0	2,302	17	0	56	17	6	
2,040	7	7	48·7	53·3	16,161	12	1	8,149	6	3	202	8	10	
668	2	8	3·9	8·5	18,600	13	11	8,411	8	5	208	17	7	
354	17	10	8·7	13·3	4,859	11	11	1,491	16	8	37	2	5	
2,158	5	7	26·0	30·6	15,492	11	6	4,539	7	5	112	0	4	
2,847	8	2	10·4	15·0	56,762	8	5	3,737	18	6	89	8	10	
512	15	7	6·6	11·2	14,043	14	7	1,585	8	0	38	3	7	
113	13	2	4·8	9·4	3,493	7	4	1,691	17	6	41	19	5	
20	14	6	1·4	6·0	2,711	10	10	1,226	2	0	30	7	8	
72	5	2	2·0	6·6	5,126	8	2	1,340	1	1	33	4	3	
1,324	10	4	6·9	11·5	74,007	19	5	3,439	2	4	85	8	5	
18,177	17	2	12·8	17·4	318,745	18	6	73,278	8	1	1,809	15	6		6d.
650	14	7	22·2	26·8	4,935	15	5	433	2	2	10	15	5	} 6d.
377	18	0	13·1	17·7	6,932	3	5	684	11	8	16	17	10	
267	2	3	16·1	20·7	5,410	19	11	2,460	4	5	61	1	8	
*370	10	11	..	*22·7	2,134	6	5	1,130	4	1	28	10	4	
*440	18	2	..	*10·4	3,555	5	1	705	3	9	17	9	0	
18,662	2	11	12·1	16·7	341,714	8	9	78,691	14	2	1,944	9	9	6d.

* Loss.

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

STATEMENT showing the AMOUNT OF CAPITAL, VALUE OF PRODUCTIONS, AMOUNT OF EXPENSES, and NET PROFIT of the SOCIETY'S MANUFACTURING DEPARTMENTS, together with the NUMBER of WORKPEOPLE EMPLOYED therein.

Year.	Amount of Capital Employed.	Cost Value of Productions.	Sales, &c., Transfers to Distributive Departments.	EXPENSES (excluding Raw Material).				NET PROFIT.			Number of Work-people Employ'd
				Wages Paid.	Ratio of Wages to Cost of Product'n	Other Expenses.	Interest on Capital and Depreciation on Property.	Total Expenses.	Ratio of Expenses to Cost Value of Product'n	Amount.		Per cent- age on Capital Employ'd
	£	£	£	£	%	£	£	%	£	%	
1883	1,401	4,094	4,094	2,357	57·6	66	111	61·9	40	2·8	73
1884	2,439	4,927	4,927	2,371	48·1	110	289	56·2	111	4·5	104
1885	7,924	21,705	21,705	7,883	36·3	301	766	41·2	459	5·7	377
1886	14,083	45,646	45,629	15,401	33·7	547	1,214	37·6	1,393	9·8	427
1887	13,729	46,441	45,646	16,864	36·3	619	1,164	40·2	1,213	8·9	473
1888	23,341	57,833	56,079	21,597	37·3	791	1,856	41·9	2,521	10·8	693
1889	35,078	78,047	73,188	28,150	36·1	1,443	2,786	41·5	4,143	11·8	783
1890	47,124	113,449	108,646	38,520	34·0	1,970	3,706	38·9	7,504	15·9	1,024
1891	75,169	183,156	167,976	48,080	26·2	3,719	5,607	31·3	8,276	11·0	1,350
1892	101,017	260,270	251,883	61,293	23·5	5,536	8,106	28·8	12,488	12·3	1,700
1893	137,804	293,089	295,544	68,260	23·3	8,051	10,086	29·5	14,816	10·8	1,784
1894	141,600	333,899	318,746	73,278	21·9	9,510	10,868	28·0	18,177	12·8	1,859

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED, ETC.

	Invested Capital at end of 1894.	No. of Workers at same date.	Capital per Head.
	£		£
Boot Factory	44,375	838	53
Shirt Factory	2,577	120	21
Tailoring Factory	4,182	214	20
Cabinet and Brush Factories	20,875	200	10½
Printing Works	8,295	124	67
Preserve and Confectionery Works	34,904	153	228
Slop Factory.....	2,340	48	48
Mantle Factory	1,399	37	38
Hosiery Factory	3,520	42	84
Tobacco Works.....	19,133	83	230
	£141,600	1859	£76 average.

CONCLUDING REMARKS.

THE opponents of co-operation, while grudgingly admitting that in its distributive phase it has been a success, are never weary prophesying that in production it is doomed to failure; that it can never hope to lay hold of the industries of the country and apply to them the principle of associated effort with success. The institution and progress of the Scottish Wholesale's Productive Departments, which we have endeavoured to sketch in the preceding pages, proves conclusively that Co-operative Production on federative lines is both practicable and profitable. The industries which have been established and carried on with so much success at Shieldhall have had no adventitious help—no bolstering up or subsidising. They have survived and succeeded entirely on their commercial merits. Their productions are not accepted without question by the societies, but are constantly subjected to comparison and competition with those of the private manufacturer. The capital sunk has yielded a handsome return, notwithstanding that buildings, plant, and general equipment have been provided on the most liberal scale, while the workers have, in addition to the maximum rates of wages, participated largely in the profits made. The Scottish Wholesale may therefore justly claim to have done much not only to improve the position of the wage-earner, but also to help forward the solution of one of our greatest social problems—the remodelling of the conditions of industry—by demonstrating that the greatest commercial success is compatible with fair and even generous treatment of the worker; and in vastly improving the conditions of labour they have set an example to capitalists and manufacturers which, we trust, they will not be slow to emulate.

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED, ETC.

As to the future of this great enterprise, it is full of hope and promise. The movement with which it is identified grows stronger day by day. Co-operation has taken firm root, and is adding to its ranks thousands of enthusiastic members every year, whose accumulated savings are flooding the coffers of the Wholesale, and making it imperative that profitable outlets must be found for the growing wealth of the societies. Past experience has shown that the Wholesale is worthy of their trust, and we doubt not those who have hitherto guided its destinies so wisely and well, will be found able and eager to lead it to still greater triumphs. New developments and the addition of new industries are certain to follow in the near future. As the movement grows so must its trade, and it will be the duty of the Wholesale to see to it that its productive resources are kept fully abreast of the growing needs of its members. The tide is at the flood, and the opportunity has arrived for a great forward movement. One thing only is needed to ensure success. The federated societies have laid a heavy burden on the Wholesale in the vast resources they have placed at its disposal; but they would do well to remember that their duty and responsibility does not end there, and that unless they also give their trade, by which alone their capital can be employed, then the burden may prove too heavy for even the broad shoulders of the Wholesale to bear. They must know that indifference or disloyalty will ultimately react upon themselves, and that "as they sow, so also shall they reap." This is a duty that cannot be too often pressed home. As societies grow in wealth and membership, the temptation is strong to adopt an independent course, and forget for the moment the paramount claims of brotherhood and unity. It need hardly be said that such a policy would be suicidal, and we have every hope that it will be strenuously avoided. The societies have hitherto nobly supported the Wholesale in its efforts to establish these productive works, and by their consistency and loyalty has success been assured. We doubt not they will continue to follow the same wise course, and can therefore with confidence leave the future in their hands, with the parting injunction which Lord Rosebery uttered at the Glasgow Congress:—"Walk warily, walk tentatively, walk cautiously, so as not to endanger what you have already achieved; and, above all, move unitedly, for union, which to all causes is strength, is to yours existence itself."



THE PROBLEM OF THE UNEMPLOYED.

BY JOHN A. HOBSON.

MEANING OF "UNEMPLOYED."

THE slowness of social progress is in no small measure due to the desire of "practical" men to solve social problems before they have clearly stated them. History, no doubt, has generally worked this way, but it is a wasteful way. There are scores of proposals for solving the unemployed problem; but very few attempts to realise precisely what the nature of that problem is. It may be said, "Everybody knows what 'unemployment' means." But this is not the case. If we were to take a census of all the able-bodied men and women in England at eleven o'clock next Monday morning we should find that large numbers of them were not working. Should we be at liberty to describe all these as "unemployed" for the purpose of our question? Clearly not. We should find large numbers of able-bodied adult men and still larger numbers of women who were not working because they had no need to work for a living, since they either draw their income as owners of land or capital or are dependent upon those who do.

UPPER-CLASS UNEMPLOYED.

THE census of 1891 showed that there were in England and Wales not less than 233,446 males between the ages of twenty and sixty-five who were not even nominal members of any trade or profession. Making all due allowance for any work of domestic management done by women of the upper and middle classes, it is clear that a much larger number of them would be rightly described as being without "employment." Now if the question of "the unemployed" were treated in its full social significance, this species of "unemployment" ought plainly to be taken into account. For the malady, viewed from the standpoint of society, consists in the waste of labour-power which might be utilised for the production of social wealth, and that labour-power deliberately withheld from social use by those euphemistically described as the "unoccupied classes" ought to be counted in.

To the list of "the upper unemployed" would also be added large numbers whose occupation was merely nominal, professional men without a practice, sleeping partners in business firms, retired officials, and a host of others who retain the empty semblance of an

THE PROBLEM OF THE UNEMPLOYED.

"occupation." But for present purposes it is better to ignore this wider aspect and to confine our attention to "the unemployment" of the working classes in the common acceptation of that term.

LEAKAGE AND SEASONAL EMPLOYMENT.

A CENSUS, however accurate, of the members of the wage-earning classes who on any given day were not working would not be a just measure of "unemployment" in the sense of "waste" of labour-power. If a miner or a gasworker chooses to condense his week's work into four or five days in order to have a longer "week-end," his Monday "play" cannot rank as "unemployment." But if this same amount of "play" is forced upon workers by slack trade it is clearly entitled to be so called. Moreover, shortness of work which does not mean "absolute unemployment" for any single day, but which means that workers are put on shorter hours, involves the same waste. In other words, the "unemployment" due to slack trade may be represented by the total "unemployment" of a smaller number or the under-employment of a larger number. In any scientific diagnosis of the malady this latter must be taken into account. Some trades by their constitution seem to require a certain margin of unemployment. The building trades are a notorious example. A bricklayer or a stonemason who is in good work will yet lose a certain number of days in a year by "leakage" or the necessary interval between jobs. But when this leakage is described as "necessary," the criterion must be a period of brisk trade. In slack trade when contracts are fewer the "leakage" will be larger, and this difference between good and bad trade is genuine "waste."

In many trades the volume of employment varies with the season of the year, or with the condition of the weather. Much outdoor work is stopped or diminished by cold or wet weather: in many trades connected with the preparation or transport of food and other perishable goods, or with the market for those articles of clothing most amenable to "season" and "fashion," the pressure of work is confined to certain fairly regular periods of the year. Are the victims of this essential irregularity, who are provided with no alternative trade, entitled to rank as "unemployed" during an off period? This important question is answered in the negative by the recent Report upon the Unemployed by the Labour Department. We are told: "A certain amount of time will be lost almost every year during frost. Are the men thus thrown out of work really unemployed? The loss of time may be considered as one of the ordinary trade risks; it recurs more or less every year; it may be supposed to be discounted in the rates of pay earned by members of these trades when fully at work. The bricklayers idle during frost are in no

THE PROBLEM OF THE UNEMPLOYED.

sense 'superfluous' if the whole year be taken as a limit; were they emigrated or planted in farm colonies, or otherwise lifted permanently off the labour market, the building trades would presently suffer from a deficiency of men. Nor are they necessarily insufficiently employed. There may be work enough for all, but the trade is such that the work it offers has to be concentrated in certain parts of the year." Now, is this highly official view correct? Is it true there is no "superfluity" or "waste" of labour-power in the idle winter of the house-painter, or the unemployed half-year of the "fur-puller," or the hands taken on for "spring fashions?" The supposition is an absurd one. It would only be tenable provided that it was physically and economically possible to pack the same amount of labour-power given out in an eight or ten hours day throughout the year into an elongated or intensified work-day during a period of three or six months. It is at least arguable that by working hard four days a week a miner may without injury or waste do a full week's work. But it is not arguable that a painter by working long hours during four spring and autumn months can do a full year's work. The conditions of his trade may be such as will not enable him to give out more of this kind of labour in a year, but to say that he is "not necessarily insufficiently employed" is wholly incorrect. This is proved by the fact that where he is the possessor of a second trade he is often able to practice it to the gain both of his pocket and his character, upon which the "essential irregularity" of his trade is apt to exercise a most demoralising influence. Again, it must not be forgotten that the assumption that all the irregularity of these season and fashion trades is "necessary" in the sense of being inherent and irremovable is often unwarranted. It is safe to say that a good deal of the seasonal unemployment in the building, dock, and many clothing and luxury trades is due to the fact that the chronic over-supply of labour available for such work makes it economically possible that contracts can be completed and orders executed at short notice to satisfy some quite trifling convenience of the customer. If there were not so many painters and other season workers upon whom brief sudden demands could be made, a smaller number would be employed for a longer period. The same holds of many trades. Climatic and other physical causes doubtless impose a certain quantity of irregularity, but this could be kept at a minimum by the better organisation which a restriction in the supply of labour would force upon many trades. The "dock" work in London has recently yielded to this pressure, and much of the irregularity of employment formerly considered "necessary" has been squeezed out. Such a course does not, it is true, diminish the total amount of unemployment, but by changing the under-employment of many into the chronic unemployment of a smaller number it effectively

THE PROBLEM OF THE UNEMPLOYED.

disposes of the official view that where irregularity is regular there is no "waste." In some cases it may be necessary that a large margin of workers should exist for work which can only be done at certain seasons, but the time when they are in waiting is clearly to be treated as "unemployment," though in the consideration of remedies it may be advisable to treat their case separately from that of those whose "unemployment" has a different origin.

UNEMPLOYMENT FROM TRADE DEPRESSION.

WE next come to that "unemployment" and "under-employment" which is attributed to bad or depressed trade, and which I shall presently show to be by far the largest factor in the problem. Since there is a certain rhythmic movement discernible in the general state of trade, slack periods alternating with tense periods, it is open to the official fatalist to suggest that these larger waves of irregularity, like the minor annual waves in season trades, are inevitable, and that since there is full employment for a short period at intervals of some seven years, the labour for which there is no demand in ordinary times is not superfluous. The Report on the Unemployed is inclined to this incredibly bold assumption: "In a period of contraction like the present there are many men who are out of work. They are industrially 'superfluous' if so short a period as a year be taken as the limit, but over a period of seven years—which for shipbuilding appears to be about the period of the cycle—they are necessary, and were they lifted off the labour market in slack years, there would not be enough men to execute the work when trade revived." In the same spirit Mr. Charles Booth informs us that "our modern system of industry will not work without some unemployed margin, some reserve of labour." It does not seem to occur to these writers that the fluctuations of trade may be due to the existence of the "margin" as much as the existence of the "margin" to the fluctuations. It is surely conceivable that the fluctuations would be less violent if there did not exist under normal conditions a large "reserve" of labour (and capital) to play with. At any rate I shall take leave to reject the notion that there is no "superfluity" or waste of labour, because once in every seven years the superfluity is for a short period mopped up. Indeed, the Unemployed Report goes so far as to admit that it would be a "strain of ordinary language to refuse to these men during slack years the title of 'unemployed.'" The "unemployment" due to bad trade will of course include short time and other forms of defective employment. In a word, "unemployment," for the purpose of scientific inquiry, must cover every form of "waste" or non-use of available labour-power.

THE PROBLEM OF THE UNEMPLOYED.

GENERAL MEASUREMENT OF "THE UNEMPLOYED."

FROM what has been said it will be clear that no exact measurement of "unemployment" at any given time is feasible. It would be hardly possible to devise a means of measuring that deficiency of work which we call "under-employment," and which, if it continues long, inflicts terrible injury upon a working class, breaking down a standard of decency or comfort which it has taken a generation to build up. We do not even possess any means of ascertaining the exact numbers of those who are "definitely unemployed" in the sense that they are obtaining no work in the trade to which they belong. Private censuses taken during periods of distress in Bradford, West Ham, and other places, yield some interesting information, but cannot of course furnish a basis for national computation. The only official figures relating to the general quantity of "unemployment" are those furnished voluntarily to the Board of Trade by trade union officials. It must be borne in mind that these figures are in no sense a full register of "unemployment" among trade-unionists. The Board of Trade has no power to compel returns to be made; many unions have no record of "unemployed;" some which have a record make no returns; many of the returns are in a form which does not allow them to be used. But since the Board of Trade's monthly percentage of "unemployed" is the best evidence as to quantity of unemployment in skilled trades it should be stated. The following table covers the eight years from 1887 to 1894. In the earlier period it is based upon the returns of about 20 unions, but in 1893 and 1894 the number of returns which could be used was considerably greater, amounting to 67 for December, 1894.

At End of each Month.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.
January	10.3	7.8	3.1	1.4	3.4	5.0	10.0	7.0
February ...	8.5	7.0	2.8	1.4	2.6	5.7	9.5	5.6
March	7.7	5.7	2.2	1.7	2.8	5.7	8.7	6.5
April.....	6.8	5.2	2.0	2.0	2.7	5.4	6.9	6.1
May	8.5	4.8	2.0	2.0	3.0	5.5	6.2	6.3
June	8.0	4.6	1.8	1.9	2.9	5.2	5.8	6.3
July	8.5	3.9	1.7	2.3	3.3	5.0	6.2	7.4
August	8.3	4.8	2.5	2.3	4.2	5.1	7.1	7.7
September..	7.5	4.4	2.1	2.6	4.5	6.2	7.3	7.6
October.....	8.6	4.4	1.8	2.6	4.4	7.3	7.3	7.4
November...	8.5	3.1	1.5	2.4	3.8	8.3	7.2	7.0
December ...	6.9	3.3	1.7	3.0	4.4	10.2	7.9	7.7

THE PROBLEM OF THE UNEMPLOYED.

EXAMINATION OF THE OFFICIAL PERCENTAGES.

TAKING these percentages for our starting point, let us ask what light they throw upon the general condition of employment. In December, 1894, 7 per cent were unemployed. Is it likely that the percentage for the whole body of the wage-earners would be greater or less than this? In order to answer this question we must first understand what this figure 7 really means. It means that 7 out of every 100 of the organised members of certain branches of skilled trades are in receipt of out-of-work benefit at a particular time. The trades from which the returns are drawn were in this case the engineering and metal trades, shipbuilding, building and furnishing, textiles, mining, printing and kindred trades, clothing, leather, glass, &c. In the textile trades the return was based upon the report of two cotton unions with a membership of 10,629, which is obviously a quite inadequate representation of textile trade in general, which according to the recent census employs 1,128,509 persons. It is, I think, generally true to say that this official barometer of employment reflects chiefly the condition of engineering and metal trades, shipbuilding, building, mining, printing. There is, however, some reason to believe that the figure 7 is not a full representation of the unemployment for these trades in December, 1894. In the first place, it would not fully represent the proportion of trade union members out of work. A qualification of twelve months' membership is required by most unions before a member is entitled to unemployed benefit; in most cases the unemployed pay is only given for a limited period—from six to thirteen weeks. Some workers make it a point of personal pride not to come upon the fund of their union until they are obliged. For these and other reasons it seems likely that 7 per cent is a low estimate of the unemployment of the union members of these skilled trades. Again, it must be admitted that on the average the members of trade unions are the pick of the trade in skill, strength, intelligence, and character, and would therefore even in their individual capacity be less likely to be out of work than non-union workers in their trade. When we remember that one chief object of trade-unionism is to secure regular employment for its members, it will seem reasonable to conclude that the 7 per cent would be an under-estimate for the whole trades. Two further considerations confirm this opinion. The strain of modern competition with its multifarious "driving" system tends to confine full and regular employment more and more to workers in the prime of life and strength, and to superannuate or press out of employment men who have passed middle age. Many trade unions, requiring as a condition of full membership the ability to earn the standard wage, make no allowance in their returns for the "unemployment" of the superannuated. In the second place, it is a chief

THE PROBLEM OF THE UNEMPLOYED.

object of many unions to distribute slack trade over all the members, by working short time, instead of throwing a certain proportion of the members entirely out of work. The "unemployment" represented by short time does not figure in the official returns. It therefore appears likely that the official figures of "unemployment" are considerably below the true figure for the whole trades to which they refer. But can these trades be taken as fair representation of trade in general? This question does not admit of an easy answer. Certain skilled trades are among the most fluctuating, as, for example, shipbuilding; and it is sometimes contended that the great fundamental and staple industries (from which the trade union reports are chiefly drawn) are more fluctuating than the minor trades. Though the means of accurate comparison are wanting, it is unreasonable to accept this view. It seems more likely that the minor manufactures, engaged chiefly in the supply of luxuries or less urgent needs, and more subject to freaks of fashion or changes of taste, would present a greater irregularity of employment. Taking the manufacturing and mining industries in the aggregate, it is reasonable to expect that the actual displacement of labour in December, 1894, was considerably larger than 7 per cent.

EMPLOYMENT AMONG LOW-SKILLED WORKERS.

WHEN we turn from the skilled and organised trades to the mass of low-skilled or unskilled labour of our towns, we shall find reason to believe that the "waste" is far greater in the latter. In periods of good trade nearly all the members of skilled trades find full employment, but in our large centres of population there appears to exist a permanent excess of low-skilled and casual labour which is never fully utilised.

There are many who wish to separate this chronic glut of low-skilled casual inefficient labour of our towns, as a problem distinct from the "unemployed" question, in its bearing on the skilled trades. An examination of "the industrial residuum" in our cities discloses the fact that most of them are physically, morally, and intellectually incapable of undertaking and putting through any solid piece of regular work. "Unemployment" here, even more than among skilled workers, is a matter of degree. Few of them could be said to be absolutely "out of work" for any length of time together; some scraps of casual employment they constantly get, odd jobs, by means of which they keep from starvation or "the house," but never a sufficiency of regular work. The amount of waste or superfluity represented by this class is of course not capable of measurement. Mr. Charles Booth, however, estimates that in East London they form 11¼ per cent of the whole population, and that from the social standpoint

THE PROBLEM OF THE UNEMPLOYED.

their labour is all superfluous. "It may not be too much to say that if the whole of Class B (100,000) were swept out of existence, all the work they do could be done, together with their own work, by the men, women, and children of Classes C and D; that all they earn and spend might be earned and could very easily be spent by the classes above them; that these classes, and especially Class C, would be immensely better off, while no class nor any industry would suffer in the least." This population may be proportionately larger in East London than in most other towns, but it seems evident that in Class B we are face to face with a mass of "waste" or superfluous labour which is not represented in the Monthly Report of the Board of Trade.

IS THE PROBLEM OF THE RESIDUUM SEPARATE?

THE problem of this low-skilled casual labour is not really separate from the other. No doubt it appears that these people are out of regular work because they are incapable or unwilling to undertake it. But this is, after all, a superficial treatment of the "residuum." A closer investigation will disclose the fact that they form a "sediment," the gradual accretion of deposits from the regular grades of workers; that they or their parents are shaken out of their industrial place by agricultural or manufacturing disturbances, and, weakened further in physique, morale, and industrial capacity by the struggle for existence in low city life, are unable to recover a sound industrial footing. It may be and probably is necessary to apply somewhat different remedies to this class than to the case of irregularities in skilled employment, but the unity of the problem must not be lost sight of. The true measure of "unemployment" in this case would be the waste of such labour-power as this class in its present condition is capable of exerting. But since this "sediment" is due in large measure to the instability of the staple trades, the damaged capacity of labour in the "sediment" must be accounted a direct testimony to the organic unity of the unemployed question.

TRANSPORT AND DISTRIBUTIVE TRADES.

IF we were in a position to make an accurate estimate for all the manufacturing and "making" trades of the country, I think we should find that the waste of labour-power far exceeded the official figures of trade union work. But in applying this or any other estimate to the working population of the whole country it must not be forgotten that England is not in the main a manufacturing nation, as is sometimes supposed. If, as a rough estimate, we set down the wage-earners of the United Kingdom at 13,000,000, we should not be justified in placing more than about 4,000,000, or 30 per cent of

THE PROBLEM OF THE UNEMPLOYED.

them, as engaged in manufactures. The processes of transport by rail and road, wholesale and retail distribution, are constantly engaging an increased portion of the labour of this country. The public services—State, county, or municipal—and the semi-public services connected with the supply of water, gas, &c., are continually absorbing an increased proportion. In most of these services the employment is far more steady than in the manufactures, and if taken into due account would bring down the average of “unemployment” for the aggregate of wage-earners. No doubt in certain departments of road traffic—*e.g.*, among carmen, stablemen, and cab drivers—the irregularity of work is very great, but still on the whole the trades engaged in “the conveyance of men, goods, and messages” would yield less unemployment than the manufactures. In “distribution” the growing competition in the two chief departments, clerks and shopmen, is growing more intense, and many are out of work at any given time. But from the social standpoint the chief waste in distributive trade consists more in the wasteful multiplication of distributors than in actual unemployment. Summing up the mass of evidence and legitimate conjecture bearing upon the question of quantity of unemployment, I am disposed to conclude that if under-employment were taken into full account, as it ought, the actual waste of labour-power is far greater than is suggested by the figures published by the Board of Trade.

INDIVIDUAL DEFECTS AS CAUSES OF UNEMPLOYMENT.

TURNING now to causes of unemployment, I do not find it necessary to discuss at length the unreflecting position of those who explain “unemployment” by causes affecting the moral and industrial character of the individual worker, such as drink, indolence, incapacity, lack of technical skill. These are, of course, potent forces in determining what individuals shall be thrown out of work when a slack time comes; they determine who shall be unemployed, but they do not determine the amount of unemployment. If every worker were sober, industrious, intelligent, and technically skilled, the amount of available labour-power which the community possesses would be greatly enhanced, but there is no reason to suppose that an increased quantity of labour-power would materially improve the regularity or even increase the volume of trade and employment. Unemployment, if it is general, means that the quantity of labour-power in all departments is excessive; it is therefore impossible to admit that improvements of personal efficiency, which operated by increasing the quantity of labour-power, would in themselves mitigate the malady of unemployment. If A and B and C, who are now out of employment because they are lazy or unreliable, were cured of their personal defects they might get work, but they would get it by

THE PROBLEM OF THE UNEMPLOYED.

pushing out D, E, and F, who now possess it. There is nothing to show that this raising of personal character would of itself cause an increased demand for labour, and therefore an increased employment.

CLIMATE AND SEASON NOT CHIEF FACTORS.

THE table of "unemployed" percentages on page 355, though it cannot be taken as a faithful index of general "unemployment," throws useful light upon the causes of the malady. The first lesson it teaches is that the elements of "leakage" which belong to certain trades, weathers, fashions, season, and minor changes of industrial method, cannot be held accountable for any large proportion of "unemployment." Take, for instance, the influence of winter upon many outdoor and some indoor occupations. This is operative every winter, and yet in the January of 1890 only 1·4 per cent of the skilled trade-unionists were out of work, as compared with 10·3 per cent for January, 1887, and 10·0 per cent for January, 1893. The difference between 1·4 and 10·3 must therefore be due to other than climatic or season causes. At certain periods large sudden displacements have undoubtedly been due to the substitution of machinery for hand-labour, and great political events, such as the American Civil War. But fluctuations of employment in recent years cannot be thus accounted for. It is of course true that displacements are constantly taking place, due to detailed changes of industrial method and "labour-saving" machinery, or the decline of demand for certain kinds of English goods. But while these are of importance in their bearing on individual trades, they are so extremely numerous and varied in their application that there is no reason to suppose that their combined effort is much greater one year than another.

TRADE DEPRESSION THE LEADING FACTOR.

TAKING a number of years into our survey, we are driven irresistibly to the conclusion that the great mass of the "unemployment" is attributable to the great tidal movements of trade, and not to the chance accumulation of a number of minor causes traceable in the separate trades. Detailed inquiries into "unemployment," undertaken by Parliamentary Committees or by bodies of commercial men, find out that the "depression" in each trade is directly caused by a number of special circumstances, and reach the conclusion that only in the detailed manipulation of these special circumstances rests any hope of improving trade. The innumerable little practical explanations, which they find, are doubtless real, but they are not final; they are secondary not prime causes. Those who take a general view of the whole situation, studying the secondary causes with the discovery of which practical men generally rest contented,

THE PROBLEM OF THE UNEMPLOYED.

are unanimous in attributing to general trade depressions the bulk of unemployment. But a mere declaration that depression of trade is the cause of "unemployment" does not carry us far, and the narrow-sighted man is very apt to wallow back into his old fallacy, by attributing trade depression to the special causes which he sees operative in particular trades, strikes, high wages, lack of technical training, tariffs, push of foreigners, want of new markets, &c.

OVER-SUPPLY OF PRODUCING-POWER.

It is not possible to understand "unemployment" as an economic fact so long as we consider it merely as a "labour" question. The real problem of the "unemployed" is the problem of the simultaneous and general unemployment of labour, land and capital, or in other words an apparent over-supply of producing-power. It is idle for the political economist of the older school to urge that such over-supply is impossible. Its existence as an economic fact is attested by an irrefutable weight of evidence. Not only in times of extreme depression, but normally in England of recent years, the supply of labour not merely in this or that trade, but in nearly all departments of trade, is so large that regular employment is not found for all. The old economist who thought industry, and therefore employment, was limited by capital might urge that possibly there was not enough capital to give full employment to all, that population had outrun the rate of saving. But, unfortunately for this view, the phenomenon of "unemployed" capital is as distinct as that of unemployed labour. The unemployed workers are faced by factories and mills either closed or working short time, mines shut down, and good agricultural land which cannot be worked at a profit. The glut of capital is at least as evident as the glut of labour. It is not a question of misplacement or wrong application of capital and labour as between trade and trade. In depressed times there is no important avenue of trade that is not over-fed and congested with capital. At the beginning of 1895, Mr. A. J. Wilson, writing in *The Investor's Review*, proved that all the money markets of the world were glutted with loanable capital unable to find any profitable form of investment. Both the Majority and the Minority Reports of the Commission on the Depression of Trade, in 1885, admit the existence of an excess of producing-power as a vital factor in the depression. The Minority Report describes as the chief agent in depression: "Over-production, by which we understand the production of commodities (or existence of the agencies of production) in excess, not of the capacity of consumption, if their distribution were gratuitous, but of the demand for export at remunerative prices, and of the amount of income or earnings available for their purchase in the home market—that is, of profitable employment for the people.

THE PROBLEM OF THE UNEMPLOYED.

The depression under which we have so long been suffering is undoubtedly of this nature." The Majority, though rejecting the notion of "a general over-production," admit: "That, owing to the nature of the times, the demand for our commodities does not increase at the same rate as formerly; that *our capacity for production is consequently in excess of our requirements*, and could be considerably increased at short notice; that this is due partly to the competition of the large amount of capital which is being steadily accumulated in the country." A certain ambiguity in the term "over-production" has retarded the recognition of the truth. Economists have dwelt upon the absurdity of supposing that people will go on continuing to glut the markets with goods which cannot be sold and consumed, and it may well be admitted that the production of an excess of consumable goods cannot proceed very far. The excess which the Commission disclosed, and which experts like Mr. Carrol Wright and Mr. Wells find existing in the United States, is an excess of "capacity for production." From the standpoint of capital this, of course, implies that an over-production of machinery and plant of every sort has taken place, but it does not imply that the same excess is carried over into the actual production of goods, although a continuous fall of general prices does prove that some attempt is made to keep on producing a supply of goods greater than can be sold at former prices. Investigation into the condition of labour shows that this excessive capacity for production is vested simultaneously in capital and labour, or in other words that in periods of depression there is general under-employment of capital and labour. In trade after trade it is made manifest that the capacity of production is far in advance of the current or expected demand at a profitable price, and in all of them brief bursts of activity alternate with long periods of torpor, during which weaker mills, works, mines, &c., are closed or are working short time, while large numbers of workers are out of work or only half-employed.

HAS CONSUMPTION KEPT PACE WITH PRODUCING-POWER?

It is not altogether unnatural that the growth of consumption or demand for commodities should have failed to keep pace with the growth of the power of production vested in modern capital and labour. When we reflect upon the meaning of the Industrial Revolution, how it has opened up vast new tracts of land for the growth of our foods and raw materials of manufacture, how it has transformed all the processes of manufacture and transport by the introduction of power-driven machinery, how it has multiplied the direct productivity of human labour by intelligent division of labour and co-operation, we are able to realise the prodigious increase of the power of producing material wealth which a modern community

THE PROBLEM OF THE UNEMPLOYED.

possesses. When we compare this progress in the arts of production with the progress made in consumption, we have reason to believe that the latter has not been commensurate with the former. A standard of consumption is essentially conservative; it admits of progress, but the inertia which has to be overcome in the establishment of new and enlarged wants is far greater than the inertia which must be overcome in reforms of industry. That the actual standard of consumption has been considerably raised for nearly every class of the community must be at once conceded. The owners of manufacturing and trading capital and the great majority of landowners live far more expensively than at the beginning of this century; the standard of comfort in the professional and middle classes generally is far higher than it was; statistics of working-class life show that except among the very poor the standard of consumption is considerably raised, though the stability of that standard is grievously impaired by growing irregularity of work. But this rise of general consumption has not been fast enough. If modern machinery and reformed methods of production has raised the productive power of the community ten-fold its rate of consumption has increased at a lower ratio, so that a full and continuous use cannot be found for all the factors of production, and some of them are left unemployed. This is no theory, but a mere summary of generally admitted facts. The full excess of producing-power is concealed by the absorption of much of it in the wasteful multiplication of middlemen and retailers, but it is commonly admitted that the output of nearly every department of manufacture could be greatly increased, without addition to the plant, if a profitable market could be secured for the larger output.

THE ECONOMIC CAUSE OF UNDER-CONSUMPTION.

BUT granting this excess of producing-power in labour and capital, why does it exist? In other words, what is the economic cause of the failure of consumption to keep pace with power of production? There might, according to the older economics, exist for a time a quantity of unemployed or under-employed labour provided there was not enough capital to employ it, but those who held that industry was limited by capital had no possible explanation of the simultaneous unemployment of capital and labour. Taking the standpoint of a single business, it may readily seem as if the quantity of employment given in that business was dependent upon the quantity of capital it contained. Arguing from the single business to the trade, and from the single trade to industry as a whole, it might thus seem plausible to hold that the quantity of capital possessed by a community determined the quantity of employment; and in the sense that it forms an upper limit to employment, this view is correct. Aggregate employment could not increase faster

THE PROBLEM OF THE UNEMPLOYED.

than the necessary growth of capital. But the fallacy consists in failing to see that the employment alike of capital and labour is directly determined by the rate of consumption; raise that rate and you necessarily employ more labour and capital, lower that rate you necessarily reduce the employment. Most modern political economists have dropped what was called the wage-fund theory, but many of them have still retained an economic dogma which is nothing but an implication of that theory, to the effect that "a demand for commodities is not a demand for labour." Now this dogma stands on a basis of falsehood. The demand for commodities, or in other words the rate of consumption, is ultimately the only demand for labour and for capital. For a time the demand for plant and machinery may legitimately take the place of demand for consumables, but only on condition that the future increase of consumption shall be large enough to give use to this increased plant and machinery. In the long run consumption determines, not merely the demand for labour and capital engaged directly in producing commodities, but the amount usefully engaged in producing forms of capital. If, then, we find quantities of capital and labour lying unutilised or "unemployed," it can only be due to the fact that for some reason or other consumption lags behind. "But," it is urged, "how can consumption lag behind if there is labour and capital, production can always take place, and someone always owns whatever is produced; moreover, since human wants are insatiable, whatever is produced will be consumed." There is only one slip in this line of reasoning, but it is a fatal one. In order to prove that whatever is produced will be consumed it is needful to assume that the power to consume and the desire to consume are vested in the same persons. Now this assumption is invalid. Those who draw profit, interest, and rents from modern industry are thereby invested with *the power* to consume large masses of cotton and other textile goods, coals, hardware, pottery, &c., but they desire to use only a small proportion of this power; some portion of this power they wish to transfer to other classes of goods, but a great deal of the power to consume they do not wish to use at all. They wish to postpone indefinitely a large share of the power to consume. Other people who have not a shirt to their back, who are shivering for lack of coal, starving for food, have the desire to consume, but they have not the power.

SEVERANCE OF POWER AND DESIRE TO CONSUME.

THE under-consumption which we perceive as a historical fact is due to an artificial severance of desire to consume and power to consume. J. S. Mill and the holders of the wage-fund theory thought that those who did not wish to make a present use of their

THE PROBLEM OF THE UNEMPLOYED.

power to consume handed it over to be consumed as wages by those who had the desire to consume.* But he showed no reason why they should do this, nor is it in fact what they do. A little reflection will serve to show that the "savings" made by those who have larger incomes than they can use in the satisfaction of legitimate wants are represented not by any increased consumption of the workers, but by an increased quantity of machinery and plant and other forms of capital which are the tangible material forms of such "savings" as find a genuine investment. This increased quantity of capital cannot be worked so as to afford increased employment to labour except on the assumption that there is an increased demand for the goods it can produce, *i.e.*, unless other persons in the community are actuated by a policy which is the reverse of "saving," and are willing to make an increased use of their power to consume. This argument is in no sense designed to cast a reflection upon "saving;" it merely lays down the self-evident truth that the quantity of valid as opposed to bogus "saving" which a community can do is limited by the extent to which it is willing to increase its future consumption.

OVER-CAPITALISATION.

WHEREVER we find a quantity of capital and labour which is "unemployed," we have proof that an attempt has been made in the community to push "saving" and the creation of capital beyond this limit. Thus we reach the conclusion that, from the standpoint of capital, under-consumption is the reverse side of over-saving. There is even some ambiguity in the term over-saving. What is over-saved is not real saving; it is the mere creation of forms of capital which are not wanted and which can only be employed on the condition that they throw out of employment other forms. If 300 mills are sufficient to supply all the goods which can be sold at a profitable price in a trade, the erection of 100 new mills will not only perform no useful social service but will not add to the total value of the capital in the trade. The 400 mills would be worth no more than the 300 in any proper business valuation. This view of over-saving, of course, assigns no limit to the proportion of his income which any individual can save, but if all the individuals in a community cut down this expenditure to a minimum and tried to save the rest of their income, it will easily be understood that the diminished consumption would also reduce the quantity of valid investments, and that the policy is consequently a suicidal one. To some extent this is what has been actually happening.

* *Mill*.—"Political Economy," vol. 1., chap. v., sec. 6.

THE PROBLEM OF THE UNEMPLOYED.

ACCUMULATION OF UNEARNED ELEMENTS OF INCOME.

THE modern distribution of economic power leaves the richer classes in the possession of large elements of unearned income. In many cases, after the satisfaction of all wholesome and many unwholesome wants, there remains a considerable surplus, which accumulates as a fund for investment. The luxury and extravagance of many members of the plutocracy conceals the fact, but there can be no reasonable doubt that the great mass of modern saving is done by the rich, whose surplus incomes by mere process of accumulation attain immense proportions. "I can do nothing with my income," said Mr. J. J. Astor, "but buy more land, build more houses, and lend money on mortgage." This is more or less the normal condition of the commercial millionaire. Their personal expenditure, however profuse, leaves an enormous surplus to accumulate for investment. Turning from these leviathans to the merely wealthy, there is reason to believe that most of these live well within their income. Add to this the great and natural incentive to saving imparted to all classes by the growing insecurity of all modern means of livelihood, you perceive an operation of economic forces which impels individuals in their self-interest or for their self-protection to endeavour to establish more forms of capital than are required to supply current consumption. A thorough grasp of the principle that industry is limited by consumption, and that a continual steady rise of national consumption keeping pace with the increase of productive power is essential in order to give full and legitimate employment to capital and labour, is the natural intellectual heritage of co-operators. Their theory and practice alike are based upon a recognition of the fact that the consumer by his exercise of demand for commodities determines alike the quantity, the stability, and the quality of production.

A TEST FOR PROPOSED REMEDIES.

IF then under-consumption, chiefly due to the excessive saving of surplus elements of unearned incomes, is the direct cause of unemployment, no remedy will be effective which does not help to raise the general standard of consumption. This analysis provides us with a test which must be applied to all proposals which claim to cure or to alleviate the malady. It is quite beyond the scope of this treatment to examine in detail even the leading schemes of social reformers, but a few of them may be briefly presented to see how far they satisfy the test.

These schemes may be generally classified under two heads according as they are designed to relieve—

- (a) The chronic glut of low-skilled labour in the towns.
- (b) Temporary unemployment due to season or trade fluctuations.

THE PROBLEM OF THE UNEMPLOYED.

The distinction here indicated is not simply that between skilled and unskilled labour, for season and trade causes are directly responsible for increasing the glut of low-skilled labour and making casual employment still more precarious.

Proposals for the establishment of labour colonies or farm colonies have commonly a double purpose, to drain off the surplus low-skilled labour of the towns and to train and engage it in the production of wealth under more wholesome conditions. In Belgium and Germany some of these colonies have the character of semi-penal settlements, and are designed to deal with the casual pauper and "tramp" elements of the population. In so far as these classes are constantly fed by the offscourings of the low-skilled labour market, all attempts to deal with them touch the subject of "the unemployed," but rather as palliatives applied to special symptoms of the disease than direct remedies of the disease itself. It is no doubt desirable that society should be relieved as far as possible from the contamination of a tramp population, and in so far as organisation and training can strengthen the industrial and moral character of those industrial weaklings there is a certain gain. But public work given upon penal terms to these people cannot be regarded as a direct or important contribution to the solution of the unemployed problem, so long as nothing is done to obviate those defects of low-skilled employment which produce the pauper and the tramp. It is only ignorance which supposes that "unemployment" can be substantially affected by methods of poor-law reform.

LABOUR COLONIES.

MORE valuable are those experiments in labour colonies which seek to enlist volunteers from the ranks of low-skilled labour when it is displaced from agricultural employment or is already established in the towns. The Salvation Army colony at Hadleigh, and one or two smaller experiments in the way of training farms, succeed by means of private subsidies in providing employment and a maintenance for a certain number of men who would otherwise be "unemployed," with the design that, when sufficient training has enabled them to be self-supporting, they may emigrate, and so permanently relieve the English labour market. The Starthwaite colony aims at a more permanent form of co-operative settlement, animated by the idea that groups of labourers who would otherwise be unemployed may be able, with some assistance of capital, to so organise and apply their labour as to make communities which shall be self-supporting, or nearly so.

Now, although it is unlikely these colonies can be made wholly self-supporting, since the average industrial calibre of the "unemployed" is low, it is evident that, if private or public munificence

THE PROBLEM OF THE UNEMPLOYED.

will supply the necessary capital for founding the colony and meeting current deficits, the outside labour market might be drained of a quantity of its over-supply. Properly organised, these colonies will satisfy our economic test by raising the standard of consumption of a class in the community without lowering the standard of another class. It is no economic objection whatever to these schemes that they cannot be made entirely self-supporting. On the contrary, the subsidies required to sustain the increased consumption of this class, drawn by charity or taxation from wealthier classes, apply in demand for commodities certain elements of income which would otherwise have been left to accumulate as socially wasteful capital. The proposal which politicians of both great parties—such as Mr. Mather and Sir John Gorst—seem disposed to press, that labour colonies subsidised by public money to supply training and wage-work to the unemployed should be established, is an economically sound palliative, provided one condition be strictly observed.

DANGER OF COMPETING IN OUTSIDE MARKETS.

No produce of this subsidised labour must be placed upon the open market so as to compete with the produce of outside English labour. This condition, though admitted in theory, is commonly ignored in practice by labour colonies. Since it is not possible for small colonies to be fully self-sufficing in the sense that they produce all they consume, it is necessary that they should purchase in the open market what they are unable to produce. To meet this expense they are disposed to confine a large proportion of their energy to producing articles most suitable to their soil and labour, and to sell these articles in the neighbouring markets. The result is that they help to congest outside markets, lower prices, and the weakest among the outside producers are unable to make profits and pay wages. If Salvation Army matches or Starnthwaite vegetables are placed upon the open markets of the neighbourhood they cannot fail to have the effect of lowering prices and of causing the "unemployment" of the least efficient outside producers. This argument is not refuted by showing that the colony does not deliberately underbid outsiders; it assists to increase supply, and any increase of supply without a corresponding growth of demand necessarily brings down prices. In a competition between "subsidised" and "free" labour the former has an economic advantage which must be detrimental to the latter. If these "colonies" could produce commodities which are not produced in the outside English market, but are imported, this objection to placing them on the open market would not lie, although even in this case they might occasion an indirect displacement of the English labour engaged in making the goods which went out as "exports" to pay for the previously imported

THE PROBLEM OF THE UNEMPLOYED.

goods. But taking an all-round view of the matter, the increased consumption of the class of persons assisted by labour colonies, implying a corresponding increase of employment both inside and outside the colonies themselves, would be some direct contribution to the solution of the unemployed problem.

STATE-AIDED SMALL AGRICULTURAL HOLDINGS.

THE expenses, however, and the difficulties of administration make it unlikely that any large experiments in the shape of labour colonies, either for training or for continuous employment, will be permanently supported. Expenditure of public money and use of the machinery of public administration to plant labour upon small agricultural holdings, with sufficient capital to supply the market with dairy produce, eggs, fruit, vegetables, &c., which we largely import from foreign countries, is perhaps a further-sighted and a more feasible policy. The application of the principles of co-operation to agriculture has been hitherto both slight and slow, the conditions of land tenancy as well as the defects of rural education having furnished insuperable obstacles. If, however, public effort would enable the establishment of groups of selected tenants with full security for the property and free cultivation of their holdings, and with sufficient capital loaned out of public funds to enable them to use their land properly, aided by some co-operation in the use of machinery and storehouses, in credit, and in marketing, it seems likely that a greatly increased employment could be maintained upon English land. By checking the flow of rural labour into the towns, other remedies directly applicable to town labour would be rendered more effective.

It must of course be kept in mind that all these schemes, in so far as they are directed to displacing agricultural or other foreign imports by English produce, are purely national remedies. If by improved methods of dairy-farming we can keep out of England Danish and Brittany butter, we increase employment in England by diminishing employment in Denmark and Brittany, and the problem of unemployment will have simply shifted its locale, unless the people in Denmark and Brittany will raise their standard of consumption to the extent of consuming the supply of butter themselves.

One final economic point must be clearly kept in mind. In regarding the influence of schemes for agricultural revival upon employment, it is of urgent importance that the chief gain of this revival shall go in wages, and not in profits and rents to the land-owning and wealthy capitalist classes. For while the former will be "consumed" in raising the standard of comfort for agricultural workers, the latter will in large measure be "saved" and invested so as to increase the excess of producing-power in forms of capital, and to maintain and aggravate the general instability of trade.

THE PROBLEM OF THE UNEMPLOYED.

Schemes for increased production, even while they seem to employ labour and capital, will in large measure defeat their end unless an increased proportion of the consuming-power which they cause passes to those who will use it in demand for commodities.

PALLIATIVES FOR SEASONAL UNEMPLOYMENT.

IT is not possible here to deal with the schemes for relief of temporary unemployment due to "season" or "trade fluctuations." It is often suggested that if "season" workers, such as house-painters, had a second or alternative trade they would be less out of work. But the suggestion is not a very thoughtful one, for what trade is there which is not adequately supplied or over-supplied with efficient labour? It is no use planning new kinds of work unless there is a growing demand which shall take off such work. A mere increase of production has, we see, no actual power to force a sufficient increase of consumption to give profitable employment. Though the intelligence and goodwill of private employers may do something to distribute employment evenly over the year and to throw extra work of repair, &c., on to times when general trade is slack, it is clear that not very much can be effected by this means. Neither can public bodies, so far as they act on ordinary business principles, throw any large amount of employment on to periods when great numbers of men are out of work. If they do seek to deal effectively with the local mass of unemployment, it will be by providing work which either would not otherwise have been done at all, or else would have been done at a different time and by a different class of men. If drains have to be cleaned or repaired, if a road has to be made or indoor repairs executed, it is reasonable and business-like to do such work when plenty of suitable labour is available, and such a public body acting in its own direct interest should select such times and such classes of labour. Since public bodies are not always business-like, it is legitimate for the Local Government Board to remind them of the duty of executing their business on truly economical principles. But if it is meant that public bodies should "make" work or should give it at times other than the most convenient, or to kinds of workers who are not fully competent, it is evident that what is done should be regarded as relief works and not classed with ordinary public work.

USE AND ABUSE OF RELIEF WORKS.

THREE tolerably obvious rules should guide the organisation of such relief works:—(1) The work done must not compete with the product of outside labour; (2) wages should be somewhat lower than the wages paid for similar work in the outside market; (3) the work should, as far as possible, be adapted to the circumstances and

THE PROBLEM OF THE UNEMPLOYED.

capacity of the individuals relieved, *i.e.*, a writing clerk or a working jeweller should not be set to do navvy's work. The first two rules are necessary to provide against the growth of a surreptitious and uneconomical form of socialism. If municipal bakeries were started, not for the sake of supplying cheaper and better bread to the consumer, but of giving employment to bakers out of work, one of two results would be likely to follow. If the municipal bakery paid the same or higher wages than outside bakeries, it would gradually induce bakers to throw up their work in order to qualify by "unemployment" for work in the municipal bakery, which would then be compelled to enlarge its operations until it had absorbed the trade. If, on the other hand, the municipal wages were much lower it is conceivable that the municipal loaf might undersell the outside loaf. In any case, the increase of the aggregate supply of bread by the addition of the municipal loaves would tend to bring down the price of bread and to maintain and even increase that congestion of supply which caused the "unemployment" of the bakers for whose benefit the municipal bakery was first started. The establishment of the municipal bakery could not reduce and might easily increase the unemployment of bakers; it could only absorb the unemployed by absorbing the entire trade. Some socialists acknowledge this, and base their advocacy of municipal workshops on the supposition that it must lead to the organisation of the baking and other industries by the municipality. More thoughtful socialists, however, commonly repudiate this line of advance, because they perceive that to try socialistic experiments with workers who are selected for incapacity in trades which are lowly organised would ensure prompt and signal failure. If municipalities decide that it is to the public interest to meet unforeseen depressions of employment by offering public wage-work upon conditions less obnoxious and degrading than poor-law relief, they should do so with a clear understanding that they are departing from ordinary rules of business, and should confine their experiments within the narrowest limits consistent with the provision of effective relief. If the expansion of municipal or other public enterprise in business is desirable it should be determined by considerations affecting the structure of the industry and the interests of the consumer, not by the immediate pressure of demand for employment. To concede the demand that unemployed workers should be provided with work in their own several trades, paid at standard wages, would mean an attempt at social revolution by pushing in the thick end of the wedge. Since these periods of unemployment are quite beyond the control of individual workers who are in most cases unable either to foresee or to make any adequate provision against them, it is most desirable that the organised community should do all it can to

THE PROBLEM OF THE UNEMPLOYED.

relieve by means of public work and wages that unemployment which injures the life and damages the industrial character of large numbers of its members. But the employment offered by public bodies in these times of distress should be regarded as a temporary expedient and not as an organised attempt to re-construct the industrial system.

THE DOUBLE LINE OF PROGRESSIVE POLICY.

SINCE under-consumption lies at the root of the matter, it will be evident that no measures can claim to be directly remedial which do not directly aim at throwing a larger proportion of the consuming-power into the hands of those who will use it. The bulk of the mischief is due, if our analysis is correct, to the futile endeavour of the owners of "unearned" elements of income to save and invest the "surplus" for which they had no present use. Now these "unearned" incomes are only unearned in the sense that they represent no effort expended by their recipients. The rapidly rising ground rents of our towns, the high profits of many gas and water companies, of breweries, and many other large business undertakings which are screened in various ways from the full force of free competition, do not indeed represent the efforts of the owners of this land and capital. They are due partly to the organised efforts of the community in government and public improvements, partly to the free general efforts and industry of the members of society, and to the growth of social demands imparting increased value both to land and to all forms of industrial capital. Taxation is rightly based, not upon the right of the State to interfere with private property, but upon the claim of the public to take and use for public purposes those forms of value which are true public property in the sense that they are the product of social work.

PROGRESSIVE TAXATION.

THE adoption of progressive taxation of accumulated wealth through Death Duties is based entirely upon a recognition that this assertion of a public claim is both just and expedient. The same is true of a progressive income tax and other attempts to throw an increasing burden of taxation upon that portion of the income of the well-to-do which represents no work of the owner, and which in the natural order of events would go to swell the excess of accumulated forms of capital. An increase of the public income by these means, expended in the support of a fuller and more wholesome public life, might do much to give increased volume and stability to trade. Our civic and in general our public life is narrow, meagre, inefficient, and undignified, in comparison with what it might be and ought to be. A constant and rapidly-growing increase of wise public expenditure,

THE PROBLEM OF THE UNEMPLOYED.

not in the direct interests of unemployed workers, but by an expansion of public services along the converging lines of monopoly and "routine" industries, might do much to give increased employment and to mitigate the fluctuations due to the preponderance of competitive trade.

PROGRESSIVE WAGES.

THE other line of advance is the steady, organised, persistent pressure of the working classes for an increasing share of the national product. Part of the "unearned" elements of income were attributable to the economic power of monopolies to take "values" due to social effort. Another part may be said to be directly "sweated" out of the workers by a use of the superior economic power which employers often possess in making bargains with owners of labour-power. In trades where competition is not keenly operative, and where, consequently, profit and interest are above the margin necessary to induce the application of capital and business ability, effective organisation of labour may gain the surplus for "wages" without injuring trade. Where keen competition keeps interest and profit at a minimum more care must be exercised. But this condition is not always an impenetrable barrier to the demands for a "living wage." For, setting aside the consideration of the increased productivity of well-paid labour, which of itself will often justify a rise of wages, we cannot fail to recognise that a demand for higher wages tends, like a tax, to settle on unearned elements of income. If profits are low, a rise of wages tends to lower rents, and, in default of rent, by raising prices, falls upon those classes of consumers whose money incomes are not affected by a rise of prices. In different ways the co-operative and the trade union movements are potent forces for enabling the workers to obtain an increased proportion of the real income of the community, the latter by raising the money wage, the former by raising the real wage, *i.e.*, improving the purchasing power of the money wage. By an intelligent and organised use of the franchise and other political rights the workers may secure such improvement of economic and educational opportunities as will enable them to extend more widely the co-operative and trade union methods to the mass of low-skilled workers whose backwardness so seriously retards the progress of labour. A general rise of wages expended in raising the standard of working-class comfort is a sure method of improving the quantity and the steadiness of trade.

The recognition of "unemployment" as the labour aspect of a wider problem, *viz.*, the excess of producing-power over the requirements of current consumption, enables us to insist that all practical schemes for dealing with "the unemployed" shall satisfy a crucial test by showing that they will result in raising the standard of current consumption.

SANITATION, HEALTH, AND LONG LIFE.

BY HENRY PITMAN.

PART I.—SANITATION.

SANITARY science and hygiene, being based upon the laws of Nature, are sure guides to health and longevity. Breathing is the primary and most vital function of life, therefore it claims the first place in treating of sanitation. A man can live several days without food, but not many minutes without the "breath of life."

BREATHING.

ALTHOUGH breathing "comes by Nature," it requires regulating by art. The right method is to breathe through the nose, not the mouth. The "breath of life" was breathed into man's nostrils. It is natural to keep the mouth shut, but the nasal passages are always open, and cannot be closed by their own action. Breathing in the proper way purifies the air, and warms it when necessary. A man may inhale mephitic air through the nostrils for a time without harm, say in a well, but should he open his mouth to call for help, he almost instantly expires. George Catlin, who lived amongst the North-American Indians, records in his book* that by correcting his mode of breathing he saved his life when sleeping in the open air on the malarious banks of the Missouri, and he mentions that Indian mothers always press the lips of their infants together on laying them down to sleep, and after giving them the breast.

Respiration is the source and sign of life, and when it stops life ceases. The measure of a man's vitality is the strength of his lung power, as tested by the spirometer. Inspiration and expiration are involuntary and unnoticed when body and brain are quiescent; but during vigorous exercise or mental emotion the painful feeling is experienced of "getting out of breath." Respiration, which begins with entrance into this "breathing world," is most active in youth. A child of five years breathes about 26 times in a minute, an adult 14 to 18 times; rapid walking raises the respiration to 30, running to 70, and violent exercise to 100. In extreme age and pulmonary complaints the breathing becomes quicker as it gets weaker. People of short stature generally respire faster than tall persons; men take deeper and longer inspirations than women; the mode of breathing also differs, in man the diaphragm being exercised more than the upper ribs, while with women the reverse is the case, consequently

* "Shut your Mouth and Save your Life." Trübner and Co.

SANITATION, HEALTH, AND LONG LIFE.

the foolish fashion of compressing the ribs is perilous to life and maternity. During sleep the breathing is subdued, nor is it so free when seated as when erect, hence the advantage of working, reading and writing in a standing position.

Sustained breathing and profound thinking appear inseparable. Deep thought may even induce temporary suspension of the breath, which is probably one cause of its exhaustive effect upon the body. When the soul is tranquil breathing is calm, in the tempest of anger it becomes tumultuous. This reciprocal action of thought and breath shows that the poetical expression, "thoughts that breathe," has a physiological foundation. The ratio of breaths to beats of the heart is about one to four; when they become synchronous death is near. The volume of a strong man's breath determined the length of poetic lines, or the number of syllables that can be uttered in a full breath, as in octosyllabic verse, the favourite meter of Sir Walter Scott—"O Caledonia, stern and wild." Proportion between breath and vocal power is observed by the musician in constructing musical phrases. Pace in walking and running is regulated by the breath—long breathers are long steppers.

Animals respire by the lungs, where the air coming into contact with the blood is purified by the oxygen, making it a bright red (arterial); during its circulation the oxygen is absorbed by the tissues of the body, the blood becomes of a dark colour (venous), and re-enters the lungs to be again oxygenised. The millions of red corpuscles in the blood may be likened to tiny boats which take in little cargoes of oxygen in the lungs, and floating on the ever-flowing tide of the blood through the "gates and alleys of the body," discharge their life-giving cargoes, and return for fresh freights. These voyages are quick or slow according to the speed of the circulation. Air once breathed is not fit to breathe again.

A man of moderate height inhales about twenty cubic inches of air at each breath; at eighteen inspirations per minute this would amount to 518,400 cubic inches, or 300 cubic feet every twenty-four hours, and exercise enlarges the breathing capacity. For the sake of health and enjoyment of life, it is desirable to acquire in youth the habit of breathing deeply in the way Nature designed.

VENTILATION.

To prevent bad air making bad blood is the object of ventilation, which is the art of circulating pure air without draughts, and the expulsion of foul air. This art has exercised the ingenuity of scientists, whose contrivances are more or less efficient, but need adapting to the size and purpose of the building. Ventilation is either natural or artificial. Nature's perfect system of ventilation, by which the illimitable atmosphere is renovated and circulated, is

SANITATION, HEALTH, AND LONG LIFE.

by means of the sun, which produces hot and cold currents, electricity, vegetation, rain, tides, the salt seas, motion of the earth, &c.

The Indian's wigwam, with a hole in the roof for the exit of smoke, is a simple and effectual mode of ventilation, because heated air ascends; but many-chambered dwellings cannot be aired in that primitive way, and mechanism has to be employed to inject fresh air and expel exhausted air.

Pressure of the air varies with the weather and altitude; the average is about 14lbs. to the square inch, which would cause a rush of air into a room if not regulated. A flow of air 60 degrees Fahrenheit, at two miles per hour, or three feet per second, is comfortable, at 90 degrees a higher speed can be borne.

Infants and children suffer more from impure air than adults; the blood moves faster in the young, and their pulse beats quicker. The Education Act strictly enforces the ventilation of Board Schools. Expired air differs from inspired air in quality and quantity. An adult man takes in every hour about 450 grains of oxygen, and emits about 600 grains of carbonic acid, 40 or 50 grains of nitrogen, and 9,720 grains of watery vapour; therefore a constant supply of pure air laden with oxygen is necessary to maintain life. In the "Black Hole" of Calcutta, a small room with two openings, out of 146 prisoners 123 perished from poisoned breath in eight hours, and some of the survivors died of putrid fever from the same cause. Of 300 Russian prisoners confined in a cave, after the battle of Austerlitz, 260 were soon suffocated. Out of 150 passengers batted down in the steamer "Londonderry" on a stormy night, 70 died before daylight. Symptoms of foul air are heaviness, languor, loss of appetite, low spirits, desire for artificial stimulants.

Overcrowding in unventilated bedrooms doubles the rate of infant mortality. A simple and effectual ventilator can be made by placing a strip of wood, about four inches deep, an inch thick, and as wide as the window, under the bottom sash; this sends the air upwards, and there is no draught. At night there is nothing to breathe except night air, either pure or impure. Other contrivances are cone-shaped perforations in walls, near the floor and ceiling, valves, cowls and air tubes.

A man weighing 140lbs. befoils five cubic feet of air per hour in breathing, to which must be added impure emanations from the body and clothing. Six hundred times this bulk of air should be supplied by ventilation, amounting to 3,000 cubic feet per hour. The average weight of labouring men, age 25 to 30, is 140lbs.; those who work less and eat more average 154lbs. Animals contaminate more air than human beings; hence the danger of sleeping over stables.

SANITATION, HEALTH, AND LONG LIFE.

Excepting the electric light, all artificial illuminants generate impure air, which should be carried away by shafts. A three-light gasalier burns 12 feet of air per hour, and requires 21,600 cubic feet of renewed air to neutralise combustion. Papered walls, carpets, books, dust, and every kind of decomposable matter, deteriorates the air. A man living in a room 30 feet long, 10 feet broad, and 10 feet high, would use all the air in an hour; if the room were 7 feet by 7, the air would need renewing six times in an hour.

The best disinfectant is pure air. Antiseptics, which are supposed to destroy or arrest the development of disease germs, should be used with caution, some of them, such as carbolic acid, being poisonous. Heat is a powerful disinfectant. The great fire of London in 1666 checked the ravages of the Plague.

SMOKE.

THE Lord Mayor of Manchester stated at the recent Health Congress that nine-tenths of the smoke in that city proceeded from house chimneys; yet in London, with ten times as many houses, the air is not polluted by dense smoke, such as destroys vegetation in manufacturing towns, while thousands of balconies are filled with flowers, and fine trees abound in the parks and squares. The altitude of the London houses may account for some of the atmospheric advantage the metropolis has over Manchester, where the endless succession of dirty, diminutive houses and smoking chimneys, a traveller approaching London Road Station declared to be a more dismal sight than Sheffield or the Black Country. From Phillips Park there can be counted seventy factory chimneys belching black smoke. Electricity and gas, instead of coal, for cooking and creating power will lessen the smoke nuisance, which is not only unhealthy and destructive of comfort, cleanliness and vegetation, but is costly, and its prevention would be economical at any price, for cost should not count when life is at stake. Careful stoking and coal-feeders destroy or diminish black smoke. Blackstone defines a "nuisance" as "anything which worketh hurt, inconvenience, or damage." The smoke nuisance is amenable to that triple indictment; it is therefore the duty of sanitary officers to enforce the penalties of the Health Act against producers of dense smoke, stench from gas and chemical works, fat melting, bone and soap boiling, and slaughter-houses. Electricity gives light, heat and power without smoke or contamination of the air.

THE DEATH RATE.

THERE is no surer criterion of the sanitary condition of a people than the rate at which they die from year to year. The general death rate has fallen two per thousand during the last twenty years

SANITATION, HEALTH, AND LONG LIFE.

—a slight improvement compared with what might have been effected. In Manchester the death rate has been reduced from 39 to 24 per thousand; in the better parts of the city the mortality is about half the last figure; this healthier state has been induced by partial purification of the atmosphere, removal of cellar dwellings, increased water supply, prompt emptying of ashpits, streets swept daily, and erection of blocks of buildings for artisans, fitted with sanitary appliances, but lacking hoists, gardens on the roofs, and co-operative arrangements for cooking and washing.

DRAINAGE.

MILLIONS of money have been spent in draining cities and towns and the land, and millions more will have to be expended upon national drainage and water supply. Experience keeps a dear school, but experimenters will learn in no other, consequently there have been costly blunders. The general principle has been, "sewage to the land, storm water to the river." When sewage is used for fertilisation it should be disinfected to destroy the ova of entozoa. In the system of "broad irrigation" the sewage is spread over the land at intervals, the land having first been drained; this is the plan adopted at Croydon, Cheltenham, and Blackburn.

Sewers apply to public roads, drains to houses. Brick drains are objectionable; they leak and harbour rats. Glazed sanitary pipes should be used, having collars, to be filled with cement, not clay, which is liable to wash out; or patent joints, which do not need cementing. House drains should be watertight, fitted with a syphon, or disconnecting chamber, have a sufficient fall, be deep enough to drain the cellars, but should not be laid under the house. The fall should be at least one in 48. Sinks ought to be fitted with syphon taps, with provision for cleansing. Dipstone traps are often little better than cesspools. Fat liquids will soon stop scullery drains, unless provided with a grease trap, which should be often cleaned. Drains may be tested for foul air by peppermint, smoke, or water. There should be different channels for sewage and water. Sewers ought to be as straight as possible, with easy curves, no right-angles, and manholes, which should not be near a public school; and they require to be ventilated and flushed periodically. At the recent Health Exhibition in Manchester there were sixty exhibitors of appliances in sanitary science, including smoke-consumers, draughtless windows, and a model house with water pipes fixed so as to avoid freezing or bursting.

DIRT AND DEATH.

