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VITAL, SOCIAL, AND ECONOMIC  
STATISTICS OF GLASGOW,  
1885-1891.



VITAL, SOCIAL,  
AND  
ECONOMIC STATISTICS  
OF  
THE CITY OF GLASGOW,  
1885-1891.

*WITH OBSERVATIONS THEREON*

BY  
JAMES NICOL,  
CITY CHAMBERLAIN.



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TO THE HONOURABLE JOHN MUIR, LORD PROVOST,  
THE MAGISTRATES, AND TOWN COUNCILLORS OF  
THE CITY OF GLASGOW.

MY LORD PROVOST AND GENTLEMEN,

On the eve of your entering upon the fuller duties before you, I present some statistical facts illustrative of the progress of the City, under various aspects, in the past six years, and particularly the results of some of the important work carried out by you.

The much needed extension of the City boundaries, and a new decennial census, make the time opportune for such a record. Next week will bring a great accession to your numbers, and I am hopeful that while to you the book, for such it has grown to be, can at the most possess only interest, the new members may find in it useful information. Now that it is ready to go out, I become very sensible of its many shortcomings.

During the first half of the period dealt with severe depression was felt in some of the larger departments of manufacturing industry; but in the last three years employment of capital and labour has been good.

I illustrate with some little fulness the aggressive and widespread spirit of philanthropy and benevolence abroad over the City, and side by side will be found some results of its working in diminished pauperism, crime, and juvenile delinquency.

Need I say that for many of the tables and for much

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information in the volume I am indebted to numerous official sources, and to my kind and courteous helpers I acknowledge gratefully the services rendered.

I commit to you the work of a long summer's spare hours, with respect, gratitude, and esteem.

I am,

MY LORD PROVOST AND GENTLEMEN,

Your faithful Servant,

J. NICOL,

*City Chamberlain.*

CITY CHAMBERLAIN'S OFFICE,

GLASGOW, 30th October, 1891.

I discover some discrepancies due to changes in the arrangement and to interpolations, but shall only point out the following:—On page 101, line 18—for “before” read “hereafter.” On page 149, line 2 below table—read “first four years, (1881-85).”

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# THE TOWN COUNCIL OF THE CITY AND ROYAL BURGH OF GLASGOW, 30TH OCTOBER, 1891.

## FIRST WARD—

Hugh Steel Thomson.  
John Pollock M'Phun.  
Alexander Waddel.

## SECOND WARD—

William Ure.  
James Henderson Martin.  
James Martin.

## THIRD WARD—

Hugh Brechin.  
Michael Simons.  
James Millar Jack.

## FOURTH WARD—

Archibald Neilson.  
Peter Burt.  
James M'Lennan.

## FIFTH WARD—

David Morrin.  
William M'Kellar.  
Robert M'Farlane Mitchell.

## SIXTH WARD—

Alexander M'Laren.  
John Neil.  
Alexander Osborne.

## SEVENTH WARD—

Robert Murdoch.  
Henry Shaw Macpherson.  
Thomas Watson.

## EIGHTH WARD—

Archibald Dunlop.  
Thomas Cumming.  
James Bell.

## NINTH WARD—

James Parnie.  
James Colquhoun.  
Thomas Cochrane Guthrie.

## TENTH WARD—

James Gray.  
Robert Crawford.  
Robert Graham.

## ELEVENTH WARD—

Samuel Chisholm.  
John Muir.  
William Pettigrew.

## TWELFTH WARD—

James Alexander.  
James Hunter Dickson.  
John M'Farlane.

## THIRTEENTH WARD—

William Bilsland.  
Hugh Wallace.  
Angus Campbell.

## FOURTEENTH WARD—

William Wilson.  
Henry Tait.  
David Richmond.

## FIFTEENTH WARD—

William Stevenson.  
David Bowman.  
Walter Wilson.

## SIXTEENTH WARD—

John Shearer.  
John Ure Primrose.  
Walter Paton.