IN the Dark Ages no systematic efforts were made to prevent disease by sanitation. The Black Death in 1349 killed more than

SANITATION, HEALTH, AND LONG LIFE.

half the population, its ravages being greatest in the crowded and dirty towns; nearly 60,000 people perished in Norwich; in Bristol the living were hardly able to bury the dead. In 1665 a hundred thousand died of the Plague in London. Before the days of John Howard, jail fever was the terror of judges and juries. Prisons now are healthy to the bodies of their inmates, but not sanitary to their souls. The periodical outbreak of fever amongst pilgrims to Mecca is attributed to the use of the same water for washing and drinking. At Over Darwen, in 1874, sewage in the water supply caused 2,035 cases of typhoid fever, and 104 deaths. Epidemic diarrhœa occurred in the Old Bailey Prison, Salford, and other places from the same cause. Sheffield, in 1887, was one of the most insanitary towns in the kingdom, having twelve acres of ground covered with cesspools, causing numerous deaths from smallpox.

WATER.

THE consumption of water and soap is a criterion of individual and civic health. This has been called a "soap and water age;" the description is complimentary. Glasgow, Manchester, and Liverpool have secured abundant supplies of pure water from the lakes of Scotland, Cumberland, and Wales; Birmingham is also going to the Principality, and London will have to do the same. The daily consumption of water per head varies in different places; these are the figures of Sir J. W. Bazalgette: Calcutta, 2 gallons; Madrid, 3; Hong Kong, 5; Venice, 8; Cairo, 11; Berlin, 13; London, 31; Paris, 36; Marseilles and Rome are the highest, 158 and 160. American cities have ample supplies. Loch Katrine, with its 3,000 acres, can supply 50,000,000 gallons per day to Glasgow. The average consumption of water per head in Manchester in 1894 was 15 gallons for domestic use, and 9 gallons for manufacturing and public purposes.

The ideal house will be on a dry, healthy site, soundly built, well drained, ventilated and lighted, with a damp-proof course, windows to open top and bottom, cellars cemented, chimneys should not run one into another, there should be an extra flue for ventilation, living rooms on the sunny side, walls colour-washed, little furniture, no carpets, kitchen boiler should be made of wrought iron or copper, and have a safety valve.

PART II.—HEALTH.

SANITATION means the practical application of knowledge and science to the preservation of individual and national health—that is, keeping ourselves and the community in a sanitary condition. The word "sanitary" is derived from the Latin "sanita,"

SANITATION, HEALTH, AND LONG LIFE.

meaning soundness of body and mind, the opposite being disease and insanity. Charles Kingsley, who was one of the earliest and most earnest advocates of the science of health, called it the "blessed plans of sanitary reform."

The words "sanitary" and "sanatory" are sometimes confused; the first appertains to health, hygienic; the second means healing, as applied to medicine. "Health" means the same as "whole," soundness of body, that condition of the functions which conduces to strength and long life; it also implies physiologically the power to produce healthy offspring. In the "General Confession"—"there is no health in us"—the word signifies moral health; again in Proverbs, "The tongue of the wise is health." Health or healing is the main theme of the Sacred Writings, and a leading topic in secular literature. The books about health and the treatment of disease would fill a library. They are summarised in two words, Temperance and Exercise. Robert Burns' warmest wish for Scotia's hardy sons was that they might "be blest with health and peace and sweet content," for he knew by sad experience that there cannot be peace and content without health.

Lord Verulum said, "That health of body is best which is ablest to endure all alterations and extremities." Emerson considered that "health is the first wealth." Herder declares health to be "the foundation of all physical happiness." Sir Philip Sidney said, "The ingredients of health and long life are temperance, pure air, easy labour, little care." Dr. Abernethy prescribed for all ailments as being caused by abuse of the stomach or the want of exercise. To a stout patient he said, "Eat less, and remember that what you leave upon your plate does you more good than what you eat." He gave a nervous young lady the odd shilling of his guinea fee, saying, "Buy a skipping rope, that is what you want." Another saying of this honest doctor was, "If you would be healthy, live on sixpence a day, and earn it." The poet Crashaw* said, "That which makes no need of physic, that's physic indeed." Socrates said, "I will not take anything that will tempt me to eat or drink when I am not hungry or thirsty." Dr. Johnson wrote, "Health is so necessary to the duties of life that the crime of squandering it is equal to the folly." Cicero was of opinion that "to live long it is necessary to live slowly."

The conditions of health are (1) a sound constitution, (2) pure air, (3) food in moderation with thorough mastication, (4) cleanliness, (5) exercise, (6) cheerfulness, (7) chastity.

* He died in 1650. His poems were deemed worthy of imitation by Milton and Pope.

SANITATION, HEALTH, AND LONG LIFE.

The signs of health are a cool head, clear eye, clean tongue, daily motion, ruddy complexion, sweet breath, moist lip, merry face, gentle breath, dreamless sleep, good appetite, elastic step, upright bearing, desire for work and strength to do it.

FOOD.

In the golden age of innocence, mankind lived upon the fruits of the earth. We are told that man's appointed food (Genesis, 1, 29) was of two kinds, "every herb bearing seed," meaning the cereals, which are largely hydro-carbons—that is, heat producers; and every tree yielding "fruit," the nitrogenous, or tissue makers. As mankind dispersed and adapted themselves to their surroundings, their diet varied with occupation, climate, soil, and location. Nature produces endless varieties of food, suited to all tastes and constitutions, and variety is "the very spice of life," one kind adding relish to another, but many sorts should not be eaten at one meal. Animals eat when hungry; epicures eat because it is dinner time. An overfed alderman said, "I'd give a guinea to feel hungry."

If it be true that "disease enters by the mouth," those who desire health should set a watch over their mouth, and keep the door of their lips, allowing no meat or drink to enter that will derange the blood, and eat only what is necessary.

"Temperance is better than physic." "Diet cures more than the doctor." "Hunger is the best sauce;" a delicious and healthy sauce to farinaceous food is the juice of an orange, or grapes, with olive oil, sweetened, if desired. Thorough mastication of fruit and farinaceous food makes it more sustaining and nourishing, and less quantity suffices; the carnivora do not chew their food. Mr. Gladstone (85) is said to make thirty bites at every mouthful; Sir Eizak Pitman (82) about forty. Digestion should begin in the mouth. "Well begun is half done." Better fast than eat in haste. Every mouthful of unnecessary food is the seed of disease. Sidney Smith confessed that he had eaten forty truck loads of useless food, which would have fed many hungry people. Excess of food that cannot be absorbed may become putrid in the intestines and cause constipation or diarrhœa. A pause after each mouthful prevents flatulence.

The Rev. W. P. Alcott, son of Dr. Alcott, with whose "potato gospel" Thomas Carlyle made merry, writes, "My parish work requires of me long rides in all weather, but I rarely have the slightest cold, and a little starvation quickly checks it. Epidemic colds and influenza several times a year sweep around my family, while none of us ever suffer in the slightest. Pure air, a plain fruit diet, cleanliness in all respects, love of God and man, industry—such habits as these, in my experience, are the secrets of health and happiness."

SANITATION, HEALTH, AND LONG LIFE.

John Milton had music after meals, "to assist and cherish Nature in her first concoction." Sir Henry Thompson says, "It is a vulgar error to regard flesh in any form as a necessity of life;" and Sir B. W. Richardson is of opinion that "man is adapted to a diet of grain and fruit." Dr. Andrew Wilson says, "Subjects of liver trouble should eat sparingly of all kinds of flesh meat. If bilious, I should say, eat no flesh or eggs."

The best drink is water. Those who cannot take it do not need drink. Man, by Nature, is not a drinking animal, and fruit feeders are never thirsty. Lemons, limes, and many other fruits make pleasant and wholesome drinks. The less tea and coffee the better.

CLOTHING.

THE object of clothing, which was probably first assumed for ornament, is to retain the heat of the body, for clothes do not generate heat. Clothing should be light in weight, porous, and not compress any part of the body. One thick garment is not so warm as two thin ones of equal weight. White is warmest in winter and coolest in summer. Reform is needed in men's dress, but "the apparel oft proclaims the man," and no one likes to appear singular. The stiff hat is mainly the cause of baldness; women are not bald, nor men below the rim of the hat. A cap of cloth or velvet is a comfortable covering for the head, it is also cheap, does not cause headache, or blow off in a gale. Muffling the neck predisposes to throat ailments. High collars first covered sore necks and trousers bow legs and spindle shanks. The vest should cover the chest and be equally warm at the back. Corns are due to pride and pressure; ease is got by cutting a hole in the boot over the corn, covering with a raised patch. Clothing should conform to the seasons. "Don't change a clout till May be out." Spring is a trying time to the delicate, according to the adage, "March will search, and April try, and May will tell if to live or die."

SLEEP.

SANCHO PANZA implored "blessings upon the man who invented sleep." Shakspeare bestowed on "balmy sleep" his choicest epithets. This "sweet restorer," sound sleep, is one of the signs of health. Early hours conduce to sleep. The first step to early rising is to retire early. "Sweet is the breath of morn." Lord Rosebery found insomnia yield to a draught of hot water. Children should have plenty of sleep because it is "chief nourisher in life's feast," night being the time of growth; blood is made in the day and during sound sleep it is solidified. The Duke of Wellington, who could sleep on the eve of battle, reposed on a camp bed at Apsley

SANITATION, HEALTH, AND LONG LIFE.

House, and when a visitor said there was hardly room to turn in it, the Duke replied, "When a man begins to turn in bed, it is time to turn out." Lord Palmerston and Edward Freeman could sleep at any time. Richard Cobden said he fell asleep very soon after laying his head on the pillow. John Bright confessed that composing his speeches kept him awake. The habit of "going to sleep" can be acquired. Monotony induces somnolence.

EXERCISE.

A CELEBRATED statesman (not Mr. Gladstone) said he never took exercise; he had not time. People who won't find time for exercise to keep well, will be obliged to find time to be ill. Bodily exercise rests the mind and renews the tissues. Strange that men who are prodigal of time to get wealth, grudge an hour a day to get health. Exercise in the open air makes the skin all alive with its myriads of blood vessels and sweat glands, expands the lungs, increases the amount of oxygen breathed in and carbonic acid breathed out, strengthens the heart, ærates the blood, keeps the brain active and the spirit inspired. Exercise in walking, running, swimming, rowing, or outdoor games should be as regular as the action of the heart and lungs, and may be safely increased in force and duration with the strengthening of those organs. Horses are trained for the race by undergoing more and more exercise every day until the requisite endurance is attained. Children and birds delight in continual activity, which is the source and sign of vitality; and those who wish to be always young and beloved must take daily exercise throughout life. "Youth, I do adore thee; Age, I do abhor thee." The world loves strong, healthy men and women; their magnetism is attractive and invigorating. "Endure hardness." Coddling causes dispepsia, nervousness, irritability. Pugilists become insensible to blows; athletes are good tempered.

THE BATH.

ARCHIMEDES was in his bath when he exclaimed "Eureka!"—I have found it. Soap and water have solved many a problem by purifying the blood and invigorating the brain. Cleanliness is said to be "next to godliness;" uncleanness is ungodliness. Dirt and doubt keep company. A thorough rubbing and scrubbing in the morning sets one up for the day. A bowl of water, warm in winter, will suffice; using the loofah, sponging with cold water, and rubbing with a rough towel, brings the blood to the surface to be ærated. A plunge bath suits the robust; warm, vapour, and hot air baths are capital cleansers; the shower bath is a fine tonic. A wise father gave this parting advice to his son, "Keep a clean skin and a clear conscience."

SANITATION, HEALTH, AND LONG LIFE.

HAIR AND BEARD.

A FINE head of hair and flowing beard indicate health and add to beauty. The revived custom of wearing the beard is a sign of increased vigour and manliness. Shaving is unhealthy, irritating, and time wasting. Hair on the upper lip and about the throat protects from dust and colds. Diogenes taunted his smooth-faced friends by asking, "Are you ashamed of your manhood?" Fifty years ago the bearded civilian was a marked and derided man, and bankers' clerks were told to "shave or leave."

PART III.—LONG LIFE.

Follow Nature in her frugal plan,
And you will lengthen out life's little span.

LONGEVITY depends more upon temperance, exercise, and sanitation than upon climate, occupation, or constitution.

Centenarians have generally been poor, hard-working people, yet instances have occurred in the higher grades of society. Persons of moderate size are usually the strongest, and live longest, yet giants and dwarfs have attained to great age.

CENTENARIANS.

MARY JONES, who died at Wem, in Shropshire, in 1773, aged 100, was only 2 feet 8 inches high, deformed and lame. James Macdonald, who died near Cork in 1760, aged 117, was 7 feet 2 inches. In the chapel of Great Wollaston, Salop, there is a brass plate inscribed, "Old Parr died at 152 years 9 months. He lived through the reigns of ten kings and queens of England." Parr married at 120, and had children; a son lived to 113, and a grandson to 124. A contemporary, James Sands, of Harborough, Stafford, lived 140 years, and his wife 120. In Ware churchyard there is a tomb to the memory of W. Mead, M.D., who died in 1652, aged 148 years. "The Gentleman's Magazine" for 1818 mentions ten other cases of centenarians. Mr. C. Walford, in his *Insurance Guide*, gives a list of 220 persons who lived 120 years and upwards. A recent census of French centenarians contains the names of 147 women and 66 men, nearly all in humble life. A woman in the Haute Garonne lived 150 years. Henry Jenkins, who died in 1670, is said to have lived to the age of 169. The most remarkable instance of longevity in British history was Thomas Cam, who died in 1588, and, according to the parish register of St. Leonard's, Shoreditch, lived to the age of 207. Mr. Whitehurst gives a list of 32 centenarians; two of them were Yorkshiremen—Robert Montgomery, 126,

SANITATION, HEALTH, AND LONG LIFE.

and Francis Consist, 150. The parish register of Church Minshull, Chester, contains an entry of the burial of Thomas Damme, aged "seven score and fourteen years." Mary, wife of James Yates, of Idsall, married her third husband at 92, was hearty at 120, and lived to 127.

Eating slowly, the first essential to health and long life, is to many persons one of the most difficult of human attainments. "Bolting" food is "as easy as lying," and as harmful, one ruins the stomach, the other the soul. Three meals a day are enough; people who eat only twice a day claim to be better for their abstinence. Those who break their fast overnight cannot expect to enjoy their breakfast in the morning.

In his "History of Ralahine," E. T. Craig records that they "had not a single case of sickness or death, although the people around were carried off in scores by fever and cholera. The perfect health of the members was the result of sanitation, nourishing (non-flesh) diet, cleanliness, and cheerfulness."

As doctors live by disease their number affords a gauge of the hygienic habits of the people. In England, there is one doctor to 1,707 inhabitants; the United States, one in 636; France, one in 2,766; Germany, one in 3,038; Russia, one in 8,551; so that John Bull is midway, in purgatory, and Jonathan at the bottom.

The tendency to longevity seems to be hereditary; it runs in families. Why should there be any reasonable limit to life, seeing that the human machine is self-repairing? Short life is a loss to the community. Animals live about five times as long as they take to come to maturity; accordingly, human beings should live at least a hundred years. "His days shall be a hundred and twenty years."—Genesis, vi., 3. There is a satisfaction in old age which cannot be felt by those who do not live out half their days. "With long life will I satisfy him." Age brings experience, and should bring wisdom. Old people generally find that their last days have been their best. Inestimable good has accrued to our country from the long life of Queen Victoria.

Mr. Mallock asked, "Is Life Worth Living?" That depends upon the Liver. Those people value and enjoy life most who make the best use of it, and who have healthy livers. The liver is the largest organ connected with the digestive apparatus; its purpose is not merely to make bile. A diseased liver poisons the blood. A bilious attack is incipient poisoning, with its symptoms—headache, nausea, vomiting, collapse. The liver has played an important part in human affairs; the etymological meaning of "melancholy" is black bile. A hygienic life makes a healthy liver. It is unwise to devote twelve hours a day to acquire wealth, and guard one hour to get health.

AN ITALIAN CENTENARIAN.

LEWIS CORNARO, a noble Venetian who lived in the fifteenth century, was a feeble dispeptic until his fortieth year, when by resolute temperance he regained health and lived to the age of a hundred. At 83 he wrote a book on "Sure and Certain Methods of Attaining a Long and Healthy Life." He lived to see four editions of his book, which has been translated into other languages; one of the English editions was entitled, "How to Live a Hundred Years, by One who Did it." Cornaro, finding that custom and habit had superseded reason, determined to return to the simplicity of nature, and eat no more than was necessary. His stomach was disordered and he suffered from gout, colic, fever, and perpetual thirst. "From these disorders," he wrote, "the best delivery I had to hope was death." By eating sparingly of simple food, chiefly fruit and polenta, in a few days he "felt like a new man," and in a year he was free from all his complaints. He says truly—"What pleases the palate is not always good for the stomach. I took only the food that I found agreed with me, by being easily digested. I always rose from table with a disposition to eat and drink more. People who care for their health must check their appetite. I enjoy the best of health. I avoid extremes of heat and cold, excessive fatigue, interruption of rest and bad air. I did not find it so easy to avoid hatred and other violent passions, but I have discovered that these passions have no great influence over bodies governed by the rule of little food and light food. At the age of 70 I was upset in a carriage, received a dislocated leg and arm, and my body was terribly battered. The physicians said I should die in three days. They wanted to bleed and purge me; but, knowing that my blood was in a good condition, I refused to be either purged or bled. I just caused my arm and leg to be set, and had myself rubbed with sweet oil. Thus, without using any other kind of remedy, I recovered and did not feel any bad effects from the accident, which appeared miraculous in the eyes of the physicians. He who lives soberly will suffer little in mind or body. Four years ago, to please my friends, I increased the quantity of my food from 12 ozs. to 14 ozs. daily. In a few days, instead of being cheerful and brisk, I became peevish and melancholy, had a violent pain in my side, followed by fever, which lasted 35 days. Everybody thought I was a dead man, but, God be praised, I recovered. We must find out what things suit us. It is impossible for any man to be a perfect physician to another. A man cannot have a better guide than himself, nor any physic better than a regular life. The sages of old lived sparingly and lived long. It is objected that this strict life in health leaves no recourse of diet in sickness. I reply that the abstemious will

SANITATION, HEALTH, AND LONG LIFE.

seldom be sick, and but for a short time; abstemiousness destroys every seed of sickness." He writes in raptures at his happiness and good spirits. "I mount my horse without assistance; I ascend a flight of stairs and climb a hill with the greatest ease. Then how gay and good humoured I am; my mind ever undisturbed; joy and peace have fixed their abode in my breast." He mentions the recreations of his old age and his desire to be of service to others, adding, "My taste is perfect, and I relish better my simple fare than formerly the most delicious dishes. I can sleep soundly anywhere, and my dreams are delightful. I have another comfort in eleven grandchildren, all the offspring of one father and mother, and all blest with good health. I have a better voice for singing now than at any period of my life. It is a mistake to suppose that abundance of food is necessary in age to keep up the animal heat. Large quantities of food cannot be digested by old stomachs. All the food in the world will not increase the natural heat. Let none be afraid of shortening their days by eating too little. At the age of 91 I am more sound and hearty than ever. My senses are perfect, also my voice, sight, and teeth. As this sober manner of living brings so much happiness, I beseech every man to embrace this valuable treasure of a long and healthful life. Divine sobriety is agreeable to God, the friend of Nature, the daughter of Reason, sister of all the virtues; from her spring life, health, cheerfulness, industry, learning, and everything worthy of noble and generous minds."

CONCLUSION.

THERE is no single specific for health and long life, which depend upon the easy working of all parts of the human machine. If we take care of our habits, our health will take care of itself. The rules of health have to be observed, with avoidance of passion, excitement, and self indulgence. Our bodies are constantly changing; we are dying every instant, and are kept alive by replacing dead matter with living tissue. Truly we are "fearfully and wonderfully made." An awful responsibility belongs to parentage, for the iniquity of fathers is visited upon children, to the third and fourth generation. On the other hand, "a good man leaveth an inheritance to his children's children." The most precious heritage is health. National decay is caused by luxury and lust. It has been said that the training of children should begin several generations before they are born. An afflicted farmer shook his fist at the picture of his grandsire, saying, "Thy drinking brought disease upon us all." Infallible guidance to health and long life will be found in the 34th Psalm.

THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

IRLAM SOAP WORKS.

IN order to obtain some idea of the amount of money spent in advertising, it is only necessary to look around. From the busiest thoroughfares of our large towns to the most secluded and remote parts of the world the names of various well-known articles of domestic use are to be found, and perhaps of all articles thus prominently brought before the public eye, soap takes the lead. It has been stated by one firm that they had spent £100,000 in one year for this purpose, and there can be little doubt that this sum is exceeded by at least one manufacturer, and probably closely approached by several others. Now any one of our store managers will tell you that whenever a soap is well advertised one of two results always follows. The soap is either inferior in quality or the wholesale price is higher than it should be, the ultimate result being that the poor consumer has to pay.

Apart from the advertising question, the manufacture of soap is a great industry. Millions of pounds are invested in British soap factories, the products of which are exported to all parts of the world, and it is estimated that something like £6,000,000 is the annual value of the soap made in these islands.

Remembering these facts, it is difficult to realise that no soap was made in England until the sixteenth century, and that for two hundred years very little if any progress was made either in the quality or the quantity manufactured.

The researches of the three great chemists, Chevreul, Geoffrey, and Leblanc, the removal of the duties on salt and soap, and the abolition of the vexatious Government restrictions with which the industry was surrounded, opened wide the doors to the introduction of new processes, new materials, and new ideas, which have combined to raise the industry to the commanding position it now holds.

The Co-operative Wholesale Society commenced the manufacture of soap at Durham in 1875, chiefly to supply societies in the Newcastle district, and although until the last seven or eight years the results were not entirely satisfactory, much valuable information and experience has been acquired both as regards the manufacture itself and the class and qualities of soaps necessary to meet the requirements of the stores throughout the entire movement. This experience has been utilised to the full in erecting, on the banks of

IRLAM SOAP WORKS.

the Manchester Ship Canal, the magnificent works forming the subject of this article, and which are illustrated and described in detail in the following pages.

It was in June, 1891, that permission was given to the directors to purchase the plot of land (about thirteen acres in extent) upon which the works stand; but it was two years later before negotiations were completed and the erection of the works began, and a further eighteen months before they were finished and formally opened on October 2nd, 1895.

The Wholesale Society being one of the first to realise the advantage of having a factory on the banks of the Ship Canal, it is only fitting that it should have—to use the words of an authority in no way connected with the co-operative movement—“the best site on the whole length of the Canal.”

The site is indeed admirable. A “laybye” has been built at a cost of £8,000, and is capable of accommodating two large steamers. There are direct services of steamers between Manchester and the chief ports in Great Britain, as well as many foreign ones, all of which will stop at Irlam when required.

The first illustration is well adapted to show the value of the site. The barque at the “laybye” brought a cargo of resin from South America, where it was produced, direct to the works. Again, all Australian produce is transferred direct from the inward vessels into the steamers in London, from whence it is landed at our works, thereby saving the London river and dock dues, &c.

The view of the works is taken from the old main line. The two-storey building, forming part of the boundary wall, is the offices and laboratory. In the latter is tested all raw materials and manufactured products, not only of the Soap Works, but of the other productive works of the Wholesale Society. It is also intended to be of use to the stores in analysing at a comparatively cheap rate any of their goods, the purity of which they may doubt.

The raw materials as they arrive are lifted into trucks by a locomotive crane and transferred to the storage ground, or direct to the “melting out” shed.

An ingenious method is adopted for removing the tallow from the casks. The bungs being removed, a steam pipe is inserted, and the tallow melted out into tanks placed underground to receive it. From these tanks it is pumped into the “pan” room, a portion of which is seen in the accompanying illustration.

These pans, each with a capacity of 50 tons, are placed at the top of the Soapery, and so arranged that the finished soap may be run off by gravity to the middle floor, where, after being mixed with various colours, perfumes, &c., it is again run off to the “frame” room, and when sufficiently cold is ultimately cut up and packed.

IRLAM SOAP WORKS.

The third view, representing the "frame" room (which is so named from the fact that it contains hundreds of "frames" or cooling boxes), is on the ground floor, and at the back of the Soapery.

The soap is conveyed to the frames by means of wooden shoots. On standing a few days, after being filled, these frames are opened and disclose a solid block of soap weighing from 12 to 15 cwt. These blocks, by special machines, are first cut into slabs, and the latter into bars, which are piled loosely. After standing a day or two they get quite cold and hard, and are then ready for packing.

For the "Household" tablets the bars of the soap required are cut into proper lengths and stamped in moulding machines.

A portion of the "frame" room is specially set apart for the machinery and pans used for manufacturing the "Special French Milled" and other toilet soaps.

The soap boxes are made and branded by machinery.

It may be mentioned here that the buildings and plant have been so arranged that the output can be doubled by simply adding more plant and erecting a wing to the present building. No machinery would have to be replaced, or any portion of the buildings (as they now stand) altered or pulled down.

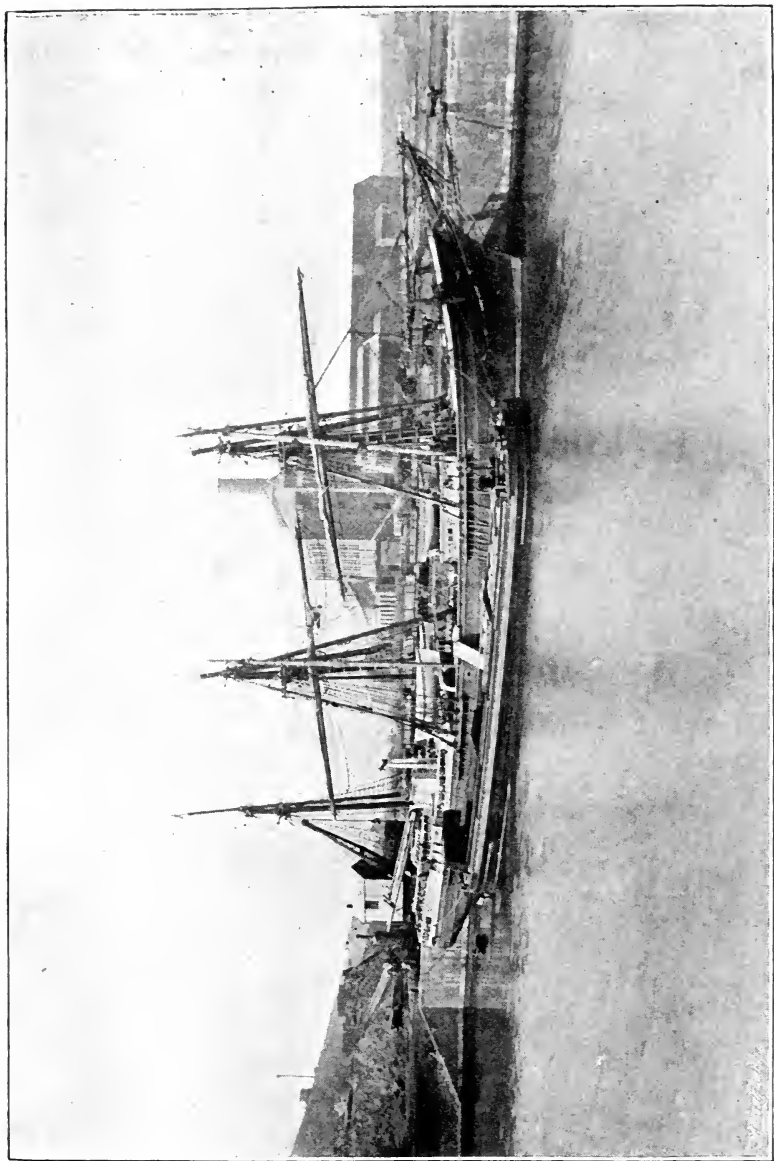
In passing to the four Lancashire boilers, we notice the chimney towering some 160 feet above.

Here again the latest machinery has been adopted in the shape of "stokers" and "feeders." The coal—after being discharged into the bunkers—is not touched by hand, but carried by machinery into the furnaces, and a great saving of labour is thereby effected, besides a decreased consumption of coal, by the efficiency of the arrangement adopted.

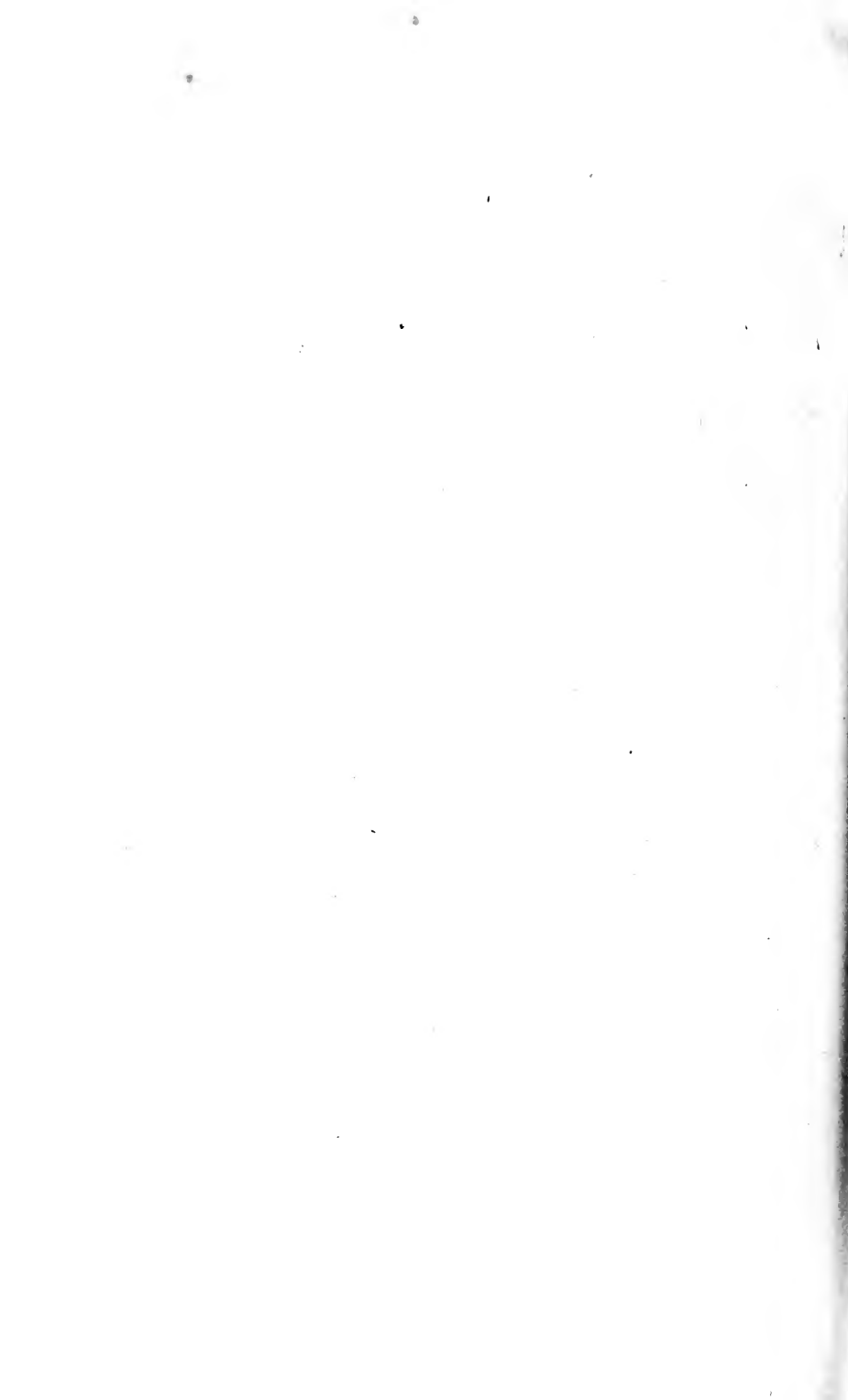
Adjoining the boiler-house is the engine and dynamo room, which supply the works with the necessary power and light.

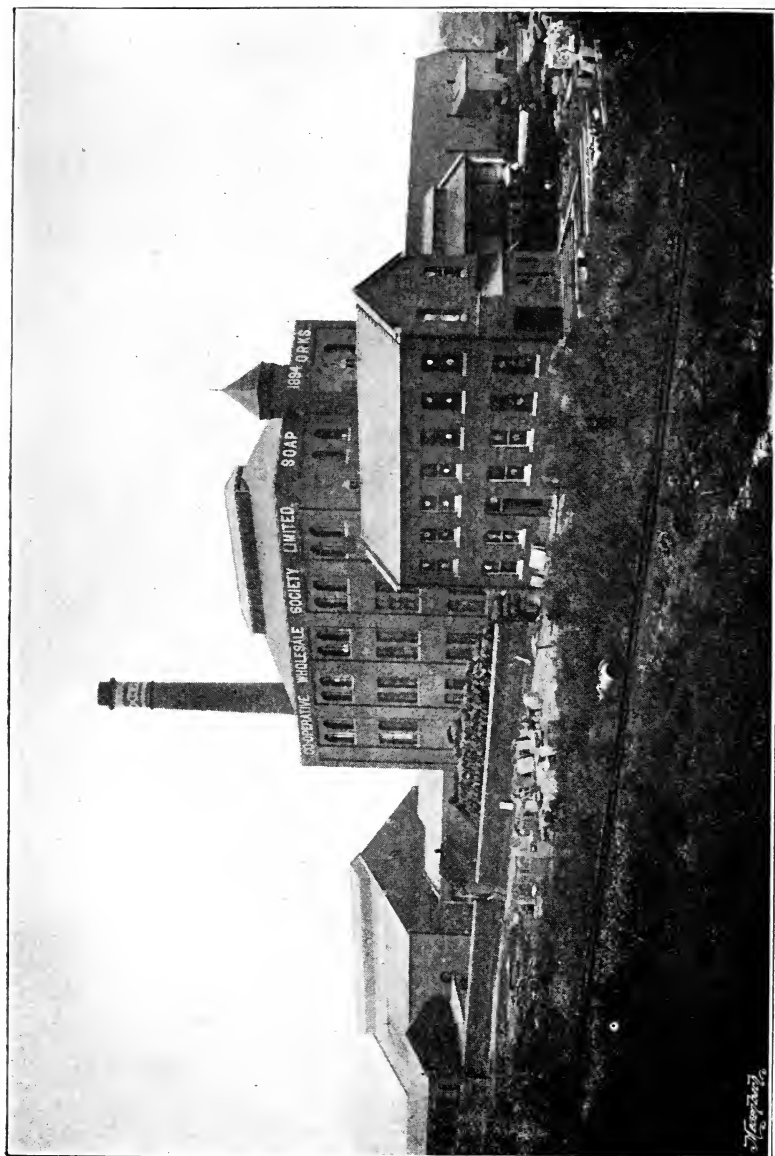
The large building at the end of the Soapery is the Glycerine and Caustic Department. This is divided into three parts, namely, at one end caustic soda is made from soda ash, it is then pumped up into the Soapery, and there stored in tanks for use when required.

The Glycerine Department, which is perhaps the most interesting as well as the best-paying part of a soap works, is divided into two portions, the "crude" and the "refinery," views of which are here shown. The spent lye, or refuse, holding the glycerine originally contained in the fat, the salt used in the process of manufacture, and certain impurities from the raw materials, is allowed to flow down into the "crude" department. It is here purified and boiled down, and the salt recovered for use over again, and a crude glycerine obtained. The latter, which somewhat resembles treacle in appearance, is transferred to the refinery, where it is distilled



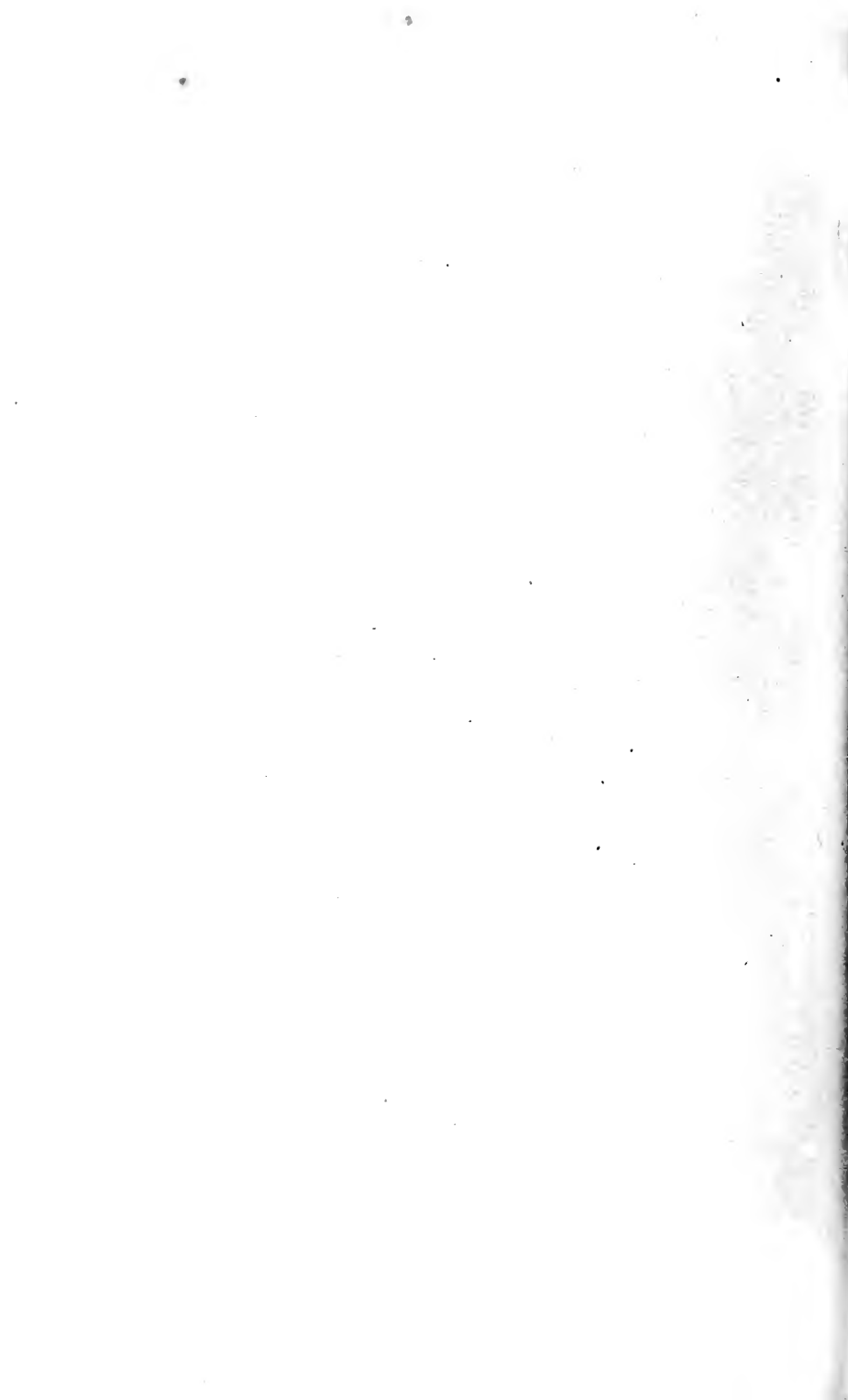
LAYBYE AND WORKS





IRLAM SOAP WORKS.

W. H. H. 1897



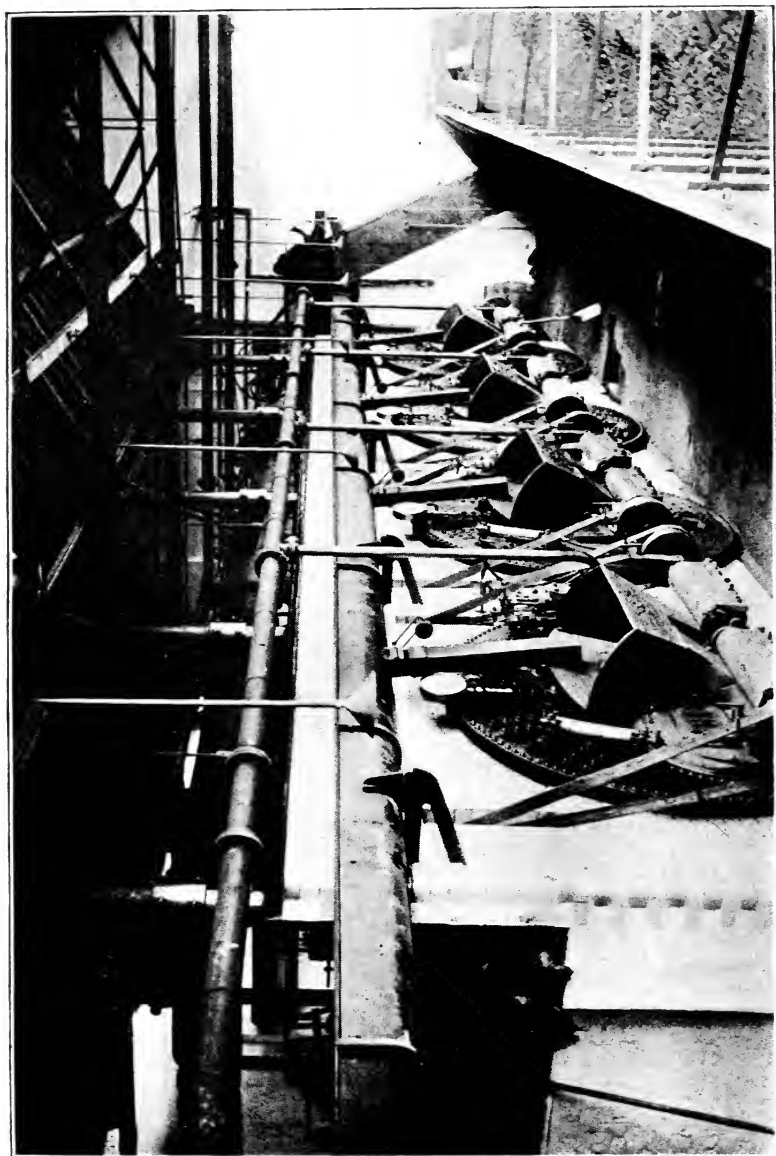


PART OF PAN-ROOM.



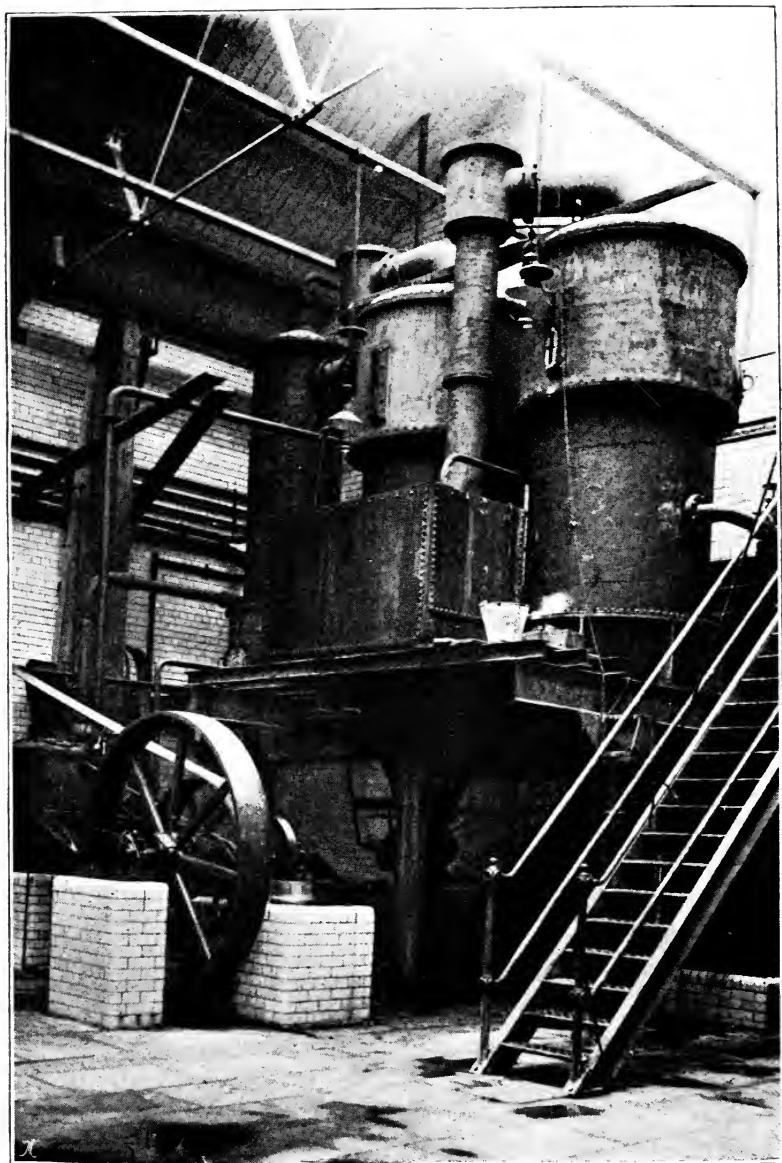
FRAME-ROOM.



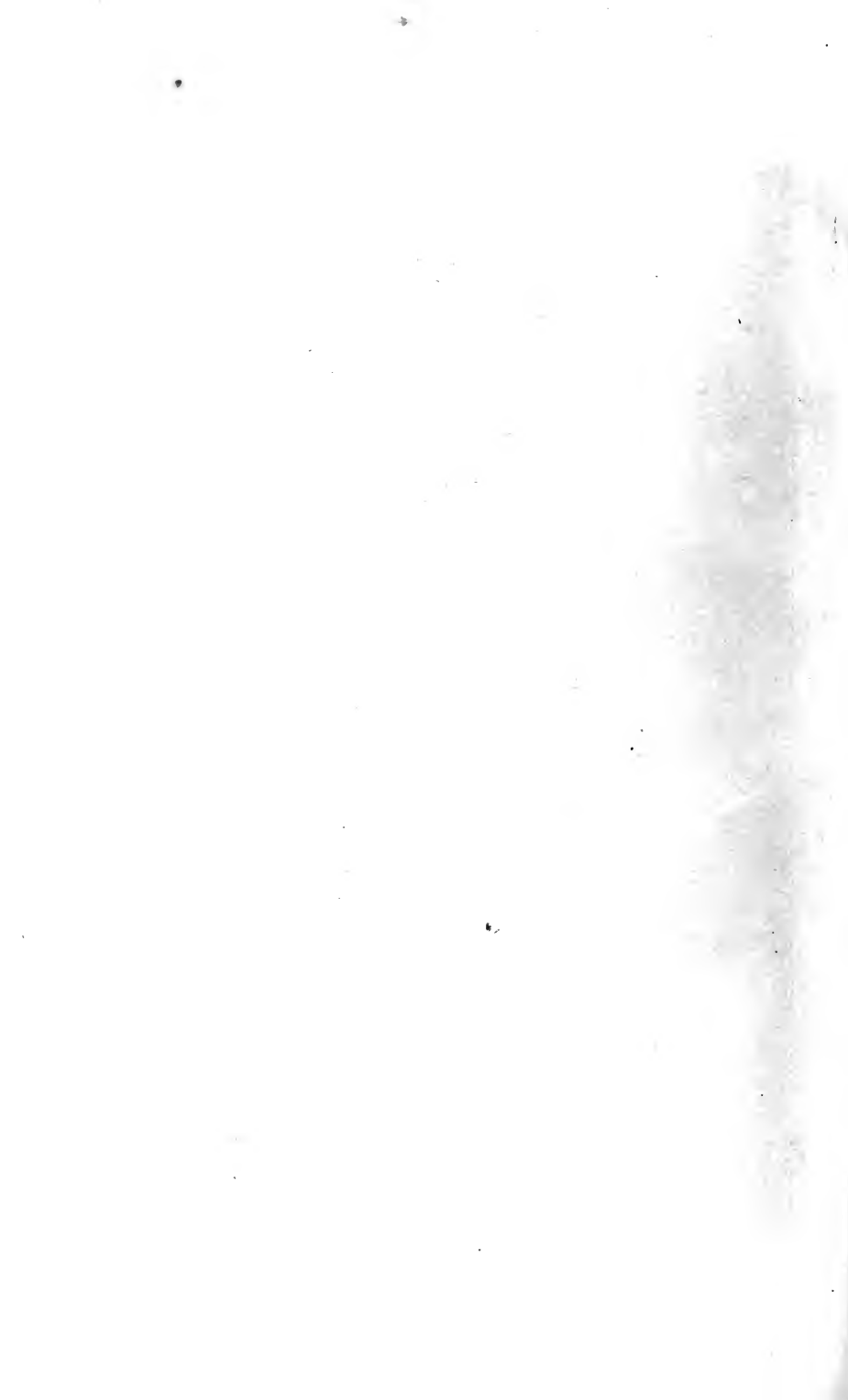


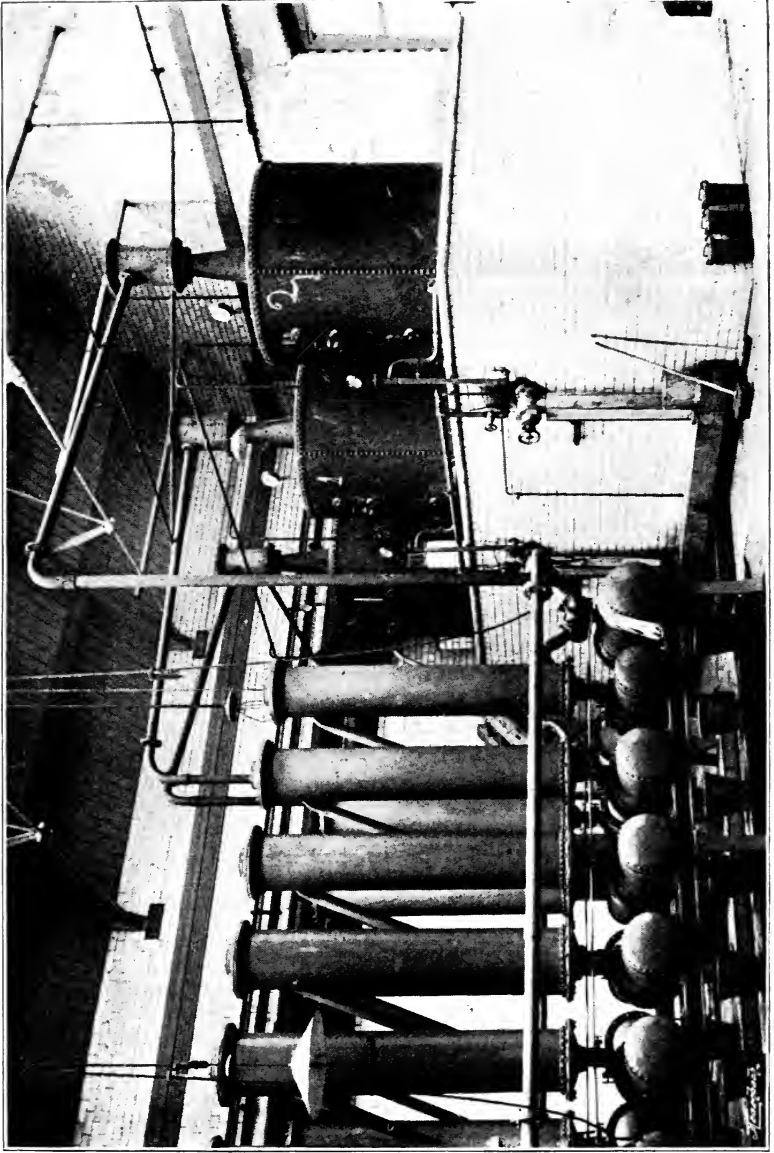
BOILERS.





CRUDE GLYCERINE DEPARTMENT.





GLYCERINE REFINERY.



IRLAM SOAP WORKS.

in the stills shown in the last illustration. After distillation, the glycerine has a pale yellow colour, and is sold as dynamite glycerine. Should the chemically pure quality be required, the dynamite is re-distilled and decolourised with animal charcoal.

In soap manufacture, glycerine only a few years ago was thrown away as a by-product. The total production of this article in 1878 was estimated to be about 9,000 tons, of which only 300 tons were produced in England. The great development of its use, however, and its high price, has resulted in the invention of processes for its recovery from these by-products, and the above quantity of 300 tons will now be exceeded by Irlam Works alone.

In all new productive works their success depends to a great extent upon three primary conditions. (1) The site of the works must be a suitable one. (2) Their equipment and arrangement must be up to date, and the processes carried on as near as possible theoretically correct. (3) A ready sale for the articles manufactured.

The Wholesale Society may fairly claim they have fulfilled to the best of their power the first two conditions, and they look to the societies, who have supplied the capital invested in the works, to carry out the third, and so contribute their share towards making them a great success.



THE LATE

John Thomas Whitehead Mitchell, J.P.,

PRESIDENT OF THE CO-OPERATIVE WHOLESALE SOCIETY.

—
BY WILLIAM MAXWELL, J.P.,

PRESIDENT OF THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY.

THE memoirs of eminent men are generally made the more attractive because their life's work bears directly or indirectly on some historical epoch. Thus the multitude of good men in all professions and in all ages whose memoirs we enjoy have become part of some great historical, geographical, social, or political question. Their great efforts and sacrifices are remembered, and in time pass into the records of the nation itself. The study of such men's lives, no doubt, has far-reaching results—here firing the youth with patriotic zeal, or there setting up noble examples of heroism, self-sacrifice, honesty, and honour. We may trust the untiring pen of history to keep the lives of such good men ever green in our memories.

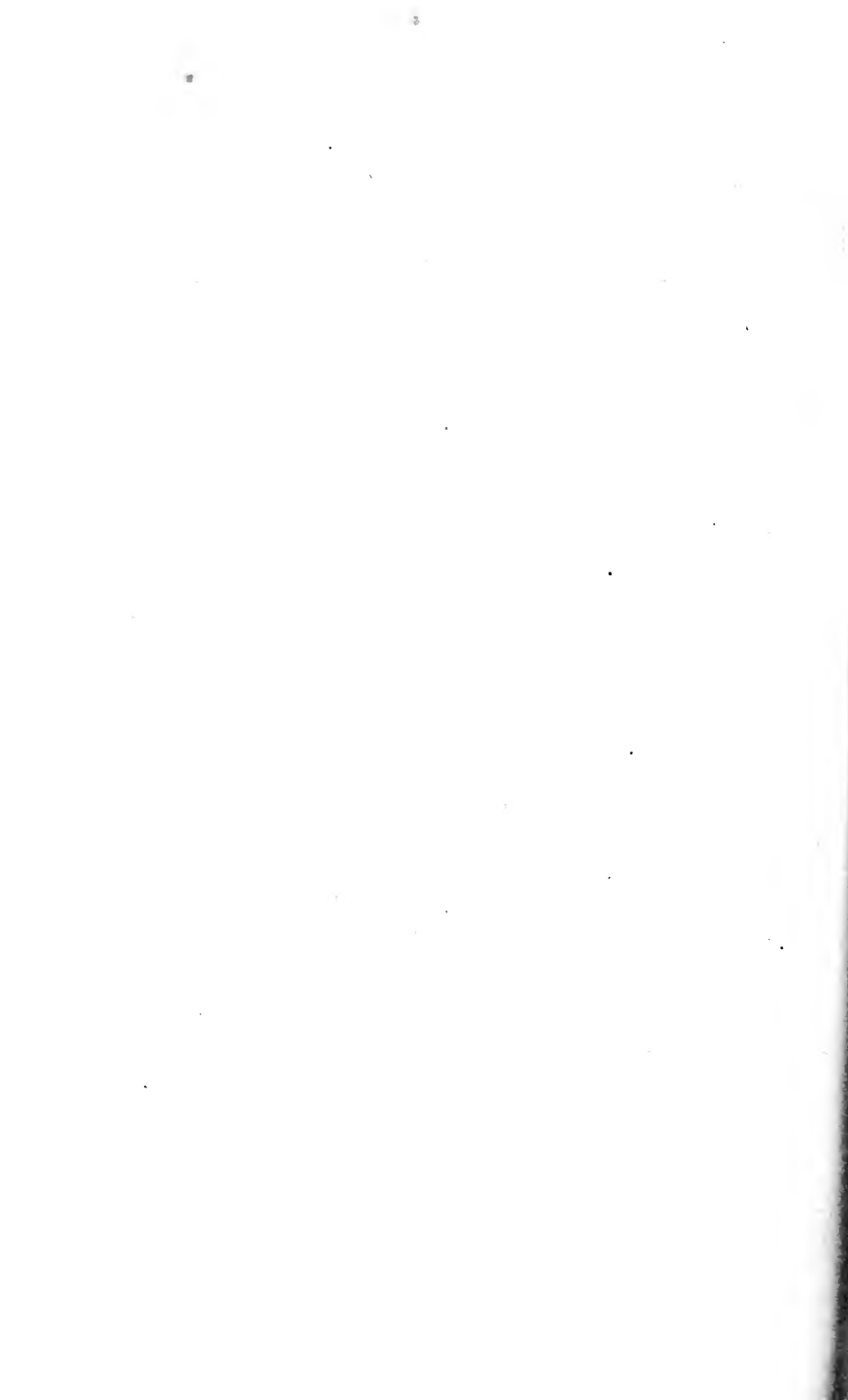
But there have been heroes and heroines in the past, as there doubtless will be again, whose good works have been left unrecorded. These men and women have not lived in vain. If history has not provided them with a memorial niche, their influence on their fellows for good has more than compensated for not having been enrolled among the world's great ones.

Some village Hampden, that, with dauntless breast,
The little tyrant of his fields withstood;
Some mute inglorious Milton here may rest;
Some Cromwell, guiltless of his country's blood.

Thus all our lives have been more or less influenced, our characters moulded, it may be, and our opinions formed as much by the lives and good works of some "village Hampden" as by the deeds or examples of historic heroes.



Mr J. T. W. MITCHELL, J.P.,
LATE CHAIRMAN OF THE CO-OPERATIVE WHOLESALE SOCIETY.



THE LATE J. T. W. MITCHELL, J.P.

To chronicle the life of one of those humble benefactors of his race may seem commonplace to some; yet to others it may stand as an example and model for doing good and unselfish work, although not surrounded by wealth and influence. It may show how useful the poorest and humblest may become, and how richly rewarded in the highest sense they may be, not in gold, but in the success of their endeavours to make the lives of others more tolerable. In this spirit the following sketch is written of one who started in life sadly handicapped by the lack of education, the absence of influential friends, and the continuous presence of a menacing poverty. Yet, by his indomitable perseverance, his amiability and uprightness of character, his tireless devotion to duty, he became one of the most useful, respected, and best known men in Britain.

Much of his life may appear tame and uninteresting to those who delight in highly-coloured romance or tragic situation. But to the ever-increasing army of men and women who firmly believe in "loving their neighbour as themselves," it may not be without interest.

Rochdale, the birthplace of Mr. J. T. W. Mitchell, has been famous for the manufacture of flannel since the fourteenth century. The hand-loom weavers, down to the early years of the present century, seemed to have been surrounded with fairly comfortable circumstances. But the introduction of the factory system, with new machinery, changed at once the appearance of the town and the condition of the weaver. Happily, the introduction of the cotton industry, about 1820, opened up a new form of employment for the hard-pressed weavers. The introduction of the hated Corn Laws, added to the increased American Tariff, which was followed by a reduction of wages, had brought the operatives of Rochdale to comparative poverty by the year 1828. The subject of our sketch was born on the 18th of October, 1828. Although he latterly became known over the length and breadth of the land, and while on co-operative duty visited nearly every town and village of our country, yet during his long life in Rochdale he had not moved his dwelling-places more than a few hundred yards from his birthplace. The circumstances connected with his birth he cared not to dwell upon, even with his most intimate friends, although always referring

THE LATE J. T. W. MITCHELL, J.P.

to his mother in the most affectionate terms. His mother shared in the misfortunes of the industrial class, and at John's birth could not be said to be in very affluent circumstances. Her lot was a hard one, but by dint of perseverance and love for her son, she struggled through where many would have failed. She seemed to live only for her boy. If she could only work on and sustain him till he should be enabled to do something for himself she would be satisfied. Mitchell never for a moment in his after life forgot this beautiful trait in his mother's character. He knew in after years how great were the difficulties she had to encounter and how many the sacrifices this poor woman had to make on his behalf. Hundreds of children at this time were employed in the factories, at a very tender age, simply to add to the already shrunken income of the parents. Mrs. Mitchell, although hardly pressed, would not allow her child from her side, and at this time, in her rough-and-ready way, set herself to plant those principles in his mind that bore such rich fruit in after years. Young Mitchell was more fortunate than many of his contemporaries. While they were sent to work in the mills, some it is said at the age of seven and eight years, he was sent to Red Cross Street National School. His education there was of the most elementary kind, but still it was a foundation to build upon. His first employment began when he was possibly ten or eleven years of age. In the Townhead Cotton Mill he worked as a piecer. On Sundays he attended a school in Bailie Street, where he was instructed in reading and writing by Mr. Matthew Brearley, a clerk employed in one of the foundries. The life of young Mitchell at this time must have been peculiarly hard. His mother, at all times in difficulties, had now secured a small beerhouse in Red Cross Street. By letting a portion of the house to lodgers, she was able to maintain herself and her son in better circumstances than formerly. Still it was a poor home, with poor surroundings. Mitchell does not seem to have had any companions of his own age, and is described as a thoughtful, quiet, and courteous boy.

The want of education seems to have troubled him greatly, for, despite his long hours at the mill on week-days, he attended a class taught by Mr. John Kershaw on the Sundays. Here he really began his studies proper, and got a glimpse at least of the higher subjects.

THE LATE J. T. W. MITCHELL, J.P.

Before the year 1846 the beerhouse had been given up, and Mrs. Mitchell and her son had removed to a house in Hope Street, which had formerly been in possession of one of the "little masters," which they used both as home and workshop. The growth of the cotton industry and the building of large mills had left many of these houses tenantless. Mrs. Mitchell now lived by keeping working-men lodgers. It was in this house, in 1846, that two gentlemen one Sunday afternoon found young Mitchell, and asked him to attend their Sunday school. One of the gentlemen says the boy was reading, and the mother was busy preparing the dinner. They seemed to live on the most affectionate terms. The mother heard the request of the gentlemen, and after a few questions and careful scrutiny of her visitors, she turned and said: "John, tha's never been to Sunday schoo'; tha might go." John's previous Sunday schooling had been for the purpose of improving his ordinary education. He was now asked to connect himself with Sunday school and chapel for the purpose of religious training.

The lad intimated his readiness to join the school and chapel, and on the following Sunday morning Mr. Pagan, one of the gentlemen referred to, called for Mitchell, who was duly introduced to the young men's class taught by Mr. Pagan himself. Here Mitchell for the first time in his life discovered that he really had no opinions either religious or political. A new life seemed to burst upon him; new prospects opened up to his mind as he continued his studies with zeal and enthusiasm. He now conceived the idea of being useful to others; his past life he regarded with little kindly remembrance. Up to that time he said his mother had been his only friend. Thanks to her care and tender solicitude he had no bad habits to unlearn; he had an affectionate and unselfish disposition that made troops of friends for him. At his daily work, even at this early stage, he had the name of being an industrious and zealous worker. His hours were from six in the morning till half-past seven in the evening. Any holidays were grudgingly given two or three times a year, and then only in half-days. Can it be wondered at that boys and girls working under such conditions were not very zealous for study and self-improvement! Physically worn out, they craved for rest. There were many exceptions to this rule, and among them

THE LATE J. T. W. MITCHELL, J.P.

young Mitchell; who, from the library of the Providence Sunday School, studied the works of some of our best authors. The teachers and scholars of this school seemed to have been an industrious community; they had just built new schools, and were not long in having a full complement of scholars. They had in view something more than the teaching of mere dogma, there seemed to be a desire for the material and social improvement of the people; nor was the intellectual progress of the young men left out of their programme. They also started a juvenile temperance society, when temperance was not the popular movement it is to-day. From this little society many able advocates of temperance sprang. John Mitchell was early in the front rank of the young temperance orators. He gradually out-distanced his companions as a speaker, both on temperance and politics. Radical from the beginning, he was Radical to the end. Every form of privilege he condemned. Active in his habits, forceful in his utterances, he soon became a recognised leader among his young men companions. The religious opinions he formed at this time remained with him till his death. His regular and punctual attendance at chapel and school gave evidence of the earnest character of the lad. A portrait of him at this time shows a tall, spare youth, with long fair hair, his kindly and intelligent face at once making him attractive to all who came in contact with him.

About 1850 a new pastor was about to be appointed to the Congregational Chapel. The people could not agree on the gentleman proposed, and Mitchell, with great reluctance, along with a number of friends, joined the then new congregation, called Milton Congregational Chapel, in Bailie Street, in which he remained a devoted and much-loved worker all his life.

About this time he also joined the town's temperance society, and soon became an active member of the committee, and one of their most acceptable speakers. He attached himself to the local Rechabite Tent, which ultimately became "The Love and Truth" division of the "Sons of Temperance," of which he remained a member and an honoured official until his death.

Mr. Pagan, who was proprietor of a large mill for the manufacture of flannel, and who, it will be remembered, along with another, was instrumental in inducing Mitchell to attend the Sunday school, was

THE LATE J. T. W. MITCHELL, J.P.

so much impressed with young Mitchell's character, his love of truth and devotion to duty, that he offered him a situation in his warehouse at 16s. per week. The offer was accepted, and John left the cotton mill, where as a lad he was much respected by both employer and employed.

Mr. Pagan—who was twice mayor of Rochdale, and a man universally respected not only for his sagacious and generous disposition, but for his blameless life—recognised from the first the good qualities in Mitchell, and always had a warm friendship for him.

Our hero's work now became more congenial, and his opportunities for displaying those business qualifications which so distinguished him in after years were more frequent.

He had now a little room to himself at his mother's house; it was on the top flat, and here the sub-committee of the temperance society held its meetings. His mother, naturally proud of the position taken by her son, did all she could to make her humble dwelling presentable. Here, also, in this room he laid the nucleus of his library. The Bible and Shakespeare were his favourites; the small amount he could afford from his limited income was expended on books recommended to him by his better-informed friends. His kindness to his mother knew no bounds, and she in turn was all a loving mother could be. His diligence and energy won him promotion step by step at Mr. Pagan's mill; from the assorting of wool in the warehouse he rose to be manager. The firm changed hands more than once, but Mitchell was still the trusted and devoted servant. The workpeople liked him because of his equable temper and fair-mindedness; he would not shelter the indolent or unscrupulous from due admonition, nor would he allow energy and worth to go unrewarded. The employers respected him for his shrewdness in business, his uprightness of character, and his unswerving loyalty to truth. It was this business training, which lasted till 1867, that fitted him so well for the larger field of wholesale co-operation. In 1854 his interest was awakened in the co-operative movement; ten years before this the Toad Lane men had begun their crusade against the competitive system. He was acquainted with many of the Pioneers. He had also heard much from

THE LATE J. T. W. MITCHELL, J.P.

his mother about the former effort in Rochdale, in which his grandfather had been involved. It had been frequently discussed at his young men's classes; he foresaw its possibilities, and forthwith joined the Pioneers' Equitable. With this, as with everything else, he was deeply interested, attending meetings and studying its literature. In the midst of this busy life he had the good fortune to meet with one who was his close friend till his dying day. Mr. Abraham Howard had been much in his company in connection with temperance and political work; they now met as earnest co-operators. They had much in common. In the summer of 1855, while each in his way was earnestly working for others, the angel of death stepped into both their homes—Mr. Mitchell's mother and Mr. Howard's young wife passing away. To Mitchell this was no ordinary loss; the only companion he ever knew was gone. To him the loss was irreparable. He could not be consoled. He sought the company of his friend Howard, and together they found temporary relief in mutual consolation. Though not in the same business, their careers had been singularly alike. They had both started from the lowest possible position, and had by their merits now arrived at the highest appointment in the gift of their respective employers. Their social and religious work now lay much together, in fact they were inseparable. They were like Damon and Phintias—their mutual confidence and esteem being only equalled by the strength of their attachment.

Mitchell remained for some time in the house where his mother died, but ultimately gave it up, and went into lodgings with a Mr. Whitworth who lived opposite. This arrangement only lasted till 1857. Mr. Howard had married again, and Mr. Mitchell went to live with him, where he found a true home.

For some years Mr. Mitchell served on the committee of the Pioneers. He was also appointed secretary for a time. He served on the educational committee at the same time; in fact, no amount of work could daunt him. At this period he devoted every spare moment of his life to the furthering of those various movements with which he had become associated. Although closely engaged all day, he was never known to decline an invitation to a meeting in the evening where he thought he might do some good.

THE LATE J. T. W. MITCHELL, J.P.

Always cheerful and willing, he threw the energy of two men into his work. The extension of the library of the Pioneers' Society gave him great pleasure. Here he was associated with Mr. Abraham Greenwood, who was chairman of the Educational Committee. At this time he read some of our best literature, and it was noted that for a young man he was exceptionally well informed in social and religious works. Although it cannot be said he was a musician, he was passionately fond of singing. His earnest Christianity often found expression in his bursting into some of the hymns he knew so well, such as "When I can read my title clear." His simple life is described as being most exemplary and happy. He gave no trouble to any one about him, but every one felt the good influence of his blameless life. Even in his early manhood it was noticed that, although kind and genial to all, he had a powerful will of his own. When once convinced that he was right, nothing would move him. This characteristic reigned supreme. He made some opponents because of his determined stand against self-seekers, or what appeared to him to be selfishness. He would not lend himself to intrigue or party for the sake of gaining power or popularity. The co-operative ideas that distinguished his later years cannot be said to have been hastily considered, for even at this period of his life he advocated the distribution of all profits on the basis of consumption. He would not recognise the worker as such, but as a consumer only should he participate. He clung to this idea throughout his life, and although some of his dearest friends for years tried to alter his opinions yet it was all in vain. No angry or unkind word did he utter to those who differed from him; he simply contended that they were mistaken. He regarded the wages system as sufficient for all purposes, and in courteous and gentlemanly language made this known wherever he went. In later years he displayed a more bellicose spirit when discussing the subject of profit-sharing.

In the summer of 1861, Mr. Howard removed to another locality to suit an appointment he had received. Mr. Mitchell had again to seek a home for himself. It was thought by some of his friends at this time that a change would come over his life, whereby his home would have been greatly brightened and the loneliness of his bachelorhood changed; but again he took to housekeeping alone,

THE LATE J. T. W. MITCHELL, J.P.

having a Mr. John Williamson and his wife as caretakers of his residence, which was situated adjacent to the warehouse of his employers. This house was ultimately added to the warehouse, which necessitated his removal to the house in John Street where he passed away. Mr. Williamson died, and some time afterwards his widow married again, leaving poor Mitchell alone. From this time he lived absolutely by himself, and many who have been stirred by his eloquence and warmed by his bright presence will now think sadly of him returning to such a home—no one to welcome him after his long and frequently thankless journeys for the good of others. And yet in that dark and sullen abode lived one of the brightest and happiest men on earth.

In 1867 Mr. Mitchell found, if he was to carry on all the self-imposed duties properly in the different organisations he was connected with, he must find some other employment where he would have his time at his disposal. He now began business on his own account as a merchant. He had served his late employers for eighteen years. He carried with him the respect of both employers and employed. His unselfish devotedness to duty had endeared him to the master, while his undeviating fairness and kindness had won him the respect of the workers. He had risen from the humblest to the highest position, and now left honoured by all. His life now was a trying one; he was travelling all over the country trying to make a business, but always finding time to take a large share of propagandist temperance, religious, and co-operative work, while his voice was also frequently heard in politics on the side of the people. He was chairman of the Rochdale Manufacturing Society, and as usual spared no effort to advance the interests of the concern. About this time he was elected to the Board of the Wholesale Society, which was now rapidly growing in bulk and influence. His own business prospered chiefly through a London agency he had established. The cotton goods he sold he got made by the Rochdale Manufacturing Society, getting them dyed and finished at Middleton. For many years he carried on this business, giving satisfaction to all who came in contact with him because of his scrupulous honour and honesty in dealing. His home was also his warehouse, but as his business extended he added an adjoining

THE LATE J. T. W. MITCHELL, J.P.

cottage which he used as a warehouse. Although his home was almost destitute of domestic comfort, and after working a long day he had to prepare his own food, yet his brightness never forsook him. At the various meetings which he addressed his racy anecdote, beaming countenance, and hearty hand-shake spoke of contentment and happiness. He never was heard to grumble or express dissatisfaction with his surroundings. His aim in life seemed to be to make others happy, and in this he invariably succeeded by his consideration and kindness for all around him. The Sunday school of which he was superintendent was a great source of pleasure to him. He never tired of children; to bring some poor waif under the influence of the Sunday school was a great joy to him. Appointed a deacon of the church, his high moral principles and keen business talents were of great service. Honoured and admired by clergy and layman alike, his opinions were highly appreciated and his good influence made itself felt. The Wholesale now began to make considerable demands upon his time, and he had discontinued his official position with the Manufacturing Society. He was at this time secretary of the science and art classes in connection with the Pioneers. Thus, while many wondered at him taking upon himself so much public and gratuitous work, yet none could reproach him for inattention or carelessly performed duties. His landlord, a Mr. Butterworth, became a close friend in after years, and it may not be uninteresting to trace the acquaintanceship. This person at one time fell into deep disgrace in Rochdale, and was shunned by all his former associates. Mitchell had a full knowledge of all the details of the unfortunate occurrence. But on Butterworth emerging from under the cloud which had necessarily covered him consequent upon his disgrace, Mitchell, with characteristic forgiveness, held out his hand as a friend. From that moment they were inseparable friends. Butterworth had now come into possession of extensive property, and might be considered independent, yet because of Mitchell's kindness he became his willing serving man. He lived close by, and he would send his servant into Mr. Mitchell's to occasionally clean up, while he himself would run messages, fetch letters, or pack his valise; in fact, he looked upon Mitchell as his veritable master. They trusted each other implicitly, and when Butterworth's wife

THE LATE J. T. W. MITCHELL, J.P.

died they seemed to get even more attached, the neighbours frequently remarking that if Mr. Mitchell died Mr. Butterworth would have to accompany him, as he could not exist alone. This proved too true a forecast of what actually took place.

His friend Howard removed to Liverpool, and by reason of Mitchell's many duties and engagements he could not visit Liverpool as often as he wished, yet he had a bedroom fitted up specially, so that if Howard should be in Rochdale at any time he might pass the night at his residence. A visit to his house showed distinctly that if he provided liberally for his friend he had no thought of himself. His own bedroom was furnished with some of the old furniture his mother had when he was a boy, humble in the extreme. Piles of reports and balance sheets took the place of ordinary literature. The portraits of a few dear friends who had passed away, to be looked at occasionally, also his well-read Bible and hymn book, completed the furnishings of the room in which he lived and died.

His private business suffered severely from the failure of his London agent. This was a great blow to Mitchell, as he held his agent in high respect. From this time he allowed his business quietly to slip away from him, as he was giving all his time and attention to the Wholesale business. It must be stated here that any money Mitchell ever saved, was made in his own business before he devoted all his time to co-operative work. In the midst of such a busy life as Mitchell led, time was valuable and method therefore necessary; thus he became one of the most punctual of men. He seldom or ever was late for a meeting or a train. He was never known to have taken a holiday, and although often ailing, for his chest was never strong, yet he would not consent to any time being spent away from business. True, he had arranged to spend a few days during the summer with his friend Howard, but he had passed into an eternal summer before he could carry out his arrangements.

His force of character, purity of motive, soundness of judgment, and ready expression soon made themselves felt at the Wholesale Board, and in June, 1874, he was chosen President by his colleagues. A better or wiser choice could not have been made. This is borne out by his repeated elections, which kept him in the honoured position for nearly twenty-one years. Alike in committee as in the great

THE LATE J. T. W. MITCHELL, J.P.

meetings of shareholders, his conduct was impartial, his temper equable, his tact and resource unlimited, his replies straight, and his general demeanour tolerant in the extreme. He was never evasive, always courteous, and frequently humorous. His genial wisdom turned away many a carping critic. His power of explaining intricate and difficult questions gained for the institution over which he presided confidence and respect; while his unbounded and unlimited belief in the power of co-operation, especially as represented by the Wholesale, was made contagious, because of his ready forms of expression and earnest manner of delivery. Losses or difficulties made little or no impression on him; the ultimate triumph of the co-operative principles was so strongly expressed that he not infrequently roused the enthusiasm of his audience even in the day of difficulty. It cannot be wondered at that such a man was loved and respected by all. The employés recognised in him a friend, while the co-operators generally regarded him as a wise counsellor and unselfish leader. No work was too great or difficult for him to undertake. Most men would have considered the work of the Wholesale Society more than enough, with its many meetings, its great demand for organisation, and its large necessity for continued superintendence in different parts of the country. Still, Mr. Mitchell found time and opportunity to visit and address large meetings of co-operators in almost every town and village in England and many in Scotland. His presence was hailed with gladness everywhere. Here he gave strength by his advice to the weak; there he gave wise counsel to the strong—how to increase their usefulness and strengthen their resources. On the platform he was sometimes boisterous and discursive, failing sometimes to follow up his premises to their logical conclusion; but everywhere he was earnest and sincere. Long and fatiguing journeys, frequently at night after speaking in warm and crowded rooms, latterly had their effect on a constitution never very robust. The kindly warnings of anxious friends were unheeded in his determination to do what he considered his duty. Wherever the call of duty came from, he went with alacrity, frequently paying his own expenses, without remonstrance or murmur. Co-operators owe him much in hard cash expended for them, to say nothing of the good work done by him for their benefit alone.

THE LATE J. T. W. MITCHELL, J.P.

In April, 1884, along with others appointed, he proceeded to the United States and Canada on Wholesale business. There, as at home, his wide knowledge of business, his courteous and kindly manner, won him troops of friends. It was no uncommon incident in his American tour to find him on Sunday making inquiry for the Sunday schools, and when found he would introduce himself to the superintendent and later deliver an address to the children. In Toronto he addressed a large public meeting on the advantages of co-operation, the local co-operators giving a banquet in honour of the co-operative visitors. His whole conduct during his American tour was marked by keen business inquiry, and a beautiful Christian charity in all things. He could not approve of everything he saw and heard, but his reproofs were couched in gentle although decisive language. To those who were his fellow voyagers he was courtesy and kindness itself; they felt themselves in the company of an affectionate father, who was as generous as he was just.

His connection with the Lancashire and Yorkshire Productive Society cannot be overlooked. In 1878, while his hands were already more than full of work, he accepted the position of liquidator of this society. Its position at the time was hopeless financially, the whole of the share capital and half the loan capital being gone; in fact, it was so bad that some of the societies holding share and loan capital struck out of their assets the whole of the capital invested at Littleborough, believing it was hopelessly lost. Mr. Mitchell undertook his position with a full knowledge of the difficulties to be overcome. Having once grasped the situation, he simply smiled at those who said it was a forlorn hope.

He began by raising new loans, called "special loans," on his own responsibility, and by this means he succeeded in getting about £4,000, which, added to the overdraft from the C.W.S. Bank, enabled him to work the society. The whole of the loan capital, from the commencement of the liquidation up to the end of July, 1894, was credited with 5 per cent compound interest; and at this stage the society had so far recovered its position that the liquidator found himself in a position to pay out the original private and sick and burial societies' loans, which he did in August, 1894. This amounted to £4,350, leaving a debit balance of only about £850.

THE LATE J. T. W. MITCHELL, J.P.

He wrote up the share capital from £2,640 to £6,600 (the original amount). For this great work he had never received one penny as expenses or remuneration. In April, 1880, he was voted £20 for expenses, which he declined to take, but it was placed to his credit in the society's books as loan capital. After that time he would not allow the subject of remuneration to be considered at the society's meetings. When mooted, he would say the time had not yet arrived for the consideration of such a subject. Since the death of Mr. Mitchell the loan standing in his name has been paid to his executors, which, with interest, amounted to £41. For the first few years of his liquidatorship he was at Littleborough every morning before eight o'clock. He took the deepest possible interest in the work. With the valuable aid of Mr. Greenwood, the manager, he made the productions of Littleborough famous. The highest wages were paid to the workers, and the kindest relationship existed between the management and the employés. During the sixteen years he acted as liquidator he managed to sell about 16 per cent of the productions outside the co-operative movement. Some of the largest drapers in the country are proud to sell the flannels of Littleborough to-day. Comment on such a work is useless. It speaks of a hero, a commercial giant—in fact, it is unique in the commerce of the land. Yet that pure-minded man was sometimes suspected and doubted by men who were profiting by his unselfish labours.

For many years our hero held the responsible and honourable position of treasurer to the Sons of Temperance, with whom he was a recognised leader. The Co-operative Congress being altered from Easter to Whitsuntide, the latter being the annual meeting time of the Sons of Temperance, he demitted his office, as he decided to attend the Co-operative Congresses. On his retirement from the treasurership they presented him with a magnificent gold watch, which some of his friends named the "Teetotaler," in contradistinction to his silver watch, which was named the "Co-operator." Although he had ceased to hold office among the temperance party, he still remained an enthusiastic temperance reformer. Frequently, when in London on co-operative business, he spent his evenings advocating temperance principles in the East-end. His early temperance advocacy was conducted under great difficulties.

THE LATE J. T. W. MITCHELL, J.P.

His friend Howard and a few other earnest young men hired a schoolroom or small hall in some of the neighbouring villages, and there, at their own cost, tried to spread the temperance cause. On one of these occasions Mr. Mitchell was the premier orator, his platform being an ordinary school form. As was his habit when he warmed to his subject, he began careering from one end of his platform to the other; coming to the extreme end of the seat, the other end tilted up in the air, and J. T. W. Mitchell found himself in the midst of his peroration sprawling on the floor. His friends soon set him up again amidst great laughter; in a few minutes he was clenching his argument with sonorous voice and great gesticulation, when he approached the end again, only to repeat the accident, which brought his oration to an abrupt termination. To remind him of this gave him great pleasure. No man could stand bantering better than he could. His friends took great delight in reminding him of his bachelorhood, but he was always equal to the occasion, and could easily give a Roland for an Oliver.

Mr. Mitchell twice contested wards unsuccessfully for the Rochdale Town Council. The trading interest, it was said, was too strong for him, although many who were constrained to vote against him because of his co-operative belief still paid him the highest respect as an upright and conscientious gentleman.

Although not reaching the council chamber of his native town, an honour which was not sought by himself so much as by his numerous friends and admirers, he was appointed a justice of the peace about two years before his death. He accepted this honour with his usual modesty, simply remarking that he hoped his magisterial duties would in no way interfere with the proper discharge of his co-operative obligations. For many years he had been elected a member of the Co-operative Union; here his work brought him into close contact with the late E. Vansittart Neale, General Secretary of the Union; and while it is scarcely possible to imagine two men more divergent in their co-operative views, still each regarded the other with the most profound respect and affection. Sincerity was the key-note of both their lives. Mr. Mitchell had early evinced a deep interest in the success of the *Co-operative News*, and for many years served as a director on its board of

THE LATE J. T. W. MITCHELL, J.P.

management. Here, as elsewhere, he was punctual and painstaking. Always bright and cheerful himself, he encouraged by his example those around him to work cheerfully and enthusiastically.

Perhaps the honour he most prized was the invitation to become President of the Co-operative Congress at Rochdale, in 1892, as he said it was like yesterday to him since he was a poor friendless lad in the town. He was thus called to the highest honour in the gift of the working men of Great Britain. He discharged the trying duties of his office satisfactorily. His presidential address was characteristic of the man—impulsive, generous, and clear—for which he received a perfect ovation.

As president of the Wholesale Society he received and accepted an invitation to meet the President of France at the opening of the new docks at Calais. He also represented the English co-operators at the French Co-operative Congress held at Paris, where his forcible and declamatory style of speaking greatly interested his French audience.

A more trying ordeal was his appearance as a co-operative witness before the Royal Commission on Labour in October, 1892, where for the best part of two days he was heckled by the various commissioners. He surprised some of the gentlemen by the enthusiastic descriptions he gave of the power of co-operation. He gambolled with millions of money in share and loan capital. He jauntily talked of fleets of co-operative steamers. He wrote down buildings and machinery by thousands of pounds annually, till some of his hearers called for proof of his statements. Balance sheets were handed round immediately, and many expressed their pleasure and astonishment with the gigantic and prosperous institution over which he presided so ably.

During his long official life at the Wholesale Society he took part in many important functions connected with the movement; in fact, the opening of a new store or the laying of a memorial stone were incidents of almost monthly occurrence with him. A large collection of silver trowels, keys, and mallets—happily now in the possession of the Wholesale Society—speak of honour conferred and work well performed. His speeches at all these functions were pointed and instructive, notably those delivered at the opening of the new hall in connection with the London Branch and the turning on of

THE LATE J. T. W. MITCHELL, J.P.

the engines at Dunston Mill. He was also the recipient of the Order of The Golden Cross from the King of Greece, which was presented to him by the Greek Consul in the boardroom of the society at Manchester. Not one of the honours conferred unduly elated him ; he always regarded them as given to the movement rather than to himself personally.

At the beginning of 1895, on the death of Sir Joseph Lee, the directors of the Manchester Ship Canal unanimously invited him to fill the vacancy caused by the demise of Sir Joseph, but after careful consideration this high honour was courteously declined. He preferred to give all his time and attention to the institution and the cause he had already done so much for. What better proof could we have of that large-heartedness, of that conscientious devotion to duty which characterised his life ? But it was not in matters of this kind only, which naturally became known to all, that his single-mindedness shone out, but in the little details of his daily life the same continuous consideration for others was conspicuously apparent to all who came in contact with him. Some one has said that the Wholesale Society was his spouse and the members his family. Surely, then, there never was a more affectionate husband and father. His energy, his time, and his very life were freely given up for them.

About three years ago on leaving the train at Rochdale one day he fell rather heavily on the steps leading from the platform, and from this time walking to any extent became painful ; his chest, too, which had never been strong, became troublesome. Still he worked on, travelling hundreds of miles to speak at co-operative gatherings in different parts of the country, frequently leaving heated rooms to undertake a winter-night journey by rail. His friends saw the end approaching and beseeched him to take some rest ; but no, his rest was not here.

At the last quarterly meeting of the Wholesale at which he presided, on the 9th of March, 1895, it was seen by those present that his old vigour was waning. One of the delegates, perhaps more discerning than others, spoke of his long and valuable service, of his approaching majority as president, of long-delayed but well-earned recognition. The old characteristic spirit asserted itself immediately

THE LATE J. T. W. MITCHELL, J.P.

by him declaring that such a subject was out of order and could not be discussed. By the kindness and forethought of his colleagues and principal employés of the Wholesale, his portrait had been painted in oils by a talented artist with the intention of presenting it to him on the occasion of completing his twenty-first year as president. We know that he appreciated this mark of kindness very much, saying continually he had done nothing to deserve such a token of respect and goodwill.

On Sunday, 10th of March, he proceeded to London to preside over two important meetings of representatives from the English and Scottish Wholesale Societies: the meetings were to be held on the 11th and 12th. On arrival at his hotel in London it was seen that the long journey had increased his weakness, and his cough became very troublesome. His colleagues did everything possible for their fallen chief. He was prevailed upon to rest on Monday, but he was much disappointed at not being able to attend the meeting. Kind friends stood around his couch that evening assuring him that the business was having every attention. On Tuesday morning the various committees had assembled in Lemn Street Hall, and when about to begin business Mr. Mitchell entered the room and tottered to his accustomed place. No amount of persuasion could induce him to remain absent from this meeting. Death was written largely on every line of that genial face. In a feeble and mechanical way he got through his last meeting on earth. Feelings of reverence, love, and pity were recognisable on every one of his devoted comrades. They beheld the rare sight of a man dying at his post. The vote of thanks that day to the chairman was full of pathos and heart-stirring words that cling to many of us yet. His good-bye that day sent a new sensation through us; we felt poorer, we felt a void had been created that could not be filled in our time. His last co-operative meeting was over. Kindly hands bore him back to his beloved Rochdale, where after lingering only four days his great loving spirit passed away. In his last hours he spoke of his great work at the Wholesale, urging continuous application. He sent loving Christian messages to his Sunday scholars, thus showing to the very last moment of his beautiful life his thoughts were for the good of others.

THE LATE J. T. W. MITCHELL, J.P.

On the 20th of March, 1895, crowds of men and women of all classes might have been seen wending their way with solemn air to Milton Church, where the funeral service was to be held. The body had been removed during the night from Mr. Mitchell's house in John Street and placed in front of the pulpit. The building was soon crowded to excess. The coffin was literally hidden under the beautiful floral tributes that had been sent by loving friends resident all over the country. The congregation represented all the organisations with which the deceased had been identified—his fellow deacons of the church, the Sunday school teachers and scholars over whom he had been superintendent, the temperance societies with whom he had worked, the Liberal political leaders of the locality, the representatives of co-operative organisations in England and Scotland, and many others who had been admirers of deceased's life and work. Seldom, if ever, has such a widely representative audience met under one roof to pay the last tribute of respect to one who never thought himself more than an ordinary workman.

After the devotional part of the service, which was most impressive, the Rev. J. Hirst Hollowell delivered an address on the life and character of his late deacon. The following quotation from that address will be thoroughly endorsed by every one who had the honour of Mr. Mitchell's acquaintance:—

"A FATHER TO THE SCHOOL.

"WE little thought at our last meeting, when his absence was explained by indisposition, what coming event was then casting its shadow before. I can speak, too, for myself, and for the deacons and members of this church. My loss is great. A man of such winning urbanity, such great heart, such transparent character, and such steady devotion, is hard to lose, and harder to replace. We all lose, not merely a colleague, but a friend and a stay. And when I look around on this congregation, I see represented many a society, association, order, and movement that counted him for a leader and ornament. In Rochdale he belonged to everything that was progressive, humane, and Christian. Every cause that is marching forward—whether its watchword be temperance, or education, or

THE LATE J. T. W. MITCHELL, J.P.

liberty, or benevolence, or thrift, or the children, or peace, or co-operation, or religion—had a friend in him. The names that have ennobled the social and political history of this borough were names he held in reverence, and the new departures for which those names stood were hailed by him with joy, and furthered by his fervent zeal. But outside his church and the Sunday school, the one movement into which he poured the passion of his life was the great co-operative movement. I know its leaders are here to-day. And many of you feel sad at heart as you look at this silent form. It is hard to believe that the colossal frame, the animated gesture, the kindling eye, the beaming smile, the rich, cordial tone of his voice, have come to this. I know why you loved him. He was no mere salaried official. He loved your movement, and he served it without a trace of self-seeking. He was a composer of your differences, and a peacemaker between men. You have brought charming wreaths to his bier to-day. But there is one more precious, one of truly amaranthine bloom, which you lay over him to-day, and that is the beatitude of our Lord: 'Blessed are the peacemakers, for they shall be called the children of God.' The great movement you represent is in our time the sanest, the soundest, the most legitimate, and the most successful of all embodiments of the socialistic spirit. Its mission is peace. It aims at the social elevation of the people without violence. It seeks to bind nations together by ties of commercial intercourse and mutual service. He, with you, was labouring to realise in a time of delirious and ruinous militarism the lovely dream of Tennyson:—

And let the fair white-winged peacemaker fly
 To happy havens under all the sky,
 And blend the seasons and the golden hours;
 Till each man find his own in all men's good,
 And all men work in happy brotherhood,
 Breaking their mailéd fleets and armed towers,
 And ruling by obeying nature's powers,
 And gathering all the fruits of earth, and crown'd
 with all the flowers.

I see here many young men who served under his kindly authority. Your expressions of regard for him are very touching. Some of you have travelled long distances to pay respect to his memory. And

THE LATE J. T. W. MITCHELL, J.P.

as there is no near relative here to acknowledge your kindness, I ask to be allowed to do so. You will not forget him. And I beg you not to forget

"THE SECRET OF HIS LIFE.

"HE achieved no success that he did not deserve. No man could have had a more inauspicious start. Social advantages he had none. The rock whence he was hewn was no quarry of Carrara. But 'if God be for us, who can be against us?' The secret lay there. He looked to God for help, and he gave his best to God and men. There is one present here to-day who, fifty years ago, canvassed for new scholars in some of the poor streets of Rochdale, and gave an invitation to the lad, John Mitchell, to attend the Sunday school. He did so, and from that time to this he has tried—he would be the first to admit with weakness and imperfection, but steadily tried—to please God. He governed himself. He practised total abstinence, for lack of which tens of thousands of business careers and homes have been wrecked. He took an interest in the real happiness of others, which is the only way to be happy ourselves. He never set personal gain before him as the goal of his ambition. His colleagues trusted him, because he was working from the love of a great cause and not for his own ends. Plain living, hard work, love for the children, purity of motive, love to God, and kindness to his fellowmen, marked and ennobled his whole life. And now we say 'Farewell!' and as we say it there is no answer from the lips that once greeted us. But this silence, we believe, is not that of death, but the silence of sleep.

They sleep in Jesus, and are blest;
 How kind their slumbers are;
 From suffering and from sin released,
 And freed from every snare.

Sleep on, dear brother and friend! 'He that keepeth thee, shall neither slumber nor sleep.' Many a stroke of hard work thou hast done, many a poor home has gained in comfort through thy pains. To many a little one that believed in Christ, hast thou given a cup of cold water in Christ's name. Many a discouraged heart hast thou strengthened. Many a drooping banner hast thou carried higher. Sleep on! 'Something attempted, something done, has

THE LATE J. T. W. MITCHELL, J.P.

earned a night's repose.' Only 'a night's!' 'Weeping may endure for a night, but joy cometh in the morning.' 'For if we believe that Jesus died and rose again; even so them also that sleep in Jesus will God bring with Him.'"

On leaving the church to proceed to the cemetery the mourners were accommodated in carriages provided by the Wholesale Society. The hearse was followed by two lorry loads of wreaths and other floral devices, the long line of vehicles following. The streets were crowded with rich and poor, all anxious to show their respect for one who while living was greatly loved and when dead was sincerely mourned. "By common consent, no greater demonstration in honour of a deceased Rochdale citizen has in recent years been witnessed save and except in the case of Rochdale's greatest citizen, John Bright."

Many of those who lined the streets and wept bitterly as the *cortège* moved slowly along had doubtless been scholars at one time in his Sunday school. Others were indebted to him for his efforts on their behalf in temperance or co-operative work. All of them, and there were thousands, mourned the loss of a true friend.

At the graveside hundreds of friends gathered to hear the last few words said over his ashes. Now we sadly leave all that was mortal of our hero. The Wholesale Society has placed an artistically designed monument over his grave, but the greater work of commemorating his memory in the co-operative movement will remain with the societies that reaped so much benefit from his labours among them.

A true estimate of Mr. Mitchell's life and character may be found in his old friend Howard's words, who said: "His whole life, public and private, was blameless and Christ-like. He followed to the letter St. Paul's injunction in being 'not slothful in business, fervent in spirit, serving the Lord.'"

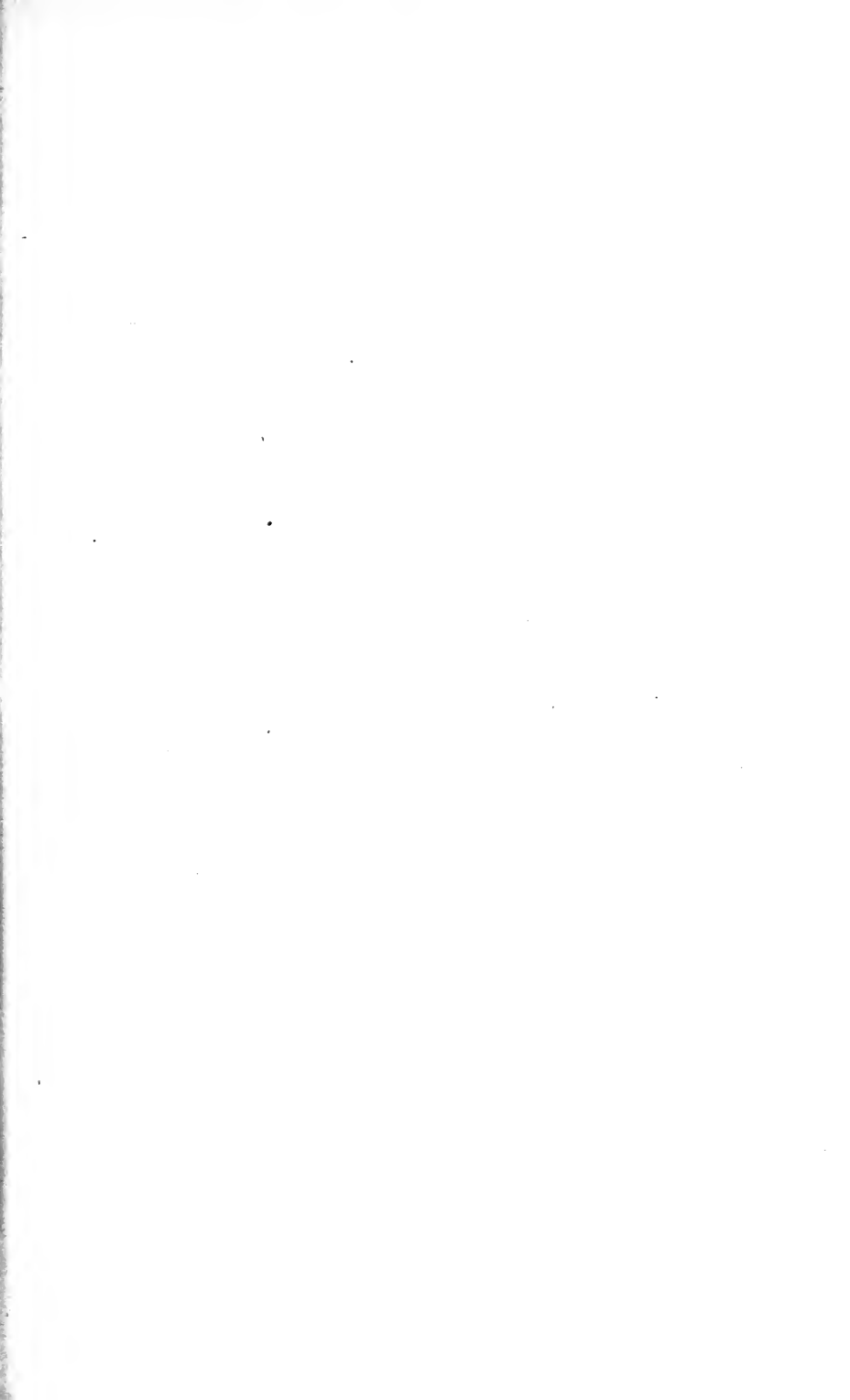
He could not be corrupted; his principles were deep-rooted in early life, and grew stronger with his years. All those who differed with him most in co-operative policy now recognise how sincere he was. A more perfectly transparent and unsuspecting nature could not be found. A chivalrous generosity could be noticed in thought, word, and deed. In business he was punctuality itself, and although

THE LATE J. T. W. MITCHELL, J.P.

never overbearing to those who were not, he was incisive in his remarks to the laggard. No matter how preoccupied he might be, he was always accessible and obliging to strangers and friends alike. His firm grasp of the financial position of the Wholesale was always remarkable, the writing down of the assets was a favourite study, and it may not be too much to claim that he was largely instrumental in placing the Wholesale Society in the secure financial position it occupies to-day.

He was at heart a man of peace, and gave himself infinite pains to bring about harmony and conciliation, and frequently was the means of establishing harmony where partizanship might have run into spleen and retrogression. Although frequently lauded and eulogised as few men of his class have been, it never changed the humble, unpretending nature that had distinguished him in early life. He had no airs of office nor affectation of position. He laid no claim to education, but how many circumstances that have no connection with books or tutors contribute to the rearing of the human mind? The school of experience had been his university. He lived and died a poor man, and it could not be otherwise; his great energy and capabilities were given for the advancement of his fellows. None were more liberal in giving, and few did their giving more quietly and unostentatiously. The three hundred odd pounds he left behind perhaps is the finest testimony we can find of his unselfish and self-abnegating life. The material and spiritual advancement of others was the only reward he sought for here. This in a large measure was granted him, and he died in the full belief that having done his duty, as he said, "imperfectly," he would have the full reward hereafter.







THE LATE
Mr. J. LOWNDS.

THE L A T E

→* James Lownds. *←



MR. JAMES LOWNDS, a director of the Co-operative Wholesale Society, died somewhat suddenly, and under very painful circumstances, on July the 27th, 1895.

He had not for some time enjoyed the best of health, but on the date of his death he thought himself so much better as to justify him in attending the quarterly meeting of the Star Corn Millers' Society, at Oldham, of which he had been chairman for fourteen years. During the journey from Ashton to Oldham, Mr. Lownds showed evident signs of illness, and it was deemed advisable to obtain medical aid as soon as the train reached Clegg Street Station, but before the doctor arrived he breathed his last.

The deceased was 64 years of age. In early life Mr. Lownds was left an orphan, being the eldest of three children. He was apprenticed to a shoemaker, which calling he followed for a period of sixteen years. He afterwards accepted an insurance agency, which he retained to the time of his death.

For over twenty years he was a member of the Ashton-under-Lyne Working Men's Co-operative Society, and held the office of a member of the committee for eighteen years, and was chairman for upwards of five years. Mr. Lownds was elected a director of the Co-operative Wholesale Society in March, 1885, and had taken an active part in helping forward this great institution.

The funeral took place at Dukinfield Cemetery, and was attended by representatives from the English and Scottish Wholesale Societies, Star Corn Millers, Ashton-under-Lyne, Oldham Industrial, Oldham Equitable, Failsworth, Droylsden, and other neighbouring societies, the *Co-operative News* Society, Co-operative Printing Society, and the Co-operative Insurance Company, as well as friends of the deceased from the chapel where he was in the habit of worshipping.

His death was sincerely regretted by a large number of his fellow co-operators and friends, and it was recognised on all hands that he had spent a useful life, and helped forward movements for the welfare and bettering of his fellow men.

THE LATE

➤‡ Emanuel Hibbert, ‡◀

Born March 20th, 1839 ; died June 25th, 1895.



THE subject of our notice passed away on the 25th June, 1895. For some time previously he had been in failing health, and was confined to the house for the greater portion of the preceding winter. He attended the quarterly meeting of the Co-operative Wholesale Society, on the 22nd June last, which was held in the Central Hall, Oldham Street, Manchester. At the close he had a serious relapse, and it was found necessary to convey him home to Failsworth. He was elected on the Board of the Wholesale Society on the 2nd of September, 1882, where he continued to work in a quiet and unostentatious way up to the time of his death; he thus filled the honoured position of a director of this Society for upwards of twelve years.

Besides his connection with this Society, he was on the Board of the Failsworth Industrial Society, a position he retained until death. In the year 1873 he was elected chairman, which position he held until the close of 1879.

His remains were interred in Failsworth Cemetery, representatives being present from the Co-operative Wholesale Society, Co-operative Union, Failsworth Industrial Society, *Co-operative News* Society, Oldham Industrial Society, and members and friends of the New Church Congregation, of which deceased was a member.

Mr. Hibbert was a very clear-headed and thorough co-operator, and carried out the work to which he had devoted his life effectively and successfully. His death, at the comparatively early age of 56 years, was deeply felt by his colleagues and a large circle of friends.



THE LATE
Mr. E. HIBBERT.



CO-OPERATIVE SOCIETIES IN THE UNITED KINGDOM.

STATISTICS SHOWING THE POSITION AND PROGRESS OF THE
CO-OPERATIVE MOVEMENT FROM 1862 TO 1893.

WE again place before our readers a synopsis of the Trade of Co-operative Societies in the United Kingdom. The tables have been brought up to date on the basis of the Annual Returns by Societies to the Registrar of Friendly Societies, and corrected by the more recent returns to the Co-operative Union.

The tables refer to the United Kingdom, England and Wales, Scotland, and Ireland, and give the comparison between the figures of 1893, and those of ten years ago. We have also inserted below the figures relating to profits devoted to Education.

CO-OPERATION IN THE UNITED KINGDOM DURING 1883 AND 1893.

	1883.	1893.	INCREASE PER CENT.
Societies (making returns)..No.	1,291	1,825	41
Members	No. 729,957	1,340,318	83
Capital (share and loan)£	9,493,442	19,193,619	102
Sales	£ 29,336,028	51,803,836	76
Profits	£ 2,434,996	4,610,657	89
Profits devoted to Education..£	16,788	32,677	94

CO-OPERATION IN ENGLAND AND WALES DURING 1883 AND 1893.

	1883.	1893.	INCREASE PER CENT.
Societies (making returns)..No.	990	1,432	44
Members	No. 622,871	1,119,210	79
Capital (share and loan)£	8,485,212	15,854,560	86
Sales	£ 24,776,980	41,483,346	67
Profits	£ 2,036,826	3,592,856	76
Profits devoted to Education..£	15,903	29,151	83

CO-OPERATION IN SCOTLAND DURING 1883 AND 1893.

	1883.	1893.	INCREASE PER CENT.
Societies (making returns)..No.	292	352	20
Members	No. 106,034	217,521	105
Capital (share and loan)£	1,003,849	3,310,215	229
Sales	£ 4,526,461	10,094,381	123
Profits	£ 395,795	1,013,955	156
Profits devoted to Education..£	885	3,526	298

CO-OPERATION IN IRELAND DURING 1883 AND 1893.

	1883.	1893.	INCREASE PER CENT.
Societies	No. 9	.....	41
Members.....	No. 1,052	.....	3,587
Capital (share and loan).....£	9,381	.....	28,844
Sales	£ 32,587	.....	226,109
Profits	£ 2,375	.....	3,846

CO-OPERATIVE SOCIETIES,

TABLE (1).—GENERAL SUMMARY of RETURNS

(Compiled from Official

YEAR.	NO. OF SOCIETIES			Number of Members.	CAPITAL AT END OF YEAR.		Sales.	Net Profit.
	Registered in the Year.	Not Making Returns.	Making Returns.		Share.	Loan.		
					£	£	£	£
1862	a454	g68	332	90,341	428,376	54,499	2,333,523	165,562
1863	51	73	381	111,163	579,902	76,738	2,673,778	216,005
1864	146	110	394	b129,429	684,182	89,122	2,836,606	224,460
1865	101	182	403	b124,659	819,367	107,263	3,373,847	279,226
1866	163	240	441	b144,072	1,046,310	118,023	4,462,676	372,307
1867	137	192	577	171,897	1,475,199	136,734	6,001,153	398,578
1868	190	93	673	211,781	1,711,643	177,706	7,122,360	424,420
1869	65	133	754	229,861	1,816,672	179,054	7,353,363	438,101
1870	67	153	748	248,108	2,035,626	197,029	8,201,685	553,435
1871	56	235	746	262,188	2,305,951	215,453	9,463,771	666,399
1872	141	113	935	330,550	2,969,573	371,541	13,012,120	936,715
1873	226	138	983	387,765	3,581,405	496,830	15,639,714	1,110,658
1874	130	232	1,031	412,733	3,905,093	587,342	16,374,053	1,228,038
1875	117	285	1,170	480,076	4,403,547	849,990	18,499,901	1,429,090
1876	82	177	1,167	508,067	5,141,390	919,772	19,921,054	1,743,980
1877	67	246	1,148	529,081	5,445,449	1,073,275	21,390,447	1,924,551
1878	52	121	1,185	560,993	5,647,443	1,145,717	21,402,219	1,837,660
1879	52	146	1,151	572,621	5,755,522	1,496,343	20,382,772	1,857,790
1880	69	100	1,183	604,063	6,232,093	1,341,290	23,248,314	c1,868,599
1881	66	..	1,240	643,617	6,940,173	1,483,583	24,945,063	1,981,109
1882	67	115	1,288	687,158	7,591,241	1,622,431	27,541,212	2,155,398
1883	55	170	1,291	729,957	7,921,356	1,577,086	29,336,028	2,434,996
1884	78	63	1,400	797,950	8,646,188	1,830,836	30,424,101	2,723,794
1885	84	50	1,441	850,659	9,211,259	1,945,834	31,305,910	2,988,690
1886	83	65	1,486	894,488	9,747,452	2,160,090	32,730,745	3,070,111
1887	87	145	1,516	967,828	10,344,216	2,253,576	34,483,771	3,190,309
1888	100	140	1,592	1,011,258	10,946,219	2,452,887	37,793,903	3,454,974
1889	193	123	1,621	1,071,089	11,687,912	2,923,711	40,674,673	3,734,546
1890	122	159	1,647	1,140,573	12,783,629	3,169,155	43,731,669	4,275,617
1891	117	122	1,684	1,207,511	13,847,705	3,393,394	49,024,171	4,718,532
1892	127	24	1,791	1,284,843	14,647,707	3,773,616	51,060,854	4,743,352
1893	106	59	1,825	1,340,318	15,318,665	3,874,954	51,803,836	4,610,657
Totals ..							£708,549,292	£61,757,659

a The Total Number Registered to the end of 1862. b Reduced by 18,278 for 1864, by the Wholesale Society, and which were included in the returns from the Retail Board for 1881. d Includes Joint-stock Companies. e The return states this sum to be Corn Mills, Joint-stock Companies, Building Departments, Banks, Mortgages, Loans, &c.

UNITED KINGDOM.

for each Year, from 1862 to 1893 inclusive.

Sources, and Corrected.)

Trade Expenses.	Trade Stock.	CAPITAL INVESTED IN		Profit Devoted to Education.	Amount of Reserve Fund.	YEAR.
		Industrial and Provdnt. Societies, and other than Trade.	Joint-stock Companies.			
£	£	£	£	£	£	
127,749	....	....	....	....	....	1862
167,620	....	....	....	....	....	1863
163,147	....	....	....	....	....	1864
181,766	....	....	....	....	....	1865
219,746	....	....	....	....	....	1866
255,923	583,539	d494,429	....	3,203	32,629	1867
294,451	671,165	137,397	166,398	3,636	33,109	1868
280,116	784,847	117,586	178,367	3,814	38,630	1869
311,910	912,102	126,736	204,876	4,275	52,990	1870
346,415	1,029,446	145,004	262,594	5,097	66,631	1871
479,130	1,383,063	318,477	382,846	6,696	93,601	1872
556,540	1,627,402	370,402	449,039	7,107	102,722	1873
594,455	1,781,053	418,301	522,081	7,949	116,829	1874
686,178	2,095,675	667,825	553,454	10,879	241,930	1875
1,279,856	2,664,042	....	....	....	....	1876
1,381,961	2,648,282	....	....	....	....	1877
1,494,607	2,609,729	....	....	....	....	1878
1,537,138	2,857,214	....	....	....	....	1879
1,429,160	2,880,076	e3,447,347	....	13,910	....	1880
....	3,053,333	....	....	13,825	....	1881
1,690,107	3,452,942	e4,281,264	....	14,778	....	1882
1,826,804	3,709,555	e4,497,718	....	16,788	....	1883
1,936,485	3,575,836	e4,550,890	....	19,154	....	1884
2,082,539	3,729,492	e5,433,120	....	20,712	....	1885
1,800,347	4,072,765	e3,858,940	....	19,878	....	1886
1,960,374	4,360,836	e4,491,483	....	21,380	....	1887
2,045,391	4,556,593	e5,233,859	....	24,245	....	1888
2,182,775	4,795,132	e5,833,278	....	25,455	....	1889
2,361,319	5,141,750	e6,958,787	....	27,587	....	1890
2,621,091	5,838,370	e6,394,867	....	30,087	....	1891
2,902,994	6,175,287	e6,952,906	....	32,753	....	1892
3,181,818	6,314,715	e7,089,689	....	32,677	....	1893

23,927 for 1865, and 30,921 for 1866, being the number of "Individual Members" returned Societies. c Estimated on the basis of the returns made to the Central Co-operative "Investments other than in Trade," which may mean investments in the Wholesale, g Estimated.

CO-OPERATIVE SOCIETIES,
TABLE (2).—GENERAL SUMMARY of RETURNS
(Compiled from Official

YEAR.	NO. OF SOCIETIES			Number of Members.	CAPITAL AT END OF YEAR.		Sales.	Net Profit.
	Registered in the Year.	Not Making Returns.	Making Returns.		Share.	Loan.		
1862	a454	g68	332	90,341	£ 428,376	£ 54,499	£ 2,333,523	£ 165,562
1863	51	73	381	111,163	579,902	76,738	2,673,778	216,005
1864	146	110	394	b129,429	684,182	89,122	2,836,606	224,460
1865	101	182	403	b124,659	819,367	107,263	3,373,847	279,226
1866	163	240	441	b144,072	1,046,310	118,023	4,462,676	372,307
1867	137	192	577	171,897	1,475,199	136,734	6,001,153	398,578
1868	190	93	673	211,781	1,711,643	177,706	7,122,360	424,420
1869	65	133	754	229,861	1,816,672	179,054	7,353,363	438,101
1870	67	153	748	248,108	2,035,626	197,029	8,201,685	553,435
1871	56	235	746	262,188	2,305,951	215,453	9,463,771	666,399
1872	138	104	927	339,986	2,968,758	371,531	12,992,345	935,551
1873	225	135	978	387,301	3,579,962	496,740	15,623,553	1,109,795
1874	128	227	1,026	412,252	3,903,608	586,972	16,358,278	1,227,226
1875	116	283	1,163	479,284	4,793,909	844,620	18,484,382	1,427,365
1876	82	170	1,165	507,857	5,140,219	919,762	19,909,699	1,742,501
1877	66	240	1,144	528,576	5,437,959	1,073,265	21,374,013	1,922,361
1878	52	119	1,181	560,703	5,645,883	1,145,707	21,385,646	1,836,371
1879	51	146	1,145	573,084	5,747,907	1,496,143	20,365,602	1,856,308
1880	67	100	1,177	603,541	6,224,271	1,341,190	23,231,677	c1,866,839
1881	62	..	1,230	642,783	6,937,284	1,483,583	24,926,005	1,979,576
1882	66	113	1,276	685,981	7,581,739	1,622,253	27,509,055	2,153,699
1883	55	165	1,282	728,905	7,912,216	1,576,845	29,303,441	2,432,621
1884	76	57	1,391	896,845	8,636,960	1,830,624	30,392,112	2,722,103
1885	84	47	1,431	849,616	9,202,138	1,945,508	31,273,156	2,986,155
1886	82	62	1,474	893,153	9,738,278	2,159,746	32,684,244	3,067,436
1887	84	140	1,504	966,403	10,333,069	2,252,672	34,437,879	3,187,902
1888	100	130	1,579	1,009,773	10,935,031	2,452,158	37,742,429	3,451,577
1889	89	118	1,608	1,069,396	11,677,286	2,923,506	40,618,060	3,731,966
1890	110	151	1,631	1,138,780	12,776,733	3,168,788	43,667,363	4,273,010
1891	95	108	1,656	1,205,244	13,832,158	3,390,076	48,921,697	4,714,298
1892	118	14	1,753	1,282,103	14,627,570	3,766,737	50,902,681	4,739,771
1893	98	42	1,784	1,336,731	15,297,470	3,867,305	51,577,727	4,606,811
Totals ..							£707,503,806	£61,709,735

a The Total Number Registered to the end of 1862. b Reduced by 18,278 for 1864, by the Wholesale Society, and which were included in the returns from the Retail Board for 1881. d Includes Joint-stock Companies. e The return states this sum to be Corn Mills, Joint-stock Companies, Building Departments, Banks, Mortgages, Loans, &c.

GREAT BRITAIN.

for each Year, from 1862 to 1893 inclusive.

Sources, and Corrected.)

Trade Expenses.	Trade Stock.	CAPITAL INVESTED IN		Profit Devoted to Education.	Amount of Reserve Fund.	YEAR.
		Industrial and Provident Societies, and other than Trade.	Joint-stock Companies.			
£	£	£	£	£	£	
127,749	....	....	....	....	....	1862
167,620	....	....	....	....	....	1863
163,147	....	....	....	....	....	1864
181,766	....	....	....	....	....	1865
219,746	....	....	....	....	....	1866
255,923	583,539	d494,429	....	3,203	32,629	1867
294,451	671,165	137,397	166,398	3,636	33,109	1868
280,116	784,847	117,586	178,367	3,814	38,630	1869
311,910	912,102	126,736	204,876	4,275	52,990	1870
346,415	1,029,446	145,004	262,594	5,097	66,631	1871
477,846	1,383,063	318,477	382,846	6,696	93,601	1872
555,766	1,627,402	370,402	449,039	7,107	102,722	1873
593,548	1,781,053	418,301	522,081	7,949	116,829	1874
685,118	2,094,325	667,825	553,454	10,879	241,930	1875
1,279,392	2,664,042	....	....	....	....	1876
1,381,285	2,647,309	....	....	....	....	1877
1,493,842	2,609,729	....	....	....	....	1878
1,536,282	2,857,214	....	....	....	....	1879
1,428,303	2,878,832	e3,429,935	17,407	13,910	....	1880
....	3,051,665	....	....	13,822	....	1881
1,689,823	3,450,481	e4,281,243	....	14,778	....	1882
1,818,880	3,706,978	e4,490,477	....	16,788	....	1883
1,933,297	3,572,226	e4,543,388	....	19,154	....	1884
2,080,427	3,726,756	e5,425,319	....	20,712	....	1885
1,797,696	4,068,831	e3,858,451	....	19,878	....	1886
1,957,873	4,354,857	e4,490,674	....	21,380	....	1887
2,041,566	4,550,743	e5,233,349	....	24,238	....	1888
2,178,961	4,789,170	e5,832,435	....	25,455	....	1889
2,357,647	5,136,580	e6,958,131	....	27,587	....	1890
2,617,200	5,832,573	e6,390,827	....	30,087	....	1891
2,897,117	6,168,947	e6,946,321	....	32,753	....	1892
3,174,460	6,309,624	e7,076,071	....	32,677	....	1893

23,927 for 1865, and 30,921 for 1866, being the number of "Individual Members" returned Societies. c Estimated on the basis of the returns made to the Central Co-operative "Investments other than in Trade," which may mean investments in the Wholesale, g Estimated.

CO-OPERATIVE SOCIETIES,

TABLE (3).—GENERAL SUMMARY of RETURNS

(Compiled from Official

YEAR.	NO. OF SOCIETIES			Number of Members.	CAPITAL AT END OF YEAR.		Sales.	Net Profit.
	Registered in the Year.	Not Making Returns.	Making Returns.		Share.	Loan.		
					£	£	£	£
1862	454	68	332	90,341	428,376	54,499	2,333,523	165,562
1863	51	73	381	111,163	579,902	76,738	2,673,778	216,005
1864	146	110	394	129,429	684,182	89,122	2,836,606	224,460
1865	101	182	403	124,659	819,367	107,263	3,373,847	279,226
1866	163	240	441	144,072	1,046,310	118,023	4,462,676	372,307
1867	137	192	577	171,897	1,475,199	136,734	6,001,153	398,578
1868	190	93	673	211,781	1,711,643	177,706	7,122,360	424,420
1869	65	133	754	229,861	1,816,672	179,054	7,353,363	438,101
1870	67	153	748	248,108	2,035,626	197,029	8,201,685	553,435
1871	56	235	746	262,188	2,305,951	215,453	9,463,771	666,399
1872	113	66	749	301,157	2,786,965	344,509	11,397,225	809,237
1873	186	69	790	340,930	3,344,104	431,808	13,651,127	959,493
1874	113	177	810	357,821	3,653,582	498,052	14,295,762	1,072,139
1875	98	237	926	420,024	4,470,857	742,073	16,206,570	1,250,570
1876	72	113	937	444,547	4,825,642	774,809	17,619,247	1,541,384
1877	58	186	896	461,666	5,092,958	916,955	18,697,788	1,680,370
1878	48	65	963	490,584	5,264,855	965,499	18,719,081	1,583,925
1879	40	106	937	504,117	5,374,179	1,324,970	17,816,037	1,598,156
1880	53	62	953	526,686	5,806,545	1,124,795	20,129,217	1,600,000
1881	50	..	971	552,353	6,431,553	1,205,145	21,276,850	1,657,564
1882	51	82	1,012	593,262	7,058,025	1,293,595	23,607,809	1,814,375
1883	42	158	990	622,871	7,281,448	1,203,764	24,776,980	2,036,826
1884	64	48	1,079	672,780	7,879,686	1,359,007	25,600,250	2,237,210
1885	73	47	1,114	717,019	8,364,367	1,408,941	25,858,065	2,419,615
1886	67	61	1,141	751,117	8,793,068	1,551,989	26,747,174	2,476,651
1887	73	139	1,170	813,537	9,269,422	1,598,420	28,221,988	2,542,884
1888	94	125	1,244	850,020	9,793,852	1,743,890	30,350,048	2,766,131
1889	81	112	1,268	897,841	10,424,169	2,098,100	33,016,341	2,981,543
1890	103	149	1,290	955,393	11,380,210	2,196,364	35,367,102	3,393,991
1891	88	108	1,313	1,008,448	12,253,427	2,260,686	39,617,376	3,781,254
1892	106	12	1,404	1,073,739	12,848,024	2,487,499	40,827,931	3,701,402
1893	92	40	1,432	1,119,210	13,400,837	2,453,723	41,483,346	3,592,856
					Totals ..		£599,106,076	£51,236,069

ENGLAND AND WALES.

for each Year, from 1862 to 1893 inclusive.

Sources, and Corrected.)

Trade Expenses.	Trade Stock.	CAPITAL INVESTED IN		Profit Devoted to Education.	Amount of Reserve Fund.	YEAR.
		Industrial and Provdnt. Societies, and other than Trade.	Joint-stock Companies.			
£	£	£	£	£	£	
127,749	....	....	....	....	....	1862
167,620	....	....	....	....	....	1863
163,147	....	....	....	....	....	1864
181,766	....	....	....	....	....	1865
219,746	....	....	....	....	....	1866
255,923	583,539	494,429	....	3,203	32,629	1867
294,451	671,165	137,397	166,398	3,636	33,109	1868
280,116	784,847	117,586	178,367	3,814	38,630	1869
311,910	912,102	126,736	204,876	4,275	52,990	1870
346,415	1,029,446	145,004	262,594	5,097	66,631	1871
419,567	1,219,092	300,712	380,043	6,461	79,292	1872
488,464	1,439,137	337,811	443,724	6,864	83,149	1873
517,445	1,572,264	386,640	510,057	7,486	98,732	1874
598,080	1,852,437	636,400	538,140	10,454	220,011	1875
1,137,053	2,377,380	....	....	....	....	1876
1,222,664	2,310,041	....	....	....	....	1877
1,315,364	2,286,795	....	....	....	....	1878
1,353,832	2,486,704	....	....	....	....	1879
1,285,875	2,512,039	+3,226,370	....	13,262	....	1880
....	2,585,443	....	....	13,314	....	1881
1,499,633	2,969,957	+3,919,455	....	14,070	....	1882
1,606,424	3,160,569	+4,113,995	....	15,903	....	1883
1,684,070	2,932,817	+4,118,751	....	18,062	....	1884
1,825,717	3,044,534	+4,811,819	....	19,374	....	1885
1,525,194	3,323,450	+3,475,319	....	18,440	....	1886
1,670,290	3,512,626	+4,112,807	....	19,707	....	1887
1,743,838	3,687,394	+4,868,141	....	22,391	....	1888
1,849,811	3,856,498	+5,386,444	....	23,388	....	1889
1,996,438	4,121,400	+6,407,701	....	24,919	....	1890
2,207,143	4,691,801	+5,749,811	....	27,196	....	1891
2,420,270	4,947,231	+6,154,426	....	29,105	....	1892
2,645,989	5,032,623	+6,234,093	....	29,151	....	1893

† "Investments at end of year"—the class not stated.

CO-OPERATIVE

TABLE (4).—GENERAL SUMMARY of RETURNS

(Compiled from Official

YEAR.	NUMBER OF SOCIETIES			Number of Members.	CAPITAL AT END OF YEAR.	
	Registered.	Not Making Returns.	Making Returns.		Share.	Loan.
1872	25	38	178	38,829	£ 181,793	£ 27,022
1873	39	66	188	46,371	235,858	64,932
1874	15	50	216	54,431	250,026	88,920
1875	18	46	237	59,260	323,052	102,547
1876	10	57	228	63,310	314,577	144,953
1877	8	54	248	66,910	345,001	156,310
1878	4	54	218	70,119	381,028	180,208
1879	11	*40	208	68,967	373,728	171,173
1880	14	38	224	76,855	417,726	216,395
1881	12	9	259	90,430	505,731	278,438
1882	15	31	264	92,719	523,714	328,658
1883	13	7	292	106,034	630,768	373 081
1884	12	9	312	124,065	757,274	471,617
1885	11	..	317	132,597	837,771	536,567
1886	15	1	333	142,036	945,210	607,757
1887	11	1	334	152,866	1,063,647	654,252
1888	5	5	335	159,753	1,141,179	708,268
1889	8	6	340	171,555	1,253,117	825,406
1890	7	2	341	183,387	1,396,523	972,424
1891	7	..	343	196,796	1,578,731	1,129,390
1892	12	2	349	208,364	1,779,546	1,279,238
1893	6	2	352	217,521	1,896,633	1,413,532
						Totals...£

* Not stated, but estimated at about 40.

SOCIETIES, SCOTLAND.

for each Year, from 1872 to 1893 inclusive.

Sources, and Corrected.)

Sales.	Net Profit.	Trade Expenses.	Trade Stock.	CAPITAL INVESTED IN		Profit Devoted to Education.	Amount of Reserve Fund.	YEAR.
				Industrial and Provident Societies, and other than Trade.	Joint-stock Companies			
£	£	£	£	£	£	£	£	
1,595,120	126,314	58 279	163,971	17,765	2,803	235	14,309	..1872
1,972,426	150,302	67,302	188,265	32,591	5,315	243	19,573	..1873
2,062,516	155,087	76,103	208,789	31,661	12,024	463	18,097	..1874
2,277,812	176,795	87,038	241,888	31,425	15,314	425	21,919	..1875
2,290,452	201,117	142 339	286,662	..	..	..	..	..1876
2,676,225	241,991	158,621	337,268	..	..	..	..	..1877
2,666,565	252,446	178,478	322,934	..	..	..	..	..1878
2,549,565	258,152	182,450	370,510	..	..	..	..	..1879
3,102,460	266,839	142,428	366,793	203,565	17,407	648	..	..1880
3,649,155	322,012	..	466,222	..	..	508	..	..1881
3,901,246	339,324	190,190	480,524	+361,788	..	708	..	..1882
4,526,461	395,795	212,456	546,409	+376,482	..	885	..	..1883
4,791,862	484,893	249,227	639,409	+424,637	..	1,092	..	..1884
5,415,091	566,540	254,710	682,222	+613 500	..	1,338	..	..1885
5,937,070	590,785	272,502	745,381	+383,132	..	1,438	..	..1886
6,215,891	645,018	287,583	842,231	+377,867	..	1,673	..	..1887
7,392,381	685,446	297,728	863,349	+365,208	..	1,847	..	..1888
7,601,719	750,423	329,150	932,672	+445,991	..	2,067	..	..1889
8,300,261	879,019	361,209	1,015,180	+550,430	..	2,668	..	..1890
9,304,321	933,044	410,057	1,140,772	+641,016	..	2,891	..	..1891
10,074,750	1,038,369	476,847	1,221,716	+791,895	..	3,648	..	..1892
10,094,381	1,013,955	528,471	1,277,001	+841,978	..	3,526	..	..1893
108397730	10473666							

† "Investments at end of year;" the class of investment is not stated.

CO-OPERATIVE SOCIETIES, IRELAND.
 TABLE (5).—GENERAL SUMMARY OF RETURNS for each Year, from 1872 to 1893 inclusive.
 (Compiled from Official Sources, and Corrected.)

YEAR.	NUMBER OF SOCIETIES			CAPITAL AT END OF YEAR.		Sales.	Net Profit.	Trade Expenses.	Trade Stock.	CAPITAL INVESTED IN		Profit Devoted to Education.	Amount of Reserve Fund.
	Registered.	Not Making Returns.	Making Returns.	Share.	Loan.					Industrial Societies.	Joint-stock Companies.		
1872	3	9	8	1,815	10	19,775	1,164	1,284	..	..	..	..	..
1873	1	3	5	1,443	90	16,161	863	774	..	..	..	..	..
1874	2	5	5	1,485	370	15,775	812	907	..	..	..	..	..
1875	1	2	7	9,638	5,370	15,519	1,725	1,060	1,350	..	..	..	67
1876	..	7	2	1,171	10	11,355	1,479	464	..	..	..	..	..
1877	..	6	4	7,490	10	16,434	2,190	676	..	..	..	..	..
1878	..	2	4	1,560	10	16,573	1,289	765	..	..	..	..	15
1879	1	..	6	7,615	200	17,170	1,482	856	..	..	..	45	71
1880	2	..	6	7,822	100	16,637	1,760	857	1,244	..	..	..	..
1881	4	..	10	2,889	..	19,058	1,533	1,039	1,668	..	..	3	..
1882	1	2	12	9,502	178	32,157	1,699	2,284	2,461	..	..	..	..
1883	..	5	9	9,140	241	32,587	2,375	1,924	2,577	..	..	..	..
1884	..	6	9	9,228	212	31,989	1,691	3,188	3,610	..	..	..	..
1885	..	3	10	9,121	326	32,754	2,535	2,112	2,736	..	..	..	..
1886	1	3	12	9,174	344	46,501	2,675	2,651	3,934	..	..	..	..
1887	3	5	12	11,147	904	45,892	2,407	2,501	5,979	..	..	..	..
1888	1	10	13	11,188	729	51,474	3,397	3,825	5,850	..	..	7	..
1889	4	5	13	10,626	205	56,613	2,580	3,814	5,962	..	..	..	..
1890	12	8	16	6,896	367	64,306	2,607	3,672	5,170	..	..	..	..
1891	22	14	28	15,547	3,318	102,474	4,234	3,891	5,797	..	..	..	..
1892	9	10	38	20,137	6,879	158,173	3,581	5,877	6,340	..	..	..	..
1893	8	17	41	21,195	7,649	226,109	3,846	7,558	5,091	..	..	..	..
						Totals ..	47,924	1,045,486					

† "Investments at end of year;" the class not stated.

CO-OPERATIVE SOCIETIES IN ENGLAND AND WALES
WITH AN ANNUAL TRADE IN 1894 OF OVER £200,000.

(See Table 6, pages 428-29.)

THE number of societies under this head is twenty-seven, of which twelve are in Lancashire, eight in Yorkshire, three in Durham, and one each in Cheshire, Derbyshire, Devonshire, and Northumberland.

The combined sales of these twenty-seven societies amount to £17,475,136, being 42 per cent of the entire sales of societies in England and Wales. The Wholesale Society comes first with a business of £9,443,937, followed by Leeds Society and Corn Mill, with sales amounting to £834,569; next come Bolton, Barnsley British, Newcastle-on-Tyne, Oldham Industrial, Gateshead, Burnley, Pendleton, and Bishop Auckland, all of whose sales considerably exceed £300,000. The sales of the remaining seventeen societies are under that sum.

CO-OPERATIVE SOCIETIES IN ENGLAND AND WALES WITH AN,
ANNUAL TRADE OF BETWEEN £100,000 AND £200,000.

(See Table 7, pages 430-31.)

THREE fresh societies make their appearance in Table 7 this year—Birtley with a trade of £101,995, Ryhope and Silksworth, £109,924, and Hartlepoons, £101,415.

Of the thirty-nine societies coming under this head for 1894, Lancashire furnishes eleven, Yorkshire ten, Durham seven, Cumberland two, and Cheshire, Leicestershire, Derbyshire, Lincolnshire, Essex, Gloucestershire, Glamorgan-shire, Kent, and Northumberland one each. Their total sales are £5,167,199, or 12 per cent of the total sales of societies in England and Wales.

CO-OPERATIVE SOCIETIES,

BIRD'S-EYE VIEW

TABLE (6), showing the Sales of all Societies which,

NAMES OF SOCIETIES.		COUNTIES.	1875	1876	1877
1	Rochdale Equitable Pioneers..	Lancashire.	£305,657	£305,191	£ 311,715
2	Rochdale Co-op. Corn Mill....	Lancashire.	202,988	....	252,045
3	Co-operative Wholesale Society	Lancashire.	2,247,395	2,697,366	2,827,052
4	Sowerby Bridge Corn Mill....	Yorkshire..	338,364	406,017	460,013
5	Halifax Industrial	Yorkshire..	270,499	237,754	237,447
6	Leeds Industrial and Corn Mill	Yorkshire..	390,645	365,639	374,166
7	Oldham Industrial	Lancashire.	253,438	284,977	316,903
8	Bury District	Lancashire.	212,314	231,692	251,057
9	Rochdale Cotton Manufact'ring	Lancashire.	....	....	....
10	Halifax Corn Mill.....	Yorkshire..	....	207,648	244,262
11	Oldham Star Corn Mill	Lancashire.	....	....	219,664
12	Manchester Equitable.....	Lancashire.	....	....	....
13	Bolton.....	Lancashire.	....	....	....
14	Gateshead	Durham ..	....	....	....
15	Barnsley British	Yorkshire..	....	....	....
16	Oldham Equitable	Lancashire.	....	....	.. :
17	Huddersfield	Yorkshire..	....	....	....
18	Newcastle-upon-Tyne	Nrthmbrlnd	....	....	....
19	Accrington and Church	Lancashire.	....	....	....
TOTALS			4,221,800	4,736,284	5,494,324

NAMES OF SOCIETIES.		COUNTIES.	1885	1886	1887
1	Rochdale Equitable Pioneers..	Lancashire.	£252,072	£246,031	£256,736
2	Rochdale Co-op. Corn Mill....	Lancashire.	....	....	....
3	Co-operative Wholesale Society	Lancashire.	4,793,151	5,223,179	5,713,235
4	Sowerby Bridge Corn Mill....	Yorkshire..	343,723	333,655	357,886
5	Halifax Industrial	Yorkshire..	226,175	224,870	224,259
6	Leeds Industrial and Corn Mill	Yorkshire..	495,297	480,204	526,002
7	Oldham Industrial	Lancashire.	330,038	312,230	322,090
8	Bury District.....	Lancashire.	256,545	240,239	236,042
9	Rochdale Cotton Manufact'ring	Lancashire.	....	....	206,549
10	Halifax Corn Mill	Yorkshire..	203,877	....	222,008
11	Oldham Star Corn Mill	Lancashire.	....	....	....
12	Manchester Equitable.....	Lancashire.	232,998	229,886	233,181
13	Bolton.....	Lancashire.	324,467	335,877	327,288
14	Gateshead	Durham ..	268,720	269,585	266,005
15	Barnsley British	Yorkshire..	260,112	283,903	293,876
16	Oldham Equitable	Lancashire.	227,873	228,946	228,523
17	Huddersfield	Yorkshire..	....	209,426	252,682
18	Newcastle-upon-Tyne	Nrthmbrlnd	312,719	338,030	328,848
19	Accrington and Church	Lancashire.	208,307	209,291	211,226
20	Bishop Auckland	Durham ..	....	200,931	209,969
21	Brighouse	Yorkshire..	....	....	204,127
22	Bradford	Yorkshire..	....	....	....
23	Pendleton	Lancashire.	....	....	....
24	Burnley	Lancashire.	....	....	....
25	Crook	Durham ..	....	....	....
26	Plymouth	Devonshire.	....	....	....
27	Derby	Derbyshire..	....	....	....
28	Chester-le-Street	Durham ..	....	....	....
29	Dewsbury	Yorkshire..	....	....	....
30	Crewe Friendly.....	Cheshire ..	....	....	....
31	Leigh	Lancashire.	....	....	....
32	Eccles.....	Lancashire.	....	....	....
TOTALS			8,736,074	9,366,283	10,620,532

ENGLAND AND WALES.

OF SALES.

during the years 1875 to 1894, exceeded £200,000 a year.

1878	1879	1880	1881	1882	1883	1884	
£299,039	£270,070	£283,655	£272,141	£274,627	£276,457	£262,270	1
285,920	270,337	301,836	299,672	286,966	259,396	209,912	2
2,705,625	2,645,331	3,339,681	3,574,095	4,038,238	4,546,891	4,675,371	3
468,001	447,301	565,194	589,929	594,664	499,260	395,502	4
209,571	....	207,539	....	....	206,058	224,780	5
358,865	360,017	412,225	432,811	438,478	486,784	490,332	6
279,999	261,813	303,012	310,387	320,336	335,672	344,647	7
241,886	217,282	231,918	225,689	240,227	250,123	249,978	8
....	....	....	....	....	....	....	9
224,018	....	....	....	....	....	240,363	10
....	....	....	....	....	....	....	11
....	208,513	242,966	242,535	254,124	258,935	240,241	12
....	....	....	219,657	254,414	295,437	326,201	13
....	....	....	200,261	225,202	248,364	248,295	14
....	....	....	....	215,421	253,512	266,616	15
....	....	....	....	210,531	235,678	239,364	16
....	....	....	....	201,718	208,710	....	17
....	....	....	....	....	239,877	286,686	18
....	....	....	....	....	....	200,608	19
5,072,924	4,680,664	5,888,026	6,367,177	7,554,996	8,601,154	8,901,166	
1888	1889	1890	1891	1892	1893	1894	
£267,727	£270,675	£270,583	£296,025	£302,454	£290,238	£285,143	1
....	201,159	235,274	315,596	254,062	....	....	2
6,200,074	7,028,944	7,429,073	8,766,430	9,300,904	9,526,167	9,443,937	3
406,185	430,703	472,668	525,734	457,673	366,031	299,731	4
223,217	231,256	241,262	256,326	272,967	266,725	246,160	5
558,771	639,223	692,435	802,936	861,959	847,063	834,569	6
337,368	350,698	345,335	378,008	380,861	361,926	374,773	7
241,033	246,112	262,624	238,821	293,317	281,620	276,310	8
206,549	206,490	....	220,348	221,310	209,000	204,036	9
....	....	216,516	280,226	274,576	218,216	....	10
....	....	....	....	....	....	....	11
249,340	267,960	282,957	298,154	290,960	274,681	269,492	12
357,001	392,458	428,529	496,011	516,906	526,747	545,584	13
272,877	282,186	301,347	334,053	344,797	350,242	333,065	14
292,635	327,704	395,433	498,489	531,964	482,129	471,626	15
233,454	242,959	254,074	271,883	267,446	255,666	260,022	16
269,865	287,844	294,357	312,865	307,116	293,917	272,173	17
327,911	338,339	380,895	432,333	445,004	426,212	376,655	18
214,728	209,776	....	206,140	207,945	....	211,498	19
212,471	229,224	266,886	266,886	308,426	297,035	304,806	20
209,948	219,917	225,464	241,008	232,648	216,745	214,331	21
202,930	224,911	223,265	256,500	290,930	304,595	248,977	22
204,501	225,488	240,827	279,942	290,710	307,642	316,979	23
213,219	238,824	256,530	281,727	298,019	291,224	319,630	24
....	....	221,269	....	203,953	210,006	213,203	25
....	....	212,113	240,675	240,570	237,235	258,529	26
....	....	....	206,315	213,889	212,984	231,961	27
....	....	....	213,846	202,596	203,801	....	28
....	....	....	200,255	237,147	227,499	224,070	29
....	....	....	213,703	226,566	212,947	....	30
....	....	....	....	231,464	209,765	234,188	31
....	....	....	....	....	....	202,738	32
11,701,804	13,092,850	14,149,716	17,381,240	18,509,139	17,908,108	17,475,136	

CO-OPERATIVE SOCIETIES—ENGLAND AND WALES.

BIRD'S-EYE VIEW OF SALES.

TABLE (7), showing the SALES of all SOCIETIES which, during the years 1891 to 1894, were over £100,000 and under £200,000 a year; also SALES of the same SOCIETIES for the year 1884.

No.	NAME OF SOCIETY.	COUNTY.	1884.	1891.	1892.	1893.	1894.
1	Crewe Friendly	Cheshire	£ 132,374	£ (over)	£ (over)	£ (over)	£ 189,764
2	Stockport (Chestergate)	Cheshire	40,511	110,017	116,337	116,546	127,205
3	Carlisle	Cumberland.....	92,943	127,264	129,453	120,362	117,312
4	Cleator Moor	Cumberland.....	109,529	134,701	119,818	115,659	130,767
5	Derby	Derbyshire	104,477	(over)	(over)	(over)	(over)
6	Ripley	Derbyshire	62,833	112,216	121,977	108,352	112,241
7	Annfield Plain	Durham	67,331	177,637	159,583	185,502	191,254
8	Blaydon	Durham	149,152	168,402	147,343	130,449	137,211
9	Cornforth and Coxhoe	Durham	60,618	117,362	.....	.....	.....
10	Chester-le-Street	Durham	124,434	(over)	(over)	(over)	199,774
11	Crook	Durham	146,421	138,753	(over)	(over)	(over)
12	Derwent Flour Mill	Durham	73,057	118,753	.....	.....	.....
13	Haswell	Durham	116,507	119,956	.....	.....	102,576
14	Jarrow Industrial	Durham	57,735	113,000	112,590	.....	.....
15	Stockton-on-Tees	Durham	40,653	111,063	114,551	123,193	132,269
16	Sunderland	Durham	67,077	103,857	110,773	.....	102,165
17	West Stanley	Durham	37,893	.....	.....	108,541	120,982
18	Birtley	Durham .....	.....	.....	.....	.....	101,995
19	Rynhope and Silksworth	Durham .....	.....	.....	.....	.....	109,924
20	Hartlepoons.....	Durham .....	.....	.....	.....	.....	101,415

21	Stratford	Essex	85,452	174,079	177,107	157,638	144,401
22	Cwmbach and Aberaman....	Glamorgan	95,513	127,293	128,488	118,385	127,428
23	Gloucester	Gloucestershire	88,373	121,209	123,485	106,691	.....
24	Woolwich Royal Arsenal....	Kent	59,145	174,943	143,108	136,352	139,147
25	Accrington and Church	Lancashire	200,608	.....	(over)	199,141	(over)
26	Barrow-in-Furness	Lancashire	19,357	115,198	108,380	.....	.....
27	Eccles	Lancashire	103,225	195,219	189,767	193,088	(over)
28	Failsforth	Lancashire	117,815	128,941	139,834	142,810	151,059
29	Farnworth and Kearsley....	Lancashire	69,690	131,266	131,075	126,124	121,913
30	Heywood	Lancashire	85,536	113,510	110,042	111,060	115,195
31	Leigh	Lancashire	116,293	167,549	(over)	(over)	(over)
32	Nelson	Lancashire	41,557	.....	104,776	111,469	132,938
33	Oldham Star Coru Mill	Lancashire	174,922	.....	197,629	179,186	154,719
34	Over Darwen Industrial	Lancashire	86,295	115,774	129,314	126,129	135,418
35	Preston	Lancashire	56,482	133,536	143,627	171,960	180,770
36	Radcliffe and Pilkington	Lancashire	96,308	149,380	148,479	139,645	138,419
37	Rochdale Corn Mill	Lancashire	209,912	.....	.....	186,271	168,449
38	Rochdale Manufacturing....	Lancashire	180,850	(over)	(over)	(over)	(over)
39	Leicester	Leicestershire	142,368	138,581	151,859	155,544	150,303
40	Lincoln	Lincolnshire	100,288	175,662	183,203	184,343	176,380
41	Granglton	Northumbria..	63,609	109,571	115,095	111,339	118,574
42	Dudley	Worcestershire..	5,966	100,908	.....	.....	.....
43	Batley	Yorkshire	93,301	131,181	133,083	127,555	123,812
44	Brighside and Carlbrook	Yorkshire	10,616	.....	100,873	102,151	112,540
45	Dewsbury	Yorkshire	137,742	(over)	(over)	(over)	(over)
46	Doncaster	Yorkshire	55,012	.....	103,464	109,577	119,724
47	Halifax Flour	Yorkshire	240,363	(over)	(over)	(over)	179,672
48	Heckmondwike	Yorkshire	142,311	168,016	157,931	152,512	146,421
49	Keighley	Yorkshire	104,097	169,144	161,324	166,151	164,514
50	Middlesbrough	Yorkshire	87,924	125,542	103,789	103,995	105,267
51	Morley	Yorkshire	79,881	123,098	126,950	120,498	116,659
52	Sowerby Bridge	Yorkshire	83,745	104,937	106,642	104,351	101,840
53	Todmorden	Yorkshire	101,302	134,610	134,874	129,960	118,235
54	Windhill	Yorkshire	63,365	123,615	122,430	120,217	116,034
			4,892,968	5,085,743	4,808,983	4,902,746	5,536,635

SALES OF CIVIL SERVICE SUPPLY STORES.

	Civil Service Supply.	Civil Service (Haymarket).	New Civil Service.
	£	£	£
1871	625,305	....	....
1872	712,399	....	....
1873	819,428	....	....
1874	896,094	....	....
1875	925,332	....	....
1876	983,545	....	....
1877	946,780	....	....
1878	1,384,042	....	....
1879	1,474,923	....	....
1880	1,420,619	514,399	....
1881	1,488,507	520,155	139,367
1882	1,603,670	497,650	....
1883	1,682,655	329,805	149,478
1884	1,691,455	481,560	148,975
1885	1,758,648	468,992	150,948
1886	1,743,306	465,096	150,383
1887	1,732,483	469,456	155,000
1888	1,763,814	473,817	158,028
1889	1,775,500	481,120	158,317
1890	1,789,397	481,352	164,160
1891	1,817,779	475,066	178,761
1892	1,749,384	471,133	168,582
1893	1,675,848	448,171	158,313
1894	1,663,970	489,283	154,541

Above we give the Sales of the Civil Service Supply Stores as distinct from the ordinary distributive societies appearing in the previous tables.

PRINCIPAL PUBLIC ACTS OF PARLIAMENT

(58 AND 59 VICTORIA—1895).

. *The figure before each Act denotes the Chapter.*

The following are the measures of the Session 1895 (58 and 59 Victoria) :—

1. Local Government (Scotland) Act, 1894 Amendment.
2. Seed Potatoes Supply (Ireland).
3. Australian Colonies Duties.
4. Consolidated Fund (No. 1).
5. Shop Hours.
6. Convention of Royal Burghs (Scotland) Act, 1879, Amendment.
7. Army (Annual).
8. Grand Jury (Ireland).
9. Documentary Evidence.
10. Mr. Speaker's Retirement.
11. Land Clauses (Taxation of Costs).
12. Metropolitan Police (Receiver).
13. Cruelty to Animals (Scotland).
14. Court of Law Fees (Scotland).
15. Consolidated Fund (No. 2).
16. Finance.
17. Reformatory and Industrial Schools (Channel Islands Children).
18. Post Office Amendment.
19. Court of Sessions Consignations (Scotland).
20. Tramways (Ireland) No. 2.
21. Seal Fisheries (North Pacific).
22. Outdoor Relief (Ireland).
23. Volunteer Act.
24. Law of Distress Amendment.
25. Mortgagees' Legal Costs.
26. Friendly Societies.
27. Market Gardeners' Compensation.
28. False Alarms of Fire.
29. Fisheries Close Season (Ireland).
30. Industrial and Provident Societies Amendment.
31. Appropriation.
32. Local Government (Stock Transfer).
33. Extradition.
34. Colonial Boundaries.
35. Naval Works.
36. Fatal Accidents Inquiry (Scotland).
37. Factories and Workshops.
38. Isle of Man Customs.
39. Summary Jurisdiction (Married Women).
40. Corrupt and Illegal Practices Prevention.
41. Lands Valuation (Scotland) Amendment.
42. Sea Fisheries Regulation (Scotland).
43. Naturalisation.
44. Judicial Committee Amendment.

NATIONAL INCOME AND EXPENDITURE.

An Account of the Public Income and Expenditure of the United Kingdom of Great Britain and Ireland in the Year ended March 31, 1895, prepared in compliance with Section 4 of the Sinking Fund Act, 1875 (38 and 39 Vict., c. 45).

INCOME.		EXPENDITURE.	
	£	s.	d.
Customs	20,115,000	0	0
Excise	26,050,000	0	0
Stamps (excluding Fee, &c., Stamps)	14,440,000	0	0
Land Tax and House Duty ..	2,450,000	0	0
Property and Income Tax ..	15,600,000	0	0
Post Office	10,760,000	0	0
Telegraph Service	2,580,000	0	0
Crown Lands (Net)	410,000	0	0
Interest on Advances	412,976	10	9
Miscellaneous— £ s. d.			
Allowance out of the Profits of Issue received from the Bank of England, per Act 24 Vict. c. 3.	169,542	13	3
Mint, Seignorage on Silver, &c.	240,901	7	8
Net Profit, Post Office Savings Banks	35,100	9	10
Fee, &c., Stamps ..	823,724	9	6
Other Miscella- neous Receipts ..	596,516	19	2
	<u>1,865,785</u>	<u>19</u>	<u>5</u>
CONSOLIDATED FUND SERVICES.			
NATIONAL DEPT SERVICES—			
Inside the Permanent or Fixed Annual Charge.	£	s.	d.
Funded Debt—			
Interest and Management	16,246,821	13	10
Terminable Annuities (including Trustee Savings Banks Deficiency Annuity) ..	6,422,410	1	0
Interest on Unfunded Debt	461,830	4	8
New Sinking Fund	1,718,263	3	7
Adjustments under the Finance Act, 1894	150,674	16	11
	<u>25,000,000</u>	<u>0</u>	<u>0</u>
Outside the Permanent or Fixed Annual Charge.			
OTHER CONSOLIDATED FUND SERVICES—			
Civil List	£407,774	3	1
Annuities and Pensions	316,757	15	7
Salaries and Allowances	81,618	3	9
Courts of Justice	514,632	17	11
Miscellaneous Charges	321,637	18	0
	<u>1,642,420</u>	<u>18</u>	<u>4</u>
SUPPLY SERVICES.			
Army	17,899,800	0	0
Ordnance Factories	200	0	0
Navy	17,545,000	0	0
Civil Services	18,915,000	0	0
Customs and Inland Revenue Departments.	2,646,000	0	0
Post Office	6,869,000	0	0
Telegraph Service	2,674,000	0	0
Packet Service	727,000	0	0
	<u>67,276,000</u>	<u>0</u>	<u>0</u>
Total Expenditure			
Excess of Income over Expenditure			
	<u>93,918,420</u>	<u>18</u>	<u>4</u>
	<u>765,341</u>	<u>11</u>	<u>10</u>
Total Income			
	<u>94,683,762</u>	<u>10</u>	<u>2</u>

IMPORT DUTIES IN THE UNITED KINGDOM.

TABLE showing the several ARTICLES subject to IMPORT DUTIES in the UNITED KINGDOM, and the RATE of DUTY levied upon each ARTICLE, according to the TARIFF in operation in the year 1894-95.

ARTICLES.		Rates of Duty.		
		£	s.	d.
COCOA.....	per lb.	0	0	1
Husks and Shells	per cwt.	0	2	0
Cocoa or Chocolate, ground, prepared, or in any way manufactured	per lb.	0	0	2
COFFEE	per cwt.	0	14	0
Kiln-dried, roasted, or ground.....	per lb.	0	0	2
CHICORY :—				
Raw or kiln-dried	per cwt.	0	13	3
Roasted or ground	per lb.	0	0	2
Chicory (or other vegetable substances) and Coffee, roasted and ground; mixed.....	„	0	0	2
FRUIT—Dried:—				
Currants	per cwt.	0	2	0
Figs and Fig Cake, Plums, Prunes, and Raisins.....	„	0	7	0
TEA.....	per lb.	0	0	4
TOBACCO—Manufactured:—				
Cigars.....	„	0	5	0
Cavendish or Negro-head.....	„	0	4	6
Cavendish or Negro-head Manufactured in Bond	„	0	4	0
Other Manufactured Tobacco	„	0	4	0
Snuff containing more than 13lbs. of moisture in every 100lbs. weight thereof	„	0	3	9
Snuff not containing more than 13lbs. of moisture in every 100lbs. weight thereof.....	„	0	4	6
TOBACCO—Unmanufactured:—				
Containing 10lbs. or more of moisture in every 100lbs. weight thereof	„	0	3	2
Containing less than 10lbs. of moisture in every 100lbs. weight thereof	„	0	3	6
WINE :—				
Not exceeding 30° of Proof Spirit.....	per gallon.	0	1	0
Exceeding 30° but not exceeding 42° of Proof Spirit ..	„	0	2	6
And for every degree or part of a degree beyond the highest above charged, an additional duty	„	0	0	3
The word “degree” does not include fractions of the next higher degree.				
Wine includes Lees of Wine.				
Additional duty on Sparkling Wine imported in Bottle		0	2	0

IMPORT DUTIES IN THE UNITED KINGDOM.

ARTICLES.		Rates of Duty.
		£ s. d.
Import Duties to countervail Excise Duty on British Beer.		
BEER of the descriptions called Mum, Spruce, or Black Beer, and Berlin White Beer, and other preparations, whether fermented or not fermented, of a character similar to Mum, Spruce, or Black Beer, where the worts thereof were, before fermentation, of a specific gravity—		
Not exceeding 1,215°	{ per every 36 galls. }	1 8 0
Exceeding 1,215°	"	1 12 10
Beer of any other description where the worts thereof were, before fermentation, of a special gravity of 1.055°	"	0 7 0
And so on in proportion for any difference in gravity.		
Import Duties to countervail Excise Duty upon British Spirits.		
SPIRITS OR STRONG WATERS :—		
For every gallon, computed at hydrometer proof, of Spirits of any description (except Perfumed Spirits), including Naphtha or Methylic Alcohol, purified so as to be potable, and mixtures and preparations containing Spirits	per proof gallon.	{ 0 10 4 and 6d. addi- tional.
For every gallon of Perfumed Spirits	per gallon.	{ 0 16 6 and 9d. addi- tional.
Liqueurs, Cordials, or other preparations containing Spirits, in Bottle, entered in such a manner as to indicate that the strength is not to be tested And so on in proportion for any less quantity.)	"	{ 0 14 0 and 8d. addi- tional.
Spirits, Methylated, in Bond		0 0 4
Chloroform	per lb.	0 3 1
Chloral Hydrate	"	0 1 3
Collodion	per gallon.	1 5 0
Cocoa or Chocolate, in the manufacture of which Spirit has been used	per lb.	0 0 0½
Confectionery, in the manufacture of which Spirit has been used (the duty being in addition to any other existing duty to which such Confectionery is at present liable)	"	0 0 0½
Ether, Acetic	"	0 1 10
Ether, Butyric	per gallon.	0 15 8
Ether, Sulphuric	"	1 6 2
Ethyl, Iodide of	"	0 13 7
And so in proportion for any less quantity.		
Soap, Transparent, in the manufacture of which Spirit has been used	per lb.	0 0 3
CARDS, Playing	per doz. }	0 3 9
PLATE, of Silver	per oz. }	0 1 6

NOTE AS TO ARTICLES CHARGED WITH IMPORT DUTIES :—In this Return, sub-divisions of Articles of a similar nature, and subject to the same rate of duty, are classed under one head. The total number of Articles and sub-divisions of Articles in the English Tariff of Import Duties was 53 in May, 1876, as compared with 397 in 1859, and 1,048 in 1840.

INCOME TAX RATES FROM ITS FIRST IMPOSITION
IN 1842 TO THE PRESENT TIME.

From and to April 5th.	Income free under.	On £100	On £100	Chancellor of the Exchequer.	Premier.
		to £150.	and upw'ds		
	£	Rate in the £			
1842 to 1846	150	—	7d.	Henry Goulburn.	Sir Robert Peel.
1846 „ 1852	Do.	—	7d.	Sir Charles Wood.	Lord John Russell.
1852 „ 1853	Do.	—	7d.	Benjamin Disraeli.	Earl of Derby.
1853 „ 1854	100	5d.	7d.	William E. Gladstone.	Earl of Aberdeen.
1854 „ 1855	Do.	10d.	1s. 2d.	Do.	Do.
1855 „ 1857	Do.	11½d.	1s. 4d.	Sir G. Cornewall Lewis	Viscount Palmerston.
1857 „ 1858	Do.	5d.	7d.	Do.	Do.
1858 „ 1859	Do.	5d.	5d.	Do.	Do.
1859 „ 1860	Do.	6½d.	9d.	Benjamin Disraeli.	Earl of Derby.
1860 „ 1861	Do.	7d.	10d.	William E. Gladstone.	Viscount Palmerston.
1861 „ 1863	*100	6d.	9d.	Do.	Do.
1863 „ 1864	Do.		7d.	Do.	Do.
1864 „ 1865	Do.		6d.	Do.	Do.
1865 „ 1866	Do.		4d.	Do.	Do.
1866 „ 1867	Do.		4d.	Do.	Earl Russell.
1867 „ 1868	Do.		5d.	Benjamin Disraeli.	Earl of Derby.
1868 „ 1869	Do.		6d.	George Ward Hunt.	Benjamin Disraeli.
1869 „ 1870	Do.		5d.	Robert Lowe.	William E. Gladstone.
1870 „ 1871	Do.		4d.	Do.	Do.
1871 „ 1872	Do.		6d.	Do.	Do.
1872 „ 1873	Do.		4d.	Do.	Do.
1873 „ 1874	Do.		3d.	Do.	Do.
1874 „ 1876	Do.		2d.	Sir Stafford Northcote	Benjamin Disraeli.
1876 „ 1878	†150		3d.	Do.	Earl of Beaconsfield.
1878 „ 1880	Do.		5d.	Do.	Do.
1880 „ 1881	Do.		6d.	William E. Gladstone.	William E. Gladstone.
1881 „ 1882	Do.		5d.	Do.	Do.
1882 „ 1883	Do.		6½d.	Do.	Do.
1883 „ 1884	Do.		5d.	Hugh C. E. Childers.	Do.
1884 „ 1885	Do.		6d.	Do.	Do.
1885 „ 1886	Do.		8d.	Sir M. Hicks-Beach.	Marquis of Salisbury.
1886 „ 1887	{ Do.		8d.	Sir William Harcourt.	William E. Gladstone.
1886 „ 1887	{ Do.		8d.	Ld. Randolph Churchill.	Marquis of Salisbury.
1887 „ 1888	Do.		7d.	G. J. Goschen.	Do.
1888 „ 1889	Do.		6d.	Do.	Do.
1889 „ 1890	Do.		6d.	Do.	Do.
1890 „ 1891	Do.		6d.	Do.	Do.
1891 „ 1892	Do.		6d.	Do.	Do.
1892 „ 1893	Do.		6d.	Sir W. Harcourt.	William E. Gladstone.
1893 „ 1894	Do.		7d.	Do.	Do.
1894 „ 1895	†160		8d.	Do.	Earl Rosebery.
1895 „ 1896	Do.		8d.	Sir M. Hicks-Beach.	Marquis of Salisbury.

* Differential rate upon scale of incomes abolished. Incomes under £100 are exempt; and incomes of £100 and under £199 per annum have an abatement from the assessment of £60:—thus, £100 pays on £40; £160 upon £100; £199 upon £159; but £200 pays on £200.

† Under £150 exempt; if under £400 the tax is not chargeable upon the first £120.

‡ Under £160 exempt; if under £400, the tax is not chargeable upon the first £160; above £400 and up to £500, an abatement of £100.

AVERAGE PRICE PER £100 of the THREE PER CENT CONSOLIDATED STOCK of the PUBLIC FUNDS of the UNITED KINGDOM, in EACH MONTH in EACH YEAR from 1879 to 1888, and of the NEW TWO-AND-THREE-QUARTER PER CENT CONSOLIDATED STOCK MONTHLY from MARCH, 1888, to DECEMBER, 1894.

MONTHS.	New 2½ per cent Consolidated Stock.																
	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1888.	1889.	1890.	1891.	1892.	1893.	1894.
January....	£ 95½	£ 97¼	£ 98½	£ 99½	£ 101½	£ 101½	£ 99¾	£ 99½	£ 100¾	£ 102¼	£ ..	£ 98½	£ 97½	£ 96¾	£ 95¾	£ 98½	£ 98½
February...	96½	98½	98½	99½	102½	101½	100½	100½	100¾	102½	..	99	97½	97½	95¾	98¾	99½
March.....	96½	97½	99½	100¾	102½	101½	97¾	100½	101½	101½	100¾	97¾	97¼	97¾	95¾	98¾	99½
April.....	98½	98½	100½	101½	102½	102½	96½	100½	102½	101	100½	98½	98	96½	96½	99	100
May.....	98½	99½	102½	102	101½	101½	99½	101½	103½	101½	99½	99	98½	95½	97½	98½	100½
June.....	97½	98½	100½	100½	100½	100½	99½	100½	101½	100½	99½	98½	97½	95½	96¾	99	101½
July.....	97½	98½	101½	99½	99½	100½	99½	101½	101½	100½	99½	98½	96½	95½	96¾	99	101½
August....	97½	97½	100½	99½	99½	100½	100	101½	101½	100½	99¾	98½	96½	96	97½	98	102½
September..	97½	97½	99½	99½	100½	101½	100½	100½	101½	100½	98	97	95½	94½	97	98¾	102½
October....	98	98½	98½	101½	101½	100½	100½	100½	102½	100½	97½	97	94½	94½	97	98½	101½
November...	98½	99½	100½	102½	101½	100½	100½	101½	103½	101	97	97	94½	95	97½	98½	102½
December..	97½	98½	99½	100½	100½	99½	100	100½	101½	99½	96½	97½	95½	95½	97¾	98½	103½
Average for the year..	97½	98½	100	100½	101½	101	99½	100½	101½	101	..	98	96½	95½	96½	98½	101½

AVERAGE MINIMUM RATE PER CENT OF DISCOUNT CHARGED BY THE BANK OF ENGLAND, IN EACH MONTH
IN EACH YEAR FROM 1879 TO 1894.

MONTHS.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	MONTHS.
Jan.	4½	3	3½	5½	4½	3	5	3½	5	3½	4½	6	4	3½	2½	3	Jan.
Feb.	3	3	3½	5½	3½	3½	5	2½	4	2½	3	5½	3	3	2½	2½	Feb.
March....	2½	3	3	4	3	3½	3½	2	3½	2½	3	4½	3	3	2½	2	March.
April....	2½	3	3	3	3	2½	3½	2	2½	2	2½	3	3½	2½	2½	2	April.
May.....	2	3	2½	3	3½	2½	2½	2½	2	2½	2½	3	4½	2	3½	2	May.
June.....	2	2½	2½	3	4	2½	2	2½	2	2½	2½	3½	3½	2	3	2	June.
July.....	2	2½	2½	3	4	2	2	2½	2	2½	2½	4	2½	2	2½	2	July.
August...	2	2½	2½	3½	4	2	2	2½	2½	2½	3	4½	2½	2	4	2	August.
Sept.	2	2½	4	4½	3½	2	2	3½	4	3½	4½	4½	2½	2	4½	2	Sept.
October..	2	2½	3½	5	3	2½	2	3½	4	5	5	5	3	2½	3	2	October.
Nov.....	2½	2½	5	5	3	4½	2½	4	4	5	5	5½	4	3	3	2	Nov.
Dec.....	3	2½	5	5	3	5	3½	4½	4	5	5	5½	3½	3	3	2	Dec.
(Average for the year...)	2½	2½	3½	4½	3½	2½	3	3	3½	3½	3½	4½	3½	2½	3½	2½	(Average for the year.)

DEALINGS WITH LAND.

SCALE OF LAW COSTS ON THE SALE, PURCHASE, OR MORTGAGE OF
REAL PROPERTY, HOUSES, OR LAND.

	For the 1st £1,000.	For the 2nd and 3rd £1,000.	For the 4th and each subsequent £1,000 up to £10,000.	For each subsequent £1,000 up to £100,000.*
	Per £100. £ s. d.	Per £100. £ s. d.	Per £100. £ s. d.	Per £100. £ s. d.
Vendor's solicitor for negotiating a sale of property by private contract	1 0 0	1 0 0	0 10 0	0 5 0
Do., do., for conducting a sale of property by public auction, including the conditions of sale—				
When the property is sold	1 0 0	0 10 0	0 5 0	0 2 6
When the property is not sold, then on the reserve price†.....	0 10 0	0 5 0	0 2 6	0 1 3
Do., do., for deducing title to freehold, copyhold, or leasehold property, and perusing and completing conveyance (including preparation of contract, or conditions of sale, if any).....	1 10 0	1 0 0	0 10 0	0 5 0
Purchaser's solicitor for negotiating a purchase of property by private contract..	1 0 0	1 0 0	0 10 0	0 5 0
Do., do., for investigating title to freehold, copyhold, or leasehold property, and preparing and completing conveyance (including perusal and completion of contract, if any)	1 10 0	1 0 0	0 10 0	0 5 0
Mortgagor's solicitor for deducing title to freehold, copyhold, or leasehold property, perusing mortgage, and completing....	1 10 0	1 0 0	0 10 0	0 5 0
Mortgagee's solicitor for negotiating loan.	1 0 0	1 0 0	0 5 0	0 2 6
Do., do., for investigating title to freehold, copyhold, or leasehold property; and preparing and completing mortgage...	1 10 0	1 0 0	0 10 0	0 5 0

Vendor's or mortgagor's solicitor for procuring execution and acknowledgment of deed by a married woman, £2. 10s. extra.

Where the prescribed remuneration would amount to less than £5 the prescribed remuneration is £5, except on transactions under £100, in which case the remuneration of the solicitor for the vendor, purchaser, mortgagor, or mortgagee, is £3.

* Every transaction exceeding £100,000 to be charged for as if it were for £100,000.
† A minimum charge of £5 to be made whether a sale is effected or not.

DEALINGS WITH LAND.

Scale of Law Costs as to Leases, or Agreements for Leases, at Rack Rent (other than a Mining Lease, or a Lease for Building Purposes, or Agreement for the same).

LESSOR'S SOLICITOR FOR PREPARING, SETTLING, AND COMPLETING
LEASE AND COUNTERPART.

Where the rent does not exceed £100, £7. 10s. per cent on the rental, but no less in any case than £5.

Where the rent exceeds £100, and does not exceed £500, £7. 10s. in respect of the first £100 of rent, and £2. 10s. in respect of each subsequent £100 of rent.

Where the rent exceeds £500, £7. 10s. in respect of the first £100 of rent, £2. 10s. in respect of each £100 of rent up to £500, and £1 in respect of every subsequent £100.

Lessee's solicitor for perusing draft and completing—one-half of the amount payable to the lessor's solicitor.

Scale of Law Costs as to Conveyances in Fee, or for any other Freehold Estate reserving rent, or Building Leases reserving rent, or other Long Leases not at Rack Rent (except Mining Leases), or Agreements for the same respectively.

VENDOR'S OR LESSOR'S SOLICITOR FOR PREPARING, SETTLING, AND COMPLETING CONVEYANCE AND DUPLICATE, OR LEASE AND COUNTERPART.

Amount of Annual Rent.	Amount of Remuneration.
Where it does not exceed £5 ..	£5.
Where it exceeds £5, and does not exceed £50	The same payment as on a rent of £5, and also 20 per cent on the excess beyond £5.
Where it exceeds £50, but does not exceed £150	The same payment as on a rent of £50, and 10 per cent on the excess beyond £50.
Where it exceeds £150	The same payment as on a rent of £150, and 5 per cent on the excess beyond £150.

Where a varying rent is payable the amount of annual rent is to mean the largest amount of annual rent.

Purchaser's or lessee's solicitor for perusing draft and completing—one-half of the amount payable to the vendor's or lessor's solicitor.

RAILWAY ACCIDENTS.

PROPORTION OF PASSENGERS KILLED AND INJURED FROM CAUSES BEYOND THEIR OWN CONTROL.

THE FOLLOWING STATEMENT SHOWS THE PROPORTION OF PASSENGERS RETURNED AS KILLED AND INJURED FROM CAUSES BEYOND THEIR OWN CONTROL, IN PASSENGER-JOURNEYS, FOR THE YEARS 1874 TO 1894:—

YEAR.	Number of Passengers Killed and Injured from causes beyond their own control, from Accidents to Trains.		Number of Passenger Journeys (exclusive of Journeys by Season-ticket Holders).	Proportion returned as Killed and Injured (from causes beyond their own control) to number carried.	
	Killed.	Injured.		Killed.	Injured.
1874.....	86	1,613	477,840,411	1 in 5,556,284	1 in 296,243
1875.....	17	1,212	506,975,234	1 in 29,882,073	1 in 418,296
1876.....	38	1,279	538,287,295	1 in 14,165,455	1 in 420,865
1877.....	11	664	551,593,654	1 in 50,144,876	1 in 830,713
1878.....	24	1,173	565,024,455	1 in 23,542,685	1 in 481,692
1879.....	*75	602	562,732,890	1 in 7,503,105	1 in 934,772
1880.....	29	904	603,885,025	1 in 20,823,586	1 in 668,013
1881.....	23	987	622,160,000	1 in 27,050,435	1 in 630,354
1882.....	18	808	654,838,295	1 in 36,879,905	1 in 815,489
1883.....	11	662	683,718,137	1 in 62,156,194	1 in 1,032,806
1884.....	31	864	694,991,860	1 in 22,419,092	1 in 804,338
1885.....	6	436	697,213,031	1 in 116,202,171	1 in 1,599,112
1886.....	8	615	725,584,390	1 in 90,698,049	1 in 1,179,812
1887.....	25	538	733,670,000	1 in 29,346,800	1 in 1,363,699
1888.....	11	594	742,830,000	1 in 67,530,000	1 in 1,250,555
1889.....	+88	+1,016	775,183,073	1 in 8,808,875	1 in 762,975
1890.....	18	496	817,744,046	1 in 45,430,224	1 in 1,648,677
1891.....	5	875	845,463,668	1 in 169,092,733	1 in 966,244
1892.....	21	601	864,435,388	1 in 41,163,589	1 in 1,438,328
1893.....	17	484	873,177,052	1 in 51,363,356	1 in 1,804,084
1894.....	16	347	911,412,926	1 in 56,963,307	1 in 2,626,550

* Including 73 persons lost in the Tay Bridge disaster in the year 1879. + Including 80 killed and 202 injured in a collision near Armagh.
 Number of season tickets issued in 1894, 1,185,000.

THE DEATH DUTIES.

ESTATE DUTY.

THIS duty, which in the case of persons dying after the 1st August, 1894, takes the place of the old Probate Account and Estate Duties, is now regulated by the Finance Act, 1894.

It is payable on the principal value of all property (save in a few exceptional cases), whether real or personal, settled or not settled, which passes on death.

The rates of duty (which in case of real estate may be paid by instalments) are as follow :—

PRINCIPAL NET VALUE OF ESTATE.			RATE PER CENT.
Above	£100, but not above	£500	1
„	500 „ „	1,000	2
„	1,000 „ „	10 000	3
„	10,000 „ „	25,000	4
„	25,000 „ „	50,000	4½
„	50,000 „ „	75,000	5
„	75,000 „ „	100,000	5½
„	100,000 „ „	150,000	6
„	150,000 „ „	250,000	6½
„	250,000 „ „	500,000	7
„	500,000 „ „	1,000,000	7½
„	1,000,000 .....	.....	8

Fractions of £10 capital are to count as £10 with a liability to pay duty accordingly.

Where the net value of the estate (real and personal) does not exceed £100, no duty is payable.

Where the gross value of the estate (real and personal) exceeds £100, but does not exceed £300, the duty is only 30s., and where it exceeds £300, but does not exceed £500, only 50s.

Where the property is settled, an extra duty known as Settlement Estate Duty is in certain cases payable at the rate of 1 per cent.

Debts and funeral expenses are deducted before calculating the duty, except where the gross value of the estate does not exceed £500, and it is desired to pay the fixed duty of 30s. or 50s., as the case may be, instead of the *ad valorem* duty.

THE DEATH DUTIES.

LEGACY DUTY.

This duty is regulated by 55 Geo. III., cap. 184, 51 Vict., cap. 8, and the Finance Act, 1894, and is payable in respect of personal estate (including proceeds of sale of real estate) passing on death, either under a will or in case of intestacy.

The rates of duty are as follow :—

DESCRIPTION OF LEGATEE.	RATE OF DUTY.
Children of the deceased and their descendants, or the father or mother or any lineal ancestor of the deceased, or the husbands or wives of any such persons	£1 per cent.
Brothers and sisters of the deceased and their descendants, or the husbands or wives of any such persons	£3 "
Brothers and sisters of the father or mother of the deceased and their descendants, or the husbands or wives of any such persons	£5 "
Brothers and sisters of a grandfather or grandmother of the deceased and their descendants, or the husbands or wives of any such persons	£6 "
Any person in any other degree of collateral consanguinity or strangers in blood to the deceased.....	£10 "

SUCCESSION DUTY.

This duty is regulated by 16 and 17 Vict., cap. 51, 51 Vict., cap. 8, and the Finance Act, 1894, and is payable in respect of real estate (including leaseholds) passing on death, and in certain cases in respect of settled personal estate.

The rates of duty are as follow :—

DESCRIPTION OF SUCCESSOR.	RATE OF DUTY.
Lineal issue or lineal ancestor of the predecessor, or the husband or wife of any such person	£1 per cent.
Brothers and sisters of the predecessor and their descendants, or the husbands or wives of any such persons	£3 "
Brothers and sisters of the father or mother of the predecessor and their descendants, or the husbands or wives of any such persons	£5 "
Brothers and sisters of a grandfather or grandmother of the predecessor and their descendants, or the husbands or wives of any such persons.....	£6 "
Persons of more remote consanguinity, or strangers in blood.	£10 "

THE DEATH DUTIES.

NOTE.—Where the duty under the foregoing tables is at the rate of £1 per cent, an extra duty at the rate of 10s. per cent, and in all other cases an extra duty at the rate of £1. 10s. per cent, is leviable in respect of legacies payable out of or charged on real estate (not including leaseholds) and of successions to real estate (not including leaseholds) on deaths between the 1st July, 1888, and the 2nd August, 1894.

The husband or wife of deceased is exempt from legacy or succession duty.

Legacy duty is payable on the capital value, while succession duty is in certain cases payable on the capital value, and in other cases payable on the value of an annuity equal to the net income of the property, calculated according to the age of the successor.

Where the whole net value of the estate does not exceed £1,000, no legacy succession, or settlement estate duty is payable.

All pecuniary legacies, residues, or shares of residue, although not of the amount of £20, are subject to duty.

In case of persons dying leaving issue, the estate duty covers all legacy and succession duty which would formerly have been paid by such issue.

In case of persons dying domiciled in the United Kingdom, legacy duty is payable on all movable property wherever situate.

In case of persons dying domiciled abroad, no legacy duty is payable on movable property.

RULES BY WHICH THE PERSONAL ESTATES OF PERSONS
DYING INTESTATE ARE DISTRIBUTED.

If the Intestate die, leaving

His representatives take in the proportion following:—

Wife and child, or children	One-third to wife, rest to child or children; and if children are dead, then to the representatives (that is, their lineal descendants), except such child or children, not heirs-at-law, who had estate by settlement of intestate, or were advanced by him in his lifetime, equal to other shares.
Wife only, no relations	Up to £500, all to wife; all above the first £500, in each case, half to wife, rest to Crown.
Wife, no near relations	Up to £500, all to wife; all above the first £500, in each case, half to wife, rest to next-of-kin in equal degree to intestate, or their legal representatives.
No wife or child	All to next-of-kin and their legal representatives.
No wife, but child, children, or representatives of them, whether such child or children by one or more wives	All to him, her, or them.
Children by two wives	Equally to all.
If no child, children, or representatives of them	All to next-of-kin in equal degree to intestate.
Child, and grandchild by deceased child	Half to child, half to grandchild, who takes by representation.
Husband	Whole to him.
Father, and brother or sister	Whole to father.
Mother, and brother or sister	Whole to them equally.
Wife, mother, brothers, sisters, and nieces (daughters of deceased brother or sister)	Up to £500, all to wife; all above the first £500, in each case, half to wife, residue to mother, brothers, sisters, and nieces.
Wife, and father	Up to £500, all to wife; all above the first £500, in each case, half to wife, and half to father.
Wife, brothers or sisters, and mother	Up to £500, all to wife; all above the first £500, in each case, half to wife, half to brothers or sisters, and mother.
Mother, but no wife, child, father, brother, sister, nephew, or niece	The whole to mother.
Wife, and mother	Up to £500, all to wife; all above the first £500, in each case, half to wife, half to mother.
Brother or sister of whole blood, and brother or sister of half blood	Equally to both.
Posthumous brother or sister, and mother	Equally to both.
Posthumous brother or sister, and brother or sister born in lifetime of father	Equally to both.
Father's father, and mother's mother	Equally to both.
Uncle or aunt's children, and brother's or sister's grandchildren	Equally to all.
Grandmother, uncle, or aunt	All to grandmother.
Two aunts, nephew, and niece	Equally to all.
Uncle, and deceased uncle's child	All to uncle.
Uncle by mother's side, and deceased uncle or aunt's child	All to uncle.
Nephew by brother, and nephew by half-sister	Equally <i>per capita</i> .*
Nephew by deceased brother, and nephews and nieces by deceased sister	Each in equal shares <i>per capita</i> , and not <i>per stirpes</i> .
Brother, and grandfather	Whole to brother.
Brother's grandson, and brother or sister's daughter	All to brother or sister's daughter.
Brother, and two aunts	All to brother.
Brother, and wife	Up to £500, all to wife; all above the first £500, in each case, half to brother, half to wife.
Wife, mother, and children of a deceased brother (or sister)	Up to £500, all to wife; all above the first £500, in each case, half to wife, a fourth to mother, and a fourth <i>per stirpes</i> to deceased brother's or sister's children.
Wife, brother, or sister, and children of a deceased brother or sister	Up to £500, all to wife; all above the first £500, in each case, half to wife, one-fourth to brother or sister, one-fourth to deceased brother's or sister's children <i>per stirpes</i> .
Brother or sister, and children of a deceased brother or sister	Half to brother or sister, half to children of deceased brother or sister <i>per stirpes</i> .
Grandfather, no nearer relation	All to grandfather.

* That is, taking individually, and not by representation. Thus, if A die, leaving three brothers or sisters, they each take an equal part of his effects in his or her own right. But if either of them die, leaving children, his children would take his share *per stirpes*, that is *through him*, and not in their own rights.

By the Act 19 & 20 Vict., cap. 94, all special *local* customs relating to the estates of intestates are abolished so far as they affect personal property.

RULES OF DIVISION, ACCORDING TO THE LAW OF SCOTLAND,
OF THE MOVABLE ESTATE OF A PERSON WHO
HAS DIED INTESTATE.—CON.

If a person die, leaving

His movable estate is divided in the following proportions :—

Brothers or sisters of full blood, and brothers or sisters of half-blood	}	Whole to brothers and sisters of full blood.
Brothers or sisters consanguinean (that is, by same father but not same mother) and brothers or sisters uterine (that is, by same mother but not by same father)	}	Whole to brothers and sisters consanguinean.
Brothers or sisters consanguinean, and uncles or aunts	}	Whole to brothers and sisters.
Brothers and sisters uterine, and uncles or aunts	{	Half to brothers and sisters, other half to uncles and aunts.
Father, mother, and uncles and aunts	}	Whole to father.
Father, and cousins of full blood	}	Whole to father.
Mother, and uncles or aunts	{	One-third to mother, two-thirds to uncles and aunts.
Mother, and cousins of full blood	{	One-third to mother, two-thirds to cousins equally.
Grandfather, and uncles and aunts	}	Whole to uncles and aunts.
Grandfather, grandmother, and mother	}	One-third to mother, two-thirds to grandfather.

Where a wife dies, survived by

Her movable estate is divided in the following proportions :—

Husband	}	Half to husband, other half to next-of-kin.
Husband and children	}	One-third to husband, rest to children.
Children only	}	Whole to children.
Children, and issue of deceased children	{	Half to children, other half among children <i>per capita</i> , and issue <i>per stirpes</i> .
Children by two or more marriages	}	Equally to all.

Illegitimate children do not succeed to their father and mother, when the latter leave no will in their favour. When an illegitimate child dies without a will, and leaves neither wife nor children, his estate falls to the Crown.

* *Per capita*, i.e., by the head; *per stirpes* (by descent), i.e., through their parent and not in their own right. Where property divides *per capita*, it is divided into as many shares as there are children; where *per stirpes*, the share which would have fallen to the predeceasing parent if alive is divided equally among his children.

EXPECTATION OF LIFE.

EXPECTATION OF LIFE TABLES were constructed by the late Dr. Farr, of the General Register Office, and were calculated on the death-rates of 1838-54; but since that time very important changes have occurred in the death-rates at different ages; and consequently new tables have been constructed by Dr. W. Ogle, who succeeded Dr. Farr, on the basis of the death-rates of 1871-80. The following table gives the results both of the older and the later calculations; the first two columns in the male and female parts, respectively giving the survivors at each year of life out of a million born of the corresponding sex, by the older and the newer calculation; and the two other columns giving similarly the expectation of life at each year.

AGE.	MALES.				FEMALES.				AGE.
	OF 1,000,000 BORN, THE NUMBER SURVIVING AT THE END OF EACH YEAR OF LIFE.		MEAN AFTER-LIFETIME (EXPECTATION OF LIFE).		OF 1,000,000 BORN, THE NUMBER SURVIVING AT THE END OF EACH YEAR OF LIFE.		MEAN AFTER-LIFETIME (EXPECTATION OF LIFE).		
	1838-54.	1871-80.	1838-54.	1871-80.	1838-54.	1871-80.	1838-54.	1871-80.	
Col'mn	1	2	3	4	5	6	7	8	Col'mn
0	1,000,000	1,000,000	39.91	41.35	1,000,000	1,000,000	41.85	44.62	0
1	836,405	841,417	46.65	48.05	865,288	871,266	47.31	50.14	1
2	782,626	790,201	48.83	50.14	811,711	820,480	49.40	52.22	2
3	754,849	763,737	49.61	50.86	782,990	793,359	50.20	52.99	3
4	736,845	746,587	49.81	51.01	764,060	775,427	50.43	53.20	4
5	723,716	734,068	49.71	50.87	750,550	762,822	50.33	53.08	5
6	713,881	726,815	49.39	50.38	740,584	755,713	50.00	52.56	6
7	706,156	721,103	48.92	49.77	732,771	750,267	49.53	51.94	7
8	699,688	716,309	48.37	49.10	726,116	745,631	48.98	51.26	8
9	694,346	712,337	47.74	48.37	720,537	741,727	48.35	50.53	9
10	689,557	708,990	47.05	47.60	715,769	738,382	47.67	49.76	10
11	685,982	706,146	46.31	46.79	711,581	735,405	46.95	48.96	11
12	682,512	703,595	45.54	45.96	707,770	732,697	46.20	48.13	12
13	679,256	701,200	44.76	45.11	704,155	730,122	45.44	47.30	13
14	676,057	698,840	43.97	44.26	700,581	727,571	44.66	46.47	14
15	672,776	696,419	43.18	43.41	696,917	724,956	43.90	45.63	15
16	669,296	693,695	42.40	42.58	693,050	722,084	43.14	44.81	16
17	665,529	690,746	41.64	41.76	688,894	718,993	42.40	44.00	17
18	661,402	687,507	40.90	40.96	684,378	715,622	41.67	43.21	18
19	656,868	683,941	40.17	40.17	679,463	711,946	40.97	42.43	19
20	651,903	680,033	39.43	39.40	674,119	707,949	40.29	41.66	20
21	646,502	675,769	38.80	38.64	668,345	703,616	39.63	40.92	21
22	641,028	671,344	38.13	37.89	662,474	699,141	38.98	40.18	22
23	635,486	666,754	37.46	37.15	656,509	694,521	38.33	39.44	23
24	629,382	661,997	36.79	36.41	650,463	689,759	37.68	38.71	24
25	624,221	657,077	36.12	35.68	644,342	684,858	37.04	37.98	25
26	618,503	651,998	35.44	34.96	638,148	679,822	36.39	37.26	26
27	612,731	646,757	34.77	34.24	631,891	674,661	35.75	36.54	27
28	606,906	641,353	34.10	33.52	625,575	669,372	35.10	35.83	28
29	601,026	635,778	33.43	32.81	619,201	663,959	34.46	35.11	29
30	595,089	630,038	32.76	32.10	612,774	658,418	33.81	34.41	30
31	589,094	624,124	32.09	31.40	606,296	652,747	33.17	33.70	31
32	583,036	618,056	31.42	30.71	599,769	646,957	32.53	33.00	32
33	576,912	611,827	30.74	30.01	593,196	641,045	31.88	32.30	33
34	570,716	605,430	30.07	29.33	586,575	635,003	31.23	31.60	34
35	564,441	598,860	29.40	28.64	579,908	628,842	30.59	30.90	35
36	558,083	592,107	28.73	27.96	573,192	622,554	29.94	30.21	36
37	551,634	585,167	28.06	27.29	566,431	616,144	29.29	29.52	37
38	545,084	578,019	27.39	26.62	559,619	609,599	28.64	28.83	38
39	538,428	570,656	26.72	25.96	552,758	602,924	27.99	28.15	39
40	531,657	563,077	26.06	25.30	545,844	596,113	27.34	27.46	40
41	524,761	555,254	25.39	24.65	538,876	589,167	26.69	26.78	41
42	517,734	547,288	24.73	24.00	531,849	582,104	26.03	26.10	42
43	510,567	539,161	24.07	23.35	524,765	574,919	25.38	25.42	43
44	503,247	530,858	23.41	22.71	517,617	567,612	24.72	24.74	44

EXPECTATION OF LIFE.

AGE	MALES.				FEMALES.				AGE.
	OF 1,000,000 BORN, THE NUMBER SURVIVING AT THE END OF EACH YEAR OF LIFE.		MEAN AFTER-LIFETIME (EXPECTATION OF LIFE).		OF 1,000,000 BORN, THE NUMBER SURVIVING AT THE END OF EACH YEAR OF LIFE.		MEAN AFTER-LIFETIME (EXPECTATION OF LIFE).		
	1888-54.	1871-80.	1888-54.	1871-80.	1888-54.	1871-80.	1888-54.	1871-80.	
	Col'mn 1	2	3	4	5	6	7	8		Col'mn
45	495,770	522,374	22·76	22·07	510,408	560,174	24·06	24·06	45
46	488,126	513,702	22·11	21·44	503,122	552,602	23·40	23·38	46
47	480,308	504,836	21·46	20·80	495,768	544,892	22·74	22·71	47
48	472,306	495,761	20·82	20·18	488,339	537,043	22·08	22·03	48
49	464,114	486,479	20·17	19·55	480,833	529,048	21·42	21·36	49
50	455,727	476,980	19·54	18·93	478,245	520,901	20·75	20·68	50
51	447,139	467,254	18·90	18·31	465,572	512,607	20·09	20·01	51
52	438,099	457,022	18·28	17·71	457,814	504,188	19·42	19·34	52
53	428,801	446,510	17·67	17·12	449,966	495,645	18·75	18·66	53
54	419,256	435,729	17·06	16·53	442,027	486,973	18·08	17·98	54
55	409,460	424,677	16·45	15·95	433,331	477,440	17·43	17·33	55
56	399,408	413,351	15·86	15·37	424,239	467,443	16·79	16·69	56
57	389,088	401,740	15·26	14·80	414,761	456,992	16·17	16·06	57
58	378,481	389,827	14·64	14·24	404,895	446,079	15·55	15·45	58
59	367,570	377,591	14·10	13·68	394,636	434,695	14·94	14·84	59
60	356,330	365,011	13·53	13·14	383,974	422,835	14·34	14·24	60
61	344,744	352,071	12·96	12·60	372,895	410,477	13·75	13·65	61
62	332,789	338,820	12·41	12·07	361,387	397,644	13·17	13·08	62
63	320,451	325,256	11·87	11·56	349,436	384,819	12·60	12·51	63
64	307,720	311,368	11·34	11·05	337,031	370,495	12·05	11·96	64
65	294,588	297,156	10·82	10·55	324,165	356,165	11·51	11·42	65
66	281,064	282,638	10·32	10·07	310,833	341,326	10·98	10·90	66
67	267,160	267,229	9·83	9·60	297,048	325,988	10·47	10·39	67
68	252,901	252,763	9·36	9·14	282,819	310,170	9·97	9·89	68
69	238,323	237,487	8·90	8·70	268,177	293,899	9·48	9·41	69
70	223,490	222,056	8·45	8·27	253,161	277,225	9·02	8·95	70
71	208,453	206,539	8·03	7·85	237,822	260,207	8·57	8·50	71
72	193,297	190,971	7·62	7·45	222,230	242,334	8·13	8·07	72
73	178,114	175,449	7·22	7·07	206,464	225,497	7·71	7·65	73
74	163,003	160,074	6·85	6·70	190,620	208,003	7·31	7·25	74
75	148,076	144,960	6·49	6·34	174,800	190,566	6·93	6·87	75
76	133,453	130,227	6·15	6·00	159,126	173,316	6·56	6·51	76
77	119,251	115,986	5·82	5·68	143,722	156,892	6·21	6·16	77
78	105,592	102,359	5·51	5·37	128,711	139,927	5·88	5·82	78
79	92,587	89,449	5·21	5·07	114,229	124,065	5·56	5·50	79
80	80,343	77,354	4·93	4·79	100,394	108,935	5·26	5·20	80
81	68,946	66,153	4·66	4·51	87,323	94,662	4·98	4·90	81
82	58,471	55,842	4·41	4·26	75,119	81,805	4·71	4·63	82
83	48,970	46,489	4·17	4·01	63,862	68,966	4·45	4·37	83
84	40,471	38,132	3·95	3·88	53,615	57,723	4·21	4·12	84
85	32,979	30,785	3·73	3·56	44,419	47,631	3·98	3·88	85
86	26,476	24,486	3·53	3·36	36,284	38,710	3·76	3·66	86
87	20,926	19,054	3·34	3·17	29,202	30,958	3·56	3·46	87
88	16,268	14,576	3·16	2·99	23,135	24,338	3·36	3·26	88
89	12,428	10,926	3·00	2·82	18,027	18,788	3·18	3·08	89
90	9,321	8,015	2·84	2·66	13,802	14,225	3·01	2·90	90
91	6,859	5,748	2·69	2·51	10,376	10,553	2·85	2·74	91
92	4,946	4,025	2·55	2·37	7,650	7,658	2·70	2·58	92
93	3,492	2,749	2·41	2·24	5,526	5,429	2·55	2·44	93
94	2,411	1,828	2·29	2·12	3,908	3,756	2·42	2·30	94
95	1,628	1,183	2·17	2·01	2,704	2,533	2·29	2·17	95
96	1,071	742	2·06	1·90	1,827	1,661	2·17	2·11	96
97	688	452	1·95	1·81	1,204	1,057	2·06	2·03	97
98	430	266	1·85	1·72	774	653	1·96	1·83	98
99	262	151	1·76	1·65	483	389	1·86	1·73	99
100	154	82	1·68	1·61	295	225	1·76	1·62	100

THE QUEEN AND ROYAL FAMILY.

THE QUEEN.—VICTORIA, of the United Kingdom of Great Britain and Ireland, &c., Queen, Defender of the Faith. Her Majesty was born at Kensington Palace, May 24, 1819; succeeded to the throne, June 20, 1837, on the death of her uncle, King William IV.; was crowned June 28, 1838; and married, February 10, 1840, to his Royal Highness Prince Albert. Her Majesty is the only child of his late Royal Highness Edward, Duke of Kent, son of King George III. The children of Her Majesty are:—

1. Her Royal Highness Victoria Adelaide Mary Louisa, PRINCESS ROYAL OF ENGLAND AND PRUSSIA, born November 21, 1840, and married to his Royal Highness Wilhelm of Prussia, January 25, 1858, died June 15, 1888, and has had issue three sons and four daughters.

2. His Royal Highness Albert Edward, PRINCE OF WALES, born November 9, 1841, married, March 10, 1863, Alexandra of Denmark (Princess of Wales), born December 1, 1844, and has issue, Prince Albert Victor, born January 8, 1864, died January 14, 1892; George Frederick Ernest Albert, Duke of York, born June 3, 1865, married his cousin Princess Victoria May, only daughter of the Duke of Teck, July 6, 1893, has a son born June 23, 1894; Louisa Victoria Alexandra Dagmar, born February 20, 1867, married, July 27, 1889, Alexander William George, Duke of Fife, has two daughters, born October 3, 1891, and April 3, 1893; Victoria Alexandra Olga Mary, born July 6, 1868; Maud Charlotte Mary Victoria, born November 26, 1869; and Alexander John Charles Albert, born April 6, 1871, died April 7, 1871.

3. Her Royal Highness Alice Maud Mary, born April 25, 1843; died December 14, 1878; married his Royal Highness Prince Frederick Louis of Hesse, July 1, 1862, who died March 13, 1892; had issue five daughters and two sons; the second son died by an accident, May, 1873; the youngest daughter died November 15, 1878.

4. His Royal Highness Alfred Ernest Albert, Duke of Saxe-Coburg and Gotha, born August 6, 1844; married the Grand Duchess Marie of Russia, January 9, 1874; and has had issue a son, born October 15, 1874, and four daughters, born October 29, 1875, November 25, 1876, September 1, 1878, and March, 1884.

5. Her Royal Highness Helena Augusta Victoria, born May 25, 1846; married to his Royal Highness Prince Frederick Christian Charles Augustus of Schleswig-Holstein Sonderburg-Augustenburg, July 5, 1866; and has issue living two sons and two daughters.

6. Her Royal Highness Louise Caroline Alberta, born March 18, 1848; married to the Marquis of Lorne, eldest son of the Duke of Argyll, March 21, 1871.

7. His Royal Highness Arthur William Patrick Albert, Duke of Connaught and Strathearn, born May 1, 1850; married Princess Louise Margaret of Prussia, March 13, 1879; issue, a daughter, born January 15, 1882; a son, born January 13, 1883; and a daughter, born March 17, 1886.

8. His Royal Highness Leopold George Duncan Albert, Duke of Albany, born April 7, 1853; married, April 27, 1882, Princess Helen of Waldeck; died March 28, 1884; issue, a daughter, born February 26, 1883, and a son, born July 19, 1884.

9. Her Royal Highness Beatrice Mary Victoria Feodora, born April 14, 1857; married, July 23, 1885, to Prince Henry of Battenberg; issue, three sons and a daughter.

PARLIAMENTS OF THE UNITED KINGDOM.

Assembled.			Dissolved.			Duration.			Assembled.			Dissolved.			Duration.		
						Yrs. m. d.			VICTORIA.						Yrs. m. d.		
1	GEORGE III. Sept. 27, 1796*		June 29, 1802		5 9 2		13	Nov. 15, 1837		June 23, 1841		3 7 8					
2	Oct. 29, 1802		Oct. 25, 1806		3 11 27		14	Aug. 19, 1841		July 23, 1847		5 11 4					
3	Dec. 15, 1806		April 29, 1807		0 4 14		15	Nov. 18, 1847		July 1, 1852		4 7 13					
4	June 22, 1807		Sept. 29, 1812		5 3 7		16	Nov. 4, 1852		Mar. 21, 1857		4 4 17					
5	Nov. 24, 1812		June 10, 1818		5 6 16		17	April 30, 1857		April 23, 1859		1 11 23					
6	Jan. 14, 1819		Feb. 29, 1820		1 1 15		18	May 31, 1859		July 6, 1865		6 1 6					
							19	Feb. 1, 1866		Nov. 11, 1868		2 9 10					
							20	Dec. 10, 1868		Jan. 26, 1874		5 1 16					
7	GEORGE IV. April 23, 1820		June 2, 1826		6 1 9		21	Mar. 5, 1874		Mar. 25, 1880		6 0 20					
8	Nov. 14, 1826		July 24, 1830		3 8 10		22	April 29, 1880		Nov. 18, 1885		5 6 20					
							23	Jan. 12, 1886		June 25, 1886		0 5 5					
9	WILLIAM IV. Oct. 26, 1830		April 22, 1831		0 5 27		24	Aug. 5, 1886		June 28, 1892		5 10 24					
10	June 14, 1831		Dec. 3, 1832		1 5 9		25	Aug. 4, 1892		July 24, 1895		2 11 20					
11	Jan. 29, 1833		Dec. 30, 1834		1 11 1		26	Aug. 12, 1895									
12	Feb. 19, 1835		July 17, 1837		2 4 28												

*Parliament first met after the Union with Ireland, Jan. 22 1801.

LIST OF ADMINISTRATIONS IN THE PRESENT CENTURY.

Date.	Prime Minister.	Duration.		Chancellor.	Exchequer.	Home Secretary.	Foreign Sec.
		Yrs.	Days.				
Dec. 23, 1783	William Pitt	17	84	{ Thurlow... { Loughboro'	William Pitt.	Portland	Grenville.
Mar. 17, 1801	Hy. Addington . . .	3	59	Eldon	H. Addington.	Portland, Pelham, C. Yorke.	Hawkesbury.
May 15, 1804	William Pitt	1	272	Eldon	William Pitt.	Hawkesbury . . .	{ Harrowby. { Milgrave. { Charles J. Fox. { Visct. Howick.
Feb. 11, 1806	Lord Grenville . . .	1	48	Erskine	Lord H. Petty	Spencer	{ Bathurst. { Wellesley.
Mar. 31, 1807	Duke of Portland	2	246	Eldon	S. Perceval . .	Hawkesbury . . .	G. Canning.
Dec. 2, 1809	Spencer Perceval	2	190	Eldon	S. Perceval . .	R. Ryder	{ Castlereagh. { G. Canning.
June 9, 1812	Earl of Liverpool	14	319	Eldon	{ N. Vans start. { F. J. Robinson	Sidmuth Robert Peel	Castlereagh. G. Canning.
Apr. 24, 1827	George Canning.	0	134	Lyndhurst	G. Canning . .	{ Sturges Bourne. { Lansdowne . . .	Dudley.
Sept. 5, 1827	Visct. Goderich . .	0	142	Lyndhurst	J. C. Herries.	Lansdowne	Dudley. { Dudley. { Aberdeen.
Jan. 25, 1828	D. of Wellington.	2	301	Lyndhurst	H. Goulburn . .	Robert Pee	{ Palmerston. { Granville.
Nov. 22, 1830	Earl Grey	3	298	Brougham	Althorp	Melbourne	Palmerston.
July 18, 1834	Visct. Melbourne	0	161	Brougham	Althorp	Duncannon	Palmerston.
Dec. 26, 1834	Sir Robert Peel . . .	0	113	Lyndhurst	Sir R. Peel . . .	H. Goulburn . . .	Wellington.
Apr. 18, 1835	Visct. Melbourne	6	141	{ In Comm. { Cottenham	F. S. Rice	Lord J. Russell . .	Palmerston.
Sept. 6, 1841	Sir Robert Peel . . .	4	803	Lyndhurst	H. Goulburn . .	Normanby	Palmerston.
July 6, 1846	Ld. John Russell	5	236	{ Cottenham { Truro	Sir C. Wood . . .	Sir George Grey	{ Palmerston. { Granville.
Feb. 27, 1852	Earl of Derby . . .	0	305	St. Leonards	B. Disraeli . .	S. H. Walpole . . .	Malmesbury.
Dec. 28, 1852	Earl of Aberdeen	2	44	Cranworth	W. Gladstone	Palmerston	{ Lord J. Russell. { Clarendon.
Feb. 10, 1855	Lord Palmerston	3	15	Cranworth	{ W. Gladstone. { Sir G. C. Lewis	Sir George Grey	Clarendon.
Feb. 25, 1858	Earl of Derby . . .	1	113	Chelmsford	B. Disraeli . .	S. H. Walpole . . .	Malmesbury.
June 18, 1859	Lord Palmerston	6	141	{ Campbell . . . { Westbury . . .	W. Gladstone.	{ Sir G. C. Lewis. { Sir George Grey	Russell.
Nov. 6, 1865	Earl Russell	0	242	Cranworth	W. Gladstone.	Sir George Grey	Clarendon.
July 6, 1866	Earl of Derby . . .	1	236	Chelmsford	B. Disraeli . .	{ S. H. Walpole . . { Gathorne Haroy.	Stanley.
Feb. 27, 1868	Benjmn. Disraeli	0	285	Cairns	G. W. Hunt . . .	G. Hardy	Stanley.
Dec. 9, 1868	W. E. Gladstone.	5	74	{ Hatherley . . . { Selborne . . .	{ Robert Lowe . . { W. Gladstone . .	{ H. A. Bruce { Robert Lowe	{ Clarendon. { Granville.
Feb. 21, 1874	Benjamin Disraeli } Earl Beaconsfield. }	6	67	Cairns	S. Northcote . .	R. A. Cross	{ Derby. { Salisbury.
Apr. 28, 1880	W. E. Gladstone.	5	57	Selborne	{ W. Gladstone . . { H. C. E. Childers	Sir W. Harcourt	Granville.
June 24, 1885	Mrq. of Salisbury	0	227	Halsbury	Hicks-Beach . .	R. A. Cross	Salisbury.
Feb. 7, 1886	W. E. Gladstone.	0	139	Herschel	W. Harcourt . .	H. C. E. Childers	Rosebery.
July 24, 1886	Mrq. of Salisbury	6	17	Halsbury	{ Lrd. Churchill. { G. J. Goschen.	H. Matthews . . .	{ Iddesleigh. { Salisbury.
Aug. 15, 1892	W. E. Gladstone.	2	313	Herschel	W. Harcourt . .	H. H. Asquith . .	{ Rosebery. { Kimberley
Mar. 3, 1894	Earl of Rosebery			Halsbury	Hicks-Beach . .	Sir M. W. Ridley	Salisbury.
June 24, 1895	Mrq. of Salisbury						

THE SALISBURY MINISTRY, 1895.

Prime Minister and Secretary of State for Foreign Affairs	}	MARQUIS of SALISBURY.
Lord President of the Council ..		DUKE of DEVONSHIRE.
First Lord of the Treasury		Rt. Hon. A. J. BALFOUR.
Lord Chancellor		LORD HALSBURY.
Secretary for India.....		LORD G. HAMILTON.
Chancellor of the Exchequer		Sir M. HICKS-BEACH.
Home Secretary		Sir MATTHEW WHITE RIDLEY.
Secretary for the Colonies....		Rt. Hon. J. CHAMBERLAIN.
Secretary for War		MARQUIS of LANSDOWNE.
Secretary for Scotland		LORD BALFOUR of BURLEIGH.
First Lord of the Admiralty.....		Rt. Hon. G. J. GOSCHEN.
President of the Board of Trade		Rt. Hon. C. T. RITCHIE.
Chancellor of the Duchy of Lancaster ..		LORD JAMES.
Lord Privy Seal		VISCOUNT CROSS.
President of the Local Government Board.....	}	Rt. Hon. HENRY CHAPLIN.
Lord Lieutenant of Ireland		EARL CADOGAN.
Lord Chancellor of Ireland		LORD ASHBOURNE.
President of the Board of Agriculture....		Rt. Hon. W. LONG.
First Commissioner of Works		Rt. Hon. ACKERS DOUGLAS.

The above form the Cabinet.

Chief Secretary for Ireland	G. BALFOUR.
Postmaster-General	DUKE of NORFOLK.
Vice-President of the Council	Sir JOHN E. GORST.
Junior Lords of the Treasury	(H. T. ANSTRUTHER. W. HAYES FISHER. LORD STANLEY.
Financial Secretary to the Treasury	Rt. Hon. R. W. HANBURY.
Patronage Secretary to the Treasury	Sir WM. WALROND.
Under Secretary for the Home Depart- ment	} JESSE COLLINGS.
Under Secretary for Foreign Affairs	Hon. GEORGE CURZON.
Under Secretary for the Colonies	EARL of SELBORNE.
Under Secretary for India	EARL of ONSLOW.
Parliamentary Secretary of the Board of Trade	} EARL of DUDLEY.
Parliamentary Secretary of the Local Government Board	} T. W. RUSSELL.

THE SALISBURY MINISTRY, 1895—*Continued.*

Secretary to the Admiralty	W. E. G. MACARTNEY.
Under Secretary for the War Office	Hon. W. ST. J. BRODRICK.
Financial Secretary to the War Office ..	POWELL WILLIAMS.
Civil Lord to the Admiralty	AUSTEN CHAMBERLAIN.
Attorney-General.....	Sir R. WEBSTER.
Solicitor-General	Sir R. B. FINLAY.
Lord Advocate for Scotland	Rt. Hon. Sir C. PEARSON.
Solicitor-General for Scotland	A. G. MURRAY.
Attorney-General for Ireland	Rt. Hon. JOHN ATKINSON.
Solicitor-General for Ireland	W. KENNY.
Vice-Chamberlain of the Household	Hon. ALWYN FELLOWES.
Comptroller of the Household	LORD ARTHUR HILL.
Lord Chamberlain	EARL of LATHOM.
Lord Steward	EARL of PEMBROKE.

PRIME MINISTERS SINCE 1834.

Sir Robert Peel	December 15, 1834	Mr. Disraeli..	March to December, 1868
Viscount Melbourne	April 18, 1835	Mr. Gladstone	December 9, 1868
Sir Robert Peel	August 31, 1841	Earl Beaconsfield ..	February 21, 1874
Lord John Russell.....	July 6, 1846	Mr. Gladstone.....	April 29, 1880
Earl of Derby	February 27, 1852	and Ch. of Ex. to April,	1883.
Earl of Aberdeen ..	December 28, 1852	Marquis of Salisbury	June 24, 1885
Viscount Palmerston.	February 26, 1855	Mr. Gladstone	February 2, 1886
Earl of Derby	February 26, 1858	Marquis of Salisbury ..	August 3, 1886
Viscount Palmerston	June 18, 1859	Mr. Gladstone	August 15, 1892
Earl Russell	October 28, 1865	Earl Rosebery.....	March 3, 1894
Earl of Derby.....	July 8, 1866	Marquis of Salisbury ..	June 25, 1895

Twenty changes of Governments have taken place since the beginning of 1834. but in that time only ten men have been Premiers, and of these Mr. Gladstone, the Marquis of Salisbury, and Earl Rosebery are the sole survivors. Mr. Gladstone has been Premier longer than any other statesman since the Earl of Liverpool, who held office nearly fifteen years in succession.

In 1885 the number of members of the Lower House was finally fixed at 670, as against 658 in previous years; England returning 465, Wales 30, Scotland 72, and Ireland 103 members. The previous distribution had been—England 469, Wales 30, Scotland 60, and Ireland 103 seats. There are now 377 county members, as against 283; 284 borough members, as against 360; and 9 University members, as against 9.

THE
HOUSE OF COMMONS AS ELECTED JULY, 1895.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Parliamentary	
BEDFORD (3).							
<i>County Divisions (2).</i>							
Biggleswade, or N....	Lord A. Compton .....	..	..	1	..	..	64,457
Luton, or S.	T. G. Ashton .....	..	1	..	..	..	68,249
		..	1	1	..	..	132,706
<i>Borough (1).</i>							
Bedford	G. Pym	1	..	..	..	..	28,023
		1	1	1	..	..	160,729
BERKS. (5).							
<i>County Divisions (3).</i>							
Abingdon, or N.....	A. K. Lloyd	1	..	..	..	..	49,077
Newbury, or S.	W. G. Mount	1	..	..	..	..	55,846
Wokingham, or E....	Sir George Russell	1	..	..	..	..	59,104
		3	..	..	..	..	164,027
<i>Boroughs (2).</i>							
Reading	C. T. Murdock	1	..	..	..	..	55,752
Windsor (New)	F. T. Barry.....	1	..	..	..	..	12,327
		5	..	..	..	..	232,106
BUCKS. (3).							
<i>County Divisions (3).</i>							
Aylesbury, or M.	Baron F. de Rothschild .....	..	..	1	..	..	58,510
Buckingham, or N. ...	W. W. Carlile	1	..	..	..	..	57,389
Wycombe, or S.....	Viscount Curzon	1	..	..	..	..	66,792
		2	..	1	..	..	182,691
CAMBRIDGE (4).							
<i>County Divisions (3).</i>							
Chesterton, or W.	R. Green.....	1	..	..	..	..	46,041
Newmarket, or E.....	H. Mc.Calmont.....	1	..	..	..	..	48,878
Wisbeach, or N.....	C. T. Giles	1	..	..	..	..	49,556
		3	..	..	..	..	144,475
<i>Borough (1).</i>							
Cambridge	R. U. P. Fitzgerald	1	..	..	..	..	44,387
		4	..	..	..	..	188,862

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1881.
		Conservative	Liberal.	Liberal U.	Nationalist	Farr'nlite	
CHESTER (13).							
<i>County Divisions (8).</i>							
Altrincham.....	C. R. Disraeli	1	..	..	..	..	63,390
Crewe	Hon. R. A. Ward	1	..	..	..	..	64,434
Eddisbury	H. J. Tollemache	1	..	..	..	..	55,249
Hyde	J. W. Sidebotham.....	1	..	..	..	..	57,468
Knutsford	Hon. A. de T. Egerton	1	..	..	..	..	55,073
Macclesfield	W. Bromley Davenport	1	..	..	..	..	53,147
Northwich	Sir J. T. Brunner .....	..	1	..	..	..	69,893
Wirrall	Colonel Cotton-Jodrell.....	1	..	..	..	..	73,725
		7	1	..	..	..	492,379
<i>Boroughs (5).</i>							
Birkenhead.....	Elliot Lees.....	1	..	..	..	..	99,249
Chester	R. A. Yerburgh	1	..	..	..	..	42,295
Stalybridge	T. H. Sidebottom	1	..	..	..	..	44,135
Stockport (2)	G. Whiteley	1	..	..	..	..	70,253
	B. V. Melville	1	..	..	..	..
		12	1	..	..	..	748,311
CORNWALL (7).							
<i>County Divisions (6).</i>							
Bodmin, or S.E.	Rt. Hon. L. H. Courtney ....	..	..	1	..	..	52,386
Camborne, or N.W. ..	A. Strauss .....	..	..	1	..	..	54,192
Launceston, or N.E. ..	T. Owen .....	..	1	..	..	..	48,086
St. Austell, or M.	W. A. McArthur .....	..	1	..	..	..	49,517
St. Ives, or W.	T. B. Bolitho .....	..	..	1	..	..	50,160
Truro	E. Lawrence .....	..	..	1	..	..	50,715
		..	2	4	..	..	305,056
<i>Borough (1).</i>							
Penryn and Falmouth	F. J. Horniman .....	..	1	..	..	..	17,533
		..	3	4	..	..	322,589
CUMBERLAND (6).							
<i>County Divisions (4).</i>							
Cockermouth	Sir Wilfrid Lawson .....	..	1	..	..	..	63,592
Egremont, or W.	H. Duncombe	1	..	..	..	..	53,629
Eskdale, or N.	R. A. Allison .....	..	1	..	..	..	45,300
Penrith, or M.	J. W. Lowther	1	..	..	..	..	45,636
		2	2	..	..	..	208,157
<i>Boroughs (2)</i>							
Carlisle ..	W. C. Gully, Q.C.....	..	1	..	..	..	39,176
Whitehaven	A. Helder	1	..	..	..	..	19,217
		3	3	..	..	..	266,550

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Parliament	
DERBY (9).							
<i>County Divisions (7).</i>							
Chesterfield	T. Bayley .....	.	1	..	.	61,294
High Peak	Captain Sidebottom.....	1	..	..	..	60,740
Ilkeston	Sir W. B. Foster .....	..	1	..	..	69,192
Mid	J. A. Jacoby .....	..	1	..	..	59,716
North-Eastern	T. D. Bolton .....	..	1	..	..	61,995
Southern	J. Gretton	1	..	..	..	63,816
Western	V. C. Cavendish .....	..	..	1	..	56,987
		2	4	1	..	433,740	
<i>Boroughs (2).</i>							
Derby (2)	H. Bemrose	1	..	..	..	94,146
	G. Drage.....	1	..	..	..
		4	4	1	..	527,886	
DEVON (13).							
<i>County Divisions (8).</i>							
Ashburton, or M. ...	C. Seale Hayne .....	..	1	..	..	53,005
Barnstaple, or N.W...	Sir W. B. Gull .....	..	..	1	..	61,349
Honiton, or E.	Sir J. Kennaway	1	..	..	..	52,025
South Molton, or N...	G. Lambert .....	..	1	..	..	46,718
Tavistock, or W. ...	H. C. F. Luttrell .....	..	1	..	..	50,715
Tiverton, or N.E. ..	Sir W. Walrond	1	..	..	..	52,762
Torquay	Commander Philpott	1	..	..	..	57,463
Totnes, or S.	F. B. Mildmay .....	..	..	1	..	49,615
		3	3	2	..	423,652	
<i>Boroughs (5).</i>							
Devonport (2)	Hudson Kearley .....	..	1	..	..	70,238
	E. J. C. Morton.....	..	1	..	..
Exeter	Hon. Sir H. S. Northcote	1	..	..	..	50,570
Plymouth (2)	Sir E. Clarke	1	..	..	..	87,307
	C. Harrison .....	..	1	..	..
		5	6	2	..	631,767	
DORSET (4).							
<i>County Divisions (4).</i>							
Eastern	Hon. H. N. Sturt	1	..	..	..	57,202
Northern	J. K. Wingfield Digby.....	1	..	..	..	45,740
Southern	W. E. Brymer	1	..	..	..	49,897
Western	Colonel R. Williams.....	1	..	..	..	41,648
		4	..	..	..	194,487

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Protege	
DURHAM (16).							
<i>County Divisions (8).</i>							
Barnard Castle	Sir J. W. Pease.....	..	1	..	..	59,459
Bishop Auckland ...	J. M. Paulton .....	..	1	..	..	61,833
Chester-le-Street ...	Sir J. Joicey .....	..	1	..	..	70,206
Houghton-le-Spring ..	R. Cameron .....	..	1	..	..	69,235
Jarrow	Sir C. M. Palmer .....	..	1	..	..	80,532
Mid	J. Wilson .....	..	1	..	..	67,635
North-Western	I. Atherley-Jones..	..	1	..	..	65,987
South-Eastern	Sir H. Havelock-Allan .	..	..	1	..	63,830
		..	7	1	..	538,717	
<i>Boroughs (8).</i>							
Darlington.....	A. Pease.....	..	..	1	..	38,030
Durham	M. A. Fowler.....	..	1	..	..	15,287
Gateshead	William Allan .....	..	1	..	..	85,712
Hartlepool	T. Richardson .....	..	..	1	..	64,914
South Shields.....	W. S. Robson .....	..	1	..	..	78,431
Stockton	J. Samuel .....	..	1	..	..	68,895
Sunderland (2)	W. T. Doxford	1	..	..	..	142,097
	Colonel Gourley .....	..	1	..	..
		1	12	3	..	1,032,083	
ESSEX (11).							
<i>County Divisions (8).</i>							
Chelmsford, or M....	T. Usborne.....	1	..	..	..	58,313
Epping, or W.....	Colonel A. R. M. Lockwood ..	1	..	..	..	55,416
Harwich, or N.E....	J. Round	1	..	..	..	55,612
Maldon, or E.	C. H. Strutt	1	..	..	..	54,572
Romford, or S.	Alfred M. Wigram	1	..	..	..	103,543
Saffron Walden, or N.	C. Gold .....	..	1	..	..	47,422
South-Eastern	Major Rasch.....	1	..	..	..	69,824
Walthamstow, or S.W.	E. W. Byrne, Q.C.	1	..	..	..	101,236
		7	1	..	..	545,938
Colchester	Sir W. D. Pearson .....	..	1	..	..	34,559
West Ham, North...	E. Gray ..	1	..	..	..	92,304
„ South...	G. E. Banes	1	..	..	..	112,598
		9	2	..	..	785,399
GLOUCESTER (11).							
<i>County Divisions (5).</i>							
Cirencester, or E.	Hon. A. B. Bathurst	1	..	..	..	53,364
Forest of Dean	Rt. Hon. Sir C. Dilke .....	..	1	..	..	52,791
Stroud, or M.....	C. A. Cripps	1	..	..	..	56,488
Tewkesbury, or N....	Sir J. E. Dorington	1	..	..	..	50,325
Thornbury, or S.	C. E. H. A. Colston	1	..	..	..	63,587
		4	1	..	..	276,555

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1881.
		Conservative	Liberal.	Liberal U.	Nationalist	Paran'litic	
GLOUCESTER.—Con.							
<i>Boroughs (6).</i>							
Bristol, East	Sir W. H. Wills .....	..	1	..	..	70,685
„ North	L. Fry .....	..	..	1	..	77,172
„ South	Sir Edward Hill	1	..	..	..	72,273
„ West	Sir M. Hicks-Beach	1	..	..	..	65,481
Cheltenham	Colonel Russell	1	..	..	..	49,775
Gloucester	C. J. Monk .....	..	..	1	..	39,444
		7	2	2	..	651,385	
HANTS (12).							
<i>County Divisions (6).</i>							
Andover, or W.	W. W. B. Beach	1	..	..	..	51,225
Basingstoke, or N. ..	A. F. Jeffreys	1	..	..	..	70,497
Fareham, or S.	Lt.-Gen. Sir F. Fitzwygram....	1	..	..	..	65,987
Isle of Wight	Sir R. Webster	1	..	..	..	78,718
New Forest	Hon. J. Scott Montague	1	..	..	..	51,300
Petersfield, or E.	W. Wickham	1	..	..	..	47,165
		6	..	..	..	364,892
<i>Boroughs (6).</i>							
Christchurch	Abel H. Smith	1	..	..	..	53,270
Portsmouth (2)	Sir John Baker .....	..	1	..	..	159,255
	W. O. Clough .....	..	1	..	..
Southampton (2) ..	T. Chamberlayne	1	..	..	..	93,596
	Sir B. Simeon .....	..	..	1	..	
Winchester	W. H. Myers	1	..	..	..	19,073
		9	2	1	..	690,086	
HEREFORD (3).							
<i>County Divisions (2).</i>							
Leominster, or N.	J. Rankin	1	..	..	..	45,830
Ross, or S.	M. Biddulph .....	..	..	1	..	49,889
		1	..	1	..	95,719	
<i>Borough (1).</i>							
Hereford	C. W. R. Cooke	1	..	..	..	20,267
		2	..	1	..	115,936	
HERTFORD (4).							
<i>County Divisions (4).</i>							
Hertford, or E.	A. Smith	1	..	..	..	54,571
Hitchin, or N.	G. B. Hudson	1	..	..	..	48,437
St. Albans, or M.	Vicary Gibbs	1	..	..	..	53,239
Watford, or W.	T. F. Halsey	1	..	..	..	63,878
		4	..	..	..	220,125

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Parliamentary	
HUNTINGDON (2).							
<i>County Divisions (2).</i>							
Huntingdon, or S.....	A. H. Smith-Barry	1	..	..	..	..	25,422
Ramsey, or N.	Hon. A. E. Fellowes.....	1	..	..	..	..	29,558
KENT (19).							
<i>County Divisions (8).</i>							
Ashford, or S.....	L. Hardy	1	..	..	..	..	67,946
Dartford, or N.W.....	Rt. Hon. Sir W. Hart-Dyke ...	1	..	..	..	..	79,850
Faversham, or N.E....	F. G. Barnes	1	..	..	..	..	69,343
Isle of Thanet	Rt. Hon. J. Lowther	1	..	..	..	..	61,617
Medway, or M.	Major C. E. Warde	1	..	..	..	..	64,178
Sevenoaks, or W.	H. W. Forster	1	..	..	..	..	80,062
St. Augustine's, or E..	Rt. Hon. A. Akers-Douglas ...	1	..	..	..	..	68,011
Tunbridge, or S.W. .	A. Griffith-Boscawen	1	..	..	..	..	72,596
<i>Boroughs (11).</i>							
Canterbury	J. Henniker-Heaton.....	1	..	..	..	..	563,603
Chatham	Alderman Davies	1	..	..	..	..	22,607
Deptford	C. J. Darling	1	..	..	..	..	59,389
Dover ..	G. Wyndham	1	..	..	..	..	101,326
Gravesend	J. D. Palmer	1	..	..	..	..	33,313
Greenwich	Lord H. Cecil	1	..	..	..	..	35,492
Hythe ..	Sir B. Edwards	1	..	..	..	..	78,131
Lewisham	J. Penn	1	..	..	..	..	35,540
Maidstone	Sir F. Seager-Hunt	1	..	..	..	..	88,643
Rochester	Viscount Cranborne.....	1	..	..	..	..	32,145
Woolwich	Colonel E. Hughes	1	..	..	..	..	26,170
							98,976
LANCASTER (57).							
<i>County Divisions (23).</i>							
<i>Northern Part (4).</i>							
Blackpool	Sir M. W. Ridley	1	..	..	..	..	1,175,335
Chorley	Lord Balcarras	1	..	..	..	..	70,356
Lancaster	Colonel Foster	1	..	..	..	..	67,854
North Lonsdale.....	R. Cavendish.....	..	..	1	..	..	64,279
<i>N.-Eastern Part (4).</i>							
Accrington.....	Sir J. F. Leese, Q.C. ....	..	1	..	..	..	51,181
Clitheroe	Sir U. Kay-Shuttleworth ..	..	1	..	..	..	75,712
Darwen	J. Rutherford	1	..	..	..	..	89,331
Rossendale	J. H. Maden .....	..	1	..	..	..	70,475
<i>S.-Eastern Part (8).</i>							
Eccles	O. L. Clare	1	..	..	..	..	70,567
Gorton	E. F. G. Hatch	1	..	..	..	..	78,133
Heywood	G. Kemp .....	..	..	1	..	..	77,690
Middleton	T. Fielden	1	..	..	..	..	56,794
Prestwich	F. Cawley .....	..	1	..	..	..	68,540
Radcliffe-c'm-Farnwth	Colonel Mellor	1	..	..	..	..	79,497
Stretford	J. W. Maclure	1	..	..	..	..	72,940
Westhoughton	Lord Stanley	1	..	..	..	..	67,004
							83,063

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Parmlite	
LANCASTER.—CON.							
<i>S.-Western Part (7).</i>							
Bootle	Colonel Sandys	1	..	..	..	..	97,552
Ince	Colonel Blundell	1	..	..	..	..	67,021
Leigh	C. P. Scott .....	..	1	..	..	..	65,155
Newton	Hon. T. W. Legh	1	..	..	..	..	63,296
Ormskirk.....	Rt. Hon. A. B. Forwood	1	..	..	..	..	64,096
Southport	Hon. G. N. Curzon	1	..	..	..	..	76,581
Widnes	J. S. Gilleat	1	..	..	..	..	64,507
<i>Boroughs (34).</i>							
Ashton-under-Lyne ..	H. Whiteley	16	5	2	..	..	1,641,624
Barrow-in-Furness ..	C. W. Cayzer	1	..	..	..	..	47,322
Blackburn (2)	W. H. Hornby	1	..	..	..	..	120,064
	W. Coddington	1	..	..	..	..
Bolton (2).....	H. Shepherd Cross	1	..	..	..	..	118,730
	G. Harwood .....	..	1	..	..	..
Burnley	Rt. Hon. P. Stanhope .....	..	1	..	..	..	86,163
Bury	J. Kenyon	1	..	..	..	..	55,491
Liverpool, Abercromby	W. F. Lawrence	1	..	..	..	..	55,564
„ East Toxteth ..	Baron H. de Worms	1	..	..	..	..	63,926
„ Everton	J. A. Willox	1	..	..	..	..	78,639
„ Exchange ..	J. C. Bigham, Q.C. .....	..	..	1	..	..	47,704
„ Kirkdale.....	Sir G. Baden-Powell	1	..	..	..	..	77,018
„ Scotland.....	T. P. O'Connor .....	..	..	..	1	..	53,723
„ Walton	J. H. Stock	1	..	..	..	..	66,465
„ West Derby..	Rt. Hon. W. H. Long	1	..	..	..	..	76,971
„ WestToxteth ..	R. P. Houston	1	..	..	..	..	64,461
Manchester, East	Rt. Hon. A. J. Balfour	1	..	..	..	..	85,407
„ North.....	C. E. Schwann ..	..	1	..	..	..	76,629
„ N'th-East ..	Rt. Hon. Sir J. Fergusson ..	1	..	..	..	..	72,794
„ N'th-West ..	Sir W. H. Houldsworth	1	..	..	..	..	67,633
„ South ..	Marquis of Lorne ..	..	..	1	..	..	80,051
„ S'th-West ..	W. J. Galloway.....	1	..	..	..	..	71,968
Oldham (2)	R. Ascroft	1	..	..	..	..	183,871
	J. F. Oswald, Q.C.	1	..	..	..	..
Preston (2)	R. W. Hanbury	1	..	..	..	..	111,696
	W. E. M. Tomlinson	1	..	..	..	..
Rochdale.....	C. M. Royds	1	..	..	..	..	71,458
Salford, North	F. Platt-Higgins	1	..	..	..	..	61,520
„ South	Sir H. H. Howorth	1	..	..	..	..	68,879
„ West	Lees Knowles	1	..	..	..	..	67,740
St. Helens	H. Seton-Karr	1	..	..	..	..	71,288
Warrington	R. Pierpoint	1	..	..	..	..	55,349
Wigan	Sir F. S. Powell	1	..	..	..	..	55,013
		44	8	4	1	..	3,906 873

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Paran'lite	
LEICESTER (6).							
<i>County Divisions (4).</i>							
Bosworth, or W.....	C. B. Mc.Laren .....	..	1	..	..	..	57,240
Harborough, or S.....	J. W. Logan .....	..	1	..	..	..	59,368
Loughborough, or M...	J. E. Johnson-Ferguson.....	..	1	..	..	..	55,164
Melton, or E.....	Lord E. Manners .....	..	1	..	..	..	59,852
		1	3	..	..	..	231,624
<i>Boroughs (2).</i>							
Leicester (2)	H. Broadhurst .....	..	1	..	..	..	142,051
	Walter Hazell .....	..	1	..	..	..
		1	5	..	..	..	373,675
LINCOLN (11).							
<i>County Divisions (7).</i>							
Brigg, or N. Lindsey..	H. J. Reckitt .....	..	1	..	..	..	49,151
Gainsboro', or W. L'sey	E. Bainbridge .....	..	1	..	..	..	49,595
Horncastle, or S. L'sey	Lord Willoughby de Eresby ..	1	..	..	..	..	46,079
Louth, or E. Lindsey.	R. W. Perks .....	..	1	..	..	..	46,868
Sleaford, or N. Kestevn	Rt. Hon. H. Chaplin	1	..	..	..	..	45,474
Spalding, or Holland..	H. F. Pollock .....	..	..	1	..	..	49,279
Stamford, or S. Kest'vn	W. Younger	1	..	..	..	..	47,647
		3	3	1	..	..	334,093
<i>Boroughs (4).</i>							
Boston	W. Garfitt	1	..	..	..	..	18,927
Grantham	H. Y. B. Lopes	1	..	..	..	..	17,170
Great Grimsby	Alderman Doughty .....	..	1	..	..	..	58,603
Lincoln	C. H. Seely.....	..	..	1	..	..	43,985
		5	4	2	..	..	472,778
MIDDLESEX (47).							
<i>County Divisions (7).</i>							
Brentford	J. Bigwood.....	1	..	..	..	..	69,792
Ealing	Rt. Hon. Lord G. Hamilton ..	1	..	..	..	..	70,756
Enfield	Captain H. F. Bowles	1	..	..	..	..	84,388
Harrow	W. Ambrose	1	..	..	..	..	96,720
Hornsey	H. C. Stephens	1	..	..	..	..	78,043
Tottenham	Joseph Howard.....	1	..	..	..	..	97,166
Uxbridge	Sir F. D. Dixon Hartland	1	..	..	..	..	67,754
		7	..	..	..	..	564,619
<i>Boroughs (40).</i>							
Bethnal Green, N.E..	M. H. Bhow Naggre	1	..	..	..	..	66,804
" " S.W..	E. H. Pickersgill .....	..	1	..	..	..	62,330
Chelsea	C. A. Whitmore.....	1	..	..	..	..	96,272
City of London (2)..	Sir R. Hanson	1	..	..	..	..	37,694
	A. G. H. Gibbs	1	..	..	..	..
Finsbury, Central....	M. Mainwaring.....	1	..	..	..	..	65,885

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population. 1881.
		Conservative	Liberal.	Liberal U.	Nationalist	Protege	
MIDDLESEX.—Con.							
Finsbury, East	H. C. Richards	1	..	..	..	..	45,906
„ Holborn ..	Sir Charles Hall, Q.C.	1	..	..	..	..	70,918
Fulham	W. H. Fisher	1	..	..	..	..	91,640
Hackney, Central	Sir A. Scoble, Q.C.	1	..	..	..	..	64,760
„ North	W. R. Bousfield, Q.C.	1	..	..	..	..	77,170
„ South	T. H. Robertson	1	..	..	..	..	87,601
Hammersmith	General Goldsworthy	1	..	..	..	..	97,237
Hampstead	E. Broadie-Hoare	1	..	..	..	..	68,425
Islington, East	B. L. Cohen	1	..	..	..	..	83,883
„ North	G. C. T. Bartley	1	..	..	..	..	90,272
„ South	Sir Albert Rollitt	1	..	..	..	..	71,910
„ West	T. Lough .....	..	1	..	..	..	73,368
Kensington, North ..	W. T. Sharpe	1	..	..	..	..	82,656
„ South ..	Sir Algernon Borthwick	1	..	..	..	..	83,665
Marylebone, East	E. Boulnois	1	..	..	..	..	66,673
„ West	Sir H. Farquhar .....	..	..	1	..	..	75,708
Paddington, North ..	John Aird	1	..	..	..	..	64,671
„ South ..	T. G. Fardell	1	..	..	..	..	53,167
Shoreditch, Haggerstn	J. Lowles	1	..	..	..	..	56,356
„ Hoxton ..	Alderman James Stuart .....	..	1	..	..	..	67,653
St. George's, Hn'vr-sq.	Rt. Hon. G. J. Goschen .....	..	..	1	..	..	78,362
St. Pancras, East	R. G. Webster	1	..	..	..	..	60,844
„ North ..	E. R. Moon	1	..	..	..	..	59,126
„ South ..	Sir Julian Goldsmid .....	..	..	1	..	..	53,767
„ West	H. R. Graham	1	..	..	..	..	60,700
Strand	Hon. W. F. D. Smith	1	..	..	..	..	64,674
<i>Tower Hamlets :</i>							
Bow and Bromley	Hon. L. Holland	1	..	..	..	..	88,645
Limehouse	H. S. Samuel	1	..	..	..	..	55,232
Mile End	Spencer Charrington	1	..	..	..	..	48,850
Poplar	Sidney Buxton .....	..	1	..	..	..	78,052
St. George	H. H. Marks	1	..	..	..	..	47,913
Stepney	F. W. Isaacson	1	..	..	..	..	58,715
Whitechapel	Sir Samuel Montague .....	..	1	..	..	..	74,420
Westminster	W. Burdett-Coutts	1	..	..	..	..	55,760
		39	5	3	..	..	3,251,703
MONMOUTH (4).							
<i>County Divisions (3).</i>							
Northern	R. Mc.Kenna .....	..	1	..	..	..	62,690
Southern	Hon. F. C. Morgan	1	..	..	..	..	66,133
Western	Sir W. V. Harcourt .....	..	1	..	..	..	64,695
<i>Borough (1).</i>							
Monmouth Group	Albert Spicer	1	2	..	..	..	193,518
		..	1	..	..	..	58,742
		1	3	..	..	..	252,260

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Paran'life	
NORFOLK (10).							
<i>County Divisions (6).</i>							
Eastern	R. J. Price .....	..	1	..	..	..	40,693
Midland	F. W. Wilson .....	..	1	..	..	..	49,604
Northern	H. Cozens-Hardy, Q.C. ....	..	1	..	..	..	51,072
North-Western	Joseph Arch .....	..	1	..	..	..	51,278
Southern	F. Taylor .....	..	..	1	..	..	49,730
South-Western	T. L. Hare	1	..	..	..	..	47,133
<i>Boroughs (4).</i>							
Great Yarmouth	Sir J. C. Colomb	1	4	1	..	..	289,510
King's Lynn	T. Gibson Bowles	1	..	..	..	..	49,318
Norwich (2)	S. Hoare	1	..	..	..	..	18,265
	Sir H. Bullard	1	..	..	..	..	100,970
NORTHAMPTON (7).							
<i>County Divisions (4).</i>							
Eastern	F. A. Channing .....	..	1	..	..	..	65,499
Mid	J. Pender	1	..	..	..	..	48,790
Northern	E. P. Monckton	1	..	..	..	..	46,723
Southern	Hon. E. Douglas Pennant ...	1	..	..	..	..	46,628
<i>Boroughs (3).</i>							
Northampton (2) ..	H. Labouchere .....	..	1	..	..	..	207,640
	C. A. A. Drucker	1	..	..	..	..	70,872
Peterborough	R. Purvis .....	..	..	1	..	..	26,464
NORTH'MB'RL'ND (8).							
<i>County Divisions (4).</i>							
Berwick-on-Tweed ..	Sir Edward Grey .....	..	1	..	..	..	52,442
Hexham	W. C. B. Beaumont .....	..	1	..	..	..	51,587
Tyneside	J. A. Pease .....	..	1	..	..	..	69,642
Wansbeck	C. Fenwick .....	..	1	..	..	..	59,701
<i>Boroughs (4).</i>							
Morpeth	Thomas Burt .....	..	4	..	..	..	233,372
Newcastle-on-T'n (2) }	Alderman C. F. Hamond	1	..	..	..	..	40,133
	W. D. Cruddas	1	..	..	..	..	186,324
Tynemouth	R. S. Donkin	1	..	..	..	..	46,267
NOTTINGHAM (7).							
<i>County Divisions (4).</i>							
Bassetlaw	Sir F. Milner	1	..	..	..	..	51,452
Mansfield	J. C. Williams .....	..	1	..	..	..	65,790
Newark	Hon. H. Finch Hatton	1	..	..	..	..	50,035
Rushcliffe	J. E. Ellis .....	..	1	..	..	..	66,617
2 2 233,894							

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Parliamentary	
NOTTINGHAM.—CON.							
<i>Boroughs (3).</i>							
Nottingham, East....	E. Bond	1	..	..	..	69,181
„ South ..	Lord H. Bentinck.....	1	..	..	..	60,487
„ West ..	J. H. Yoxall .....	..	1	..	..	82,037
		4	3	..	..	445,599
OXFORD (4).							
<i>County Divisions (3).</i>							
Banbury, or N.	A. Brassey	1	..	..	..	43,861
Henley, or S.	R. Hermon Hodge	1	..	..	..	48,145
Woodstock, or M.....	G. H. Morrell	1	..	..	..	50,464
<i>Borough (1).</i>							
Oxford	Viscount Valentia.....	3	..	..	..	142,470
		1	..	..	..	45,741
		4	..	..	..	188,211
RUTLAND (1).							
<i>County Division (1).</i>							
Rutland	G. H. Finch	1	..	..	..	20,659
SALOP (5).							
<i>County Divisions (4).</i>							
Ludlow, or S.....	R. J. More.....	..	..	1	..	55,920
Newport, or N.	Colonel Kenyon Slaney	1	..	..	..	53,035
Oswestry, or W.....	Stanley Leighton.....	1	..	..	..	54,178
Wellington, or M.....	A. H. Brown .....	..	..	1	..	46,224
<i>Borough (1).</i>							
Shrewsbury.....	H. D. Greene, Q.C.	2	..	2	..	209,357	
		1	..	..	..	26,967
		3	..	2	..	236,324	
SOMERSET (10).							
<i>County Divisions (7).</i>							
Bridgwater	E. J. Stanley.....	1	..	..	..	48,226
Eastern	H. Hobhouse.....	..	..	1	..	50,152
Frome	Viscount Weymouth	1	..	..	..	53,552
Northern	E. H. Llewellyn	1	..	..	..	53,418
Southern	Edward Strachey .....	..	1	..	..	51,300
Wellington, or W.....	Sir A. Acland-Hood	1	..	..	..	48,122
Wells	G. H. Jolliffe	1	..	..	..	55,569
<i>Boroughs (3).</i>							
Bath (2)	Colonel Wyndham Murray....	5	1	1	..	360,339	
Taunton	E. R. Wodehouse.....	1	..	..	..	54,550
	Colonel Welby .....	..	..	1	..	18,026
		1	..	..	..
		7	1	2	..	432,915	

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1881.
		Conservative	Liberal.	Liberal U.	Nationalist	Farm-lite	
STAFFORD (17).							
<i>County Divisions (7).</i>							
Burton.....	Sidney Evershed .....	..	1	..	..	..	58,640
Handsworth	Sir H. Meysey Thompson .....	..	..	1	..	..	84,782
Kingswinford	Rt. Hon. A. Staveley Hill	1	..	..	..	..	47,665
Leek	Charles Bill	1	..	..	..	..	56,711
Lichfield	H. C. Fulford .....	..	1	..	..	..	52,006
North-Western	James Heath.....	1	..	..	..	..	63,166
Western	Hamar A. Bass.....	..	..	1	..	..	56,546
		3	2	2	..	..	419,516
<i>Boroughs (10).</i>							
Hanley	W. Woodall .....	..	1	..	..	..	86,845
Newcastle-und'r-Lyme	W. Allen.....	..	1	..	..	..	54,184
Stafford	C. E. Shaw.....	..	1	..	..	..	20,270
Stoke-on-Trent	D. H. Coghill.....	..	..	1	..	..	75,352
Walsall	S. Gedge	1	..	..	..	..	71,791
Wednesbury	W. D. Green	1	..	..	..	..	69,083
West Bromwich	J. Ernest Spencer.....	1	..	..	..	..	59,489
Wolverhampton, E. ..	Rt. Hon. Sir H. H. Fowler....	..	1	..	..	..	54,511
„ S. ..	Rt. Hon. C. P. Villiers .....	..	..	1	..	..	57,096
„ W.	Sir A. Hickman.....	1	..	..	..	..	62,718
		7	6	4	..	..	1,030,855
SUFFOLK (8).							
<i>County Divisions (5).</i>							
Eye, or N.E.	F. S. Stephenson .....	..	1	..	..	..	54,825
Lowestoft, or N.	H. S. Foster	1	..	..	..	..	61,654
Stowmarket, or N.W..	J. Malcolm.....	1	..	..	..	..	55,099
Sudbury, or S.	Cuthbert Quilter .....	..	..	1	..	..	55,655
Woodbridge, or S.E. ...	Captain Pretyman	1	..	..	..	..	56,539
		3	1	1	..	..	283,772
<i>Boroughs (3).</i>							
Bury St. Edmunds ..	Viscount Chelsea	1	..	..	..	..	16,630
Ipswich (2)	D. F. Goddard .....	..	1	..	..	..	57,360
	Sir C. Dalrymple	1	..	..	..	..
		5	2	1	..	..	357,762
SURREY (22).							
<i>County Divisions (6).</i>							
Chertsey, or N.W.	C. H. Coombe	1	..	..	..	..	61,968
Epsom, or M.	T. T. Bucknill	1	..	..	..	..	70,103
Guildford, or S.W.	Hon. St. John Brodrick	1	..	..	..	..	67,722
Kingston	T. S. Cox	1	..	..	..	..	85,367
Reigate, or S.E.	H. Cubitt	1	..	..	..	..	64,453
Wimbledon, or N.E. ...	Cosmo Bonsor	1	..	..	..	..	69,236
		6	..	..	..	..	418,849

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Parallite	
SURREY.—CON.							
<i>Boroughs (16).</i>							
Battersea	John Burns .....	..	1	..	..	..	97,204
Camberwell, Dulwich..	J. Blundell Maple.....	1	..	..	..	..	83,272
„ North ..	Major Dalbiac	1	..	..	..	..	88,932
„ Peckham.	F. G. Banbury	1	..	..	..	..	83,482
Clapham	P. M. Thornton.....	1	..	..	..	..	96,952
Croydon	C. T. Ritchie	1	..	..	..	..	102,697
Lambeth, Brixton...	Marquis of Carmarthen	1	..	..	..	..	70,356
„ Kennington	F. L. Cooke	1	..	..	..	..	73,919
„ North	H. M. Stanley .....	..	..	1	..	..	62,516
„ Norwood ..	C. E. Tritton	1	..	..	..	..	68,411
Newington, Walworth.	J. Bailey	1	..	..	..	..	59,040
„ West	Captain Cecil Norton .....	..	1	..	..	..	56,623
Southwark, Bermondsey	A. Lafone	1	..	..	..	..	82,898
„ Rotherhithe	J. C. Macdona	1	..	..	..	..	73,662
„ West	R. K. Causton .....	..	1	..	..	..	66,770
Wandsworth	H. Kimber	1	..	..	..	..	113,233
		18	3	1	..	..	1,698,816
SUSSEX (9).							
<i>County Divisions (6).</i>							
Chichester, or S.W. ...	Lord Edmund Talbot	1	..	..	..	..	54,357
Eastbourne, or S.	Vice-Admiral E. Field.....	1	..	..	..	..	66,468
East Grinstead, or N..	G. J. Goschen, jun.	1	..	..	..	..	52,522
Horsham, or N.W. ...	J. H. Johnstone	1	..	..	..	..	52,977
Lewes, or M.	Sir H. Fletcher.....	1	..	..	..	..	64,026
Rye, or E.	A. M. Brookfield	1	..	..	..	..	57,090
		6	..	..	..	..	347,443
<i>Boroughs (3).</i>							
Brighton (2)	G. W. E. Loder.....	1	..	..	..	..	142,121
Hastings	Bruce Wentworth.....	1	..	..	..	..
	W. L. Shadwell.....	1	..	..	..	..	60,878
		9	..	..	..	..	550,442
WARWICK (14).							
<i>County Divisions (4).</i>							
Nuneaton, or N.E. ...	F. A. Newdigate	1	..	..	..	..	53,280
Rugby, or S.E.	Hon. R. G. Verney	1	..	..	..	..	49,130
Strat'fd-on-A., or S.W.	Colonel Milward	1	..	..	..	..	46,440
Tamworth, or N.	P. A. Muntz	1	..	..	..	..	54,134
		4	..	..	..	..	202,984

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Parliamentary	
WARWICK.—CON.							
<i>Boroughs (10).</i>							
Aston Manor	Captain Grice-Hutchinson....	1	..	..	..	68,689
Birm'gham, Bordesley	Jesse Collings.....	..	..	1	..	82,863
„ Central..	E. Parkes .....	..	..	1	..	59,099
„ East	Sir B. Stone	1	..	..	..	65,683
„ Edgbaston	G. Dixon.....	..	..	1	..	67,682
„ North ..	Alderman Kenrick .....	..	..	1	..	62,948
„ South ..	J. Powell Williams .....	..	..	1	..	70,334
„ West....	Rt. Hon. J. Chamberlain .....	..	..	1	..	69,508
Coventry	C. J. Murray	1	..	..	..	54,743
Warwick & Leamington	Hon. A. Lyttelton .....	..	..	1	..	39,102
		7	..	7	..	843,585	
WESTMORLAND (2).							
<i>County Divisions (2).</i>							
Appleby, or N.	Sir Joseph Savory.....	1	..	..	..	31,176
Kendal, or S.	Captain J. F. Bagot.....	1	..	..	..	34,922
		2	..	..	..	66,098
WILTS (6).							
<i>County Divisions (5).</i>							
Chippenham, or N.W.	Sir J. D. Poynder.....	1	..	..	..	44,356
Cricklade, or N.....	A. Hopkinson .....	..	..	1	..	59,414
Devizes, or E.	A. E. Golding	1	..	..	..	48,267
Westbury, or W.	Captain Chaloner.....	1	..	..	..	52,669
Wilton, or S.	Viscount Folkestone	1	..	..	..	42,901
		4	..	1	..	247,607	
<i>Borough (1).</i>							
Salisbury.....	E. H. Hulse	1	..	..	..	17,362
		5	..	1	..	264,969	
WORCESTER (8).							
<i>County Divisions (5).</i>							
Bewdley, or W.	A. Baldwin.....	1	..	..	..	52,018
Droitwich, or M.	R. B. Martin .....	..	..	1	..	48,281
Eastern	J. A. Chamberlain .....	..	..	1	..	59,357
Evesham, or S.....	Colonel C. W. Long.....	1	..	..	..	49,538
Northern.....	J. W. Wilson .....	..	..	1	..	58,437
		2	..	3	..	267,631	
<i>Boroughs (3).</i>							
Dudley.....	Brooke Robinson	1	..	..	..	90,223
Kidderminster	A. F. Godson, Q.C.	1	..	..	..	26,905
Worcester	Hon. G. H. Allsopp	1	..	..	..	42,899
		5	..	3	..	427,658	

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Parliament	
YORKSHIRE (52).							
<i>County Divisions (26).</i>							
<i>East Riding:</i>							
Buckrose	A. Holden .....	..	1	..	..	..	50,676
Holderness	Commander Bethell	1	..	..	..	..	41,479
Howdenshire	Captain W. H. Wilson-Todd ..	1	..	..	..	..	49,627
<i>North Riding:</i>							
Cleveland	H. F. Pease .....	..	1	..	..	..	55,917
Richmond	J. Hutton	1	..	..	..	..	54,450
Thirsk and Malton ..	J. G. Lawson	1	..	..	..	..	57,191
Whitby	E. W. Beckett	1	..	..	..	..	54,781
<i>West Riding:</i>							
Barkeston Ash	Colonel Gunter	1	..	..	..	..	48,470
Barnsley	Earl Compton .....	..	1	..	..	..	78,844
Colne Valley	Sir J. Kitson .....	..	1	..	..	..	59,344
Doncaster	F. W. Fison	1	..	..	..	..	73,157
Elland	Alderman T. Wayman .....	..	1	..	..	..	64,632
Hallamshire	Sir F. Mappin .....	..	1	..	..	..	73,254
Holmfirth	H. J. Wilson .....	..	1	..	..	..	65,160
Keighley	J. Brigg .....	..	1	..	..	..	63,263
Morley	A. E. Hutton .....	..	1	..	..	..	65,219
Normanton	B. Pickard .....	..	1	..	..	..	72,013
Osgoldcross	Sir J. Austin .....	..	1	..	..	..	66,779
Otley	M. D'Arcy Wyvill	1	..	..	..	..	61,746
Pudsey	Briggs Priestley .....	..	1	..	..	..	49,252
Ripon	J. L. Wharton	1	..	..	..	..	54,925
Rotherham	Rt. Hon. A. H. D. Acland ..	..	1	..	..	..	78,578
Shipley	F. Flannery	1	..	..	..	..	62,166
Skipton	W. Morrison .....	..	..	1	..	..	58,213
Sowerby	Rt. Hon. J. W. Mellor, Q.C. ..	..	1	..	..	..	63,192
Spennithorne	T. P. Whittaker .....	..	1	..	..	..	57,402
		10	15	1	..	..	1,579,730
<i>Boroughs (26).</i>							
<i>East Riding:</i>							
Hull, Central	H. S. King	1	..	..	..	..	65,565
„ East	J. R. Firbank	1	..	..	..	..	55,492
„ West	C. H. Wilson .....	..	1	..	..	..	78,603
<i>North Riding:</i>							
Middlesbrough	J. H. Wilson .....	..	1	..	..	..	98,899
Scarborough	J. C. Reckitt .....	..	1	..	..	..	33,776
York (2)	J. G. Butcher	1	..	..	..	..	66,984
	Sir F. Lockwood, Q.C. ....	..	1	..	..	..
<i>West Riding:</i>							
Bradford, Central	J. M. L. Wanklyn .....	..	..	1	..	..	65,847
„ East	H. B. Reed	1	..	..	..	..	79,545
„ West	E. Flower	1	..	..	..	..	70,969
Dewsbury	Mark Oldroyd .....	..	1	..	..	..	72,983
Halifax (2)	Rawson Shaw .....	..	1	..	..	..	82,863
	A. Arnold	1	..	..	..	..
Huddersfield	Sir. J. T. Woodhouse .....	..	1	..	..	..	96,495

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1881.
		Conservative	Liberal.	Liberal U.	Nationalist	Parn'lite	
YORKSHIRE.—CON.							
<i>West Riding:</i>							
Leeds, Central	G. W. Balfour	1	..	..	..	69,135
„ East	T. R. Leuty .....	..	1	..	..	64,609
„ North	Rt. Hon. W. L. Jackson.....	1	..	..	..	81,547
„ South	J. L. Walton, Q.C. ....	..	1	..	..	70,018
„ West	Rt. Hon. Herbert Gladstone ..	..	1	..	..	82,197
Pontefract	T. W. Nussey .....	..	1	..	..	16,407
Sheffield, Attercliffe ..	Batty Langley .....	..	1	..	..	72,462
„ Brightside..	Rt. Hon. A. J. Mundella.....	..	1	..	..	67,083
„ Central	Colonel Howard Vincent.....	1	..	..	..	66,461
„ Ecclesall ..	Sir E. Ashmead-Bartlett.....	1	..	..	..	63,302
„ Hallam	C. B. Stuart-Wortley	1	..	..	..	54,935
Wakefield	Viscount Milton	1	..	..	..	37,269
		22	28	2	..	3,193,176	
UNIVERSITIES (5).							
Cambridge (2)	Professor R. C. Jebb	1	..	..	..	....
	Rt. Hon. Sir J. E. Gorst.....	1	..	..	..	....
Oxford (2)	Rt. Hon. Sir J. Mowbray	1	..	..	..	....
	J. G. Talbot	1	..	..	..	....
London	Rt. Hon. Sir John Lubbock ...	..	..	1	..	....
		4	..	1	..	....
WALES.							
ANGLESEY (1).							
<i>County Division (1).</i>							
Anglesey	E. J. Griffiths .....	..	1	..	..	50,079
BRECON (1).							
<i>County Division (1).</i>							
Brecon.....	C. Morley .....	..	1	..	..	54,550
CARDIGAN (1).							
<i>County Division (1).</i>							
Cardigan.....	V. Davies .....	..	1	..	..	62,596
CARMARTHEN (3).							
<i>County Divisions (2).</i>							
Eastern	Abel Thomas .....	..	1	..	..	49,135
Western	J. Lloyd Morgan .....	..	1	..	..	46,926
<i>Borough (1).</i>							
Carmarthen Group ..	Sir J. J. Jenkins .....	..	2	..	..	96,061
		..	..	1	..	34,513
		..	2	1	..	130,745	

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Parv'lite	
CARNARVON (3).							
<i>County Divisions (2).</i>							
Arfon, or N.	W. Jones.....	..	1	..	..	..	45,822
Eifion, or S.	J. B. Roberts.....	..	1	..	..	..	42,826
		..	2	..	..	..	88,648
<i>Borough (1).</i>							
Carnarvon Group	D. Lloyd George .....	..	1	..	..	..	29,577
		..	3	..	..	..	118,225
DENBIGH (3).							
<i>County Divisions (2).</i>							
Eastern	Rt. Hon. Sir G. O. Morgan....	..	1	..	..	..	47,317
Western	J. H. Roberts.....	..	1	..	..	..	46,417
		..	2	..	..	..	93,734
<i>Borough (1).</i>							
Denbigh Group	W. T. Howell.....	1	..	..	..	..	24,216
		1	2	..	..	..	117,950
FLINT (2).							
<i>County Division (1).</i>							
Flint	Samuel Smith .....	..	1	..	..	..	53,034
<i>Borough (1).</i>							
Flint Group	J. H. Lewis .....	..	1	..	..	..	23,251
		..	2	..	..	..	76,285
GLAMORGAN (10).							
<i>County Divisions (5).</i>							
Eastern	Alfred Thomas .....	..	1	..	..	..	72,465
Gower, or W.	D. D. Randall .....	..	1	..	..	..	55,261
Mid	S. T. Evans .....	..	1	..	..	..	60,968
Rhondda	W. Abraham .....	..	1	..	..	..	68,720
Southern	Major Quinn .....	..	..	1	..	..	75,337
		..	4	1	..	..	332,751
<i>Boroughs (5).</i>							
Cardiff Group	J. M. Maclean	1	..	..	..	..	132,163
Merthyr Tydvil	D. A. Thomas .....	..	1	..	..	..	104,008
	W. Pritchard Morgan .....	..	1	..	..	..
Swansea District	D. Brynmor Jones .....	..	1	..	..	..	63,140
„ Town	Sir J. T. D. Llewellyn.....	1	..	..	..	..	57,566
		2	7	1	..	..	689,628
MERIONETH (1).							
<i>County Division (1).</i>							
Merioneth	T. E. Ellis .....	..	1	..	..	..	49,204

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Constitutive	Liberal.	Liberal U.	Nationalist	Parliamentite	
MONTGOMERY (2).							
<i>County Division (1).</i>							
Montgomery	A. C. Humphreys Owen .....	..	1	..	..	..	40,214
<i>Borough (1).</i>							
Montgomery Group ..	E. P. Jones.....	1	..	..	..	..	17,789
		1	1	..	..	..	58,003
PEMBROKE (2).							
<i>County Division (1).</i>							
Pembroke	W. R. Davies.....	..	1	..	..	..	53,921
<i>Borough (1).</i>							
Pembroke Group	General Laurie.....	1	..	..	..	..	35,204
		1	1	..	..	..	89,125
RADNOR (1).							
<i>County Division (1).</i>							
Radnor	P. C. Millbank	1	..	..	..	..	21,791
SCOTLAND.							
ABERDEEN (4).							
<i>County Divisions (2).</i>							
Eastern	T. R. Buchanan .....	..	1	..	..	..	79,926
Western	Dr. R. Farquharson.....	..	1	..	..	..	65,210
<i>Boroughs (2).</i>							
Aberdeen, North	W. A. Hunter .....	..	2	..	..	..	145,186
„ South	Professor J. Bryce .....	..	1	..	..	..	59,992
		..	1	..	..	..	61,631
		..	4	..	..	..	266,759
ARGYLL (1).							
<i>County Division (1).</i>							
Argyll	D. Nicol .....	..	..	1	..	..	61,183
AYR (4).							
<i>County Divisions (2).</i>							
Northern.....	Hon. T. H. Cochrane .....	..	..	1	..	..	75,801
Southern	Sir W. Arrol .....	..	..	1	..	..	88,785
<i>Boroughs (2).</i>							
Ayr Group	C. L. Orr-Ewing	1	..	2	..	..	164,586
Kilmarnock Group ..	Colonel Denny .....	..	..	1	..	..	46,200
		..	..	1	..	..	79,828
		1	..	3	..	..	290,614

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1881.
		Conservative	Liberal.	Liberal U.	Nationalist	Parliament	
BANFF (1). <i>County Division (1).</i> Banff	Sir W. Wedderburn.....	..	1	..	..	..	52,663
BERWICK (1). <i>County Division (1).</i> Berwick	H. J. Tennant .....	..	1	..	..	..	32,368
BUTE (1). <i>County Division (1).</i> Bute	A. G. Murray.....	1	..	..	..	..	18,217
CAITHNESS (2). <i>County Division (1).</i> Caithness	Dr. G. B. Clark.....	..	1	..	..	..	28,587
<i>Borough (1).</i> Wick Group	Sir J. Pender.....	..	..	1	..	..	18,103
		..	1	1	..	..	46,690
CLACKMANNAN and KINROSS (1). <i>County Division (1).</i> Clackm'nan & Kinross	Rt. Hon. J. B. Balfour .....	..	1	..	..	..	44,309
DUMBARTON (1). <i>County Division (1).</i> Dumbarton.....	A. Wylie.....	1	..	..	..	..	77,446
DUMFRIES (2). <i>County Division (1).</i> Dumfries.....	R. Souttar .....	..	1	..	..	..	55,290
<i>Borough (1).</i> Dumfries Group	Sir R. T. Reid, Q.C.....	..	1	..	..	..	26,183
		..	2	..	..	..	81,473
EDINBURGH (6). <i>County Division (1).</i> Midlothian	Sir T. D. G. Carmichael.....	..	1	..	..	..	86,839
<i>Boroughs (5).</i> Edinburgh, Central ..	W. Mc. Ewan .....	..	1	..	..	..	63,392
„ East	Robert Wallace.....	..	1	..	..	..	61,931
„ South....	R. Cox.....	1	..	..	..	..	82,337
„ West	L. Mc.Iver .....	..	..	1	..	..	53,565
Leith Group	R. C. Munro Ferguson .....	..	1	..	..	..	84,770
		1	4	1	..	..	432,834

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Parliamentary	
ELGIN & NAIRN (2). <i>County Division (1).</i>							
Elgin and Nairn	J. E. Gordon	1	..	..	..	..	37,613
<i>Borough (1).</i> Elgin Group	A. Asher, Q.C. ....	..	1	..	..	..	33,292
		1	1	..	..	..	70,905
FIFE (4). <i>County Divisions (2).</i>							
Eastern	Rt. Hon. H. H. Asquith, Q.C. ....	..	1	..	..	..	50,996
Western	A. Birrell .....	..	1	..	..	..	58,458
<i>Boroughs (2).</i>							
Kirkcaldy Group	J. H. Dalziel .....	..	2	..	..	..	109,454
St. Andrews Group ..	H. T. Anstruther .....	..	1	..	..	..	36,901
		..	..	1	..	..	18,941
		..	3	1	..	..	165,296
FORFAR (4). <i>County Division (1).</i>							
Forfar.....	J. M. White .....	..	1	..	..	..	67,515
<i>Boroughs (3).</i>							
Dundee (2)	John Leng .....	..	1	..	..	..	153,051
	E. Robertson.....	..	1	..	..	..
Montrose Group	J. S. Will, Q.C. ....	..	1	..	..	..	58,055
		..	4	..	..	..	278,621
HADDINGTON (1). <i>County Division (1).</i>							
Haddington	R. B. Haldane, Q.C. ....	..	1	..	..	..	37,429
INVERNESS (2). <i>County Division (1).</i>							
Inverness	J. E. B. Baillie	1	..	..	..	..	69,829
<i>Borough (1).</i> Inverness Group	R. B. Finlay .....	..	..	1	..	..	28,071
		1	..	1	..	..	97,900
KINCARDINE (1). <i>County Division (1).</i>							
Kincardine	J. W. Crombie .....	..	1	..	..	..	34,438
KIRK'DBRIGHT (1). <i>County Division (1).</i>							
Kirkcudbright	Sir M. Stewart	1	..	..	..	..	32,670

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal	Liberal U.	Nationalist	Parliament	
LANARK (13).							
<i>County Divisions (6).</i>							
Govan	John Wilson .....	..	1	..	..	..	78,512
Mid	J. Caldwell .....	..	1	..	..	..	71,258
North-Eastern	Provost Colville .....	..	1	..	..	..	85,035
North-Western	J. G. Holburn .....	..	1	..	..	..	75,019
Partick	J. Parker Smith .....	..	..	1	..	..	77,136
Southern	J. H. C. Hozier	1	..	..	..	..	52,032
		1	4	1	..	..	438,992
<i>Boroughs (7).</i>							
Glasgow, Blackfriars & Hutcheson- town	A. D. Provand .....	..	1	..	..	..	73,784
„ Bridgeton ..	Rt. Hon. Sir G. Trevelyan .....	..	1	..	..	..	81,396
„ Camlachie ..	Alexander Cross .....	..	..	1	..	..	71,157
„ Central	J. G. A. Baird	1	..	..	..	..	75,379
„ College ...	Sir J. Maxwell	1	..	..	..	..	98,047
„ St. Rollox ..	Faithfull Begg	1	..	..	..	..	94,569
„ Tradeston ..	A. C. Corbett .....	..	..	1	..	..	70,649
		4	6	3	..	..	1,003,973
LINLITHGOW (1).							
<i>County Division (1).</i>							
Linlithgow	A. Ure .....	..	1	..	..	..	46,955
ORKNEY AND SHETLAND (1).							
<i>County Division (1).</i>							
Orkney and Shetland..	Sir L. Lyell .....	..	1	..	..	..	54,807
PEEBLES AND SELKIRK (1).							
<i>County Division (1).</i>							
Peebles and Selkirk ..	W. Thorburn .....	..	..	1	..	..	19,074
PERTH (3).							
<i>County Divisions (2).</i>							
Eastern	Sir J. Kinloch .....	..	1	..	..	..	43,645
Western	Sir D. Currie .....	..	..	1	..	..	47,916
		..	1	1	..	..	91,561
<i>Borough (1).</i>							
Perth	R. Wallace .....	..	1	..	..	..	29,899
		..	2	1	..	..	121,460

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1881.
		Conservative	Liberal.	Liberal U.	Nationalist	Farm-lite	
RENFREW (4). <i>County Divisions (2).</i>							
Eastern	M. H. Shaw-Stewart	1	..	..	..	..	66,137
Western	C. B. Renshaw	1	..	..	..	..	56,622
<i>Boroughs (2).</i>		2	..	..	..	..	122,759
Greenock.....	Sir T. Sutherland.....	..	..	1	..	..	63,096
Paisley.....	Sir W. Dunn .....	..	1	..	..	..	66,418
		2	1	1	..	..	252,273
ROSS & CROMARTY (1). <i>County Division (1).</i>							
Ross and Cromarty ..	J. G. Weir .....	..	1	..	..	..	71,432
ROXBURGH (2). <i>County Division (1).</i>							
Roxburgh	Earl of Dalkieth	1	..	..	..	..	34,537
<i>Borough (1).</i>							
Hawick Group	Thomas Shaw .....	..	1	..	..	..	42,244
		1	1	..	..	..	76,781
STIRLING (3). <i>County Division (1).</i>							
Stirling	J. Mc.Killop	1	..	..	..	..	86,293
<i>Boroughs (2).</i>							
Falkirk Group	J. Wilson .....	..	..	1	..	..	65,346
Stirling Group	H. Campbell-Bannerman .....	..	1	..	..	..	39,987
		1	1	1	..	..	191,626
SUTHERLAND (1). <i>County Division (1).</i>							
Sutherland	J. G. M'Leod.....	..	1	..	..	..	21,267
WIGTOWN (1). <i>County Division (1).</i>							
Wigtown	Sir H. E. Maxwell	1	..	..	..	..	35,989
UNIVERSITIES (2). Edinbro' & St. Andr'ws Glasgow and Aberdeen	Rt. Hon. Sir C. Pearson	1	..	..	..	..	....
	J. A. Campbell	1	..	..	..	..	....
		2	..	..	..	..	....

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Parv'lite	
IRELAND.							
ANTRIM (8).							
<i>County Divisions (4).</i>							
Eastern	Captain J. Mc.Calmont	1	..	..	..	..	52,032
Mid	The Hon. R. Torrens O'Neill ..	1	..	..	..	..	50,027
Northern	Colonel H. Mc.Calmont	1	..	..	..	..	51,090
Southern	W. G. E. Macartney	1	..	..	..	..	51,887
		4	..	..	..	..	205,036
<i>Boroughs (4).</i>							
Belfast, East	G. W. Wolff	1	..	..	..	..	85,661
„ North	Sir Edward Harland	1	..	..	..	..	67,585
„ South	W. Johnston	1	..	..	..	..	58,508
„ West	H. O. Arnold Forster .....	..	..	1	..	..	61,360
		7	..	1	..	..	478,150
ARMAGH (3).							
<i>County Divisions (3).</i>							
Mid	D. Plunket Barton, Q.C.....	1	..	..	..	..	45,264
Northern	Colonel Saunderson	1	..	..	..	..	49,157
Southern	E. M'Hugh .....	..	..	..	1	..	43,219
		2	..	..	1	..	137,640
CARLOW (1).							
<i>County Division (1).</i>							
Carlow	J. Hammond.....	..	..	..	1	..	40,936
CAVAN (2).							
<i>County Divisions (2).</i>							
Eastern	S. Young .....	..	..	..	1	..	54,402
Western	J. P. Farrell .....	..	..	..	1	..	57,515
		..	..	..	2	..	111,917
CLARE (2).							
<i>County Divisions (2).</i>							
Eastern	W. Redmond.....	..	..	..	..	1	61,196
Western	Major Jameson.....	..	..	..	1	..	63,287
		..	..	..	1	1	124,483

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Parliament	
CORK (9).							
<i>County Divisions (7).</i>							
Eastern	Captain Donnan .....	..	..	..	1	..	49,700
Mid	Doctor C. Tanner .....	..	..	..	1	..	49,462
Northern	J. C. Flynn .....	..	..	..	1	..	49,248
North-Eastern	W. Abraham .....	..	..	..	1	..	49,873
Southern	Edward Barry .....	..	..	..	1	..	47,215
South-Eastern	Dr. Commins .....	..	..	..	1	..	47,030
Western	J. Gilhooly .....	..	..	..	1	..	48,623
		..	..	..	7	..	341,151
<i>Boroughs (2).</i>							
Cork (2)	J. F. X. O'Brien .....	..	..	..	1	..	97,281
	Maurice Healy .....	..	..	..	1	..	
		..	..	..	9	..	438,432
DONEGAL (4).							
<i>County Divisions (4).</i>							
Eastern	Arthur O'Connor .....	..	..	..	1	..	45,417
Northern	T. B. Curran .....	..	..	..	1	..	46,248
Southern	J. G. S. MacNeill .....	..	..	..	1	..	46,624
Western	T. D. Sullivan .....	..	..	..	1	..	47,346
		..	..	..	4	..	185,635
DOWN (5).							
<i>County Divisions (4).</i>							
Eastern	J. A. Rentoul	1	..	..	..	..	52,274
Northern	Colonel Waring	1	..	..	..	..	54,179
Southern	M. M'Cartan .....	..	..	..	1	..	51,652
Western	Rt. Hon. Lord Arthur Hill	1	..	..	..	..	50,890
<i>Borough (1).</i>							
Newry	P. G. Carvill	3	..	..	1	..	208,995
		..	..	..	1	..	13,691
		3	..	..	2	..	222,686
DUBLIN (6).							
<i>County Divisions (2).</i>							
Northern	J. J. Clancy .....	..	..	..	..	1	75,009
Southern	Hon. Horace Plunkett	1	..	..	..	..	74,491
		1	..	..	..	1	149,500
<i>Boroughs (4).</i>							
Dublin, College Green.	Dr. J. E. Kenny .....	..	..	..	..	1	67,923
„ Dublin Harbour	T. Harrington .....	..	..	..	..	1	71,530
„ St. Patrick's ..	William Field .....	..	..	..	..	1	64,611
„ St. Stphn's Gr'n	W. Kenny, Q.C. .....	..	..	1	..	..	65,652
		1	..	1	..	4	419,216

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Pro-White	
FERMANAGH. (2)							
<i>County Divisions (2).</i>							
Northern	Richard M. Dane	1	..	..	..	..	37,799
Southern	J. Jordan .....	..	..	..	1	..	36,371
		1	..	..	1	..	74,170
GALWAY (5).							
<i>County Divisions (4).</i>							
Connemara	W. O'Malley .....	..	..	..	1	..	50,503
Eastern	J. Roche .....	..	..	..	1	..	49,083
Northern	D. Kilbride .....	..	..	..	1	..	51,924
Southern	J. D. Sheehy .....	..	..	..	1	..	46,243
<i>Borough (1).</i>							
Galway	J. Pinkerton .....	..	..	..	4	..	197,753
		..	..	..	1	..	16,959
		..	..	..	5	..	214,712
KERRY (4).							
<i>County Divisions (4).</i>							
Eastern	M. Davitt .....	..	..	..	1	..	44,437
Northern	T. Sexton .....	..	..	..	1	..	43,417
Southern	T. G. Farrell .....	..	..	..	1	..	45,588
Western	Sir G. T. Esmonde .....	..	..	..	1	..	45,694
		..	..	..	4	..	179,136
KILDARE (2).							
<i>County Divisions (2).</i>							
Northern	C. J. Engledew .....	..	..	..	1	..	32,925
Southern	M. J. Minch .....	..	..	..	1	..	37,281
		..	..	..	2	..	70,206
KILKENNY (3).							
<i>County Divisions (2).</i>							
Northern	P. M'Dermott .....	..	..	..	1	..	35,645
Southern	Samuel Morris .....	..	..	..	1	..	37,894
<i>Borough (1).</i>							
Kilkenny	P. O'Brien .....	..	..	..	2	..	73,539
		..	..	..	..	1	13,722
		..	..	..	2	1	87,261
KING'S COUNTY (2).							
<i>County Divisions (2).</i>							
Birr	B. C. Molloy .....	..	..	..	1	..	33,992
Tullamore	Dr. J. F. Fox .....	..	..	..	1	..	31,571
		..	..	..	2	..	65,563

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal.	Liberal U.	Nationalist	Farrillite	
LEITRIM (2).							
<i>County Divisions (2).</i>							
North	P. A. M'Hugh .....	..	..	..	1	..	39,235
South	J. Tully .....	..	..	..	1	..	39,383
		..	..	..	2	..	78,618
LIMERICK (3).							
<i>County Divisions (2).</i>							
Eastern	J. Finucane .....	..	..	..	1	..	55,912
Western	M. Austin .....	..	..	..	1	..	56,865
		..	..	..	2	..	112,777
<i>Borough (1).</i>							
Limerick	F. A. O'Keefe .....	..	..	..	1	..	46,135
		..	..	..	3	..	158,912
LONDONDERRY (3).							
<i>County Divisions (2).</i>							
Northern	J. Atkinson	1	..	..	..	..	59,824
Southern	Sir T. Lea .....	..	..	1	..	..	58,985
		1	..	1	..	..	118,809
<i>Borough (1).</i>							
Londonderry	E. F. V. Knox .....	..	..	..	1	..	33,200
		1	..	1	1	..	152,009
LONGFORD (2).							
<i>County Divisions (2).</i>							
Northern	Justin Mc.Carthy .....	..	..	..	1	..	26,735
Southern	Hon. E. Blake .....	..	..	..	1	..	25,912
		..	..	..	2	..	52,647
LOUTH (2).							
<i>County Divisions (2).</i>							
Northern	Timothy M. Healy .....	..	..	..	1	..	37,571
Southern	D. Ambrose .....	..	..	..	1	..	33,467
		..	..	..	2	..	71,038
MAYO (4).							
<i>County Divisions (4).</i>							
Eastern	John Dillon .....	..	..	..	1	..	52,454
Northern	D. Crilly .....	..	..	..	1	..	53,662
Southern	*M. Davitt .....	..	..	..	1	..	55,987
Western	Dr. Robert Ambrose .....	..	..	..	1	..	56,931
		..	..	..	4	..	219,034

* Also returned for East Kerry.

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Constitutive	Liberal.	Liberal U.	Nationalist	Parnellite	
MEATH (2).							
<i>County Divisions (2).</i>							
Northern	J. Gibney .....	..	..	..	1	..	38,854
Southern	J. H. Parnell.....	..	..	..	..	1	38,133
		..	..	..	1	1	76,987
MONAGHAN (2).							
<i>County Divisions (2).</i>							
Northern	D. Maccalese.....	..	..	..	1	..	43,536
Southern	James Daly .....	..	..	..	1	..	42,670
		..	..	..	2	..	86,206
QUEEN'S CO'NTY (2).							
<i>County Divisions (2).</i>							
Leix	M. A. MacDonell .....	..	..	..	1	..	32,060
Ossory	E. Crean.....	..	..	..	1	..	32,823
		..	..	..	2	..	64,883
ROSCOMMON (2).							
<i>County Divisions (2).</i>							
Northern	J. J. O'Kelly .....	..	..	..	..	1	56,706
Southern	L. P. Hayden .....	..	..	..	..	1	57,691
		..	..	..	..	2	114,397
SLIGO (2).							
<i>County Divisions (2).</i>							
Northern	B. Collery .....	..	..	..	1	..	48,686
Southern	Thomas Curran.....	..	..	..	1	..	49,327
		..	..	..	2	..	98,013
TIPPERARY (4).							
<i>County Divisions (4).</i>							
Eastern	T. J. Condon .....	..	..	..	1	..	44,738
Mid	J. F. Hogan .....	..	..	..	1	..	43,900
Northern	P. J. O'Brien .....	..	..	..	1	..	43,425
Southern	F. Mandeville .....	..	..	..	1	..	41,125
		..	..	..	4	..	173,188
TYRONE (4).							
<i>County Divisions (4).</i>							
Eastern	B. C. Duggan.....	..	..	..	1	..	44,760
Mid	G. Murnaghan .....	..	..	..	1	..	43,404
Northern	Serjeant Hemphill .....	..	1	..	..	..	42,403
Southern	T. W. Russell .....	..	..	1	..	..	40,834
		..	1	1	2	..	171,401

HOUSE OF COMMONS.

Constituencies.	Members.	Politics.					Parliamentary Population, 1891.
		Conservative	Liberal	Liberal U.	Nationalist	Parnellite	
WATERFORD (3).							
<i>County Divisions (2).</i>							
Eastern	P. J. Power .....	..	..	..	1	..	33,347
Western	J. J. Shee .....	..	..	..	1	..	37,191
<i>Borough (1).</i>							
Waterford	J. E. Redmond .....	..	..	..	2	..	70,538
		..	..	..	..	1	27,713
		..	..	..	2	1	98,251
WESTMEATH (2).							
<i>County Divisions (2).</i>							
Northern	J. Tuite .....	..	..	..	1	..	33,735
Southern	D. Sullivan .....	..	..	..	1	..	31,374
		..	..	..	2	..	65,109
WEXFORD (2).							
<i>County Divisions (2).</i>							
Northern	Thomas J. Healy .....	..	..	..	1	..	55,357
Southern	Peter French .....	..	..	..	1	..	56,421
		..	..	..	2	..	111,778
WICKLOW (2).							
<i>County Divisions (2).</i>							
Eastern	W. J. Corbet.....	..	..	..	..	1	31,382
Western	James O'Connor .....	..	..	..	1	..	30,754
		..	..	..	1	1	62,136
UNIVERSITIES.							
Dublin University (2) {	Rt. Hon. D. R. Plunkett.....	1	..	..	..	..	....
	E. Carson, Q.C.....	1	..	..	..	..	....
		2	..	..	..	..	....

SUMMARY OF RESULTS OF ELECTIONS, JULY, 1895.

	England.	Scotland.	Wales.	Ireland.	Total.
Liberals	115	39	22	1	177
Conservatives.....	298	18	6	17	339
Liberal Unionists.....	51	15	2	4	72
Nationalists ..	1	—	—	69	70
Parnellites	—	—	—	12	12
	465	72	30	103	670

SUMMARY.

	COUNTIES.					BOROUGHES.					UNIVERSITIES.		TOTALS.								
	Members.					Members.					Mem- bers.		Members.								
	Con- servative.	Liberal.	Liberal U.	Nationalist.	Parnellite.	Total.	Con- servative.	Liberal.	Liberal U.	Nationalist.	Parnellite.	Total.	Con- servative.	Liberal U.	Total.	Con- servative.	Liberal.	Liberal U.	Nationalist.	Parnellite.	Total.
England	143	66	25	..	234	13,838,248	151	49	25	1	..	226	13,626,602	4	1	5,294,115	50	1	..	465	27,464,850
Wales	1	17	1	..	19	996,583	5	5	1	..	11	521,427	..	..	..	6	22	2	..	30	1,518,010
Scotland	11	22	6	..	39	2,179,238	5	17	9	..	31	1,838,214	2	..	2	16	39	15	..	72	4,017,452
Ireland	12	1	2	64	6	85	3,913,219	3	..	2	5	6	16	791,531	2	..	1	4	69	12,103	4,704,750
Totals	167	106	34	64	6,377	20,927,288	164	71	37	6	6,284	16,777,774	8	1	9,331,177	71	70	12,670	37,705,062		

HOUSE OF COMMONS.

PROFESSIONS OF MEMBERS.

AN analysis of the various professions and mercantile positions of the members of the present House of Commons. It will be observed that the total number here represented exceeds those elected ; this is brought about by duplicate qualifications.

Bankers and financiers	26
Barristers (in or out of practice) and Q.C.s.....	131
Brewers and distillers and wine merchants.....	19
Builder and architect	1
Civil and mining engineers.....	12
Colliery proprietors and coal merchants	15
Diplomatists and Government officials	9
Estate agents and accountants	4
Farmers and agriculturists.....	15
Gentry and landowners	105
Hotel proprietors.....	2
Ironmasters and metal merchants	15
Labour representatives	12
Manufacturers and spinners	54
Medical profession	11
Merchants.....	35
Military and naval officers (forty-six active service) ...	119
Newspaper proprietors and journalists.....	31
Peers' sons and brothers	41
Printers and booksellers.....	7
Professors of Universities and lecturers	10
Railway contractors	2
Ship owners and builders	18
Solicitors (in or out of practice) ..	19
Stock and share brokers.....	4
Shopkeepers and traders	16
Schoolmasters	3
Professions not stated.....	5

PRESIDENTS OF THE UNITED STATES OF
AMERICA.

	YEAR.
<i>Declaration of Independence</i>	4th July, 1776
General Washington first President.....	1789 and 1793
John Adams	1797
Thomas Jefferson	1801 and 1805
James Madison	1809 and 1813
James Monroe	1817 and 1821
John Quincy Adams	1825
Gen. Andrew Jackson	1829 and 1833
Martin Van Buren	1837
Gen. William Henry Harrison (died 4th April)	1841
John Tyler (previously Vice-President)	1841
James Knox Polk	1845
General Zachary Taylor (died 9th July, 1850)	1849
Millard Fillmore (previously Vice-President).....	1850
General Franklin Pierce.....	1853
James Buchanan	1857
Abraham Lincoln (assassinated 14th April, 1865).....	1861 and 1865
Andrew Johnson (previously Vice-President).....	1865
General Ulysses S. Grant	1869 and 1873
Rutherford Richard Hayes, after long contest with Tilden	1877
General Garfield (shot July 2; died September 19)	1881
Chester A. Arthur, Vice-President, succeeded September 20	1881
Grover Cleveland	1885
General Benjamin Harrison	1889
Grover Cleveland	1893

The United States of America form a Federal Republic, consisting of 38 partially independent States, divisible as follows:—6 Eastern, or New England, 4 Middle, 10 Southern, 18 Western; and 1 Federal district, and 8 organised Territories, the centre of North America.

The area in English square miles is estimated at 5,034,459, or 1,942,053,760 acres, exclusive of the vast district of Alaska, comprising 369,529,600 acres. One-fourth only is civilised.

The estimated population of the whole of the Territories, including the States, according to the Census of 1890, was 62,622,250, every country under Heaven being represented. The increase in the ten years 1880–1890 was 12,466,467.

THE GENERAL

RETURN of CHARGES made to CANDIDATES at the GENERAL
(both exclusive and inclusive of Returning Officers' Charges) in
GRAND

	Number of Polling Districts and Stations.		Number of Polling Booths held in School-rooms.	RETURNING OFFICERS' CHARGES.					
	Districts.	Stations.		Cost of Polling Booths.	Cost of Dies, Ballot Papers, Boxes, Advertising, Placards, Stationery, &c.				
					1.	2.	3.	4.	5.
				£	s.	d.	£	s.	d.
England and Wales.	7,177	9,872	7,889	30,248	6	7½	25,136	18	7½
Scotland....	711	1,303	1,049	2,001	1	0	2,690	14	3½
Ireland....	748	1,479	385	4,725	7	1	5,607	16	1
Total....	8,636	12,654	9,323	36,974	14	8½	33,435	9	0

TOTAL EXPENSES OF CANDIDATES, EXCLUSIVE OF RETURNING OFFICERS' CHARGES.

	Agents.		Clerks and Messengers.		Printing, Advertising, Stationery, Postage, and Telegrams.		Public Meetings.		Committee Rooms.					
	11.		12.		13.		14.		15.					
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.		
England & Wales	152,331	17	286,216	4	2½	269,445	19	8	16,644	1	5	26,526	15	8½
Scotland	32,637	16	410,986	19	7½	32,120	19	4	2,769	9	11	2,534	19	3
Ireland..	7,883	9	1,774	6	5	8,790	16	7½	192	14	8	626	11	10
Total..	192,853	2	798,977	10	3	310,357	15	7½	19,606	6	0	29,688	6	9½

Number of Electors on Register:		Maximum Scale allowed by Corrupt Practices Act, 1883:	
England and Wales....	4,809,237	England and Wales.....	£864,190
Scotland	604,898	Scotland	129,460
Ireland	743,888	Ireland	135,780
Total.....	6,158,023	Total.....	£1,129,430

*Note.—The Averages in Column 21 have been calculated from the Totals of

ELECTION, 1892.

ELECTION, in 1892, specifying the TOTAL EXPENSES of CANDIDATES ENGLAND and WALES, SCOTLAND, and IRELAND.
SUMMARY.

RETURNING OFFICERS' CHARGES.				Total Returning Officers' Charges as Paid, whether reduced by Taxation or otherwise.	
Cost of Presiding Officers, Clerks, Counting Clerks, &c.	Fee charged by Returning Officer or his Official.	All other Charges of the Returning Officer.	TOTAL.		
6.	7.	8.	9.	10.	
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£	s. d.
66,402 7 2	19,256 9 2	14,131 2 11½	155,175 4 6½	154,165 14	7½
10,629 1 5	1,306 14 7	1 228 4 8½	17,855 16 0	17,855 16	0
9,686 6 4	2,610 13 0	3,818 17 10	28,260 1 5	25,520 12	0
86,717 14 11	23,173 16 9	19,178 5 6	201,291 1 11½	197,542 2	7½

TOTAL EXPENSES OF CANDIDATES, EXCLUSIVE OF RETURNING OFFICERS' CHARGES.			Total Expense of Candidates, inclusive of Returning Officers' Charges Paid.	Number of Votes Polled by Candidates	Average Cost per Vote Polled.
Miscellaneous Matters.	Personal Expenses.	Total Expenses.			
16.	17.	18.	19.	20.	21.
£ s. d.	£ s. d.	£ s. d.	£ s. d.		s. d.
50,931 9 0½	40,326 5 7½	642,422 12 10	796,588 7 5½	3,725,855	*4 2
6,761 19 3½	6,093 2 5½	93,905 6 2½	111,761 2 2½	475,130	*4 8
2,318 15 3½	2,995 11 11	24,730 2 0½	50,182 10 5½	404,457	*2 8¾
60,012 3 7½	49,415 0 0½	761,058 1 1	958,532 0 1½	4,605,442	*4 1

Members:		Candidates:	
England and Wales.....	495	England and Wales	958
Scotland	72	Scotland	151
Ireland	103	Ireland.....	198
Grand Total.....	670	Grand Total.....	1,307

Columns 19 and 20, exclusive of expenses incurred in uncontested constituencies.

FOREIGN MONEYS AND THEIR ENGLISH EQUIVALENTS.

COUNTRY.	GOLD COINS. Denominations.	STERLING VALUE.	SILVER COINS. Denominations.	60 <i>g</i> d., <i>i.e.</i> , Gold to Silver as 15:5 is to 1.
* America	See United States	£ s. d.		s. d.
Argentine Republic	Argentino or 5-peso piece	0 19 10	Peso of 100 centesimos	3 11½
* Austria-Hungary	Ducat	0 9 4	<i>Florin</i> or <i>gulden</i> of 100 kreutzer	1 11½
	8-florin or gulden piece	0 15 10½	¼-florin	0 5½
Belgium	See France, and footnote			
Brazi.	10 milreis	1 2 5½	1 milreis of 1,000 reis	2 0½
Chili, Columbia, Uruguay.	doubleon or 5-peso piece	0 18 9	1 peso of 100 centavos	3 11½
China	.....	.....	Tael of 10 mace or 100 conderin or 1000 cash	6 6½
Denmark	10-crown piece	0 11 0½	1 <i>crowne</i> of 100 ore	1 0½
Egypt	100-piastre piece (Egyptian £)	1 0 3½	1 piastre	0 2½
Finland	10-markkaa piece	0 7 11½	1 markka of 100 penni	0 9½
* France	10-franc piece	0 7 11½	5-franc piece	3 11½
			1 <i>franc</i> of 100 centimes	0 8½
* German Empire	Crown of 10 reichsmarks	0 9 9½	1 <i>reichsmark</i> or mark of 100 pfennige	0 10½
* Great Britain	Sovereign of 20 shillings	1 0 0	Crown of 5 shillings	4 7½
			Shilling of 12 pence	0 11
* Greece	See France, and footnote.			
* Holland and Java	Ducat	0 9 4½	Rixdaler of 2½ florins	4 2
	10-florin piece	0 16 6½	<i>Florin</i> of 100 cents	1 8
India	Mohur of 15 rupees	1 9 2½	Rupee of 16 annas, 64 piee, or 192 pies	1 10½
Italy	See France, and footnote			
Japan	10-yen piece	2 0 11½	1 yen of 100 sen	4 3½
Mexico	10-peso piece	2 0 5½	1 peso of 100 centavos	4 9½
* Netherlands	See Holland			
* Norway and Sweden	See Denmark, and footnote,			
Ottoman Empire	Turkish pound of 100 piastres	0 18 0½	1 piastre of 40 paras	0 2
Persia	Toman of 200 shahis	0 9 5	Khran of 20 shahis	0 8½

Intrinsic Value with Silver per Troy Ounce.

Peru	1 19 7 $\frac{3}{4}$	Sol of 10 dineros or 100 cents	3 11 $\frac{1}{2}$	Intrinsic Value with Silver per Troy Ounce.
*Portugal	2 4 4 $\frac{1}{2}$	Teston of 100 reis	0 4 $\frac{1}{4}$	
*Roumania	1 11 9	(Rouble of 100 kopecks	3 2	
Russia		<i>Tchetvertak</i> or $\frac{1}{4}$ rouble	0 9 $\frac{1}{4}$	
Servia and Bulgaria	1 0 7 $\frac{1}{4}$	Escudo (or $\frac{1}{3}$ dollar) of 10 reals	2 0 $\frac{1}{2}$	
*Spain	0 19 10	Peseta of 100 centimos	0 8 $\frac{1}{2}$	
*Switzerland		Piastre	0 6	
Tunis	0 4 9 $\frac{1}{2}$	(Trade dollar.....)	4 3 $\frac{3}{4}$	
Turkey		{Dollar of 100 cents	4 2 $\frac{3}{4}$	
*United States.....	2 1 1 $\frac{1}{4}$	{ $\frac{1}{2}$ dollar of 50 cents.....	1 11 $\frac{1}{4}$	
Uruguay				
Venezuela				

EXPLANATORY NOTES.

FRANCE, Belgium, Italy, Greece, and Switzerland constitute what is known as the "Latin" Union, and their coins are alike in weight and fineness, differing occasionally in name. The same system has been in part adopted by Spain, Servia, Bulgaria, Russia, and Roumania, but they have not joined the Union. Francs and centimes of France, Belgium, and Switzerland are designated lire and centesimi in Italy; drachmai and lepta in Greece; dinars and paras, Servia; pesetas and centimos in Spain; leys and banis in Roumania; leva and stotinkis in Bulgaria.

Norway, Sweden, and Denmark employ coins of the same weight and fineness, their names being also alike. Most of the South American States possess a standard coin, equal in weight and fineness to the silver 5-fr. piece, generally termed a "peso." In Hayti the corresponding coin is a "gourde."

Every denomination of English money is current in all British colonies. The exchange value of the moneys of those countries indicated by a * is determined by the rate of exchange for the day, and may be taken as approximately that given in the last column. The rate given in the daily papers generally represents the number of the standard coins

(those printed in italics) that are equivalent to one sovereign. The Spanish rate is given in terms of the old dollar (= 2 escudos). The value of other silver coins is approximately determined by the market value of silver, and may be found in the column headed "Intrinsic Value with Silver at per Troy Ounce." The exchange value of the rupee depends on the rate for "India Council Bills." In "bimetallic" countries pure gold is generally taken as being worth 15 $\frac{1}{2}$ times its weight of pure silver. This portion corresponds to giving standard silver a constant value of 60 $\frac{1}{2}$ d. See last column of table.

THE INDIAN

AREA AND POPULATION OF BRITISH TERRITORY, REVENUE

NOTE.—The figures are approximate, and in all the columns except the first
(From Official Sources.) For explanation

YEARS.	Area in Square Miles. <i>a</i>	Population. <i>b</i>	REVENUE.					TOTAL.	
			Land Revenue. <i>c</i>	Opium.	Taxes. <i>d</i>	Public Works. <i>e</i>	Other Receipts. <i>f</i>		
1846-7....	694,000	154·79	14·53	3·68	5·75	—	1·30	25·26	
1847-8....	699,000		15·00	2·73	5·75	—	1·19	24·67	
1848-9....	771,000		14·83	3·91	5·31	—	1·18	25·23	
1849-50 ..	772,000		15·79	4·50	5·85	—	1·27	27·41	
1850-1....	776,000		16·27	3·79	5·72	—	1·77	27·55	
1851-2....			16·24	4·26	5·77	—	1·56	27·83	
1852-3....	802,000		16·19	5·09	5·82	—	1·51	28·61	
1853-4....	828,000		16·07	4·78	5·75	—	1·53	28·13	
1854-5....	832,000		16·51	4·71	6·42	—	1·49	29·13	
1855-6....			17·11	5·20	6·81	—	1·70	30·82	
1856-7 <i>k</i> ..			17·91	5·01	6·86	·92	2·68	33·38	
1857-8....			15·32	6·86	6·19	·48	2·86	31·71	
1858-9....			18·12	6·15	7·79	·65	3·35	36·06	
1859-60 ..	856,000		18·76	5·89	9·62	·72	4·72	39·71	
1860-1....		179·13	18·51	6·68	12·66	·85	4·20	42·90	
1861-2....			19·69	6·36	13·43	·59	3·76	43·83	
1862-3....			19·57	8·06	13·55	·44	3·52	45·14	
1863-4....			20·61 <i>c</i>	6·83	12·70	·46	4·01	44·61	
1864-5....			20·44	7·36	13·30	·59	3·96	45·65	
1865-6....			20·84	8·52	12·56	·92	6·10	48·94	
1866-7 <i>l</i> ..			19·45	6·80	11·32	·54	4·01	42·12	
1867-8....			20·32	8·92	13·38	·56	5·35	48·53	
1868-9....			20·34	8·45	13·38	·55	6·54	49·26	
1869-70 ..			21·56	7·95	14·06	96	6·37	50·90	
1870-1....			190·56	21·08	8·04	15·67	·92	5·70	51·41
1871-2....				21·02	9·26	14·21	·83	4·79	50·11
1872-3....	860,000			21·37	8·69	16·25	3·90	6·34	56·55
1873-4....				21·06	8·32	15·65	4·76	6·62	56·41
1874-5....		21·33		8·56	15·91	5·32	6·89	58·01	
1875-6....		21·54		8·47	16·26	5·64	7·05	58·96	

CENSUS, 1891-2.

AND EXPENDITURE, AND SURPLUS OR DEFICIT, FOR 46 YEARS.

are given in millions and decimals of millions. The values are in Tens of Rupees. of references see foot of pages 492 and 493.

EXPENDITURE.								Surplus.	Deficit.
Charges of Collection, &c	Civil Administration. <i>g</i>	Interest.	Army.	Public Works. <i>h</i>	Famine.	Miscellaneous. <i>i</i>	TOTAL.		
5.65	5.45	2.75	11.98	.26	—	.00	26.09	—	.83
6.20	5.87	2.89	11.19	.36	—	—	26.51	—	1.84
6.06	5.72	3.04	11.27	.40	—	.11	26.60	—	1.37
6.06	6.00	3.04	11.39	.35	—	.01	26.85	.56	—
6.22	6.18	3.24	10.83	.46	—	.00	26.93	.62	—
6.36	6.19	3.13	10.81	.61	—	—	27.10	.73	—
6.56	6.48	3.30	11.09	.55	—	—	27.98	.63	—
6.72	6.90	3.47	12.10	.90	—	—	30.09	—	1.96
7.39	7.08	2.92	11.62	1.94	—	—	30.95	—	1.82
7.20	7.21	3.07	11.95	2.43	—	—	31.86	—	1.04
6.87	.88	2.94	12.78	4.34	—	1.04	33.85	—	.47
6.38	8.76	2.98	18.40	3.05	—	—	39.57	—	7.86
6.50	9.91	3.78	25.16	4.29	—	—	49.64	—	13.58
6.68	10.09	4.61	23.50	5.17	—	.43	50.48	—	10.77
7.63	9.89	4.99	18.57	5.37	—	.47	46.92	—	4.02
8.11	7.10	5.19	16.19	6.17	—	1.12	43.88	—	.05
8.49	7.39	5.47	14.89	5.97	—	1.11	43.32	1.82	—
8.97	7.72	5.10	14.55	7.05	—	1.14	44.53	.08	—
8.98	7.81	5.11	15.77	6.72	—	1.45	45.84	—	.19
8.45	8.67	5.21	16.76	5.13	—	1.95	46.17	2.77	—
7.64	8.35	4.89	15.82	6.13	—	1.81	44.64	—	2.52
8.95	9.22	5.74	16.10	7.42	—	2.11	49.54	—	1.01
9.25	9.99	5.65	16.27	8.28	—	2.59	52.03	—	2.77
9.23	10.31	5.61	16.33	6.89	—	2.41	50.78	.12	—
9.27	9.86	5.84	16.07	6.05	—	2.84	49.93	1.48	—
8.52	10.12	5.97	15.68	4.31	—	2.39	46.99	3.12	—
7.34	9.57	5.86	15.50	10.33	—	6.18	54.78	1.77	—
7.50	9.78	5.38	15.23	11.25	3.86	5.22	53.22	—	1.81
7.81	10.05	4.84	15.38	11.53	2.24	5.84	57.69	.32	—
7.87	10.32	4.83	15.70	12.57	.60	5.48	57.37	1.59	—

**THE INDIAN
AREA AND POPULATION OF BRITISH TERRITORY, REVENUE**
NOTE.—The figures are approximate, and in all the columns except the first

YEARS.	Area in Square Miles. <i>a</i>	Population. <i>b</i>	REVENUE.					TOTAL.
			Land Revenue. <i>c</i>	Opium	Taxes. <i>d</i>	Public Works. <i>e</i>	Other Receipts. <i>f</i>	
1876-7....			19·89	9·12	16·09	6·61	6·94	58·65
1877-8....			20·04	9·18	16·89	8·66	7·20	61·97
1878-9....			22·32	9·40	18·54	7·66	7·27	65·19
1879-80 ..			21·86	0·32	19·15	9·37	7·73	68·43
1880-1....		198·79	21·11	10·48	19·38	11·60	11·72	74·29
1881-2....			21·94	19·36	19·98	12·95	11·45	75·68
1882-3....			21·87	9·50	17·66	13·05	8·19	70·27
1883-4....	868,256		22·36	9·56	17·73	14·12	8·07	71·84
1884-5....			21·83	8·82	18·45	14·19	7·40	70·69
1885-6....			22·59	8·94	18·72	15·88	8·33	74·46
1886-7....	947,887		23·06	8·94	20·38	16·86	8·10	77·34
1887-8....			23·19	8·51	20·90	16·84	9·32	78·76
1888-9....			23·02	8·56	22·22	18·02	9·88	81·70
1889-90 ..			23·91	8·58	23·68	18·24	10·67	85·08
1890-1....			24·04	7·88	24·39	20·05	9·38	85·74
1891-2....		221,173	23·96	8·01	24·87	22·84	9·36	89·14
Total for 46 years			914·37	336·99	632·73	257·54	254·33	2,398·06

a Excluding Berar and Mysore.

b The first census of all British India was taken in 1871. For the population figures of 1861 and 1851 an approximate figure, on the basis of the 1871 census, has been entered, to attain which deduction has been made for the population of recently acquired territory and for an annual increment to the population.

c Including for the years previous to 1864-5, the receipts from recently acquired territory not separately classified; after 1862-3 Forest Receipts are also included. From 1877-8 the portion of Land Revenue due to Irrigation is excluded from this head and shown under Public Works.

d Excise, Assessed, Provincial Rates Customs, Salt, and Stamps. Local Funds were incorporated in the General Accounts in 1878-9 and caused an addition of over £2,000,000 to this head, the amount being balanced by sums entered under various heads on the expenditure side.

e Including from 1876-7 Guaranteed Railway Traffic Receipts, and from 1877-8 the portion of Land Revenue due to Irrigation.

CENSUS, 1891-2.

AND EXPENDITURE, AND SURPLUS OR DEFICIT, FOR 46 YEARS.—*con.*
are given in millions and decimals of millions. The values are in Tens of Rupees.

EXPENDITURE.								Surplus	Deficit.
Charges of Collection, &c.	Civil Administration. <i>g</i>	Interest.	Army.	Public Works. <i>h</i>	Famine.	Miscellaneous. <i>i</i>	Total.		
8·40	10·61	5·05	16·46	12·86	2·14	5·72	61·24	—	2·59
8·32	10·46	5·15	17·30	13·50	5·34	6·17	66·24	—	4·27
7·47	10·46	5·40	17·94	14·67	·31	6·81	63·06	2·13	—
7·86	10·46	5·39	22·58	16·52	·10	6·75	69·66	—	1·23
8·05	10·67	4·63	28·93	19·19	·03	6·42	77·92	—	3·63
8·22	11·13	4·85	19·69	18·78	1·57	7·84	72·08	3·60	—
8·49	11·04	4·77	18·36	20·31	1·50	5·13	69·60	·67	—
8·49	11·36	4·52	18·12	20·06	1·52	5·89	69·96	1·88	—
9·56	11·74	4·62	16·96	20·47	1·55	6·18	71·08	—	0·39
9·80	12·24	4·33	20·10	21·84	1·50	7·46	77·27	—	2·81
9·75	12·70	4·31	19·52	23·36	·31	7·21	77·16	·18	—
9·44	12·91	5·44	20·42	24·65	·09	7·84	80·79	—	2·03
9·74	13·01	4·71	20·30	25·71	·08	8·11	81·66	·04	—
8·91	13·23	4·24	20·68	26·53	·60	8·28	82·47	2·61	—
9·53	13·38	4·19	20·69	26·39	·60	7·47	82·25	3·49	—
9·55	13·85	4·31	22·28	30·13	1·27	7·28	88·67	·47	—
366·44	433·12	206·75	769·21	481·25	25·21	156·26	2,438·24	30·8	70·86
								Net deficit 40·18	

f Forest, Registration, Tributes, Interest, Post Office, Telegraph, Mint, Receipts by Civil and Military Departments, and Miscellaneous.

g Including Minor Departments, Law and Justice, Police, Marine, Education, &c. From 1870-1 to 1875-6 Allotments to Provincial Services are included.

h Previous to 1876-7 the figures include Guaranteed Railway Interest less Traffic Receipts; from 1876-7 the gross payments for Guaranteed Railway Interest is included.

i Including Post Office, Telegraph, Mint, Miscellaneous Civil Charges, Special Defence Works, and Provincial Adjustments.

k A change in the mode of preparing the accounts having been effected in 1856-7, the figures are given in the corrected form.

l The period of the financial year having been altered, the figures for 1886-7 are for eleven months only.

STAMPS, TAXES, EXCISE DUTIES, &c.

STAMP DUTIES.

	£	s.	d.
AFFIDAVIT, or Statutory Declaration, except declaration forming part of an application for a patent.....	0	2	6
AGREEMENT, or Memorandum of Agreement, under hand only, not otherwise charged	0	0	6
APPRAISEMENT, or VALUATION of any estate or effects where the amount of the appraisement shall not exceed £5.....	0	0	3
Not exceeding £10	0	0	6
" 20	0	1	0
" 30	0	1	6
" 40	0	2	0
Not exceeding £50.....	0	2	6
" 100.....	0	5	0
" 200.....	0	10	0
" 500.....	0	15	0
Exceeding £500.....	1	0	0
APPRENTICESHIP INDENTURES—On each instrument	0	2	6
[By the Customs and Inland Revenue Act, 1890, there is no longer an <i>ad valorem</i> stamp duty upon an instrument of apprenticeship where there is a premium or consideration.]			
ARMORIAL BEARINGS	1	1	0
If used on any carriage	2	2	0
BANKERS' NOTES payable on demand and re-issuable—Not above £1 ..	0	0	5
Not above £2	0	0	10
Not exceeding £100	0	8	6
BILLS OF EXCHANGE AND PROMISSORY NOTES, of any kind whatsoever except bank notes—Not exceeding £5	0	0	1
Exceeding £5 and not exceeding £10	0	0	2
" 10 " 25	0	0	3
" 25 " 50	0	0	6
" 50 " 75	0	0	9
" 75 " 100	0	1	0
Every £100, and also for any fractional part of £100, of such amount By Stamp Act of 1850 (33 and 34 Vict., c. 97), the distinction between inland and foreign bills of exchange was abolished.	0	1	0
BILL OF LADING	0	0	6
CERTIFICATE—Of goods, &c., being duly entered inwards	0	4	0
Of birth, marriage, or death (certified copy of)	0	1	0
DRAFT, or Order, or Letter of Credit, for payment of any sum to bearer or order, on demand	0	0	1
CHARTER PARTY	0	0	6
PASSPORT	0	0	6

STAMPS, TAXES, EXCISE DUTIES, ETC.

TRANSFERS.

Where the amount or value of the consideration for the sale does not exceed £5		£	s.	d.	Where the amount or value of the consideration for the sale does not exceed £150		£	s.	d.
		0	0	6			0	15	0
Exceeds £5	and does not exceed £10	0	1	0	Exceeds £125	and does not exceed £150	0	15	0
" 10	" 15	0	1	6	" 150	" 175	0	17	6
" 15	" 20	0	2	0	" 175	" 200	1	0	0
" 20	" 25	0	2	6	" 200	" 225	1	2	6
" 25	" 50	0	5	0	" 225	" 250	1	5	0
" 50	" 75	0	7	6	" 250	" 275	1	7	6
" 75	" 100	0	10	0	" 275	" 300	1	10	0
" 100	" 125	0	12	6	" 300				
For every £50, and also for any fractional part of £50, of such amount or value									
Conveyance or Transfer of any kind not described as above									
MARRIAGE LICENSE, special, England and Ireland									
" not special									
MEDICINE VENDORS, Great Britain									
[A separate license is required for each place where sold.]									

PATENT LAWS OF GREAT BRITAIN.

PATENTS, DESIGNS, AND TRADE MARKS ACT, 1883.

(46 and 47 Vict., Ch. 57.)

Any person, whether a British subject or not, may make application for a Patent. Two or more persons may make a joint application, and a Patent may be granted to them jointly.

GOVERNMENT FEES.

Fees on instruments for obtaining Patents and Renewals:—

(a) Up to Sealing—

On application for provisional protection	£1	0	0
On filing complete specification	3	0	0

or,

On filing complete specification with first application	£4	0	0
---	----	---	---

(b) Further before end of four years from the date of Patent—

On certificate of renewal (optional)	50	0	0
--------------------------------------	----	---	---

(c) Further before end of seven years, or in the case of Patents granted after the commencement of this Act, before the end of eight years from date of Patent—

On certificate of renewal (optional)	50	0	0
--------------------------------------	----	---	---

Or in lieu of the two fees of £50 each, the following annual fees:—

Before the expiration of—

4th year from date of Patent	5	0	0
5th " "	6	0	0
6th " "	7	0	0
7th " "	8	0	0
8th " "	9	0	0
9th " "	10	0	0
10th " "	11	0	0
11th " "	12	0	0
12th " "	13	0	0
13th " "	14	0	0

STAMPS, TAXES, EXCISE DUTIES, ETC.

INHABITED HOUSE DUTY.

This is regulated by a Sliding Scale payable upon:—

	£	s.	d.
Shops, Farmhouses, Inns, Coffee Houses, and Lodging Houses—£20 and not exceeding £40	0	0	2
Exceeding 40 " " " 60	0	0	4
" 60 and upwards	0	0	6
Private Houses—£20 and not exceeding £40	0	0	3
Exceeding 40 " " " 60	0	0	6
" 60 and upwards	0	0	9

INCOME TAX.

Incomes of £160 per annum (Schedules A C D and E) and upwards are taxed at the rate of 8d. in the £. ; (Schedule B), $\frac{7}{8}$ of 3d. in the £; in Scotland and Ireland, 3d. in the £.

Exemption and Abatement.—Incomes less than £160 a year are exempt. On incomes amounting to £160 a year and less than £400 a year there is an abatement upon £160 of assessed income, above £400 and up to £500 an abatement of £100.

AWARDS.

Where the amount or value of the matter in dispute shall not exceed £5

Not exceeding £10	0	0	3
" 20	0	0	6
" 30	0	1	0
" 40	0	1	6
" 50	0	2	0
" 100	0	2	6
" 200	0	5	0
" 500	0	10	0
" 500	0	15	0

SERVANTS.

For every male servant, without distinction of age	0	15	0
--	---	----	---

VARIOUS LICENSES AND DUTIES.

Appraisers (may act as House Agents without further license).....	2	0	0
Auctioneers.....	10	0	0
Dogs of any kind (penalty £5)	0	7	6
Game Licenses, if taken out after 31st July and before 1st November, to expire on the 31st July following	3	0	0
After 31st July, expire 31st October	2	0	0
After 31st October, expire 31st July.....	2	0	0
Gamekeepers	2	0	0
Game Dealer's License	2	0	0
Gun (License to carry)	0	10	0

POSTAL REGULATIONS, SAVINGS BANKS, ETC.

	£	s.	d.
Hawkers and Pedlars, per year.....	2	0	0
House Agents, letting furnished houses above £25 a year (may act as Appraisers without further license)	2	0	0
Passenger Vessels, on board which liquors and tobacco are sold, yearly	5	0	0
Pawnbrokers	7	10	0
Plate Dealers selling 2ozs. gold and 3ozs. silver, and upwards	5	15	0
" " under that weight	2	6	0
Retailers of Sweets	1	5	0
Retailers of Wine, England and Ireland.....	2	10	0
" (Grocers) Scotland	2	4	1
Tobacco and Snuff, dealers in	0	5	3
[A separate license is required for each place where sold.]			
Vinegar Makers.....	5	5	0

POSTAL REGULATIONS, SAVINGS BANKS, &c.

RATES OF POSTAGE.

To and from all parts of the United Kingdom, for prepaid letters :—

Not exceeding 1oz.	1d.	Exceeding 6ozs., not exceeding 8ozs.	3d.
Exceeding 1oz., not exceeding 2ozs.	1½d.	" 8 " " 10 "	3½d.
" 2 " " 4 "	2d.	" 10 " " 12 "	4d.
" 4 " " 6 "	2½d.	" 12 " " 14 "	4½d.

and so on at the rate of ½d. for every additional 2ozs.

A letter posted unpaid is chargeable on delivery with double postage, and a letter posted insufficiently paid is chargeable with double the deficiency.

No letter is to exceed one foot six inches in length, nine inches in width, and six inches in depth, unless it be sent to or from a Government Office.

A penny stamp is now issued which can be used either as a postage or receipt stamp.

INLAND BOOK AND CIRCULAR POST.

The Book Post rate is one halfpenny for every 2ozs. or fraction of 2ozs. Every Book Packet must be posted either without a cover or in a cover entirely open at the ends. No Book Packet may exceed 5lbs. in weight, or one foot six inches in length, nine inches in width, and six inches in depth, unless it be sent to or from a Government Office.

Any Book Packet which is found to contain a letter, or communication of the nature of a letter (not being a circular letter), or not wholly printed, or any enclosure sealed or in any way closed against inspection, or any other enclosure not allowed by the regulations of the Book Post, will be treated as a letter, and charged double the deficiency of the letter postage.

Circular Letters posted in covers entirely open at both ends, the whole or greater part of which are printed, engraved, lithographed, or type written, and which, according to the internal evidence, are being sent to several persons in identical terms, may be sent at book rate.

POSTAL REGULATIONS, SAVINGS BANKS, ETC.

TELEGRAPHIC MONEY ORDERS.

Sums not exceeding £1.....	4d.
" " £2.....	6d.
" " £4.....	8d.
" " £7.....	10d.
" " £10.....	1s.

In addition to the above, the person at whose request the Telegraphic Money Order is issued will be required to pay the ordinary telegraphic rates.

No single Telegraphic Money Order can be issued for a greater amount than £10.

POSTAL ORDERS.

Postal Orders are issued at the following rates :—On those for 1/- and 1/6 the charge is $\frac{1}{2}$ d.; for 2/-, 2/6, 3/-, 3/6, 4/-, 4/6, 5/-, 7/6, 10/-, 10/6, the charge is 1d.; for 15/- and 20/-, $1\frac{1}{2}$ d.

INLAND PARCEL POST.—POSTING OF PARCELS.

Parcels must be handed in at a post-office counter, and must not be dropped into a letter box. If a parcel marked "Parcel Post" is not posted in accordance with this regulation it will be charged on delivery with a fine of 1d.

All Parcels must be prepaid by stamps affixed by the senders, and the rates of postage are as follows :—

	s.	d.
For a Parcel not exceeding 1lb. in weight	0	3
For a Parcel exceeding 1lb. in weight and not exceeding 2lbs.	0	$4\frac{1}{2}$
" " 2lbs. " " " 3lbs.	0	6
" " 3lbs. " " " 4lbs.	0	$7\frac{1}{2}$
" " 4lbs. " " " 5lbs.	0	9
" " 5lbs. " " " 6lbs.	0	$10\frac{1}{2}$
" " 6lbs. " " " 7lbs.	1	0
" " 7lbs. " " " 8lbs.	1	$1\frac{1}{2}$
" " 8lbs. " " " 9lbs.	1	3
" " 9lbs. " " " 10lbs.	1	$4\frac{1}{2}$
" " 10lbs. " " " 11lbs.	1	6

LIMITATION OF WEIGHT.

No Parcel exceeding 11lbs. in weight can be received for transmission.

LIMITATION OF SIZE.

No Parcel may exceed 3ft. 6in. in length, or 6ft. in length and girth combined. Thus, a Parcel 3ft. 6in. in length may not measure more than 2ft. 6in. in girth at its widest part; but a Parcel of shorter length, say 3ft., or 2ft. 8in., may measure respectively 3ft. or 3ft. 4in. in its widest girth.

POSTAL REGULATIONS, SAVINGS BANKS, ETC.

EXPRESS DELIVERY SERVICES.

Letters and Parcels are now accepted for Express Delivery at a large number of post-offices. For fees and conditions, see the "Postal Guide."

POSTAGE ON INLAND REGISTERED NEWSPAPERS.

Prepaid Rate.—On each Registered Newspaper, whether posted singly or in a packet, the postage when prepaid is one halfpenny; but a packet containing two or more Registered Newspapers is not chargeable with a higher rate of postage than would be chargeable on a Book Packet of the same weight—viz., one halfpenny for every 2ozs. or fraction of 2ozs.

POST CARDS.

Inland Post Cards are sold at the following prices:—Stout Cards, five for 3d.; ten for 6d. Thin Cards, ten for 5³/₄d.

Reply Stout Cards are sold at ten for a shilling. Reply Thin Cards at ten for 11d. Smaller numbers in proportion.

Private Cards bearing halfpenny adhesive stamp composed of ordinary card-board not thicker than the material used for the official Post Card may be sent as Post Cards.

Foreign Post Cards, with impressed 1d. stamp, also Reply Paid Post Cards, 2d. each, are available for the countries in the Postal Union.

POST-OFFICE TELEGRAMS.

The charge for Telegrams throughout the United Kingdom is 6d. for the first twelve words, which must include addresses of sender and receiver. It is not, however, necessary to telegraph sender's address; and by this omission an average of seven words may be sent for 6d.

Free addresses are abolished; numbers in addresses are counted as one word. After the first twelve words the charge is one halfpenny a word.

For the rates charged for Foreign Telegrams, see the "Post-office Guide," published quarterly.

MONEY ORDERS FOR THE UNITED KINGDOM.

Money Orders are granted in the United Kingdom at the following rates:—

For a sum not exceeding £1	2d.
For a sum exceeding £1 and not exceeding £2	3d.
" " £2 " " £4	4d.
" " £4 " " £7	5d.
" " £7 " " £10	6d.

POSTAL REGULATIONS, SAVINGS BANKS, ETC.

INLAND PATTERN AND SAMPLE POST.

Trade Patterns and Samples of Merchandise may be sent between places in the United Kingdom at the following rates of postage:—

For a Packet not exceeding 2ozs. ....	..	.....	1d.
“	“	“ 4ozs.	1d.
“	“	more than 4ozs. but not exceeding 6ozs.....	1½d.
“	“	“ 6ozs. “ “ 8ozs	2d.

No Packet to exceed 8ozs. in weight. Limits of dimension are—12in. by 8in. 4in. If either of these conditions be infringed the Packet will not be forwarded, but returned to the sender; similar conditions as to insufficiently paid postage obtain in connection with the above.

INLAND REGISTRATION AND COMPENSATION.

The Postmaster-General will (not in consequence of any legal liability, but voluntarily, and as an act of grace), subject to the rules hereinafter mentioned, give compensation up to a maximum limit of £50 for the loss and damage of Inland Registered Postal Packets of all kinds upon prepayment of a fee in addition to the postage. This fee either consists of or includes in each case the ordinary registration fee of 2d.; and the scale of fees and the respective limits of compensation are as follows:—Fee, 2d., Limit of Compensation, £5; 3d., £10; 4d., £15; 5d., £20; 6d., £25; 7d., £30; 8d., £35; 9d., £40; 10d., £45; 11d., £50.

POST-OFFICE SAVINGS BANKS.

No deposit of less than a shilling is received, nor any pence, and not more than £50 in one year. No further deposit is allowed when the amount standing in depositor's name exceeds £200, exclusive of interest. Interest is allowed at the rate of 2½ per cent (or sixpence in the pound) per annum—that is at the rate of one halfpenny per pound per month. When the principal and interest reach to £200, no further interest is paid until the sum at the depositor's credit is reduced below that amount.

At every post-office in the United Kingdom forms for making small deposits are now issued gratuitously. Each form has twelve divisions, in each of which a penny postage stamp can be placed; when the twelve are filled in it is received at any Post-office Savings Bank as a shilling.

GOVERNMENT STOCK INVESTMENTS.

Through the Post Office Savings Bank, depositors may invest only in 2½ per Cent Stock, 2¾ per Cent Stock (1903), 2¾ (1905) Stock, and Local 3 per Cent Loans. Investment to £200 a year only is allowed through the Post Office, with a maximum of £500. The buying and selling price may be taken from the daily newspapers. Commission is about one-eighth—2s. 6d per cent—and all applications respecting Stock investments should be addressed to the Comptroller, Savings Bank Department, General Post Office, London, E.C.

BANK HOLIDAYS. LAW SITTINGS. ECLIPSES.

REGISTERS OF BIRTHS, MARRIAGES, AND DEATHS.

These are now kept at Somerset House, and may be searched on payment of the fee of one shilling. If a certified copy of any entry be required, the charge for that, in addition to the shilling for the search, is two shillings and sevenpence, which includes a penny for stamp duty. The registers contain an entry of births, deaths, and marriages since 1st July, 1837.

BANK HOLIDAYS, 1896.

ENGLAND.

Easter Monday	April	6
Whit Monday	May	25
First Monday in August	August	3
Boxing Day (Saturday)	December	26

SCOTLAND.

New Year's Day	January	1
Good Friday	April	3
First Monday in May	May	4
First Monday in August ..	August	3
Christmas Day	December	25

LAW SITTINGS, 1896.

	Begin.	Erd.
Hilary Sittings	January 11	April 1
Easter ,,	April 14	May 22
Trinity ,,	June 2	Aug. 12
Michael. ,,	October 24	Dec. 21

ECLIPSES, 1896.

In the year 1896 there will be two Eclipses of the Sun and two of the Moon:—

1.—Annular Eclipse of the Sun, visible at Greenwich	February	13
2.—A partial ,, ,, Moon	February	28
3.—A total ,, ,, Sun	August	9
4.—A partial ,, ,, Moon	August	23

MEMORANDA AS TO ACTS OF PARLIAMENT RESTRAINING
EXPORTATION OF TOOLS &C. USED IN COTTON LINEN WOOLLEN
AND SILK MANUFACTURES.

BY Act of 14 Geo. III. c. 75 being "An Act to prevent the Exportation to Foreign Parts of Utensils made use of in the Cotton Linen Woollen and Silk Manufactures of this Kingdom" persons were prohibited from exporting "Tools or Utensils" used in the Cotton Linen Woollen and Silk Manufactures of the Kingdom.

By Act of 21 Geo. III. c. 37 being an Act to explain and amend the last-mentioned Act it was enacted—

That if at any time after the 24th day of June 1781 any person or persons in Great Britain or Ireland shall upon any pretence whatsoever load or put on board or pack or cause or procure to be laden put on board or packed in order to be loaded or put on board of any ship or vessel which shall not be bound directly to some port or place in Great Britain or Ireland or shall lade or cause or procure to be laden on board any boat or other vessel or shall bring or cause to be brought to any quay wharf or other place in order to be so laden or put on board any such ship or vessel *any machine engine tool press paper utensil or implement* whatsoever which now is or at any time or times hereafter shall or may be used in or proper for the preparing working pressing finishing or completing of the *Woollen Cotton Linen or Silk Manufactures* of this Kingdom or any or either of them or any other goods wherein Wool Cotton Linen or Silk or any or either of them are or is used or any part or parts of such machine engine tool press paper utensil or implement by what name or names soever the same shall be called or known; or any *model or plan or models or plans* of any such machine engine tool press paper utensil or implement or any part or parts thereof.

Any Justice might grant a warrant to seize the machines &c. and on conviction the person offending should forfeit the machines &c. and a sum of £200 and be imprisoned for twelve months without bail and until the forfeiture should be paid.

Penalties were also imposed on the Masters of Ships and Custom House Officers conniving at any offence and on persons making machines &c.

TABLE SHOWING SUMS PAYABLE IN FOREIGN CURRENCIES ON MONEY ORDERS
ISSUED IN UNITED KINGDOM.

VALUE OF ENGLISH MONEY IN

English Money.			Belgium, France, and Algeria, Italy and Switzerland.	Germany and Heligoland.	Holland and Dutch East Indies.	Denmark, Iceland, Norway, and Danish West Indies.	Sweden.	Portugal, Azores, and Madeira.	Egypt.	United States, Canada, and Hawaii.
£	s.	d.	Francs. Cents.	Marks. Pfen.	Florins. Cents.	Kroner. Ore.	Kroner. Ore.	Reis.	Piastres. Paras.	Dollars. Cents.
0	0	1	0 10	0 8	0 5	0 7	0 7	10	0 16	0 2
0	0	2	0 20	0 17	0 10	0 15	0 15	30	0 32	0 4
0	0	3	0 30	0 25	0 15	0 22	0 22	50	1 8	0 6
0	0	4	0 40	0 34	0 20	0 30	0 30	70	1 25	0 8
0	0	5	0 50	0 42	0 20	0 37	0 37	90	2 1	0 10
0	0	6	0 60	0 51	0 25	0 45	0 45	110	2 17	0 12
0	0	7	0 70	0 59	0 30	0 52	0 52	130	2 33	0 14
0	0	8	0 80	0 68	0 35	0 60	0 60	150	3 10	0 16
0	0	9	0 90	0 76	0 40	0 68	0 68	170	3 26	0 18
0	0	10	1 0	0 85	0 45	0 75	0 75	190	4 2	0 20
0	0	11	1 10	0 93	0 50	0 83	0 83	200	4 18	0 22
0	1	0	1 20	1 2	0 55	0 90	0 90	220	4 35	0 24
0	2	0	2 50	2 4	1 15	1 81	1 81	450	9 30	0 48
0	3	0	3 70	3 6	1 75	2 72	2 72	680	14 25	0 73
0	4	0	5 0	4 8	2 35	3 63	3 62	910	19 20	0 97
0	5	0	6 30	5 10	2 95	4 53	4 53	1,140	24 15	1 21
0	6	0	7 50	6 12	3 55	5 44	5 43	1,370	29 10	1 46
0	7	0	8 80	7 14	4 15	6 35	6 34	1,590	34 5	1 70
0	8	0	10 0	8 16	4 75	7 26	7 24	1,820	39 0	1 94
0	9	0	11 30	9 18	5 35	8 16	8 15	2,050	43 35	2 19
0	10	0	12 60	10 20	5 95	9 7	9 6	2,280	48 30	2 43
0	11	0	13 80	11 22	6 55	9 98	9 96	2,510	53 25	2 67
0	12	0	15 10	12 24	7 15	10 89	10 87	2,740	58 20	2 93
0	13	0	16 30	13 26	7 75	11 79	11 78	2,970	63 15	3 16
0	14	0	17 60	14 28	8 35	12 70	12 68	3,190	68 10	3 40
0	15	0	18 90	15 30	8 95	13 61	13 60	3,420	73 5	3 65
0	16	0	20 10	16 32	9 55	14 52	14 50	3,650	78 0	3 89
0	17	0	21 40	17 34	10 15	15 42	15 40	3,880	82 35	4 12
0	18	0	22 60	18 36	10 75	16 33	16 31	4,110	87 30	4 38
0	19	0	23 90	19 38	11 35	17 24	17 21	4,340	92 25	4 62
1	0	0	25 20	20 40	11 95	18 15	18 12	4,570	97 20	4 87
2	0	0	50 40	40 80	23 90	36 30	36 24	9,140	195 0	9 74
3	0	0	75 60	61 20	35 85	54 45	54 36	13,710	292 20	14 61
4	0	0	100 80	81 60	47 80	72 60	72 48	18,280	390 0	19 48
5	0	0	126 0	102 0	59 75	90 75	90 60	22,850	487 20	24 35
6	0	0	151 20	122 40	71 70	108 90	108 72	27,420	585 0	29 22
7	0	0	176 40	142 80	83 65	127 5	126 84	31,990	682 20	34 9
8	0	0	201 60	163 20	95 60	145 20	144 96	36,560	780 0	38 96
9	0	0	226 80	183 60	107 55	163 35	163 8	41,130	877 20	43 83
10	0	0	252 0	204 0	119 50	181 50	181 20	45,700	975 0	48 70

INDIA.—Amounts of Money Orders, issued in the United Kingdom on India, are paid in Rupees, Annas, and Pies; the Rupee being the standard of value in India. As, however, the value of the Rupee is subject to constant variation, no tables of conversion can be given. All Orders on India are issued in Sterling, and the equivalent in Rupees is settled by the Post-office at Bombay on arrival of the Advice List from London.

TABLE SHOWING SUMS PAYABLE IN ENGLISH MONEY ON MONEY ORDERS ISSUED
IN FOREIGN COUNTRIES, &c.

Belgium and Switzer- land	France, Algeria, and Italy.	Germany and Heligo- land.	Holland and Dutch East Indies.	Denmark, Iceland, Norway, and Danish West Indies.	Sweden.	Portugal, Azores, and Madeira.	Egypt.	United States, Canada, and Hawaii.	English Money.
Francs. Cents.	Francs. Cents.	Marks. Pfen.	Florins. Cents.	Kroner. Ore.	Kroner. Ore.	Reis.	Piastres. Paras.	Dollars. Cents.	£ s. d.
0 11	0 11	0 9	0 6	0 8	0 8	20	0 16	0 3	0 0 1
0 22	0 21	0 18	0 11	0 16	0 16	40	0 32	0 5	0 0 2
0 32	0 32	0 26	0 16	0 23	0 23	60	1 8	0 7	0 0 3
0 43	0 42	0 35	0 21	0 31	0 31	80	1 25	0 9	0 0 4
0 53	0 53	0 43	0 26	0 38	0 38	100	2 1	0 11	0 0 5
0 64	0 63	0 52	0 31	0 46	0 46	120	2 17	0 13	0 0 6
0 74	0 74	0 60	0 36	0 54	0 54	140	2 33	0 15	0 0 7
0 85	0 84	0 69	0 41	0 61	0 61	160	3 10	0 17	0 0 8
0 95	0 95	0 77	0 46	0 69	0 69	180	3 26	0 19	0 0 9
1 6	1 5	0 86	0 51	0 76	0 76	200	4 2	0 21	0 0 10
1 16	1 16	0 94	0 56	0 84	0 84	210	4 18	0 23	0 0 11
1 27	1 26	1 3	0 61	0 91	0 91	230	4 35	0 25	0 1 0
2 53	2 52	2 5	1 22	1 82	1 82	460	9 30	0 49	0 2 0
3 80	3 78	3 8	1 83	2 73	2 72	690	14 25	0 74	0 3 0
5 6	5 4	4 10	2 44	3 64	3 63	920	19 20	0 98	0 4 0
6 33	6 30	5 13	3 4	4 55	4 53	1,150	24 15	1 22	0 5 0
7 59	7 56	6 15	3 65	5 46	5 44	1,380	29 10	1 47	0 6 0
8 86	8 82	7 18	4 26	6 37	6 35	1,600	34 5	1 71	0 7 0
10 12	10 8	8 20	4 87	7 28	7 25	1,830	39 0	1 95	0 8 0
11 39	11 34	9 23	5 48	8 19	8 16	2,060	43 35	2 20	0 9 0
12 65	12 60	10 25	6 8	9 10	9 6	2,290	48 30	2 44	0 10 0
13 92	13 86	11 28	6 69	10 1	9 97	2,520	53 25	2 68	0 11 0
15 18	15 12	12 30	7 30	10 92	10 88	2,750	58 20	2 93	0 12 0
16 45	16 38	13 33	7 91	11 83	11 78	2,980	63 15	3 17	0 13 0
17 71	17 64	14 35	8 52	12 74	12 69	3,200	68 10	3 41	0 14 0
18 98	18 90	15 38	9 12	13 65	13 59	3,430	73 5	3 66	0 15 0
20 24	20 16	16 40	9 73	14 56	14 50	3,660	78 0	3 90	0 16 0
21 51	21 42	17 43	10 34	15 47	15 41	3,890	82 35	4 14	0 17 0
22 77	22 68	18 45	10 95	16 38	16 31	4,120	87 30	4 39	0 18 0
24 4	23 94	19 48	11 56	17 29	17 21	4,350	92 25	4 63	0 19 0
25 30	25 20	20 50	12 16	18 20	18 12	4,570	97 20	4 87	1 0 0
50 60	50 40	41 0	24 32	36 40	36 24	9,140	195 0	9 74	2 0 0
75 90	75 60	61 50	36 48	54 60	54 36	13,710	292 20	14 61	3 0 0
101 20	100 80	82 0	48 64	72 80	72 48	18,280	390 0	19 48	4 0 0
126 50	126 0	102 50	60 80	91 0	90 60	22,850	487 20	24 35	5 0 0
151 80	151 20	123 0	72 96	109 20	108 72	27,420	585 0	29 22	6 0 0
177 10	176 40	143 50	85 12	127 40	126 84	31,990	682 20	34 9	7 0 0
202 40	201 60	164 0	97 28	145 60	144 96	36,560	780 0	38 96	8 0 0
227 70	226 80	184 50	109 44	163 80	163 8	41,130	877 20	43 83	9 0 0
253 0	252 0	205 0	121 60	182 90	181 20	45,700	975 0	48 70	10 0 0

NOTE.—In calculating amounts payable in the United Kingdom, it must be understood that the Foreign Offices of Exchange reserve to themselves the power of dealing with fractions of a penny as they may deem most convenient. For example, an Order issued in Denmark for 1 Kroner may be credited to this country either as 1s. 1d. or 1s. 2d. An Order issued in Switzerland for 65 Francs may be credited either as £2. 1s. 10d. or £2. 1s. 11d.

THE TIME ALL OVER THE WORLD.

WHEN the clock at Greenwich points to Noon, the time at the various places below is as follows:—

	H.	M.		H.	M.
Boston, U.S.....	7	18 a.m.	Copenhagen.....	12	50 p.m.
Dublin	11	35 a.m.	Florence	12	45 p.m.
Edinburgh	11	47 a.m.	Jerusalem	2	21 p.m.
Glasgow	11	43 a.m.	Madras	5	21 p.m.
Lisbon	11	43 a.m.	Malta	12	58 p.m.
Madrid	11	45 a.m.	Melbourne, Australia....	9	40 p.m.
New York, U.S.	7	14 a.m.	Moscow ..	2	30 p.m.
Penzance	11	38 a.m.	Munich.....	12	46 p.m.
Philadelphia, U.S.	6	59 a.m.	Paris.....	12	9 p.m.
Quebec	7	15 a.m.	Pekin	7	46 p.m.
Adelaide, Australia.....	9	11 p.m.	Prague	12	58 p.m.
Amsterdam	12	19 p.m.	Rome	12	50 p.m.
Athens	1	35 p.m.	Rotterdam	12	18 p.m.
Berlin	12	54 p.m.	St. Petersburg	2	1 p.m.
Berne	12	30 p.m.	Suez	2	10 p.m.
Bombay	4	52 p.m.	Sydney, Australia	10	5 p.m.
Brussels	12	17 p.m.	Stockholm	1	12 p.m.
Calcutta ..	5	54 p.m.	Stuttgardt	0	37 p.m.
Capetown	1	14 p.m.	Vienna	1	6 p.m.
Constantinople	1	56 p.m.			

Hence, by a little calculation, the time for those places at any hour of our day may be ascertained. At places east of London the apparent time is later, and west of London, earlier; for uniformity sake, however, Greenwich time is kept at all railways in Great Britain and Ireland.

TOTAL ANNUAL VALUE OF PROPERTY AND INCOME ASSESSED, 1875-94.

Year.	England.	Scotland.	Ireland.	United Kingdom.	Year.
	£	£	£	£	
1875	481,774,580	53,934,528	35,347,059	571,056,167	1875
1877	480,425,213	54,441,576	35,464,600	570,331,389	1877
1878	486,698,836	55,712,709	35,929,649	578,294,971	1878
1879	485,939,056	55,897,204	36,210,037	578,046,297	1879
1880	485,676,370	55,079,954	36,140,577	576,896,901	1880
1881	493,583,819	55,530,028	36,110,043	585,223,890	1881
1882	507,644,153	57,607,470	36,199,354	601,450,977	1882
1883	516,948,272	59,406,708	36,481,078	612,836,058	1883
1884	530,538,379	61,117,685	36,854,135	628,510,199	1884
1885	533,429,560	61,125,422	36,912,150	631,467,132	1885
1886	533,038,774	60,057,933	36,758,915	629,855,622	1886
1887	535,040,455	57,910,114	36,447,393	629,397,962	1887
1888	542,450,177	57,145,262	36,559,254	636,154,693	1888
1889	550,575,255	57,834,226	36,749,208	645,158,689	1889
1890	572,128,525	60,030,510	37,199,578	669,358,613	1890
1891	597,265,843	63,387,529	37,754,177	698,407,549	1891
1892	607,748,110	65,023,424	37,981,150	710,752,684	1892
1893	608,349,961	65,606,195	38,224,943	712,181,099	1893
1894	602,388,699	65,188,840	38,553,336	706,130,875	1894

BAROMETER INSTRUCTIONS.

COMPILED BY THE LATE ADMIRAL FITZROY, F.R.S.

THE barometer should be set regularly by a duly-authorized person about sunrise, noon, and sunset.

The words on scales of barometers should not be so much regarded for weather indications as the RISING or FALLING of the mercury; for if it stand at CHANGEABLE (29·50) and then rise towards FAIR (30·00) it presages a change of wind or weather, though not so great as if the mercury had risen higher; and, on the contrary, if the mercury stand above FAIR and then fall it presages a change, though not to so great a degree as if it had stood lower; beside which, the direction and force of wind are not in any way noticed.

It is not from the point at which the mercury may stand that we are alone to form a judgment of the state of the weather, but from its RISING or FALLING; and from the movements of immediately PRECEDING days as well as hours, keeping in mind effects of change of DIRECTION, and dryness or moisture, as well as alteration of force or strength of wind.

It should always be remembered that the state of the air FORETELLS COMING weather rather than shows the weather that is PRESENT—(an invaluable fact too often overlooked)—that the longer the time between the signs and the change foretold by them the longer such altered weather will last; and, on the contrary, the less the time between a warning and a change the shorter will be the continuance of such foretold weather.

If the barometer has been about its ordinary height, say near 30 inches at the sea-level, and is steady on rising, while the thermometer falls and dampness becomes less, north-westerly, northerly, north-easterly wind, or less wind, less rain or snow may be expected.

On the contrary, if a fall takes place with a rising thermometer and increased dampness, wind and rain may be expected from the south-eastward, southward, or south-westward. A fall with low thermometer foretells snow.

When the barometer is rather below its ordinary height, say down to near 29½ inches (at sea-level), a rise foretells less wind, or a change in its direction towards the northward, or less wet; but when it has been very low, about 29 inches, the first rising usually precedes or indicates strong wind—at times heavy squalls—from the north-westward, northward, or north-eastward, AFTER which violence a gradually rising glass foretells improving weather; if the thermometer falls, but if the warmth continues, probably the wind will back (shift against the sun's course), and more southerly or south-westerly wind will follow, especially if the barometer rise is sudden.

The most dangerous shifts of wind, or the HEAVIEST northerly gales, happen soon after the barometer first rises from a very low point; or if the wind veers GRADUALLY, at some time afterwards.

BAROMETER INSTRUCTIONS.

Indications of approaching change of weather and the direction and force of winds are shown less by the height of the barometer than by its falling or rising. Nevertheless, a height of more than 30 (30.00) inches (at the level of the sea) is indicative of fine weather and MODERATE winds, except from east to north, OCCASIONALLY.

A rapid rise of the barometer indicates unsettled weather, a slow movement the contrary; as likewise a STEADY barometer, when continued and with dryness, foretells very fine weather.

A rapid and considerable fall is a sign of stormy weather, and rain or snow. Alternate rising and sinking indicates unsettled or threatening weather.

The greatest depressions of the barometer are with gales from S.E., S., or S.W.; the greatest deviations, with wind from N.W., N., or N.E., or with calm.

A sudden fall of the barometer, with a westerly wind, is sometimes followed by a violent storm from N.W., N., or N.E.

If a gale sets in from the E. or S.E., and the wind veers by the south, the barometer will continue falling until the wind is near a marked change, when a lull MAY occur; after which the gale will soon be renewed, perhaps suddenly and violently, and the veering of the wind towards the N.W., N., or N.E. will be indicated by a rising of the barometer, with a fall of the thermometer.

After very warm and calm weather a storm or squall, with rain, may follow; likewise at any time when the atmosphere is HEATED much above the USUAL temperature of the season.

To know the state of the air not only the barometer AND THERMOMETER, but appearances of the sky should be vigilantly watched.

 SIGNS OF WEATHER.

WHETHER clear or cloudy, a rosy sky at sunset presages fine weather; a red sky in the morning, bad weather, or much wind, perhaps rain; a grey sky in the morning, fine weather; a high dawn, wind; a low dawn, fair weather.*

Soft-looking or delicate clouds foretell fine weather, with moderate or light breezes; hard-edged, oily-looking clouds, wind. A dark, gloomy blue sky is windy, but a light, bright blue sky indicates fine weather. Generally, the softer the clouds look, the less wind (but perhaps more rain) may be expected; and the harder, more "greasy," rolled, tufted, or ragged, the stronger the coming wind will prove. Also a bright yellow sky at sunset presages wind; a pale yellow, wet; and thus, by the prevalence of red, yellow, or grey tints, the coming weather may be foretold very nearly—indeed, if aided by instruments, almost exactly.

* A high dawn is when the first indications of daylight are seen above a bank of clouds. A low dawn is when the day breaks on or near the horizon, the first streaks of light being very low down.

BAROMETER INSTRUCTIONS.

Small inky-looking clouds foretell rain ; light scud clouds driving across heavy masses show wind and rain, but if alone may indicate wind only.

High upper clouds crossing the sun, moon, or stars in a direction different from that of the lower clouds, or the wind then felt below, foretell a change of wind.

After fine, clear weather, the first signs in the sky of a coming change are usually light streaks, curls, wisps or mottled patches of white distant clouds, which increase, and are followed by an overcasting of murky vapour that grows into cloudiness. This appearance, more or less oily or watery as wind or rain will prevail, is an infallible sign.

Light, delicate, quiet tints or colours, with soft, undefined forms of clouds, indicate and accompany fine weather ; but gaudy or unusual hues, with hard, definitely-outlined clouds, foretell rain, and probably strong wind.

When sea-birds fly out early and far to seaward, moderate wind and fair weather may be expected. When they hang about the land, or over it, sometimes flying inland, expect a strong wind, with stormy weather. As many creatures beside birds are affected by the approach of rain or wind, such indications should not be slighted by an observer who wishes to foresee weather.

Remarkable clearness of atmosphere near the horizon, distant objects such as hills unusually visible, or raised (by refraction),† and what is called a “good HEARING day,” may be mentioned among signs of wet, if not wind, to be expected.

More than usual twinkling of the stars, indistinctness or apparent multiplication of the moon’s horns, haloes, “wind-dogs” (fragments or pieces of rainbows, sometimes called “wind-galls”) seen on detached clouds, and the rainbow, are more or less significant of increasing wind, if not approaching rain with or without wind.

Lastly, the dryness or dampness of the air, and its temperature (for the season), should ALWAYS be considered WITH OTHER indications of change or continuance of wind and weather.

On barometer scales the following contractions may be useful :—

RISE
FOR
N.E.LY
(N.W.-N.-E.)
DRY
OR
LESS
WIND.
—
EXCEPT
WET FROM
N.E.D.

FALL
FOR
S.W.LY
(S.E.-S.-W.)
WET
OR
MORE
WIND.
—
EXCEPT
WET FROM
N.E.D.

When the wind shifts against the sun,
Trust it not, for back it will run.

FIRST rise after very low
Indicates a stronger blow.

Long foretold—long last ;
Short notice—soon past.

† Much refraction is a sign of easterly wind.

METEOROLOGICAL TABLE.

This Table is used to suggest what kind of weather will probably follow the changes of the Moon.

Time of New or of Full Moon, or of entering the First or Last Quarter.	Weather likely to follow during the Quarter.	
	IN SUMMER.	IN WINTER.
12 at Noon to 2 Afternoon.....	Very rainy	Snow or rain.
2 Afternoon to 4 "	Changeable	Fair and mild.
4 " to 6 "	Fair	Fair.
6 " to 10 "	(Fair, if wind North-West	Fair, frosty, if North or North-East.
10 " to 12 Midnight	(Rainy, if South or South-West	Rain or snow, if South or South-West.
12 Midnight to 2 Morning	Fair	Fair and frosty.
2 Morning to 4 "	Fair	Hard frost, unless South or West.
4 " to 6 "	Cold, with showers	Snow and stormy.
6 " to 8 "	Rain	Snow and stormy.
8 " to 10 "	Wind and rain	Stormy.
10 " to 12 Noon	Changeable	(Cold rain, if wind West. { Snow, if East.
	Frequent showers	Cold, with high wind.

REMARKS.

The nearer the time of the Moon's entrance, at full, change, and quarters, is to midnight, that is, within two hours before and after midnight, the fairer the weather will be; but the nearer to noon, the less fair. Also the Moon's entrance, at full, change, and quarters, during six of the afternoon hours, namely, from four to ten, may be followed by fair weather; but this is mostly dependent upon the wind. The same entrance during all the hours after midnight is, with the exception of the two first, unfavourable to fair weather.

MONTHLY METEOROLOGICAL TABLE FOR THE YEAR ENDING SEPTEMBER 30, 1895.

(From Official Sources.)

ROYAL OBSERVATORY, GREENWICH.—HEIGHT OF STATION ABOVE SEA LEVEL, 159 FEET.

YEAR 1894-95.	PRESSURE OF ATMOSPHERE IN MONTH.		TEMPERATURE OF AIR IN MONTH.					MEAN TEMPERATURE.		MEAN READING OF THERMOMETER.		RAIN.		
	Mean.	Range.	Highest.	Lowest.	Range.	of all Highest.	of all Lowest.	Daily Range.	Air.	Dew Point.	Maximum in Rays of Sun.	Minimum on Grass.	Number of days it fell.	In.
1894.	In.	In.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Days.	In.
October.....	29·743	1·375	62·0	30·5	31·5	56·1	45·2	10·9	50·2	46·3	85·1	40·8	18	3·99
November ..	29·808	1·610	64·9	31·1	33·8	52·4	41·4	11·0	46·9	42·9	76·9	37·8	17	3·00
December....	29·849	1·295	52·9	28·2	24·7	46·4	37·3	9·1	42·2	38·2	56·0	34·8	15	1·95
1895.														
January	29·518	1·502	53·8	20·3	33·5	37·7	29·5	8·2	33·8	29·2	51·6	27·6	19	1·62
February	29·910	0·866	45·0	6·9	38·1	35·2	22·8	12·4	28·9	22·1	62·6	19·6	4	0·22
March	29·565	1·522	63·0	25·3	37·7	51·1	36·4	14·7	42·8	37·3	87·7	32·4	19	1·43
April	29·735	1·018	67·7	31·4	36·3	57·2	40·7	16·5	47·8	42·2	98·5	35·8	12	1·25
May	29·907	1·011	86·2	37·8	48·4	67·5	45·5	22·0	56·0	45·5	118·7	39·4	6	0·45
June	29·895	0·817	84·3	42·2	42·1	74·1	50·0	24·1	61·4	48·7	128·9	45·0	8	0·21
July	29·710	0·821	83·8	49·2	34·6	72·8	54·2	18·6	62·6	51·7	124·9	50·8	16	3·39
August	29·748	0·942	82·2	45·7	36·5	73·0	53·7	19·3	62·2	54·5	128·5	50·5	15	2·14
September ..	29·977	0·621	87·3	41·2	46·1	75·4	51·3	24·1	62·2	54·0	127·3	44·3	5	0·93

MONTHLY METEOROLOGICAL TABLE FOR THE YEAR ENDING SEPTEMBER 30, 1895.

(From Official Sources.)

THE OBSERVATORY, LIVERPOOL.—HEIGHT OF STATION ABOVE SEA LEVEL, 197 FEET.

YEAR 1894-95.	PRESSURE OF ATMOSPHERE IN MONTH.			TEMPERATURE OF AIR IN MONTH.				MEAN TEMPERATURE.		MEAN READING OF THERMOMETER.		RAIN.		
	Mean.	Range.	Highest.	Lowest.	Range.	of all Highest.	of all Lowest.	Daily Range.	Air.	Dew Point.	Maximum in Rays of Sun.	Minimum on Grass.	Number of days it fell.	Amount Collected.
1894.	In.	In.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	* Deg.	* Deg.	Days.	In.
October.....	29.680	1.670	62.5	33.0	29.5	54.3	44.9	9.4	48.9	43.8	86.0	38.4	15	3.75
November ..	29.673	1.598	60.9	35.3	25.6	52.1	43.2	8.9	47.1	41.6	72.4	37.1	19	2.23
December....	29.739	1.625	55.8	26.1	29.7	47.0	39.4	7.6	43.2	39.0	61.9	31.1	21	2.22
1895.														
January	29.484	1.733	42.0	21.7	20.3	37.0	29.7	7.3	33.3	29.6	66.0	21.9	20	2.90
February	29.896	0.840	41.8	11.6	30.2	34.1	25.3	8.8	29.5	23.1	83.9	19.2	3	0.26
March	29.450	1.759	54.3	27.8	26.5	46.4	36.9	9.5	40.6	37.0	89.9	30.1	21	2.47
April	29.652	1.182	60.8	33.1	27.7	53.2	41.2	12.0	46.1	38.6	108.3	33.0	13	2.02
May	29.886	0.942	80.2	38.8	41.4	61.3	47.2	14.1	53.0	43.8	120.0	40.3	8	0.55
June	29.857	0.867	78.4	43.1	35.3	64.3	51.2	13.1	56.4	48.3	131.2	41.6	21	0.94
July	29.615	0.906	77.1	49.9	27.2	65.4	55.0	10.4	58.5	50.0	124.8	46.6	18	3.87
August	29.624	0.923	75.2	49.6	25.6	66.1	54.6	11.5	59.2	51.8	125.4	47.8	16	1.85
September ..	29.897	0.818	79.2	44.6	34.6	67.7	54.1	13.6	59.8	52.1	118.0	45.5	8	1.08

* The Mean temperature inserted in these two columns is taken from the Returns of Stonyhurst College, Lancashire, as they were not supplied by Liverpool. The height of station above sea level is 363 feet.

MONTHLY METEOROLOGICAL TABLE FOR THE YEAR ENDING SEPTEMBER 30, 1895.

(From Official Sources.)

THE OBSERVATORY, CARLISLE, SPITAL (CUMBERLAND).—HEIGHT OF STATION ABOVE SEA LEVEL, 114 FEET.

YEAR 1894-95.	PRESSURE OF ATMOSPHERE IN MONTH.			TEMPERATURE OF AIR IN MONTH.						MEAN TEMPERATURE.		MEAN READING OF THERMOMETER.		RAIN.		
	Month.	Mean.	Range.	Highest.	Lowest.	Range.	MEAN		Air.	Dew Point.	Maximum in Rays of Sun.	Minimum on Grass.	Number of days it fell.	Amount Collected.	Days.	In.
		In.	Deg.	Deg.	Deg.	Deg.	of all Highest.	Lowest.									Daily Range.
1894.																
October.....	29-755	1-772	Deg. 65-2	Deg. 21-2	Deg. 44-0	Deg. 55-5	Deg. 39-2	Deg. 16-3	Deg. 47-2	Deg. 40-8	Deg. 74-6	Deg. 36-7	16	2-88		
November....	29-687	1-640	Deg. 60-8	Deg. 28-2	Deg. 32-6	Deg. 51-6	Deg. 41-3	Deg. 10-3	Deg. 47-1	Deg. 42-9	Deg. 64-9	Deg. 37-7	18	3-38		
December....	29-754	1-954	Deg. 55-5	Deg. 23-4	Deg. 32-1	Deg. 45-4	Deg. 34-5	Deg. 10-9	Deg. 41-0	Deg. 36-9	Deg. 53-6	Deg. 31-7	17	3-33		
1895.																
January.....	29-593	1-712	Deg. 41-5	Deg. 9-4	Deg. 32-1	Deg. 36-9	Deg. 23-0	Deg. 13-9	Deg. 30-9	Deg. 26-9	Deg. 53-1	Deg. 19-4	18	2-24		
February....	29-996	0-890	Deg. 44-0	Deg. 0-5	Deg. 43-5	Deg. 37-2	Deg. 19-3	Deg. 17-9	Deg. 27-8	Deg. 23-2	Deg. 57-5	Deg. 16-2	6	0-78		
March.....	29-495	1-672	Deg. 57-8	Deg. 21-2	Deg. 36-6	Deg. 47-9	Deg. 34-6	Deg. 13-3	Deg. 40-8	Deg. 38-3	Deg. 71-7	Deg. 32-2	21	2-68		
April.....	29-713	1-172	Deg. 65-4	Deg. 26-4	Deg. 39-0	Deg. 53-5	Deg. 38-0	Deg. 17-8	Deg. 46-2	Deg. 39-0	Deg. 90-0	Deg. 35-4	14	1-48		
May.....	29-958	0-882	Deg. 82-2	Deg. 32-5	Deg. 49-7	Deg. 65-7	Deg. 41-8	Deg. 23-9	Deg. 53-1	Deg. 47-1	Deg. 101-6	Deg. 37-3	9	0-64		
June.....	29-907	0-888	Deg. 81-2	Deg. 29-0	Deg. 52-2	Deg. 70-6	Deg. 46-2	Deg. 24-4	Deg. 57-7	Deg. 49-3	Deg. 108-5	Deg. 43-1	10	1-64		
July.....	29-651	0-872	Deg. 77-5	Deg. 41-4	Deg. 36-1	Deg. 67-5	Deg. 49-1	Deg. 18-4	Deg. 57-1	Deg. 52-3	Deg. 102-8	Deg. 45-6	21	5-78		
August.....	29-642	0-924	Deg. 82-0	Deg. 44-2	Deg. 35-0	Deg. 69-5	Deg. 52-4	Deg. 17-1	Deg. 60-3	Deg. 55-4	Deg. 102-3	Deg. 49-4	28	5-54		
September....	29-929	0-940	Deg. 82-8	Deg. 35-8	Deg. 47-0	Deg. 69-6	Deg. 49-1	Deg. 20-5	Deg. 59-3	Deg. 53-8	Deg. 99-5	Deg. 45-6	10	1-28		

REMARKS ON THE WEATHER.

(From Official Sources.)

OCTOBER, 1894.—The weather was dull, with frequent rain from the 5th to the 16th, and daily from the 24th of the month. The mean high day temperature was slightly below its average during the month, the mean low night temperature being a little above. The mean daily temperature of the air was below its average from the 1st to the 9th, and from the 14th to the 23rd being as much as $8^{\circ}7$ and $7^{\circ}0$ below on the 17th and 18th respectively; and above from the 10th to the 13th, and from the 24th to the 31st, being as much as $7^{\circ}3$, $7^{\circ}2$, $7^{\circ}4$, and $8^{\circ}9$ above on the 24th, 25th, 26th, and 31st. From the 1st to the 17th the atmospheric pressure was above its average, being more than half an inch in excess of the average on the 1st and 2nd, and from the 18th to the end of the month below, particularly so on the 24th and 25th, when it was as much as 0.64in. and 0.73in. below. The fall of rain was above its average, and fell more frequently in the Midland stations than either in the North or South, there being only four days without rain at Lowestoft.

NOVEMBER.—In this month there was very mild, dull, and unsettled weather, rain falling on every day till the 16th, afterwards fine generally, with little sunshine, to the end of the month. The mean high day temperature of the month being $3^{\circ}6$, and the mean low night temperature was $3^{\circ}7$ above their averages. From the 1st to the 20th the mean daily temperature of the air was above its average, on the 1st, 2nd, and 3rd particularly so, being above the average as much as $11^{\circ}4$, $10^{\circ}6$, and $10^{\circ}6$, and from the 21st to the 30th generally below. Till the 15th the mean daily atmospheric pressure was generally below its average, being as much as 0.94in., and on the 12th and 14th respectively 0.81in. below, and from the 16th to the 30th above its average. On the 13th, 14th, and 15th very severe tempestuous weather was experienced in the South and West of England, and much damage was done generally, there being many shipwrecks, with great loss of life. On every day from October 24th to November 16th the fall of rain was remarkable. This continuous rain caused very serious floods in all low-lying places. The Thames began to overflow its banks on the 15th, continuing so for some days, flooding the whole valley of the Thames. In the neighbourhood of Windsor the floods were quite phenomenal, causing great damage besides risk of life.

REMARKS ON THE WEATHER.

DECEMBER.—The weather was dull and mild, with frequent rain in the middle of the month, $2^{\circ}1$ being the mean high day temperature; the mean low night temperature was $2^{\circ}5$ above their averages. From the 7th to the 29th the mean daily temperature of the air was above its average, on the 13th, 14th, 24th, and 25th particularly so, $9^{\circ}3$ being the mean daily excess for these four days, and from the 1st to the 6th and on the 30th and 31st below its average. From the 1st to the 28th the atmospheric pressure was generally above its average, and from the 29th to the 31st below, on the 29th and 30th being as much as 0.70 in. below. At some stations the fall of rain was a little below its average, and at others slightly above.

JANUARY, 1895.—With the exception of the week ending the 20th, the weather was bitterly cold, frost prevailing on every day to the 13th and from the 21st; on the 10th, 11th, 12th, and from the 26th the frost was particularly sharp. On nearly every day till the 13th and from the 22nd snow fell in small quantities; till the 15th and from the 22nd the ground was covered with snow. From the 1st to the 13th the mean daily temperature of the air was below its average, and from the 21st to the end of the month, being as much as $10^{\circ}3$, $10^{\circ}7$, $9^{\circ}9$ on the 10th, 11th, and 12th, and $12^{\circ}4$, $12^{\circ}3$, $14^{\circ}1$, $13^{\circ}6$, and $12^{\circ}5$ on the 27th, 28th, 29th, 30th, and 31st respectively. Till the 27th the atmospheric pressure was below the average, on the 13th, 14th, 15th, 16th, and 24th being more than three-fourths of an inch below. From the 28th it was above the average, and on the 30th was more than half an inch in excess. At most stations the fall of rain was somewhat above the average. The direction of the wind was chiefly N. and N.E. At Greenwich the mean temperature of the month was $33^{\circ}8$, being lower than any January back to 1881, which was then $31^{\circ}6$.

FEBRUARY.—This month was very dry and extremely cold, there being heavy frosts each night till the 20th. Till towards the end of the month the ground was covered with snow. On every day the mean temperature of the air was below its average. The average deficiency was $20^{\circ}5$ on four consecutive days, Feb. 6th, 7th, 8th, and 9th; and on ten consecutive days, from the 5th to the 14th, it was $16^{\circ}6$. From the 19th the cold somewhat moderated. Till the 23rd the atmospheric pressure was generally high, being, on every day except the 6th, 7th, 10th, and 11th, above the average; and from the 24th it was generally below the average. At all stations the fall of rain was much below the average. The prevalent winds were from the E. and N.E. At Greenwich $28^{\circ}9$ was the mean temperature of the month, being the coldest February back to 1771; in 1855 it was $29^{\circ}4$, being the nearest approach. From January 27th to February 18th, in this very severe period, the most remarkable feature was the long succession of

REMARKS ON THE WEATHER.

very low night temperatures. Such a series of twenty-three consecutive low night temperatures is unprecedented. The lowest temperatures were, at Salisbury, $14^{\circ}0$; Barnet, $14^{\circ}1$; Halifax, $14^{\circ}8$; Hereford, $15^{\circ}1$; Carlisle, $15^{\circ}5$; Croydon, $15^{\circ}6$; Strathfield Turgiss, $15^{\circ}7$; Wolverhampton, $15^{\circ}9$; Bristol and Royston, $16^{\circ}7$; Coventry, $17^{\circ}0$; Bath and Cambridge, $17^{\circ}1$; Cambden Square, $18^{\circ}6$. The highest were at Guernsey, $23^{\circ}6$; Truro, $26^{\circ}2$; and Llandudno, $24^{\circ}9$. At Greenwich the highest minimum temperature in February was $34^{\circ}3$.

MARCH —Till the 9th and from the 29th the weather was cold, and from the 24th gales and strong winds from the S.W. with rain. Till the 9th the mean daily temperature of the air was below its average, on the 3rd being as much as $10^{\circ}5$ below, and from the 16th to the 28th above its average, on the 22nd being as much as $10^{\circ}6$ above, and below from the 29th. Till the 13th and from the 19th the atmospheric pressure was below its average, and particularly so from the 24th to the end of the month, on the 28th the deficiency being as much as one inch, and for the eight days the mean deficiency was 0.69 in. Till the 20th the rainfall was small. but from the 26th it fell daily. From the 24th to the end of the month south-westerly gales and strong winds were experienced. The gale was very destructive on the 24th trees being uprooted in many places, some churches were injured, many houses were unroofed, chimney pots blown down, and both on land and sea there was loss of life. Frost began on December 30th, and continued, with the sole exception of one week (January 14th to the 20th), to March 9th, or for sixty-three days, during which days the mean temperature was below its average, and for these sixty-three days the mean amount of deficiency was $6^{\circ}5$. Outdoor work was stopped during the continuance of the frost, many shrubs and garden plants were killed, and all growth was checked, some water mains and gas and water service pipes were frozen, and among birds the mortality was great. Vegetation at the end of the quarter was very backward.

APRIL. At the beginning of this month the weather was rather cold and also in the middle of the month for a few days, with slight frosts, and dry and warm on all other days. The mean high day temperature of the month differed very little from the average, and the mean low night temperature was a little higher than the average. Till the 7th, from the 13th to the 16th, and on the 26th, 27th, and 28th the mean daily temperature of the air was below its average, and above on all the other days. On the 1st and 2nd, from the 6th to the 8th, and from the 16th to the 27th the atmospheric pressure was below its average, and above on all the remaining days. The 12th was the day of the highest pressure, when the mean pressure was 0.4 in. above the average, and the 25th was the lowest, when it was 0.5 in. below the average. The fall of rain was generally less than the average, and the foliage of trees was three weeks later than usual.

REMARKS ON THE WEATHER.

MAY.—Very fine and dry weather, with sunshine more than usual, the mean high day and low night temperatures being both above their averages. Till the 15th, and from the 26th, the mean daily temperature of the air was above its average, and from the 16th to the 25th below. The 30th was the highest mean day temperature in the month, when the excess of temperature was as large as $13^{\circ}8$; and the lowest was on the 17th, the deficiency of temperature being as much as $10^{\circ}4$. Till the 15th the atmospheric pressure was above its average, and from the 23rd to the 29th and from the 16th to the 22nd below, and also below on the last two days. The 2nd was the day of highest pressure, when the pressure was 0.66in. above the average; the 18th was the lowest, when it was 0.31in. below. Everywhere the fall of rain was small. The smallest at our stations were at Salisbury, 0.10in., and at Oxford, 0.18in.; the largest were at Halifax, 0.96in., and at Cambridge, 0.93in. The fall at the Royal Observatory was 0.45in. In the year 1874 the fall was 0.40in., 0.40in. in 1848, 0.30in. in 1844, and 0.20in. in 1833.

JUNE.—This month was dry, fine, bright, and sunny. The high day temperature was above its average, and the low night temperature about its average. Till the 11th and from the 20th to the end of the month the mean daily temperature of the air was above the average; and from the 12th to the 20th below the average. The 9th was the highest mean temperature in the month, when the excess above the average was as large as $11^{\circ}5$; and the 12th was the day of the lowest, when the deficiency was as large as $5^{\circ}4$. From the 3rd to the 26th the atmospheric pressure was generally above the average, and on the other days below. The 24th was the highest mean daily value, when the excess above the average was 0.45in.; and the 18th was the lowest, when the deficiency was 0.27in. The fall of rain was generally small, particularly in the South of England. At the Royal Observatory the smallest falls were 0.21in., and at Cambden Square and Barnet 0.30in. The largest was at Halifax, 4.87in.; but during a heavy thunderstorm with hail, on June 26th, 3in. fell in three hours; the next in order was Stonyhurst, when on the 1st 1.12in. fell, and on the 26th 1.26in.; the fall at Leeds was 3.10in., of which 1.13in. fell on the 1st and on the 26th 0.93in. The month was one of drought, and generally at our stations the fall was less than one inch. The fall of rain in the months of May and June at the Royal Observatory was 0.66in. There is no instance of so small a fall since 1815; the nearest approach was in 1870, when 0.86in. fell. The fall was 1.91in. in the three months April, May, and June; the fall in the same months in the year 1893 was 1.47in., and in 1870 it was 1.14in. This year, from January to June, the fall was 5.18in., in 1893 it was 6.07in., it was 6.60in. in 1874, and in 1870 it was 5.22in.

JULY.—During the first week of this month the weather was dull and wet, then dry with occasional bright sun till the 17th, and from the 18th generally wet and

REMARKS ON THE WEATHER.

dull. The mean high day temperature was a little below the average, and the mean low night temperature was a little above. Till the 11th the mean daily temperature of the air was generally above its average, and from the 24th to the 27th and on all other days generally below. From the 3rd to the 9th and from the 29th to the 31st the atmospheric pressure was above its average, and on the 1st and 2nd and from the 10th to the 28th below. At all stations the fall of rain was somewhat above the average.

AUGUST.—In this month there was wet, dull, and unsettled weather till the 14th, then generally fine and bright to the end of the month. The mean high day temperature differed very little from the average, and the mean low night temperature was a little higher than its average. Till the 15th the mean daily temperature of the air was generally below its average, and from the 16th generally above. On the 1st the atmospheric pressure was above its average, from the 2nd to the 13th below, and from the 14th generally above. At some stations the fall of rain was a little below its average, and at others above, the west wind being very prevalent.

SEPTEMBER —Very warm, fine, and dry weather, with a remarkably hot period extending from the 24th to the 29th. The mean high day temperature was $75^{\circ}4$, being $8^{\circ}1$ above the average. For September there was only one instance of as high or higher mean high day temperature back to 1841, namely, in 1865, it being then $76^{\circ}4$. The mean low night temperature was $51^{\circ}3$, being $2^{\circ}3$ above the average. From the 1st to the 11th the mean daily temperature of the air was above its average, from the 12th to the 21st below, and from the 22nd to the 30th above, being from the 24th to the 29th particularly so. On the 24th the mean temperature was $68^{\circ}4$, being $13^{\circ}3$ above the average; on the 25th $69^{\circ}9$, or $14^{\circ}9$ above; on the 26th $68^{\circ}5$, or $13^{\circ}6$ above; on the 27th $68^{\circ}3$, or $13^{\circ}9$ above; on the 28th $65^{\circ}6$, or $10^{\circ}8$ above; and on the 29th it was $65^{\circ}5$, or $10^{\circ}9$ above the average. Mean for the six days equal to $67^{\circ}7$, being above the average $12^{\circ}9$, and for the nine days ending September 30th the mean temperature was $65^{\circ}3$, being in excess of the average $10^{\circ}4$. The highest mean temperatures were in September, 1865, when they were $72^{\circ}1$ on the 8th, and on the 16th $71^{\circ}7$, being $14^{\circ}3$ and $14^{\circ}8$ above the average. From September 7th to the 16th, 1865, the mean of the ten consecutive days of high mean temperature was $68^{\circ}1$, or $10^{\circ}8$ above the average.

DAILY TIDE TABLES AT LIVERPOOL FOR THE YEAR 1896.

JANUARY.			FEBRUARY.			MARCH.			APRIL.			MAY.			JUNE.		
LIVERPOOL High Water.			LIVERPOOL High Water.			LIVERPOOL High Water.			LIVERPOOL High Water.			LIVERPOOL High Water.			LIVERPOOL High Water.		
Date.	Day.	Morn. Aftern.	Date.	Day.	Morn. Aftern.	Date.	Day.	Morn. Aftern.	Date.	Day.	Morn. Aftern.	Date.	Day.	Morn. Aftern.	Date.	Day.	Morn. Aftern.
1	W	11 87	1	S	0 38	1	W	1 5	1	S	1 25	1	W	1 30	1	W	2 48
2	Th	0 23	2	M	1 16	2	Th	1 47	2	Th	2 7	2	Th	2 16	2	Th	3 31
3	F	0 46	3	M	1 58	3	F	2 30	3	F	2 7	3	F	2 30	3	F	3 57
4	S	1 31	4	Th	2 39	4	S	3 17	4	S	3 43	4	S	3 29	4	S	4 53
5	F	2 15	5	F	3 19	5	Th	4 16	5	F	4 66	5	F	4 34	5	F	5 58
6	W	3 1	6	W	4 2	6	W	5 48	6	W	5 10	6	W	5 10	6	W	6 33
7	Th	3 47	7	Th	4 59	7	Th	7 20	7	Th	6 34	7	Th	7 41	7	Th	7 33
8	F	4 39	8	F	6 25	8	F	8 34	8	F	7 59	8	F	8 35	8	F	8 50
9	W	5 42	9	S	8 2	9	W	9 24	9	W	9 43	9	W	9 17	9	W	9 36
10	Th	7 0	10	M	9 21	10	Th	10 10	10	Th	10 18	10	Th	9 43	10	Th	10 14
11	F	7 37	11	Th	10 17	11	F	10 33	11	F	10 18	11	F	10 26	11	F	10 54
12	S	8 16	12	W	10 58	12	S	11 3	12	S	11 17	12	S	11 0	12	S	11 35
13	M	9 24	13	Th	11 17	13	M	11 9	13	M	11 17	13	M	11 35	13	M	11 51
14	Th	10 20	14	F	11 84	14	Th	11 53	14	Th	11 53	14	Th	11 35	14	Th	12 12
15	F	11 9	15	S	0 7	15	F	11 38	15	S	0 4	15	S	0 11	15	S	0 58
16	W	11 49	16	M	0 38	16	W	0 7	16	M	0 19	16	M	0 29	16	M	0 86
17	Th	0 9	17	S	0 53	17	Th	0 21	17	S	0 49	17	S	1 7	17	S	1 40
18	F	0 45	18	Th	1 22	18	F	0 49	18	Th	1 8	18	F	1 47	18	F	2 2
19	S	1 35	19	W	2 16	19	S	1 17	19	W	1 30	19	S	2 30	19	S	2 49
20	M	2 22	20	Th	2 30	20	M	2 15	20	Th	2 14	20	M	3 50	20	M	3 39
21	Th	3 7	21	F	3 38	21	Th	3 16	21	F	3 56	21	Th	4 22	21	Th	4 6
22	F	4 27	22	S	3 19	22	F	4 59	22	S	4 16	22	F	5 37	22	F	6 47
23	W	5 3	23	M	4 1	23	W	5 29	23	M	5 16	23	W	6 17	23	M	7 51
24	Th	6 8	24	Th	5 53	24	Th	6 24	24	Th	6 4	24	Th	7 23	24	Th	8 56
25	F	6 48	25	F	6 47	25	F	7 54	25	F	7 16	25	F	8 32	25	F	9 52
26	S	8 12	26	W	8 21	26	S	9 7	26	W	8 87	26	S	9 15	26	S	10 46
27	Th	9 51	27	Th	10 23	27	Th	10 36	27	Th	10 46	27	Th	10 54	27	Th	11 33
28	F	10 16	28	F	11 27	28	F	11 36	28	F	11 32	28	F	11 43	28	F	11 59
29	W	10 89	29	M	11 46	29	W	11 17	29	W	11 59	29	W	11 19	29	W	12 2
30	Th	11 24	30	Th	11 46	30	Th	11 17	30	Th	11 59	30	Th	11 43	30	Th	12 25
31	F	..	31	F	..	31	F	0 23	31	F	1 7	31	F	0 9	31	F	1 41
		0 11			0 11			0 23			1 7			0 9			1 41
		0 11			0 11			0 23			1 7			0 9			1 41
		0 11			0 11			0 23			1 7			0 9			1 41

Garston tides 7 minutes later than Liverpool each day.

DAILY TIDE TABLES AT LIVERPOOL FOR THE YEAR 1896—Continued.

JULY.			AUGUST.			SEPTEMBER.			OCTOBER.			NOVEMBER.			DECEMBER.		
Date.	LIVERPOOL High Water.		Date.	LIVERPOOL High Water.		Date.	LIVERPOOL High Water.		Date.	LIVERPOOL High Water.		Date.	LIVERPOOL High Water.		Date.	LIVERPOOL High Water.	
	Morn.	Aftern.		Morn.	Aftern.		Morn.	Aftern.		Morn.	Aftern.		Morn.	Aftern.		Morn.	Aftern.
1	h 3 21	h 3 50	1	h 1 1	h 1 21	1	h 1 1	h 1 33	1	h 1 1	h 1 33	1	h 1 1	h 1 33	1	h 1 1	h 1 33
2	h 3 39	h 4 08	2	h 1 1	h 1 21	2	h 1 1	h 1 33	2	h 1 1	h 1 33	2	h 1 1	h 1 33	2	h 1 1	h 1 33
3	h 3 57	h 4 26	3	h 1 1	h 1 21	3	h 1 1	h 1 33	3	h 1 1	h 1 33	3	h 1 1	h 1 33	3	h 1 1	h 1 33
4	h 4 15	h 4 44	4	h 1 1	h 1 21	4	h 1 1	h 1 33	4	h 1 1	h 1 33	4	h 1 1	h 1 33	4	h 1 1	h 1 33
5	h 4 33	h 5 02	5	h 1 1	h 1 21	5	h 1 1	h 1 33	5	h 1 1	h 1 33	5	h 1 1	h 1 33	5	h 1 1	h 1 33
6	h 4 51	h 5 20	6	h 1 1	h 1 21	6	h 1 1	h 1 33	6	h 1 1	h 1 33	6	h 1 1	h 1 33	6	h 1 1	h 1 33
7	h 5 09	h 5 38	7	h 1 1	h 1 21	7	h 1 1	h 1 33	7	h 1 1	h 1 33	7	h 1 1	h 1 33	7	h 1 1	h 1 33
8	h 5 27	h 5 56	8	h 1 1	h 1 21	8	h 1 1	h 1 33	8	h 1 1	h 1 33	8	h 1 1	h 1 33	8	h 1 1	h 1 33
9	h 5 45	h 6 14	9	h 1 1	h 1 21	9	h 1 1	h 1 33	9	h 1 1	h 1 33	9	h 1 1	h 1 33	9	h 1 1	h 1 33
10	h 6 03	h 6 32	10	h 1 1	h 1 21	10	h 1 1	h 1 33	10	h 1 1	h 1 33	10	h 1 1	h 1 33	10	h 1 1	h 1 33
11	h 6 21	h 6 50	11	h 1 1	h 1 21	11	h 1 1	h 1 33	11	h 1 1	h 1 33	11	h 1 1	h 1 33	11	h 1 1	h 1 33
12	h 6 39	h 7 08	12	h 1 1	h 1 21	12	h 1 1	h 1 33	12	h 1 1	h 1 33	12	h 1 1	h 1 33	12	h 1 1	h 1 33
13	h 6 57	h 7 26	13	h 1 1	h 1 21	13	h 1 1	h 1 33	13	h 1 1	h 1 33	13	h 1 1	h 1 33	13	h 1 1	h 1 33
14	h 7 15	h 7 44	14	h 1 1	h 1 21	14	h 1 1	h 1 33	14	h 1 1	h 1 33	14	h 1 1	h 1 33	14	h 1 1	h 1 33
15	h 7 33	h 8 02	15	h 1 1	h 1 21	15	h 1 1	h 1 33	15	h 1 1	h 1 33	15	h 1 1	h 1 33	15	h 1 1	h 1 33
16	h 7 51	h 8 20	16	h 1 1	h 1 21	16	h 1 1	h 1 33	16	h 1 1	h 1 33	16	h 1 1	h 1 33	16	h 1 1	h 1 33
17	h 8 09	h 8 38	17	h 1 1	h 1 21	17	h 1 1	h 1 33	17	h 1 1	h 1 33	17	h 1 1	h 1 33	17	h 1 1	h 1 33
18	h 8 27	h 8 56	18	h 1 1	h 1 21	18	h 1 1	h 1 33	18	h 1 1	h 1 33	18	h 1 1	h 1 33	18	h 1 1	h 1 33
19	h 8 45	h 9 14	19	h 1 1	h 1 21	19	h 1 1	h 1 33	19	h 1 1	h 1 33	19	h 1 1	h 1 33	19	h 1 1	h 1 33
20	h 9 03	h 9 32	20	h 1 1	h 1 21	20	h 1 1	h 1 33	20	h 1 1	h 1 33	20	h 1 1	h 1 33	20	h 1 1	h 1 33
21	h 9 21	h 9 50	21	h 1 1	h 1 21	21	h 1 1	h 1 33	21	h 1 1	h 1 33	21	h 1 1	h 1 33	21	h 1 1	h 1 33
22	h 9 39	h 10 08	22	h 1 1	h 1 21	22	h 1 1	h 1 33	22	h 1 1	h 1 33	22	h 1 1	h 1 33	22	h 1 1	h 1 33
23	h 9 57	h 10 26	23	h 1 1	h 1 21	23	h 1 1	h 1 33	23	h 1 1	h 1 33	23	h 1 1	h 1 33	23	h 1 1	h 1 33
24	h 10 15	h 10 44	24	h 1 1	h 1 21	24	h 1 1	h 1 33	24	h 1 1	h 1 33	24	h 1 1	h 1 33	24	h 1 1	h 1 33
25	h 10 33	h 11 02	25	h 1 1	h 1 21	25	h 1 1	h 1 33	25	h 1 1	h 1 33	25	h 1 1	h 1 33	25	h 1 1	h 1 33
26	h 10 51	h 11 20	26	h 1 1	h 1 21	26	h 1 1	h 1 33	26	h 1 1	h 1 33	26	h 1 1	h 1 33	26	h 1 1	h 1 33
27	h 11 09	h 11 38	27	h 1 1	h 1 21	27	h 1 1	h 1 33	27	h 1 1	h 1 33	27	h 1 1	h 1 33	27	h 1 1	h 1 33
28	h 11 27	h 12 06	28	h 1 1	h 1 21	28	h 1 1	h 1 33	28	h 1 1	h 1 33	28	h 1 1	h 1 33	28	h 1 1	h 1 33
29	h 11 45	h 12 24	29	h 1 1	h 1 21	29	h 1 1	h 1 33	29	h 1 1	h 1 33	29	h 1 1	h 1 33	29	h 1 1	h 1 33
30	h 12 03	h 12 42	30	h 1 1	h 1 21	30	h 1 1	h 1 33	30	h 1 1	h 1 33	30	h 1 1	h 1 33	30	h 1 1	h 1 33
31	h 12 21	h 13 00	31	h 1 1	h 1 21	31	h 1 1	h 1 33	31	h 1 1	h 1 33	31	h 1 1	h 1 33	31	h 1 1	h 1 33

Garston tides 7 minutes later than Liverpool each day.

DAILY TIDE TABLES AT GOOLE FOR THE YEAR 1896.

JANUARY.			FEBRUARY.			MARCH.			APRIL.			MAY.			JUNE.		
Date.	GOOLE High Water.		Date.	GOOLE High Water.		Date.	GOOLE High Water.		Date.	GOOLE High Water.		Date.	GOOLE High Water.		Date.	GOOLE High Water.	
	Morn.	Aftern.		Morn.	Aftern.		Morn.	Aftern.		Morn.	Aftern.		Morn.	Aftern.		Morn.	Aftern.
1	h m	7 54	1	h m	8 25	1	h m	9 20	1	h m	9 46	1	h m	10 10	1	h m	11 81
2	h m	8 40	2	h m	9 11	2	h m	10 30	2	h m	10 30	2	h m	10 10	2	h m	11 58
3	h m	9 25	3	h m	9 53	3	h m	10 25	3	h m	10 34	3	h m	10 58	3	h m	12 44
4	h m	10 10	4	h m	10 14	4	h m	10 36	4	h m	11 25	4	h m	11 54	4	h m	1 27
5	h m	10 57	5	h m	10 57	5	h m	11 17	5	h m	11 38	5	h m	12 28	5	h m	2 26
6	h m	11 44	6	h m	11 37	6	h m	11 81	6	h m	1 48	6	h m	1 48	6	h m	3 21
7	h m	0 11	7	h m	0 28	7	h m	1 56	7	h m	3 15	7	h m	2 54	7	h m	4 14
8	h m	0 40	8	h m	1 0	8	h m	2 32	8	h m	4 13	8	h m	3 55	8	h m	5 5
9	h m	1 11	9	h m	2 11	9	h m	3 33	9	h m	5 16	9	h m	4 23	9	h m	6 9
10	h m	1 43	10	h m	3 33	10	h m	4 16	10	h m	6 16	10	h m	5 18	10	h m	7 49
11	h m	2 46	11	h m	4 57	11	h m	5 23	11	h m	7 19	11	h m	6 25	11	h m	8 31
12	h m	3 61	12	h m	6 6	12	h m	6 54	12	h m	8 35	12	h m	7 16	12	h m	9 11
13	h m	4 29	13	h m	7 33	13	h m	7 14	13	h m	9 5	13	h m	8 27	13	h m	9 55
14	h m	5 58	14	h m	8 7	14	h m	7 50	14	h m	11 20	14	h m	9 3	14	h m	10 20
15	h m	6 59	15	h m	8 7	15	h m	7 55	15	h m	12 10	15	h m	9 32	15	h m	11 7
16	h m	7 45	16	h m	8 39	16	h m	8 24	16	h m	1 19	16	h m	10 43	16	h m	12 2
17	h m	8 26	17	h m	9 9	17	h m	8 37	17	h m	2 9	17	h m	11 44	17	h m	1 39
18	h m	9 55	18	h m	9 37	18	h m	9 19	18	h m	3 31	18	h m	12 10	18	h m	2 89
19	h m	10 7	19	h m	10 5	19	h m	9 23	19	h m	4 16	19	h m	1 19	19	h m	3 83
20	h m	10 55	20	h m	10 34	20	h m	10 48	20	h m	5 22	20	h m	2 9	20	h m	4 39
21	h m	11 10	21	h m	11 8	21	h m	11 21	21	h m	6 48	21	h m	3 9	21	h m	5 11
22	h m	11 46	22	h m	11 40	22	h m	11 9	22	h m	7 6	22	h m	4 6	22	h m	6 84
23	h m	0 8	23	h m	0 32	23	h m	0 36	23	h m	8 29	23	h m	5 4	23	h m	7 28
24	h m	0 59	24	h m	1 28	24	h m	1 43	24	h m	9 10	24	h m	6 19	24	h m	8 16
25	h m	2 0	25	h m	2 33	25	h m	2 48	25	h m	10 5	25	h m	7 10	25	h m	9 2
26	h m	3 47	26	h m	4 35	26	h m	4 49	26	h m	11 38	26	h m	8 0	26	h m	9 28
27	h m	4 26	27	h m	5 16	27	h m	5 48	27	h m	12 10	27	h m	8 48	27	h m	10 24
28	h m	5 87	28	h m	6 6	28	h m	6 51	28	h m	1 1	28	h m	9 10	28	h m	11 3
29	h m	5 87	29	h m	7 1	29	h m	7 43	29	h m	2 23	29	h m	9 57	29	h m	10 43
30	h m	6 81	30	h m	6 54	30	h m	7 56	30	h m	3 31	30	h m	10 20	30	h m	11 8
31	h m	7 41	31	h m	7 41	31	h m	8 40	31	h m	4 46	31	h m	10 20	31	h m	11 8

Hull tides 59 minutes earlier than Goole each day.

DAILY TIDE TABLES AT GOOLE FOR THE YEAR 1896—Continued.

JULY.				AUGUST.				SEPTEMBER.				OCTOBER.				NOVEMBER.				DECEMBER.			
GOOLE High Water.		Day.	Date.	GOOLE High Water.		Day.	Date.	GOOLE High Water.		Day.	Date.	GOOLE High Water.		Day.	Date.	GOOLE High Water.		Day.	Date.	GOOLE High Water.		Day.	Date.
Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.		
1	h m	11 41	1	h m	11 43	1	h m	0 20	0 53	1	h m	0 69	1 41	1	h m	3 13	3 46	1	h m	3 32	4 3		
2	h m	0 28	2	h m	0 16	2	h m	1 29	2 9	2	h m	2 26	3 10	2	h m	4 17	4 46	2	h m	4 33	5 1		
3	h m	1 21	3	h m	1 10	3	h m	2 62	3 37	3	h m	3 50	4 25	3	h m	5 11	5 32	3	h m	5 28	5 52		
4	h m	2 15	4	h m	2 63	4	h m	4 19	4 55	4	h m	4 57	5 22	4	h m	6 10	6 16	4	h m	6 18	6 43		
5	h m	3 11	5	h m	3 29	5	h m	5 26	5 50	5	h m	5 44	6 6	5	h m	7 2	7 2	5	h m	7 10	7 37		
6	h m	3 11	6	h m	4 44	6	h m	6 15	6 86	6	h m	6 25	6 46	6	h m	7 26	7 50	6	h m	8 4	8 29		
7	h m	4 12	7	h m	5 47	7	h m	7 38	7 17	7	h m	7 6	7 28	7	h m	8 14	8 39	7	h m	8 53	9 18		
8	h m	5 14	8	h m	6 35	8	h m	8 18	7 58	8	h m	7 59	8 13	8	h m	9 2	9 24	8	h m	9 40	10 3		
9	h m	6 5	9	h m	7 21	9	h m	8 18	8 39	9	h m	8 81	8 54	9	h m	9 49	10 13	9	h m	10 27	10 49		
10	h m	6 51	10	h m	8 3	10	h m	9 0	9 20	10	h m	9 16	9 39	10	h m	10 87	11 4	10	h m	11 12	11 37		
11	h m	7 36	11	h m	8 24	11	h m	9 40	10 1	11	h m	10 2	10 26	11	h m	11 35	0 45	11	h m	0 82	0 3		
12	h m	8 21	12	h m	9 46	12	h m	10 23	10 45	12	h m	10 50	11 17	12	h m	0 9	0 45	12	h m	1 1	1 1		
13	h m	9 4	13	h m	10 27	13	h m	11 7	11 33	13	h m	11 50	12 1	13	h m	1 21	1 56	13	h m	1 31	1 58		
14	h m	9 47	14	h m	10 49	14	h m	10 49	11 10	14	h m	0 28	0 52	14	h m	2 30	3 2	14	h m	2 27	2 56		
15	h m	10 31	15	h m	11 32	15	h m	0 43	0 4	15	h m	1 52	1 24	15	h m	3 82	4 2	15	h m	3 25	3 54		
16	h m	11 15	16	h m	11 57	16	h m	0 27	0 16	16	h m	2 7	2 53	16	h m	4 29	5 17	16	h m	4 23	4 50		
17	h m	0 3	17	h m	1 39	17	h m	3 36	4 18	17	h m	4 24	4 53	17	h m	5 17	5 37	17	h m	5 15	5 39		
18	h m	0 30	18	h m	2 53	18	h m	4 53	5 24	18	h m	5 18	5 39	18	h m	6 29	6 12	18	h m	6 0	6 20		
19	h m	1 33	19	h m	4 21	19	h m	5 48	6 9	19	h m	6 14	6 14	19	h m	7 40	7 22	19	h m	6 40	7 0		
20	h m	2 39	20	h m	5 3	20	h m	6 29	6 46	20	h m	6 30	6 45	20	h m	8 20	8 0	20	h m	7 20	7 20		
21	h m	3 48	21	h m	6 4	21	h m	7 3	7 19	21	h m	7 1	7 17	21	h m	9 14	8 32	21	h m	7 59	8 20		
22	h m	5 4	22	h m	7 10	22	h m	7 35	7 49	22	h m	7 33	7 47	22	h m	10 14	9 37	22	h m	8 40	8 59		
23	h m	6 6	23	h m	8 21	23	h m	8 4	8 19	23	h m	8 4	8 19	23	h m	11 14	10 28	23	h m	9 18	9 37		
24	h m	6 58	24	h m	8 21	24	h m	8 34	8 48	24	h m	9 5	9 21	24	h m	10 6	9 44	24	h m	9 57	10 19		
25	h m	7 46	25	h m	8 37	25	h m	9 1	9 16	25	h m	9 5	9 21	25	h m	10 6	10 28	25	h m	10 40	11 2		
26	h m	8 25	26	h m	9 6	26	h m	9 30	9 45	26	h m	9 37	9 56	26	h m	10 50	11 15	26	h m	11 25	11 52		
27	h m	9 4	27	h m	9 36	27	h m	10 0	10 17	27	h m	10 87	10 31	27	h m	11 50	0 21	27	h m	0 21	0 21		
28	h m	9 38	28	h m	10 5	28	h m	10 34	10 54	28	h m	10 58	11 26	28	h m	0 18	0 54	28	h m	0 51	1 24		
29	h m	10 10	29	h m	10 35	29	h m	11 15	11 43	29	h m	0 38	0 0	29	h m	1 30	2 2	29	h m	1 55	2 27		
30	h m	10 43	30	h m	11 8	30	h m	11 15	11 43	30	h m	1 59	2 39	30	h m	2 31	3 4	30	h m	2 57	3 24		
31	h m	11 14	31	h m	11 51	31	h m	0 19	0 19	31	h m	1 59	2 39	31	h m	3 4	4	31	h m	4 0	4 86		

Hull tides 50 minutes earlier than Goole each day.

TABLE

SHOWING THE NUMBER OF DAYS BETWEEN ANY TWO DATES; ALSO SHOWING THE NUMBER OF DAYS FROM ANY DAY THROUGHOUT THE YEAR TO THE 31ST OF DECEMBER, THE USUAL PERIOD TO WHICH INTEREST IS CALCULATED.

Jan. Number	JANUARY.		FEBRUARY.		MARCH.		APRIL.		MAY.		JUNE.			
	Days to Dec. 31.	Feb. Number.	Days to Dec. 31.	Mar. Number.	Days to Dec. 31.	April Number.	Days to Dec. 31.	May Number.	Days to Dec. 31.	June Number.	Days to Dec. 31.			
1	364	32	383	1	60	91	274	1	121	1	244	1	152	213
2	363	33	382	2	61	92	273	2	122	2	243	2	153	212
3	362	34	381	3	62	93	272	3	123	3	242	3	154	211
4	361	35	380	4	63	94	271	4	124	4	241	4	155	210
5	360	36	379	5	64	95	270	5	125	5	240	5	156	209
6	359	37	378	6	65	96	269	6	126	6	239	6	157	208
7	358	38	377	7	66	97	268	7	127	7	238	7	158	207
8	357	39	376	8	67	98	267	8	128	8	237	8	159	206
9	356	40	375	9	68	99	266	9	129	9	236	9	160	205
10	355	41	374	10	69	100	265	10	130	10	235	10	161	204
11	354	42	373	11	70	101	264	11	131	11	234	11	162	203
12	353	43	372	12	71	102	263	12	132	12	233	12	163	202
13	352	44	371	13	72	103	262	13	133	13	232	13	164	201
14	351	45	370	14	73	104	261	14	134	14	231	14	165	200
15	350	46	369	15	74	105	260	15	135	15	230	15	166	199
16	349	47	368	16	75	106	259	16	136	16	229	16	167	198
17	348	48	367	17	76	107	258	17	137	17	228	17	168	197
18	347	49	366	18	77	108	257	18	138	18	227	18	169	196
19	346	50	365	19	78	109	256	19	139	19	226	19	170	195
20	345	51	364	20	79	110	255	20	140	20	225	20	171	194
21	344	52	363	21	80	111	254	21	141	21	224	21	172	193
22	343	53	362	22	81	112	253	22	142	22	223	22	173	192
23	342	54	361	23	82	113	252	23	143	23	222	23	174	191
24	341	55	360	24	83	114	251	24	144	24	221	24	175	190
25	340	56	359	25	84	115	250	25	145	25	220	25	176	189
26	339	57	358	26	85	116	249	26	146	26	219	26	177	188
27	338	58	357	27	86	117	248	27	147	27	218	27	178	187
28	337	59	356	28	87	118	247	28	148	28	217	28	179	186
29	336	60	355	29	88	119	246	29	149	29	216	29	180	185
30	335	61	354	30	89	120	245	30	150	30	215	30	181	184
31	334	62	353	31	90	121	244	31	151	31	214	31	182	183

T A B L E
SHOWING the NUMBER of DAYS between any two DATES, &c.—CONTINUED.

JULY.		AUGUST.		SEPTEMBER.		OCTOBER.		NOVEMBER.		DECEMBER.	
July. Number.	Days to Dec. 31.	Aug. Number.	Days to Dec. 31.	Sept. Number.	Days to Dec. 31.	Oct. Number.	Days to Dec. 31.	Nov. Number.	Days to Dec. 31.	Dec. Number.	Days to Dec. 31.
1	182	1	213	1	244	1	274	1	305	1	335
2	183	2	214	2	245	2	275	2	306	2	336
3	184	3	215	3	246	3	276	3	307	3	337
4	185	4	216	4	247	4	277	4	308	4	338
5	186	5	217	5	248	5	278	5	309	5	339
6	187	6	218	6	249	6	279	6	310	6	340
7	188	7	219	7	250	7	280	7	311	7	341
8	189	8	220	8	251	8	281	8	312	8	342
9	190	9	221	9	252	9	282	9	313	9	343
10	191	10	222	10	253	10	283	10	314	10	344
11	192	11	223	11	254	11	284	11	315	11	345
12	193	12	224	12	255	12	285	12	316	12	346
13	194	13	225	13	256	13	286	13	317	13	347
14	195	14	226	14	257	14	287	14	318	14	348
15	196	15	227	15	258	15	288	15	319	15	349
16	197	16	228	16	259	16	289	16	320	16	350
17	198	17	229	17	260	17	290	17	321	17	351
18	199	18	230	18	261	18	291	18	322	18	352
19	200	19	231	19	262	19	292	19	323	19	353
20	201	20	232	20	263	20	293	20	324	20	354
21	202	21	233	21	264	21	294	21	325	21	355
22	203	22	234	22	265	22	295	22	326	22	356
23	204	23	235	23	266	23	296	23	327	23	357
24	205	24	236	24	267	24	297	24	328	24	358
25	206	25	237	25	268	25	298	25	329	25	359
26	207	26	238	26	269	26	299	26	330	26	360
27	208	27	239	27	270	27	300	27	331	27	361
28	209	28	240	28	271	28	301	28	332	28	362
29	210	29	241	29	272	29	302	29	333	29	363
30	211	30	242	30	273	30	303	30	334	30	364
31	212	31	243	31	274	31	304	31	335	31	365

THE ENGLISH MILE COMPARED WITH OTHER
EUROPEAN MEASURES.

	English Statute Mile.	English Geog. Mile.	French Kilomètre.	German Geog. Mile.	Russian Verst.
English Statute Mile....	1·000	0·867	1·609	0·217	1·508
English Geog. Mile	1·153	1·000	1·855	0·250	1·738
Kilomètre	0·621	0·540	1·000	0·135	0·937
German Geog. Mile	4·610	4·000	7·420	1·000	6·953
Russian Verst.....	0·663	0·575	1·067	0·144	1·000
Austrian Mile	4·714	4·089	7·586	1·022	7·112
Dutch Ure	3·458	3·000	5·565	0·750	5·215
Norwegian Mile	7·021	6·091	11·299	1·523	10·589
Swedish Mile	6·644	5·764	10·692	1·441	10·019
Danish Mile	4·682	4·062	7·536	1·016	7·078
Swiss Stunde	2·987	2·592	4·808	0·648	4·505

	Austrian Mile.	Dutch Ure.	Norwe- gian Mile	Swedish Mile.	Danish Mile.	Swiss Stunde.
English Statute Mile....	0·212	0·289	0·142	0·151	0·213	0·335
English Geog. Mile	0·245	0·333	0·164	0·169	0·246	0·386
Kilomètre	0·132	0·180	0·088	0·094	0·133	0·208
German Geog. Mile	0·978	1·333	0·657	0·694	0·985	1·543
Russian Verst.....	0·141	0·192	0·094	0·100	0·142	0·222
Austrian Mile	1·000	1·363	0·672	0·710	1·006	1·578
Dutch Ure	0·734	1·000	0·493	0·520	0·738	1·157
Norwegian Mile	1·489	2·035	1·000	1·057	1·499	2·350
Swedish Mile	1·409	1·921	0·948	1·000	1·419	2·224
Danish Mile	0·994	1·354	0·667	0·705	1·080	1·567
Swiss Stunde	0·634	0·864	0·425	0·449	0·638	1·000

TABLE SHOWING THE NUMBER OF DAYS FROM ANY DAY OF ONE MONTH TO
THE SAME DAY OF ANY OTHER MONTH.

NUMBER OF DAYS FROM DAY TO DAY.

FROM TO	JAN.	FEB.	MAR.	APRIL	MAY.	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.
JANUARY .	365	31	59	90	120	151	181	212	243	273	304	334
FEBRUARY..	334	365	28	59	89	120	150	181	212	242	273	303
MARCH....	306	337	365	31	61	92	122	153	184	214	245	275
APRIL	275	306	334	365	30	61	91	122	153	183	214	244
MAY	245	276	304	335	365	31	61	92	123	153	184	214
JUNE	214	245	273	304	334	365	30	61	92	122	153	183
JULY	184	215	243	274	304	335	365	31	62	92	123	153
AUGUST....	153	184	212	243	273	304	334	365	31	61	92	122
SEPTEMBER	122	153	181	212	242	273	303	334	365	30	61	91
OCTOBER ..	92	123	151	182	212	243	273	304	335	365	31	61
NOVEMBER..	61	92	120	151	181	212	242	273	304	334	365	30
DECEMBER .	31	62	90	121	151	182	212	243	274	304	335	365

Example of Use of Table:—To find the number of days from 16th August to 27th February. Find August in the side column and February at the top; the number at the intersection, viz., 184, is the number of days from 16th August to 16th February; and 11 (the difference between 16 and 27), and the sum 195 is the number required. Similarly, the number from 16th August to 5th February is 184 less 11, or 173.

RETURN SHOWING THE AVERAGE RETAIL PRICE PER POUND, AVOIRDUPOIS, OF THE ARTICLES OF DOMESTIC CONSUMPTION, MEDIUM QUALITIES, MENTIONED BELOW, IN SOME OF THE PRINCIPAL CITIES OF EUROPE, DURING THE YEAR 1892. (From Official Sources.)

ARTICLE.	Paris.	Lille.	Berlin.	Frankfort-on-Main.	Ham-burg.	Vienna.	Buda-Pesth.	Prague.	Rome.	Florence*	Brussels.
BEEF:—											
Prime	1s. to 1s.4d.	1s. 5½d.	10¾d.	9d.	11¼d.	8d.	8½d.	7d.	8½d.	9d.	10½d.
Medium	7½d. to 10d.	11½d.	8½d.	8d.	9½d.	6½d.	6¾d.	6½d.	6d.	7d.	8¾d.
Inferior .....	..	7½d.	6d.	7d.	7½d.	Av. 7d.	4d.	..	..	5d.	6½d.
FLOUR:—											
First quality	2d. to 2½d.	2½d.	1¾d.	2½d.	2d.	2d.	1½d.	2½d.	2d.	2½d.	1¾d.
Second quality .....	..	..	..	..	..	1¾d.	..	..	..	2½d.	..
WHEAT-BREAD:—											
White household	2d. to 2½d.	1¾d.	2½d.	2d.	3d.	1¾d.	1½d.	1½d.	2d.	2d.	1½d.
Second quality .....	..	..	..	..	..	..	..	..	..	1¾d.	..
Third quality .....	..	..	..	..	..	..	..	..	..	1¾d.	..
POTATOES:—											
For human consumption	½d. to ¾d.	½d.	½d. to ¾d.	¾d.	1d.	¾d.	¾d.	¾d.	¾d.	¾d.	½d.
RICE:—											
For human consumption, without husk.	2d. to 2½d.	3½d.	3½d. to 3¾d.	2d. to 5d.	3d.	3d.	..	2½d.	2½d.	2½d. to 3d.	1½d.
SUGAR:—											
Good white lump, cracked or sawed...	6½d.	5½d.	4½d. to 4½d.	4d. to 4½d.	4¾d.	3¾d. to 4d.	4d.	3¾d.	7½d.	6½d. to 7½d.	4½d.
COFFEE:—											
Brazil or plantation, roasted and ground, without chicory or other coffee substitute	2s. 6d. fresh roasted	2s. 0½d.	1s. 4¾d.	1s. 6d.	1s. 5d.	1s. 8½d.	1s. 5½d. (raw)	1s. 8¾d.	1s. 11d.	1s. 10d. to 2s. 3½d.	1s. 2½d.

* N.B.—The rate of exchange has been taken at twenty-six lire per £, as being the approximate average for the whole year (1892).
 † Imported in the rough, and refined in Italy; the greater portion is stated to be "beet-root."
 ‡ The coffee is chiefly imported from the Dutch Colonies; Brazil coffee is little or not used. The above price refers to coffee in the bean, ground coffee is not generally sold in Brussels.

TERMS AND ABBREVIATIONS COMMONLY USED IN BUSINESS.

- | | |
|--|---|
| <p>A/c Account.</p> <p>C Currency.</p> <p>\$ A dollar.</p> <p>E. E. Errors excepted.</p> <p>E. & O. E. Errors and omissions
excepted.</p> <p>F. O. B. Free on board (delivered
on deck without expense to the
ship).</p> <p>F. P. A. Free of particular
average.</p> <p>INST. Present month.</p> <p>PROX. Next month.</p> <p>ULT. Last month.</p> <p>D/D Days after date.</p> <p>M/D. Months after date.</p> | <p>D/S. Days after sight.</p> <p>% Per cent.,</p> <p>@ ₧ lb At per pound.</p> <p>B/L. Bill of lading.</p> <p>AD VALOREM .. According to value.</p> <p>AFFIDAVIT Statement on oath.</p> <p>AFFIRMATION.. Statement without an
oath.</p> <p>AGIO The premium borne
by a better sort of money above
an inferior.</p> <p>ASSETS A term for property
in contradistinction to liabilities.</p> <p>BANCO A continental term for
bank money at Hamburg and
other places.</p> |
|--|---|
- DEAD FREIGHT.**—The damage payable by one who engages to load a ship fully, and fails to do so.
- DEVIATION,** in marine insurance, is that divergence from the voyage insured which releases the underwriter from his risk.
- DISCOUNT.**—An allowance made for payment of money before due.
- POLICY.**—The document containing the contract of insurance. A *Valued Policy* is when the interest insured is valued. An *Open Policy* is one in which the amount is left for subsequent proof. In an open policy where the value shipped does not equal the value insured, the difference is termed *over insurance*; and the proportionable amount of premium returnable to the insurer is called a *return for short interest*.
- PRIMAGE.**—A small allowance for the shipmaster's care of goods, now generally included in the freight.
- PRO RATA.**—Payment in proportion to the various interests concerned.
- QUID PRO QUO.**—Giving one thing for another.
- RESPONDENTIA.**—A contract of loan by which goods in a ship are hypothecated to the lender, as in bottomry.
- ULLAGE.**—The quantity a cask wants of being full.

A CALENDAR

FOR ASCERTAINING ANY DAY OF THE WEEK FOR ANY GIVEN TIME WITHIN THE PRESENT CENTURY.

YEARS 1801 TO 1900.

1801	1807	1818	1829	1835	1846	1857	1863	1874	1885	1891	31 Jan.	28 Feb.	31 Mar.	30 April	31 May.	30 June	31 July.	31 Aug.	30 Sept.	31 Oct.	30 Nov.	31 Dec.
1802	1813	1819	1830	1841	1847	1858	1869	1875	1886	1897	4	7	7	3	5	1	3	6	2	4	7	2
1803	1814	1825	1831	1842	1853	1859	1870	1881	1887	1898	5	1	1	4	6	2	4	7	3	5	1	3
1804	1811	1822	1833	1839	1850	1861	1867	1878	1889	1895	6	2	2	5	7	3	5	1	4	6	2	4
1805	1811	1822	1833	1839	1850	1861	1867	1878	1889	1895	2	5	5	1	3	6	1	4	7	2	5	7
1806	1817	1823	1834	1845	1851	1862	1873	1879	1890	..	3	6	6	2	4	7	2	5	1	3	6	1
1809	1815	1826	1837	1943	1854	1865	1871	1882	1893	1899	7	3	3	6	1	4	6	2	5	7	3	5
1810	1821	1827	1838	1849	1855	1866	1877	1883	1894	1900	1	4	4	7	2	5	7	3	6	1	4	6

NOTE.—To ascertain any day of the week in any year of the present century, first look in the table of years for the year required, and under the months are figures which refer to the corresponding figures at the head of the columns of days below. For example: To know what day of the week May 4 was on in the year 1876, in the table of years look for 1876, and in a parallel line, under May, is figure 1, which directs to column 1, in which it will be seen that May 4 fell on Thursday.

LEAP YEARS.

1804	1832	1860	1888	7	3	4	7	2	5	7	3	6	1	4	6
1808	1836	1864	1892	5	1	2	5	7	3	5	1	4	6	2	4
1812	1840	1868	1896	3	6	7	3	5	1	3	6	2	4	7	2
1816	1844	1872	..	1	4	5	1	3	6	1	4	7	2	5	7
1820	1848	1876	..	6	2	3	6	1	4	6	2	5	7	3	5
1824	1852	1880	..	4	7	1	4	6	2	4	7	3	5	1	3
1828	1856	1884	..	2	5	6	2	4	7	2	5	1	3	6	1

1		2		3		4		5		6		7	
Monday	1	Tuesday	1	Wednesday	1	Thursday	1	Friday	1	Saturday	1	SUNDAY	1
Tuesday	2	Wednesday	2	Thursday	3	Friday	2	Saturday	2	SUNDAY	2	Monday	2
Wednesday	3	Thursday	3	Friday	2	Saturday	3	SUNDAY	3	Monday	3	Tuesday	3
Thursday	4	Friday	4	Saturday	4	SUNDAY	4	Monday	4	Tuesday	4	Wednes.	4
Friday	5	Saturday	5	SUNDAY	5	Monday	5	Tuesday	5	Wednesday	5	Thursday	5
Saturday	6	SUNDAY	6	Monday	6	Tuesday	6	Wednes.	6	Thursday	6	Friday	6
SUNDAY	7	Monday	7	Tuesday	7	Wednes.	7	Thursday	7	Friday	7	Saturday	7
Monday	8	Tuesday	8	Wednesday	8	Thursday	8	Friday	8	Saturday	8	SUNDAY	8
Tuesday	9	Wednesday	9	Thursday	9	Friday	9	Saturday	9	SUNDAY	9	Monday	9
Wednes.	10	Thursday	10	Friday	10	Saturday	10	SUNDAY	10	Monday	10	Tuesday	10
Thursday	11	Friday	11	Saturday	11	SUNDAY	11	Monday	11	Tuesday	11	Wednes.	11
Friday	12	Saturday	12	SUNDAY	12	Monday	12	Tuesday	12	Wednes.	12	Thursday	12
Saturday	13	SUNDAY	13	Monday	13	Tuesday	13	Wednes.	13	Thursday	13	Friday	13
SUNDAY	14	Monday	14	Tuesday	14	Wednes.	14	Thursday	14	Friday	14	Saturday	14
Monday	15	Tuesday	15	Wednes.	15	Thursday	15	Friday	15	Saturday	15	SUNDAY	15
Tuesday	16	Wednes.	16	Thursday	16	Friday	16	Saturday	16	SUNDAY	16	Monday	16
Wednes.	17	Thursday	17	Friday	17	Saturday	17	SUNDAY	17	Monday	17	Tuesday	17
Thursday	18	Friday	18	Saturday	18	SUNDAY	18	Monday	18	Tuesday	18	Wednes.	18
Friday	19	Saturday	19	SUNDAY	19	Monday	19	Tuesday	19	Wednes.	19	Thursday	19
Saturday	20	SUNDAY	20	Monday	20	Tuesday	20	Wednes.	20	Thursday	20	Friday	20
SUNDAY	21	Monday	21	Tuesday	21	Wednes.	21	Thursday	21	Friday	21	Saturday	21
Monday	22	Tuesday	22	Wednes.	22	Thursday	22	Friday	22	Saturday	22	SUNDAY	22
Tuesday	23	Wednes.	23	Thursday	23	Friday	23	Saturday	23	SUNDAY	23	Monday	23
Wednes.	24	Thursday	24	Friday	24	Saturday	24	SUNDAY	24	Monday	24	Tuesday	24
Thursday	25	Friday	25	Saturday	25	SUNDAY	25	Monday	25	Tuesday	25	Wednes.	25
Friday	26	Saturday	26	SUNDAY	26	Monday	26	Tuesday	26	Wednes.	26	Thursday	26
Saturday	27	SUNDAY	27	Monday	27	Tuesday	27	Wednes.	27	Thursday	27	Friday	27
SUNDAY	28	Monday	28	Tuesday	28	Wednes.	28	Thursday	28	Friday	28	Saturday	28
Monday	29	Tuesday	29	Wednes.	29	Thursday	29	Friday	29	Saturday	29	SUNDAY	29
Tuesday	30	Wednes.	30	Thursday	30	Friday	30	Saturday	30	SUNDAY	30	Monday	30
Wednes.	31	Thursday	31	Friday	31	Saturday	31	SUNDAY	31	Monday	31	Tuesday	31

WEIGHTS AND MEASURES.

TROY WEIGHT.

	Pennywts.	Grains.	gr.
	Ounces.	1 = 24	dwt.
Pound.	1 = 20	= 480	oz.
1	= 12 = 240	= 5760	lb.
A carat = 4 grains.	100 Troy ounces = 190½	Ounces Avoirdupois.	

AVOIRDUPOIS WEIGHT.

			dr.	Ty.	gr.		
		oz.	1 = 27½				
	lb.	1 = 16	= 437½				
	st.	1 = 16	= 256	= 7000			
	gr.	1 = 14 = 224 =	3584				
	cwt.	1 = 2 = 28 =	448 = 7168				
Ton.	1 = 4 = 8 = 112 =	1792 = 28672					
1	= 20 = 80 = 160 = 2240 =	35840 = 573440					
Ton.	cwt.	gr.	st.	lb.	oz.	dr.	gr.

A Cental = 100 pounds. 100 Ounces Avoirdupois = 91¼ Ounces Troy.

The Apothecaries' Weight is now the same as the Avoirdupois.

LINEAL MEASURE, OR MEASURE OF LENGTH.

			ft.	in.
		yds.	1 = 3	= 36
	ch.	1 = 5½ =	16½ = 198	
	fur.	1 = 4 = 22 =	66 = 792	
Mile.	1 = 10 = 40 = 220 =	660 = 7920		
1	= 8 = 80 = 320 = 1760 =	5280 = 63360		

A league = 3 miles. A hand = 4 inches. A fathom = 6 feet.

Geographical degree = 60 geographical or nautical miles = 69.121 imper. miles.

Geographical mile = 1.150 imperial miles.

A military pace = 2½ feet.

SOLID OR CUBIC MEASURE.

	Cubic feet.	Cubic inches.
Cubic yard.	1 = 1728	
1	= 27 = 46656	
1 Ton of Shipping	= 40 cubic feet.	
1 Barrel Bulk	= 5 cubic feet.	

LIQUID MEASURE OF CAPACITY.

	Quarts.	Pints.	Gills.
Gallon.	1 = 4	= 8	= 16
1	= 4 = 8 = 16	= 32	= 64

A hogshead (hhd.) contains 63 gallons. A pipe is 2 hogsheads, and 2 pipes form a tun. All liquids are measured by this table.

GRAIN MEASURE, &C., OR DRY MEASURE OF CAPACITY.

	Bushels.	Pecks.	Gallons.
Quarter.	1 = 4	= 8	= 16
1	= 8 = 32 = 64		
1 Boll of Wheat	= 4 bushels nearly.		
1 Boll of Barley	= 6 " "		
5 Bushels	are a sack.		
5 Quarters	make a load.		

SQUARE OR LAND MEASURE.

	Sq. feet.	Sq. in.
	1 = 144	
	Sq. yards.	1 = 9 = 1296
	Sq. poles.	1 = 9 = 1296
	Sq. rods.	1 = 30¼ = 272¼ = 39204
Sq. acre.	1 = 40 = 1210 = 10890 = 1568160	
1	= 4 = 160 = 4840 = 43560 = 6272640	

1 square mile = 640 acres: 36 square yards = 1 rood of building: 100 sq. feet = 1 square of flooring: 272¼ sq. feet = 1 rood of bricklayer's work. The chain with which land is measured is 22 yards long, and 1 sq. chain = 10,000 sq. links, contains 22 × 22 = 484 sq. yards: 10 sq. chains = 1 acre.

TABLE OF TIME.

	Days.	Hours.	Minutes.	Seconds.
		1 = 60	= 3600	
Week.	1 = 24 = 1440 = 86400			
1	= 7 = 168 = 10080 = 604800			
1 Common Year	= 365 days, or 52 weeks 1 day.			
1 Leap Year	= 366 days, or 52 weeks 2 days.			
1 Solar Year	= 365 days 5 hours 48 minutes 49 seconds.			

GEOGRAPHICAL OR NAUTICAL MEASURE.

1 Geographical mile	= { 1¾ imperial mile of 6,076 feet.
3 " miles	.. = 1 league.
60 " miles	.. = { 1 degree, marked deg. or [°].
360 " degs. or about	= { Circumference of the earth.
24,855½ imp. miles	

BREAD WEIGHT.

A Peck Loaf weighs	17 6½
A Half Peck Loaf	8 11
A Quartern Loaf	4 5
A Peck or Stone of Flour	14 0
A Bushel of Flour	56 6
A Sack of Flour, or 5 Bushels	280 0

USEFUL WEIGHTS.

The following Table will be found useful when it is desired to ascertain the weight of a letter or other article, and suitable weights are not at hand. The weight given is that of coins fairly worn; allowance must be made if those used be new or very old.

½ oz.	.... Halfpenny and threepenny piece.
⅓ "	.... One penny piece.
⅔ "	.... Florin and sixpence.
1 "	.... Three pennies.
2 "	.... 4 half-crowns and one shilling.
4 "	.... 4 florins, 4 half-crowns, 2½ pennies.

BOOKS.

	Pages.	Leaves.	Sheets.
Folio Book	4 or 2	make	1
Quarto, or 4to	8	"	4
Octavo, 8vo	16	"	8
Duodecimo, or 12mo	24	"	12
Octodecimo, or 18mo	36	"	18
24mo, 32mo, 48mo, 72mo, &c., &c.			

A READY RECKONER.

No.	$\frac{1}{4}d.$	$\frac{1}{2}d.$	$\frac{3}{4}d.$	1d.	2d.	3d.	4d.	5d.	6d.	7d.	8d.	9d.	10d.	11d.	No.
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
11	0	2	0	0	1	2	3	4	5	6	7	8	9	10	11
12	0	3	0	0	2	4	6	8	10	12	14	16	18	20	12
13	0	3	0	0	3	6	9	12	15	18	21	24	27	30	13
14	0	3	0	0	4	8	12	16	20	24	28	32	36	40	14
15	0	3	0	0	5	10	15	20	25	30	35	40	45	50	15
16	0	4	0	0	6	12	18	24	30	36	42	48	54	60	16
17	0	4	0	0	7	14	21	28	35	42	49	56	63	70	17
18	0	4	0	0	8	16	24	32	40	48	56	64	72	80	18
19	0	4	0	0	9	18	27	36	45	54	63	72	81	90	19
20	0	5	0	0	10	20	30	40	50	60	70	80	90	100	20
21	0	5	0	1	11	22	33	44	55	66	77	88	99	110	21
22	0	5	0	1	12	24	36	48	60	72	84	96	108	120	22
23	0	5	0	1	13	26	39	52	65	78	91	104	117	130	23
24	0	6	0	1	14	28	42	56	70	84	98	112	126	140	24
25	0	6	0	1	15	30	45	60	75	90	105	120	135	150	25
26	0	6	0	1	16	32	48	64	80	96	112	128	144	160	26
27	0	6	0	1	17	34	51	68	85	102	119	136	153	170	27
28	0	7	0	1	18	36	54	72	90	108	126	144	162	180	28
29	0	7	0	1	19	38	57	76	95	114	133	152	171	190	29
30	0	7	0	1	20	40	60	80	100	120	140	160	180	200	30
33	0	8	0	1	21	42	63	84	105	126	147	168	189	210	33
36	0	9	0	1	24	36	54	72	90	108	126	144	162	180	36
40	0	10	0	1	28	40	56	72	88	104	120	136	152	168	40
42	0	10	0	1	30	42	60	80	100	120	140	160	180	200	42
45	0	11	0	1	33	45	66	88	110	132	154	176	198	220	45
48	0	11	0	1	36	48	72	96	120	144	168	192	216	240	48
50	0	12	0	1	40	52	78	104	130	156	182	208	234	260	50
51	0	12	0	1	42	54	81	108	136	162	188	214	240	266	51
52	0	12	0	1	44	56	84	112	140	168	196	224	252	280	52
53	0	12	0	1	46	58	86	114	144	172	198	224	250	276	53
54	0	12	0	1	48	60	88	116	146	174	200	226	252	278	54
56	0	12	0	1	50	62	90	118	148	176	202	228	254	280	56
60	0	13	0	1	56	68	100	130	160	190	220	250	280	310	60

WAGES TABLE.

Per Year.	Per Month.	Per Week.	Per Day.	Per Year.	Per Month.	Per Week.	Per Day.	Per Year.	Per Month.	Per Week.	Per Day.
£ s.	s. d.	s. d.	s. d.	£ s.	£ s. d.	s. d.	s. d.	£ s.	£ s. d.	£ s. d.	£ s. d.
0 10	0 10	0 2 $\frac{1}{2}$	0 0 $\frac{1}{2}$	8 0	0 13 4	3 1	0 5 $\frac{1}{2}$	18 0	1 10 0	0 6 11	0 0 11 $\frac{1}{2}$
1 0	0 18	0 4 $\frac{1}{2}$	0 0 $\frac{1}{2}$	8 8	0 14 0	3 2	0 5 $\frac{1}{2}$	18 18	1 11 6	0 7 3 $\frac{1}{2}$	0 0 1 0 $\frac{1}{2}$
1 10	2 6	0 7	0 1	8 10	0 14 2	3 3 $\frac{1}{2}$	0 5 $\frac{1}{2}$	19 0	1 11 8	0 7 3 $\frac{1}{2}$	0 0 1 0 $\frac{1}{2}$
2 0	3 4	0 9 $\frac{1}{2}$	0 1 $\frac{1}{2}$	9 0	0 15 0	3 5	0 5 $\frac{1}{2}$	20 0	1 13 4	0 7 8 $\frac{1}{2}$	0 0 1 0 $\frac{1}{2}$
2 10	3 6	0 9	0 1	9 9	0 15 9	3 7 $\frac{1}{2}$	0 6 $\frac{1}{2}$	30 0	2 10 0	0 11 6 $\frac{1}{2}$	0 0 1 7 $\frac{1}{2}$
2 10	4 2	0 11 $\frac{1}{2}$	0 1 $\frac{1}{2}$	10 0	0 16 8	3 10 $\frac{1}{2}$	0 6 $\frac{1}{2}$	40 0	3 6 8	0 15 4	0 0 2 2 $\frac{1}{2}$
3 0	5 0	1 1	0 2	10 10	0 17 6	4 0	0 7 $\frac{1}{2}$	50 0	4 3 4	0 19 2	0 0 2 9
3 3	5 3	1 2 $\frac{1}{2}$	0 2	11 0	0 18 4	4 3	0 7 $\frac{1}{2}$	60 0	5 0 0	1 3 1	0 0 3 3 $\frac{1}{2}$
3 10	5 10	1 4 $\frac{1}{2}$	0 2 $\frac{1}{2}$	11 11	0 19 3	4 5 $\frac{1}{2}$	0 7 $\frac{1}{2}$	70 0	5 16 8	1 6 11	0 0 3 10
4 0	6 8	1 6	0 2	12 0	1 0 0	4 7	0 8	80 0	6 13 4	1 10 9	0 0 4 4 $\frac{1}{2}$
4 4	7 0	1 7 $\frac{1}{2}$	0 2 $\frac{1}{2}$	12 12	1 1 0	4 10 $\frac{1}{2}$	0 8 $\frac{1}{2}$	90 0	7 10 0	1 14 7	0 0 4 11 $\frac{1}{2}$
4 10	7 6	1 8	0 3	13 0	1 1 8	5 0	0 8 $\frac{1}{2}$	100 0	8 6 8	1 18 5 $\frac{1}{2}$	0 0 5 5 $\frac{1}{2}$
5 0	8 4	1 11	0 3 $\frac{1}{2}$	13 13	1 2 9	5 3	0 9	200 0	16 13 4	3 16 11	0 0 10 11 $\frac{1}{2}$
5 5	8 9	2 0 $\frac{1}{2}$	0 3 $\frac{1}{2}$	14 0	1 3 4	5 4 $\frac{1}{2}$	0 9 $\frac{1}{2}$	300 0	25 0 0	5 15 4 $\frac{1}{2}$	0 0 16 5 $\frac{1}{2}$
5 10	9 2	2 1 $\frac{1}{2}$	0 3 $\frac{1}{2}$	14 14	1 4 6	5 7	0 9 $\frac{1}{2}$	400 0	33 6 8	7 13 10 $\frac{1}{2}$	1 1 1 11
6 0	10 0	2 3 $\frac{1}{2}$	0 4	15 0	1 5 0	5 9 $\frac{1}{2}$	0 9 $\frac{1}{2}$	500 0	41 13 4	9 12 3 $\frac{1}{2}$	1 1 7 4 $\frac{1}{2}$
6 6	10 6	2 5	0 4 $\frac{1}{2}$	15 15	1 6 3	6 0	0 10 $\frac{1}{2}$	600 0	50 0 0	11 10 9 $\frac{1}{2}$	1 1 12 10 $\frac{1}{2}$
8 10	10 10	2 6	0 4 $\frac{1}{2}$	16 0	1 6 8	6 1 $\frac{1}{2}$	0 10 $\frac{1}{2}$	700 0	58 6 8	13 9 2 $\frac{1}{2}$	1 18 4 $\frac{1}{2}$
7 0	11 8	2 8 $\frac{1}{2}$	0 4 $\frac{1}{2}$	16 16	1 8 0	6 5 $\frac{1}{2}$	0 11	800 0	66 13 4	15 7 8 $\frac{1}{2}$	2 3 10
7 7	12 3	2 10	0 4 $\frac{1}{2}$	17 0	1 8 4	6 6	0 11 $\frac{1}{2}$	900 0	75 0 0	17 6 1 $\frac{1}{2}$	2 9 3 $\frac{1}{2}$
7 10	12 6	2 10 $\frac{1}{2}$	0 5	17 17	1 9 9	6 10 $\frac{1}{2}$	0 11 $\frac{1}{2}$	1000 0	83 6 8	19 4 7 $\frac{1}{2}$	2 14 9 $\frac{1}{2}$

PRINCIPAL ARTICLES OF THE CALENDAR,
FOR THE YEAR 1896.

Golden Number	16	Dominical Letters	ED
Epact.....	15	Roman Indiction	9
Solar Cycle	1	Julian Period.....	6609

FIXED AND MOVABLE FESTIVALS, ANNIVERSARIES, ETC.

Epiphany	Jan. 6	Queen Victoria born (1819) ..	May 24
Septuagesima Sunday	Feb. 2	Pentecost—Whit Sunday	,, 24
Quinquagesima Sunday.....	,, 16	Trinity Sunday	,, 31
Ash Wednesday	,, 19	Corpus Christi	June 4
First Sunday in Lent.....	,, 23	Accession of Queen Vict. (1837).	,, 20
St. Patrick	Mar. 17	Proclamation	,, 21
Lady Day	,, 25	St. John Baptist—Midsum. Day	,, 24
Palm Sunday	,, 29	St. Michael—Michaelmas Day.	Sept. 29
Good Friday.....	April 3	Prince of Wales born (1841) ..	Nov. 9
Easter Sunday.....	,, 5	St. Andrew	,, 30
Rogation Sunday.....	May 10	Christmas Day (Friday).....	Dec. 25
Ascension Day	,, 14		

The Year 5657 of the Jewish Era commences on September 8th, 1896.

Ramadân (Month of Abstinence observed by the Turks) commences on
February 15th, 1896.

The Year 1314 of the Mahommedan Era commences on June 12th, 1896.

Calendar • for • 1896.

January.					February.					March.								
\$	...	5	12	19	26	\$	...	2	9	16	23	\$	...	1	8	15	22	29
M	...	6	13	20	27	M	...	3	10	17	24	M	...	2	9	16	23	30
Tu	...	7	14	21	28	Tu	...	4	11	18	25	Tu	...	3	10	17	24	31
W	1	8	15	22	29	W	...	5	12	19	26	W	...	4	11	18	25	...
Th	2	9	16	23	30	Th	...	6	13	20	27	Th	...	5	12	19	26	...
F	3	10	17	24	31	F	...	7	14	21	28	F	...	6	13	20	27	...
S	4	11	18	25	...	S	1	8	15	22	29	S	...	7	14	21	28	...
April.					May.					June.								
\$	...	5	12	19	26	\$	...	3	10	17	24	31	\$	...	7	14	21	28
M	...	6	13	20	27	M	...	4	11	18	25	...	M	1	8	15	22	29
Tu	...	7	14	21	28	Tu	...	5	12	19	26	...	Tu	2	9	16	23	30
W	1	8	15	22	29	W	...	6	13	20	27	...	W	3	10	17	24	...
Th	2	9	16	23	30	Th	...	7	14	21	28	...	Th	4	11	18	25	...
F	3	10	17	24	...	F	1	8	15	22	29	...	F	5	12	19	26	...
S	4	11	18	25	...	S	2	9	16	23	30	...	S	6	13	20	27	...
July.					August.					September.								
\$	...	5	12	19	26	\$	...	2	9	16	23	30	\$	...	6	13	20	27
M	...	6	13	20	27	M	...	3	10	17	24	31	M	...	7	14	21	28
Tu	...	7	14	21	28	Tu	...	4	11	18	25	...	Tu	1	8	15	22	29
W	1	8	15	22	29	W	...	5	12	19	26	...	W	2	9	16	23	30
Th	2	9	16	23	30	Th	...	6	13	20	27	...	Th	3	10	17	24	...
F	3	10	17	24	31	F	...	7	14	21	28	...	F	4	11	18	25	...
S	4	11	18	25	...	S	1	8	15	22	29	...	S	5	12	19	26	...
October.					November.					December.								
\$	...	4	11	18	25	\$	...	1	8	15	22	29	\$	...	6	13	20	27
M	...	5	12	19	26	M	...	2	9	16	23	30	M	...	7	14	21	28
Tu	...	6	13	20	27	Tu	...	3	10	17	24	...	Tu	1	8	15	22	29
W	...	7	14	21	28	W	...	4	11	18	25	...	W	2	9	16	23	30
Th	1	8	15	22	29	Th	...	5	12	19	26	...	Th	3	10	17	24	31
F	2	9	16	23	30	F	...	6	13	20	27	...	F	4	11	18	25	...
S	3	10	17	24	31	S	...	7	14	21	28	...	S	5	12	19	26	...

January.

SUNRISE AND SUNSET.

1st Rises at.. 8 8 Sets at .. 4 0 | 15th Rises at.. 8 2 Sets at .. 4 18
 8th „ .. 8 7 „ .. 4 8 | 22nd „ .. 7 55 „ .. 4 29
 29th Rises at 7 46. Sets at 4 41.

RISING, SETTING, AND CHANGES OF THE MOON.

1st Rises.. 4 31 aft. Sets 9 5 morn. | 15th Rises 8 46 morn. Sets 4 46 aft.
 8th „ .. 1 15 morn. „ 11 9 „ | 22nd „ 10 13 „ „ morn.
 29th Rises 8 27 aft. Sets 7 34 morn.

Last Quarter, 7th 3 25 aft. | First Quarter, 23rd..... 2 42 morn.
 New Moon, 14th..... 10 19 „ | Full Moon, 30th..... 8 55 „

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &C.
1	W		<i>New Year's Day</i>
2	Th	1868	DECIDED TO START SCOTTISH WHOLESALE SOCIETY
3	F	1803	Douglas Jerrold born
4	S	1863	Working Men's College, London, opened
5	S		Second Sunday after Christmas
6	M		<i>Epiphany</i>
7	Tu	1826	Lord Kimberley born
8	W		<i>Cambridge Lent Term begins</i>
9	Th		Fire Insurance expires
10	F	1840	Penny Post commenced
11	S	1866	Wreck of the "London"
12	S	1887	Lord Iddesleigh died
13	M	1873	<i>Crumpsall Works purchased</i>
14	Tu		<i>Oxford Lent Term begins</i>
15	W	1877	<i>Cork Branch established</i>
16	Th	1888	M. Godin, of Guise, died
17	F	1706	Benjamin Franklin born
18	S	1890	James Hilton, director C.W.S., died
19	S		Second Sunday after Epiphany
20	M	1779	David Garrick died
21	Tu		<i>St. Agnes</i>
22	W	1788	Byron born
23	Th	1875	Canon Kingsley died
24	F	1800	Sir E. Chadwick born
25	S	1759	Robert Burns born
26	S		Third Sunday after Epiphany
27	M	1859	Emperor of Germany born
28	Tu	1871	Paris capitulated
29	W	1833	First Reformed Parliament met
30	Th	1880	S.S. "Plover" sold
31	F	1892	Rev. C. H. Spurgeon died

March.

SUNRISE AND SUNSET.

1st Rises at .. 6 49 Sets at 5 37 | 15th Rises at.... 6 17 Sets at.. 6 2
 8th " .. 6 33 " 5 50 | 22nd " 6 2 " .. 6 14
 29th Rises at 5 46. Sets at 6 26.

RIISING, SETTING, AND CHANGES OF THE MOON.

1st Rises.. 8 31 aft. Sets 7 7 morn. | 15th Rises 6 19 morn. Sets 7 32 aft.
 8th " 4 20 morn. " 11 5 " | 22nd " 9 16 " " 2 34 morn.
 29th Rises 7 25 aft. Sets 5 26 morn.

Last Quarter, 6th 11 29 morn. | First Quarter, 22nd 11 57 morn.
 New Moon, 14th 10 48 " | Full Moon, 29th 5 22 " "

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &C.
1	S	1869	<i>1, Balloon Street, Manchester, Warehouse opened</i>
2	M	1791	John Wesley died
3	Tu		<i>Voting Lists: Last day for receiving</i>
4	W	1856	Covent Garden Theatre burnt
5	Th	1843	Thames Tunnel opened
6	F	1886	Richard Whittle, director C.W.S., died
7	S		<i>Newcastle and London Branch and Divisional</i>
8	S		Third Sunday in Lent. [<i>Quarterly Meetings</i>]
9	M	1874	<i>London Branch established</i>
10	Tu	1863	Prince of Wales married
11	W	1812	Income Tax imposed
12	Th	1830	J. L. Toole born
13	F	1881	Czar of Russia assassinated
14	S	1864	{ <i>Wholesale Society commenced business. Gen. Quarterly Meeting. BATLEY MILL COMMENCED, 1887</i>
15	S	1860	HECKMONDWIKE CO-OPERATIVE SOCIETY COMMENCED
16	M	1895	J. T. W. Mitchell, Chairman of Directors, C.W.S., d.
17	Tu		<i>St. Patrick</i>
18	W	1848	Princess Louise born
19	Th	1876	General Chesney died
20	F	1845	Sir Thomas Potter, Knight, died
21	S	1871	Princess Louise married
22	S		Fifth Sunday in Lent
23	M	1824	National Gallery founded
24	Tu	1879	<i>Rouen Branch opened</i>
25	W		<i>Lady Day</i>
26	Th	1819	Duke of Cambridge born
27	F		<i>Cambridge Lent Term ends</i>
28	S		<i>C.W.S., Quarter Day. S.C.W.S. Stocktaking</i>
29	S	1879	<i>Trial trip s.s. "Pioneer"</i>
30	M	1848	Don Carlos born
31	Tu	1891	Earl Granville died

May.

SUNRISE AND SUNSET.

1st Rises at .. 4 35 Sets at .. 7 21 | 15th Rises at.. 4 11 Sets at .. 7 43
 8th " .. 4 23 " .. 7 31 | 22nd " .. 4 2 " .. 7 52
 29th Rises at 3 54. Sets at 8 1.

RISING, SETTING, AND CHANGES OF THE MOON.

1st Rises 0 1 morn. Sets 6 37 morn. | 15th Rises 5 9 morn. Sets 11 15 aft
 8th " 2 36 " " 3 10 aft. | 22nd " 2 23 aft. " 1 35 morn.
 29th Rises 11 20 aft. Sets 5 27 morn.

Last Quarter, 4th 3 25 aft. | First Quarter, 20th 6 21 morn.
 New Moon, 12th 7 47 " | Full Moon, 26th 9 57 aft.

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &C.
1	F	1892	John Thirlaway, director C.W.S., died
2	S		<i>Nomination Lists : Last day for receiving</i>
3	S		Fourth Sunday after Easter
4	M	1876	Strike at Constantinople
5	Tu	1892	<i>Birmingham Saleroom opened</i>
6	W	1882	Lord Cavendish assassinated
7	Th	1812	Robert Browning born
8	F	1893	<i>Broughton Cabinet Factory opened</i>
9	S	1873	John Stuart Mill died. Half Quarter Day
10	S		Rogation Sunday
11	M	1812	Spencer Percival shot
12	Tu	1869	Co-op. Printing Society, Manchester, com. business
13	W		<i>Old May Day</i>
14	Th	1883	15TH CONGRESS, EDINBURGH. W. E. BAXTER, M.P.,
15	F		[Pres. 26th CONGRESS, SUNDERLAND, T. TWEDDELL.
16	S	1871	Vendome Column destroyed. [Pres., 1894
17	S	1880	12TH CON., NEWCASTLE. Bishop of DURHAM, Pres.
18	M	1891	23RD CON., LINCOLN. A. H. D. ACLAND, M.P., Pres.
19	Tu		[S. Lever, direc. C.W.S., died, 1888
20	W	1506	Christopher Columbus died
21	Th	1888	20TH CONGRESS, DEWSBURY. E. V. NEALE, Pres.
22	F	1893	25TH CON., BRISTOL. Councillor G. HAWKINS, Pres.
23	S		<i>Oxford Trinity Term begins</i>
24	S		Whit Sunday. <i>Purchase of s.s. "Plover," 1876</i>
25	M		<i>Bank Holiday.</i> J. Atkinson, direc. C.W.S., died, 1890
26	Tu	1890	22ND CONGRESS, GLASGOW. Earl ROSEBERY, Pres.
27	W	1873	Macready died
28	Th	1878	Earl Russell died
29	F	1882	14TH CONGRESS, OXFORD. Lord REAY, President
30	S	1887	{ 19TH CONGRESS, CARLISLE. G. J. HOLYOAKE, Pres.
			{ Quarterly Meeting at Glasgow, S.C.W.S.
31	S	1884	<i>Leicester Works Second Extension opened</i>

June.

SUNRISE AND SUNSET.

1st Rises at .. 3 51	Sets at .. 8 5	15th Rises at.. 3 44	Sets at .. 8 15
8th ,, .. 3 46	,, .. 8 11	22nd ,, .. 3 45	,, .. 8 18
29th Rises at 3 47.		Sets at 8 18.	

RISING, SETTING, AND CHANGES OF THE MOON.

1st Rises.. 0 7 morn.	Sets 9 23 morn.	15th Rises 7 57 aft.	Sets 11 14 morn.
8th ,, 1 32	,, ,, 5 44 aft.	22nd ,, 6 0 aft.	,, 0 48 ,,
29th Rises 10 39 aft.		Sets 8 18 morn.	

Last Quarter, 3rd 8 3 morn.	First Quarter, 18th 11 41 morn.
New Moon, 11th 8 43 ,,	Full Moon, 25th 6 55 ,,

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &C.
1	M	1868	<i>Kilmallock Branch opened</i>
2	Tu	1884	{ 16TH CONGRESS, DERBY. SED. TAYLOR, Pres. <i>Voting Lists : Last day for receiving</i>
3	W	1865	Duke of York born
4	Th	1859	Battle of Magenta
5	F	1723	Adam Smith born
6	S	1892	{ 24TH CON., ROCHDALE. J. T. W. MITCHELL, Pres. <i>Newcastle & Lond. Branch & Divisional Quarterly Meet.</i>
7	S	1832	First Reform Bill passed
8	M	1878	Alexandra Palace burnt
9	Tu	1870	Charles Dickens died
10	W	1889	21ST CONGRESS, IPSWICH. Prof. A. MARSHALL, Pres.
11	Th		<i>St. Barnabas</i>
12	F	1876	Midland Federal Corn Mill, Laying Foundation Stones
13	S		<i>General Quarterly Meeting</i>
14	S	1886	18TH CONGRESS, PLYMOUTH. Lord MORLEY, Pres.
15	M	1875	<i>Manchester Drapery Warehouse; Dantzic St., opened</i>
16	Tu	1815	Battle of Quatre Bras
17	W	1775	Battle of Bunker's Hill
18	Th	1876	W. PARE, FIRST SEC. OF CONGRESS BOARD, died
19	F	1623	Pascal born
20	S	1837	Queen's Ascension
21	S	1884	JOS. SMITH, ASSISTANT SEC. CONGRESS BOARD, died
22	M	1893	Loss of H.M.S. "Victoria"
23	Tu	1757	Battle of Plassy
24	W		<i>Midsummer Day</i> [director C.W.S., died, 1895]
25	Th	1884	<i>Newcastle Drapery Warehouse opened.</i> E. Hibbert,
26	F	1830	George IV. died [taking, S.C.W.S.]
27	S		<i>Co-operative Wholesale Society, Quarter Day.</i> Stock-
28	S		Fourth Sunday after Trinity
29	M		<i>St. Peter</i>
30	Tu	1879	<i>Goole Forwarding Depot opened</i>

July.

SUNRISE AND SUNSET.

1st Rises at.. 3 49 Sets at.. 8 18 | 15th Rises at .. 4 1 Sets at .. 8 7
 8th ,, .. 3 54 ,, .. 8 13 | 22nd ,, .. 4 10 ,, .. 7 59
 29th Rises at 4 20. Sets at 7 49.

RISING, SETTING, AND CHANGES OF THE MOON.

1st Rises..11 0 aft. Sets 10 42 morn. | 15th Rises 9 57 morn. Sets 10 2 aft.
 8th ,, 0 56 morn. ,, 6 59 aft. | 22nd ,, 7 10 aft. ,, 0 52 morn.
 29th Rises 9 18 aft. Sets 9 36 morn.

Last Quarter, 3rd 1 23 morn. | First Quarter, 17th 4 4 aft.
 New Moon, 10th..... 7 35 aft. | Full Moon, 24th 5 45 ,,

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &C.
1	W	1872	<i>Manchester Boot and Shoe Department commenced</i>
2	Th	1867	EQUITABLE CO-OP. BUILDING SOCIETY ESTABLISHED
3	F	1881	DUNDEE BRANCH OF SCOTTISH C.W.S. OPENED
4	S	1776	Independence Day, U.S.A.
5	S		Fifth Sunday after Trinity
6	M		Length of day, 16h. 24m.
7	Tu	1888	<i>Launch of s.s. "Equity"</i>
8	W	1819	Sir L. Mc.Clintock born
9	Th		<i>Fire Insurance expires</i>
10	F	1509	John Calvin born
11	S	1450	Jack Cade killed
12	S	1869	<i>Limerick Branch opened</i>
13	M	1872	Ballot Act in operation
14	Tu	1873	<i>Waterford Branch opened</i>
15	W		<i>St. Swithin</i>
16	Th	1876	<i>Manchester Furnishing Department opened</i>
17	F	1845	Earl Grey died
18	S	1881	Dean Stanley died
19	S		Seventh Sunday after Trinity
20	M	1873	Lord Westbury died
21	Tu	1887	<i>Manchester New Furnishing Warehouse opened. Pur-</i>
22	W		<i>chase of s.s. "Marianne Briggs," 1883</i>
23	Th	1833	Duke of Devonshire born
24	F	1851	Window Tax repealed
25	S	1883	Captain Webb drowned
26	S		Eighth Sunday after Trinity
27	M	1880	<i>Purchase of s.s. "Cambrian" J. Lownds, director</i>
28	Tu	1794	Robespierre guillotined [C.W.S., died, 1895]
29	W	1833	Wilberforce died
30	Th	1868	Thames Embankment opened
31	F	1556	Ignatius de Loyola died

August.

SUNRISE AND SUNSET.

1st Rises at.. 4 24	Sets at.. 7 46	15th Rises at.. 4 46	Sets at.. 7 22
8th „ .. 4 34	„ .. 7 35	22nd „ .. 4 57	„ .. 7 10
29th Rises at 5 0.		Sets at 6 55.	

RISING, SETTING, AND CHANGES OF THE MOON.

1st Rises 9 58 aft.	Sets 1 8 aft.	15th Rises 1 31 aft.	Sets 9 23 aft.
8th „ 3 11 morn	„ 7 23 „	22nd „ 6 53 „	„ 3 43 morn.
29th Rises 8 23 aft.		Sets 0 5 aft.	

Last Quarter, 1st	6 34 aft.	First Quarter, 15th	9 3 aft.
New Moon, 9th	5 2 morn.	Full Moon, 23rd	7 4 morn.
Last Quarter, 31st....		10 55 morn.	

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &C.
1	S		<i>Nomination Lists: Last day for receiving</i>
2	S		Pinth Sunday after Trinity
3	M		Bank Holiday
4	Tu	1873	<i>Cheshire Branch opened & Leicester Works purchased</i>
5	W	1876	<i>Leicester Works First Extension opened</i>
6	Th	1809	Lord Tennyson born
7	F	1821	Queen Caroline died
8	S	1827	George Canning died
9	S		Tenth Sunday after Trinity
10	M	1831	G. J. Goschen born
11	Tu	1863	<i>Co-operative Wholesale Society enrolled</i>
12	W		<i>Trinity Law Sittings end</i>
13	Th		<i>Old Lammas Day</i>
14	F	1880	<i>Heckmondwike Boot and Shoe Works commenced</i>
15	S	1771	Sir Walter Scott born
16	S	1873	<i>C.W.S. Insurance Fund established</i>
17	M	1786	Fredérick the Great died
18	Tu	1830	Emperor of Austria born
19	W	1823	Robert Bloomfield died
20	Th	1868	Abergele accident
21	F	1889	W. P. Hemm, director C.W.S., died
22	S	1800	Rev. Dr. Pusey born
23	S	1862	CORNER STONE, BLACKLEY STORE, LAID
24	M		<i>St. Bartholomew</i>
25	Tu	1886	<i>Longton Crockery Dépôt op. Chancelot Mill op., '94</i>
26	W	1819	Prince Consort born
27	Th	1816	Algiers bombarded
28	F	1856	Gilbert Abbot A'Beckett, author, died
29	S	1887	{ <i>Heckmondwike Curryng Dept. commenced. Quarterly Meeting at Edinburgh, S.C.W.S.</i>
30	S		Thirteenth Sunday after Trinity
31	M	1688	John Bunyan died

September.

SUNRISE AND SUNSET.

1st Rises at.. 5 13	Sets at .. 6 42	15th Rises at.. 5 35	Sets at .. 6 14
8th " .. 5 24	" .. 6 30	22nd " .. 5 46	" .. 5 58
29th Rises at 5 58. Sets at 5 42.			

RISING, SETTING, AND CHANGES OF THE MOON.

1st Rises 10 16 aft.	Sets 3 29 aft.	15th Rises 3 51 aft.	Sets 10 55 aft.
8th " 6 36 morn.	" 6 30 "	22nd " 5 47 "	" 6 20 morn.
29th Rises 9 6 aft. Sets 2 11 aft.			

New Moon, 7th 1 43 aft.	Full Moon, 21st 10 50 aft.
First Quarter, 14th 4 10 morn.	Last Quarter, 30th 1 59 morn.

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &C.
1	Tu		<i>Voting Lists: Last day for receiving</i>
2	W	1871	"CO-OP. NEWS" FIRST ISSUED
3	Th	1878	"Princess Alice" disaster
4	F	1870	French Republic declared. [Quarterly Meetings
5	S		<i>Newcastle and London Branch and Divisional</i>
6	S	1870	H.M.S. "Captain" foundered
7	M	1872	Powder Explosion at Hounslow
8	Tu	1868	SCOTTISH WHOLESALE COMMENCED BUSINESS
9	W	1891	William Green, director C.W.S., died
10	Th	1771	Mungo Park born
11	F	1882	Capture of Tel-el-Kebir
12	S		<i>General Quarterly Meeting</i>
13	S	1884	LIFEBOAT "CO-OPERATOR No. 1" presented to R.N.L.I.
14	M	1857	Delhi taken
15	Tu	1873	<i>Leicester Works commenced</i>
16	W	1736	G. D. Fahrenheit died
17	Th	1863	PAISLEY MANUFACTURING SOCIETY STARTED
18	F	1854	Battle of Alma
19	S	1881	President Garfield died
20	S	1884	<i>21st Anniversary of C.W.S., Commemoration of</i>
21	M	1832	Sir Walter Scott died
22	Tu	1889	Wilkie Collins died
23	W	1803	Battle of Assaye
24	Th	1889	Eliza Cook (poetess) died
25	F	1870	Siege of Paris commenced
26	S		<i>C.W.S. Quarter Day. Stocktaking Day, S.C.W.S.</i>
27	S	1880	<i>London Drapery Department commenced in New</i>
28	M	1870	Strasburg capitulated. [Premises, Hooper Square
29	Tu	1884	<i>Bristol Depot commenced</i>
30	W	1758	Lord Nelson born

October.

SUNRISE AND SUNSET.

1st Rises at .. 6 1 Sets at .. 5 37 | 15th Rises at .. 6 25 Sets at .. 5 6
 8th ,, .. 6 13 ,, .. 5 22 | 22nd ,, .. 6 37 ,, .. 4 52
 29th Rises at 6 49. Sets at 4 38.

RISING, SETTING, AND CHANGES OF THE MOON.

1st Rises.. 11 39 aft. Sets 3 24 aft. | 15th Rises 3 7 aft. Sets morn.
 8th ,, 8 37 morn. ,, 5 26 ,, | 22nd ,, 4 35 ,, ,, 7 40 ,,
 29th Rises 10 42 aft. Sets 1 48 aft.

New Moon, 6th..... 10 18 aft. | Full Moon, 21st 4 17 aft.
 First Quarter, 13th 2 47 ,, | Last Quarter, 29th 3 21 ,,

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &C.
1	Th		<i>Cambridge Michaelmas Term begins</i>
2	F	1786	Admiral Keppel died
3	S	1883	Burnham Beeches made public
4	S		Eighteenth Sunday after Trinity
5	M	1874	<i>Durham Soap Works commenced</i>
6	Tu	1884	<i>Launch of s.s. "Progress"</i>
7	W	1849	Edgar Allan Poe died
8	Th	1871	Great Fire at Chicago
9	F	1759	Eddystone Lighthouse finished
10	S	1895	<i>Loss of the s.s. "Unity"</i>
11	S	1492	America discovered by Columbus
12	M	1886	<i>Launch of s.s. "Federation"</i>
13	Tu	1815	Murat shot
14	W	1872	<i>C.W.S. Bank Department commenced</i>
15	Th	1874	Prince Alfred of Edinburgh born
16	F	1834	Houses of Parliament burnt
17	S	1874	First Hospital Saturday
18	S	1826	Last English Lottery
19	M	1745	Dean Swift died
20	Tu	1865	Lord Palmerston died
21	W	1805	Battle of Trafalgar
22	Th	1890	<i>Northampton Saleroom opened. Cardiff Saleroom</i>
23	F	1869	Earl of Derby died [opened, 1891]
24	S	1852	D. Webster died
25	S		Twenty-first Sunday after Trinity
26	M	1859	"Royal Charter" lost
27	Tu	1870	Capitulation of Metz
28	W		<i>St. Simon and St. Jude</i>
29	Th		Hare Hunting begins
30	F	1841	Great Fire at Tower of London. [for receiving
31	S	1882	<i>Leeds Saleroom opened. Nomination Lists: Last day</i>

November.

SUNRISE AND SUNSET.

1st Rises at .. 6 55	Sets at .. 4 32	15th Rises at.. 7 19	Sets at .. 4 9
8th ,, .. 7 7	,, .. 4 20	22nd ,, .. 7 32	,, .. 4 1
29th Rises at 7 42.		Sets at 3 54.	

RISING, SETTING, AND CHANGES OF THE MOON.

1st Rises.. 1 29 morn.	Sets 2 38 aft.	15th Rises 2 3 aft.	Sets 2 0 morn.
8th ,, .. 11 35	,, ,, 6 24	22nd ,, 4 56	,, 10 0
29th Rises 0 34 morn.		Sets 0 57 aft.	

New Moon, 5th	7 27 morn.	Full Moon, 20th	10 25 morn.
First Quarter, 12th	5 41	Last Quarter, 28th	2 44

Day of Month.	Day of Week.	Year.	REMARKABLE DAYS, FESTIVALS, ANNIVERSARIES, &C.
1	S	1882	<i>Tea and Coffee Department, London, commenced</i>
2	M	1887	{ <i>London Branch New Warehouse opened—Manufacture of Cocoa and Chocolate commenced</i>
3	Tu	1852	Mikado of Japan born
4	W	1891	<i>Wheat Sheaf Works, Leicester, opened</i>
5	Th	1861	HALIFAX INDUSTRIAL SOCIETY INAUGURATED
6	F	1860	Admiral Sir Charles Napier died
7	S	1801	R. D. Owen, reformer, born
8	S	1886	<i>Trial trip s.s. "Federation"</i>
9	M	1841	Prince of Wales born
10	Tu	1483	Martin Luther born. [Canal, first sod cut, 1887
11	W	1889	<i>Longton Depôt new premises opened.</i> Manchester Ship
12	Th	1849	Brunel (Thames Tunnel engineer) died
13	F	1851	Telegraph between England and France completed
14	S	1844	Abercrombie, metaphysician, died
15	S	1871	Stanley discovered Livingstone
16	M	1891	<i>Aarhus Branch opened</i>
17	Tu	1858	Robert Owen died
18	W	1877	Kars captured by the Russians
19	Th	1758	British Museum established
20	F	1869	Suez Canal opened
21	S	1835	The "Ettrick Shepherd" died
22	S	1804	Rochdale Canal opened
23	M		<i>St. Clements</i>
24	Tu	1848	Lord Melbourne died
25	W	1748	Dr. Watts died
26	Th	1871	<i>Opening of Newcastle-on-Tyne Branch</i>
27	F	1833	Duchess of Teck born
28	S		Quarterly Meeting at Edinburgh, S.C.W.S.
29	S	1889	Martin F. Tupper died
30	M		<i>St. Andrew's Day</i>

CONTRIBUTIONS WHICH HAVE APPEARED
IN THE
CO-OPERATIVE WHOLESALE SOCIETIES' "ANNUAL"
FROM 1885 TO 1896.

TITLE OF ARTICLE.	"ANNUAL."	PAGE.
Agriculture, Co-operative.—By BOLTON KING	1885	187
Agriculture, Co-operative, applied to Market Garden- ing and Fruit Culture.—By the Editor of <i>The</i> <i>Agricultural Economist</i>	1885	194
American Immigration Laws.—By EDWARD PORRITT	1894	171
Articles Consumed by Co-operators, The Growth and Manufacture of	1885	146
Art to Labour, The Relations of.—By WM. MORRIS	1890	371
Ballot, The	1886	232
British Cotton Industry, Past, Present, and Pro- spective, A Sketch of.—By J. C. FIELDING	1887	313
British Trade, The Course of.—By GEORGE HOWELL, F.S.S., M.P.	1893	210
Boot and Shoe Making: As it Was and As it Is.— By an OLD CRAFT	1889	328
Bureau of Labour Statistics, Articles from	1886	218
Can the Empire Feed its People?—By JAMES LONG	1893	595
Capital, The World's Accumulation of.—By T. LLOYD	1893	507
Charities and their Administration.—By GEORGE HOWELL, F.S.S., M.P.	1895	175
Civil Service Stores	1887	247
Colonies Adapted for Permanent Homes	1885	259
Colonies Adapted for Temporary Residence only ...	1885	322
Colonial Empire and Emigration, Our	1885	243
Co-operation and Education.—By Rev. T. G. DAVIES	1888	308
Co-operation <i>v.</i> Socialism.—By P. GEDDES	1888	285
Co-operation in its Application to Agriculture.—By G. HINES	1887	210
Co-operation: Its Spread and Power.—By T. SWANN	1888	125
Co-operative Production.—By H. SLATTER, J.P.	1886	188
Co-operation, Valuable Opinions on	1888	337

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1896.

TITLE OF ARTICLE.	"ANNUAL."	PAGE.
Co-operative Wholesale Societies, The, and their Relations to the Retail Co-operative Societies. } By B. J., L. B.	1896	209
Commerce and Trade, Fluctuations in.—By G. HOWELL, F.S.S., M.P.	1890	161
Commercial Geography.—By Rev. L. C. CASARTELLI, Ph.D., M.A.	1889	191
Commercial and Industrial History, Sketches from. By H. DE B. GIBBINS, M.A.	1892	279
Common Lands, The Enclosure of	1885	461
Credit as practised by Co-operative Societies, The System of.—By J. C. GRAY	1889	344
Culture.—By R. D. ROBERTS.	1885	424
Dairy Produce, Our Trade in.—By JAS. LONG.	1892	360
Dairy Farming in Sweden	1888	277
Distributive Co-operation, One Outcome of.	1886	194
Early Co-operative Efforts	1886	86
Eastern Markets, Development of.—By HOLT S. HALLETT	1890	308
Education of Co-operators and Citizens.—By A. H. D. ACLAND.	1885	420
Education of the People, The.—By Rev. J. HIRST HOLLOWELL ..	1892	319
Education in Citizenship.—By HENRY DYER, C.E., M.A., D.Sc.	1894	286
Education, Higher.—By F. STORR.	1885	437
Education, The Royal Commission on.—By H. SLATTER, J.P.	1889	334
Education, Secondary.—By A. H. D. ACLAND	1885	426
Education, Statistics of Expenditure of Public Money on	1885	443
Electricity: Light and Power.—By M. HOLROYD SMITH, M.I.M.E., M.S.T.E. and E., &c.	1889	204
Electricity: Past, Present, Future.—By VICTOR V. BRANFORD, M.A.	1896	253
English Constitution, The: Its Origin and Growth. By H. DUNCKLEY, M.A., LL.D.	1891	129
English Industry up to the beginning of the Present Century, A Short Outline of the Growth of.—By H. de B. GIBBINS, B.A.	1890	273

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1896.

TITLE OF ARTICLE.	"ANNUAL."	PAGE.
Englishmen in the World of Labour.—By B. J., L. B.	1887	270
English Labour, A Century-and-a-half of.—By Pro- fessor THOROLD ROGERS, M.P.	1885	327
Emigration, The Advantages of.—By G. J. HOLYOAKE	1885	245
Eminent Men on Co-operation	1887	233
Europe and England in Africa; or the Development of the Dark Continent.—By H. DE B. GIBBINS, M.A., F.R.G.S.	1895	345
Factory Legislation in the United States.—By EDWARD PORRITT.....	1896	180
Fishing Industries of the United Kingdom.—By CHAS. E. FRYER	1893	561
Food of the People, The.—By T. OLIVER, M.A., M.D., F.R.C.P.	1896	147
Foreign Competition in the East.—By HOLT S. HALLETT	1893	371
Fruit-Growing Industry, Our.—By G. T. TURNER...	1889	366
Furniture Woods, with Suggestions for the Intro- duction of New Kinds.—By J. R. JACKSON. Illustrated by J. ALLEN	1894	349
Geography and History for Economics and Citizen- ship.—By Professor PATRICK GEDDES	1895	485
Great Strikes: Their Origin, Cost, and Results.—By G. HOWELL, F.S.S., M.P.	1889	266
Hibbert, The late Emanuel.....	1896	416
Horses and Cattle, Breeding and Feeding of.—By D. JOHNSON.....	1888	347
Hosiery Trade, The.—By ANTHONY MUNDELLA	1893	479
Housing of the Working Classes	1886	203
Ideal Communities.—By W. C. J.....	1886	151
India and its Neighbours.—By HOLT S. HALLETT, C.E.	1895	378
Industrial Conflicts and British Trade.....	1886	285
Industrial Progress, The Recent History of.—By R. S. WATSON.....	1891	308
Industrial and Provident Societies: The Legislation Relating thereto.—By E. V. NEALE	1887	344
Industrial London.—By G. HOWELL, F.S.S., M.P....	1891	163

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1896.

TITLE OF ARTICLE.	"ANNUAL."	PAGE.
Industrial and Social Legislation, A Century of.—By G. HOWELL, F.S.S., M.P.	1894	198
Industrial Mortality, Some Aspects of.—By VAUGHAN NASH	1894	314
Industries of Glasgow, The Rise and Progress of.— By ROBERT LEGGATT	1891	347
Influence of Modern Industry on Social and Economic Conditions.—By H. DYER, C.E., M.A., D.Sc.	1892	145
Influence of the Production of the Precious Metals on Industry and Trade, The.—By Professor J. S. NICHOLSON, M.A., D.Sc.	1895	456
Influence of the Land Laws upon the Prosperity of the People.—By Professor JAMES LONG	1895	422
Inland Navigation.—By J. W. HARVEY	1888	127
Insurance, and what is worth knowing about it.—By T. R. GLOVER	1888	264
Irlam Soap Works	1896	388
Land and the People, The.—By ARTHUR ARNOLD ...	1887	184
Land Nationalisation.—By A. J. OGILVY.....	1890	131
Land Tenure in England.—By Professor J. E. THOROLD ROGERS.....	1889	167
Law Cases Affecting Co-operative Societies.—By HENRY HARWOOD.....	1895	530
Leather.—By SPARKE EVANS, J.P.	1889	322
Lownds, The late James.....	1896	415
Manchester Ship Canal, An Account of the Origin and Development of the	1889	389
Meat Supply, The Sources of Our.—By JAS. LONG... Melbourne and its District.—By W. NUTTALL	1891	380
Merchant Shipping Bill, The	1888	194
Merchant Shipping, Sketch of the Rise and Progress of.....	1885	239
Military and Naval Forces of the World and their Cost.—By H. DUNCKLEY, M.A., LL.D.	1885	198
Milling, History of.—By R. WITHERINGTON.....	1893	427
Mining Royalties.—By Professor J. E. C. MUNRO ... Mitchell, J.P., The late John Thomas Whitehead.— By WM. MAXWELL, J.P.	1887	304
Money.—By Professor J. S. NICHOLSON	1891	269
	1896	392
	1887	137

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1896.

TITLE OF ARTICLE.	"ANNUAL."	PAGE.
National Debt, The: Its Origin, Growth, and the Methods which have been Adopted from time to time for its Reduction.—By W. A. S. HEWINS...)	1889	227
National Expenditure Accounts and Audit.—By W. E. SNELL	1888	315
New Food Products, with Suggestions on the Introduction and Cultivation in Britain, or the British Colonies, of New and Little Known Fruits and Vegetables.—By J. R. JACKSON, A.L.S. Illustrated by J. ALLEN	1895	279
Old-Age Pensions.—By R. L. EVERETT, M.P.	1893	464
Our Home and Our Foreign Trade, The Relative Values of.—By T. LLOYD	1895	312
Pauperism: Its Nature and Extent, its Causes and Remedies.—By GEORGE HOWELL, F.S.S., M.P. ...	1890	187
Payment of Members of Parliament.—By Sir E. GREY	1892	345
Payment of Members of Parliament: A Historical Note.—By A. H. WORTHINGTON	1893	555
Primary Education in England. — By Dr. J. WATTS	1885	393
Printing, The Origin and Growth of the Art of.—By H. SLATTER, J.P.	1893	285
Privileged Classes in Civilised Communities, The History and Effects of.—By H. DUNCKLEY, M.A., LL.D.	1894	262
Productive Departments of the C.W.S., The	1892	430
Poor Law, The History of the.—By GRAHAM WALLAS	1894	262
Popular Discontent	1886	80
Popular Freedom in England, The Birth of.—By W. C. J.	1886	250
Popular Power: A People's Party.....	1886	238
Possibilities of Machinery and Industry, and some of their Probable Results on Social and Economic Conditions, The	1893	301
Rating	1889	312
Retail Co-operation and the Relations between the Individual and the Store.—By B. J., L. B.....	1896	199

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1896.

TITLE OF ARTICLE.	"ANNUAL."	PAGE.
Rich Richer and the Poor Poorer: An Essay on the Distribution of Wealth.—By G. HOWELL, F.S.S., M.P.	1892	191
Rings, Trusts, and Syndicates.—By W. E. SNELL...			1890	209
Rochdale Society of Equitable Pioneers, First Rules of the	1895	544
Rugby Tennessee.—By THOS. HUGHES, Q.C.	1885	254
Sanitation, Health, and Long Life.—By H. PITMAN.	1896	374
Sanitation, The Economic Aspect of.....	1888	182
School Board, London.—By the Hon. E. LYULPH STANLEY, M.P.	1885	404
School Board, Manchester.—By HENRY SLATTER ...	1885	405
School Board, Rochdale	1885	407
School Board, Sheffield.—By THOS. SWANN.....	1885	409
School Work in Ipswich, Twelve Years of.—By G. HINES.....	1885	411
Scottish Co-operative Wholesale Society Limited, The, and its Productive Departments.—By D. CAMPBELL	1896	323
Shoe Machinery: Its Effect on Wages and Cost of Production.—By an OLD CRAFT .....			1890	383
Silk: Its History and Its Industries.—By A. E. PIGGOTT, F.S.A.A.	1893	686
Soap.—By J. E. GREEN, F.I.C., F.C.S.....	1891	288
Social Experiments in the United States.—By LAURENCE GRONLUND	1886	116
Socialism—French and German.—By LAURENCE GRONLUND	1886	138
Society, The Progress of	1886	77
Soil, and What it will Grow.—By JAMES LONG	1894	397
Some Facts and Considerations about Municipal Socialism.—By SIDNEY WEBB, LL.B.	1896	286
South Sea Bubble, The.—By HENRY DUNCKLEY, M.A., LL.D.	1892	243
Statistics of Trade Unions	1885	360
Stock Exchanges: Their Origin and History.—By H. DUNCKLEY, M.A., LL.D.	1893	171
Stores: Retail and Wholesale	1886	185
Spelling Reform and Phonography.—By H. PITMAN	1890	236
Sweating in Indian Factories and Workshops.—By HOLT S. HALLETT	1891	199

CONTRIBUTIONS TO THE "ANNUAL" FROM 1885 TO 1896.

TITLE OF ARTICLE.	"ANNUAL."	PAGE.
Taxation: How Raised and how Expended.—By G. HOWELL, F.S.S.	1896	232
Tea, Coffee, and Cocoa.—By J. R. JACKSON, A.L.S. Illustrated by J. ALLEN	1893	339
Technical Education at Home and Abroad.—By J. FIRST HOLLOWELL	1894	439
Technical Instruction.—By JOHN SLAGG, M.P.	1885	413
The Advantages and Necessity of a Co-operative Wholesale Centre of Supply, as Established in the Organisation of the English and Scottish Whole- sale Societies.—By H. R. BAILEY	1889	377
The Position of the World's Grain Trade.—By G. T. TURNER	1888	237
The New Cotton Kingdom.—By EDWARD PORRITT..	1895	241
Trade Unions: Their Origin, Rise, Progress, and Work.—By G. HOWELL, F.S.S.....	1885	352
Trade Unions and the Working Classes.—By T. BURT, M.P.	1885	374
Trade Unionism in its Permanent Effects upon the Worker	1886	267
Unemployed, The Problem of the.—By J. A. HOBSON	1896	351
University and the People, and the University of the Future, The.—By Professor S. S. Laurie.....	1894	380
Wages, Theories and Facts about.—By ALFRED MARSHALL	1885	379
Wheat Flour	1888	332
Working Classes and Political Economy, The.....	1886	279
Working Classes in Great Britain in 1842 and 1892, The Condition of.—By SIDNEY WEBB	1893	537
Would the Nationalisation of Railways be of Advantage to the Country?—By H. DUNCKLEY, M.A., LL.D.	1895	203



MANCHESTER :

PRINTED AND BOUND BY THE



AT THEIR CENTRAL WORKS,
NEW MOUNT STREET, ANGEL STREET.

NEWCASTLE WORKS :
CORNER OF RUTHERFORD STREET AND BATH LANE,
NEWCASTLE-ON-TYNE.

LONDON WORKS :
TUDOR STREET, NEW BRIDGE STREET, E.C.





HD
3325
A24
1896

Co-operative Wholesale
Society
Annual

**PLEASE DO NOT REMOVE
CARDS OR SLIPS FROM THIS POCKET**

UNIVERSITY OF TORONTO LIBRARY



ANNUAL 1896