## THE HOLDERS OF OFFICES OF DIGNITY FOR THE YEAR—

The Hon. John Muir, *Lord Provost.*

William Stevenson, *Senior Magistrate.*

Thomas Cumming, *Magistrate.*

James Henderson Martin, *Magistrate.*

David Morrin, *Magistrate.*

James M'Lennan, *Magistrate.*

Walter Paton, *Magistrate.*

Robert Graham, *Magistrate.*

John M'Farlane, *Magistrate.*

David Bowman, *Magistrate.*

James Martin, *Magistrate.*

John Guthrie Smith, *Dean of Guild.*

William Robertson Copland, *Deacon-Convenor.*

Thomas Watson, *City Treasurer.*

James Gray, *Master of Works.*

William Pettigrew, *Bailie of the River and Firth of Clyde.*

Hugh Brechin, *Deputy-Bailie of the River and Firth of Clyde.*



## INTRODUCTORY.

IN presenting statistical facts illustrative of the social life and progress of Glasgow during the past six years a very large field is opened up for review. In every department of the City's well-being—municipal, commercial, educational, artistic, and philanthropic, evidences of conspicuous advance present themselves; but it will be impossible in this place to do more than touch with a very light hand even the more salient of the many departments of our complex City activities.

In Corporation circles, as might be expected, there is great and growing progress to record. The new Municipal Buildings, or, as they are now permanently designated, "The City Chambers," have been completed, fittingly opened and fully occupied by the several departments, with scope within them for conducting the affairs of the City on an extended basis, and for the dignified reception of guests; the incorporation of six of the Suburban Burghs and of the important residential districts of Kelvinside, Possil Park, Shawlands, Langside, Bellahouston, etc., have been accomplished with the cordial assent of the inhabitants; the treatment of City Sewage, to appease the vengeful Nemesis overhanging the Clyde, is being vigorously grappled with by parliamentary sanction and precipitation ground for the eastern section has been acquired; the prevalent imperfect combustion of coal and preventible discharge of smoke, a still more palpable offender to health, cleanli-

ness, and pleasurable living, is receiving attention with a view to substantial abatement; most important, almost arbitrary, powers have been conferred by Parliament on the Police Commissioners of supervision and control of our milk and butcher meat supplies, of dwelling-houses and lodging-houses occupied by the poorer classes, and generally of the residential environments within the City, to secure for them proper sanitary conditions; a bill for checking certain immoral practices within the City is being framed; the further powers for augmenting our already beneficent water supply are being actively prosecuted; the progress of electric science has been closely followed, and powers have been obtained for utilizing electricity for lighting and tramways traction; the Royal Botanic Gardens have become a possession of the City under the Boundaries Extension Act, and more of the classic banks of the Kelvin are being acquired; by the generosity of a citizen a portion of the no less classic Cathkin Braes has been gifted to the City as a park; land for a new park has been acquired in the north-west quarter of the City by the purchase of Ruchill Estate; an addition has been made to the Alexandra Park which gives an extended boundary to Cumbernauld Road; the lands of Clayslaps and Overnewton and their incorporation for parks purposes with Kelvingrove Park is accomplished; the filling up of "Flesher's-haugh," in Glasgow Green, to the level of King's Park, by the Caledonian Railway Company is in progress; a handsome archway to the People's Park at Monteith Row has been gifted by a Magistrate of the City; the banks of the Clyde above Albert Bridge, seriously abraded by removal of the weir and deepening of the harbour, are being reinstated under parliamentary sanction; a new Hospital for the treatment of infectious diseases is about to be established at Ruchill for the north-west quarter of the City; a third refuse despatch work has been erected at Kelvinhaugh; the growing taste in art culture is being stimulated and the near prospect of an art palace

worthy of the City and worthily situated is assured; the Mitchell Library, now adequately housed in Miller Street, was gracefully reopened in its new home by the Marquis of Bute, on 7th October; St. Andrew's Halls have become a possession of the Corporation; the City Hall and its accesses have been renovated and lighted by electricity; the Bazaar has been considerably enlarged and similarly lighted; the Central Police Chambers have also been extended and improved; new Police Offices and Court Rooms have been erected in Maitland Street, Cowcaddens; the accommodation for the growing trade in American live cattle, fostered by the Magistrates as Local Authority, has been greatly extended on both sides of the Harbour; and the Fish Market has been enlarged. Many topographical features of the City have also been altered and improved, or are in process of change: in particular, Cathedral Square, the City's most historic resort, has been completed by the removal of the Barony Church and its re-erection on another site; the widening and reconstruction of Trongate at the Cross and of the Saltmarket is in progress; the erection of model dwellings in Saltmarket with others in prospect in High Street and Townhead, and many other minor improvements at Stobcross, Charing Cross and elsewhere, have been carried out by the Corporation.

But evidence of the activities and progress of the City is by no means confined to operations and schemes of its constituted rulers. Enormous undertakings—public, private, and philanthropic—touching the City's being and well-being, have to be enumerated in which the Corporation has had no direct responsibility, but every one of which they have watched, stimulated, or guided in the interest of the citizens.

The vastly important Cessnock Dock for extending the harbour accommodation and for keeping our shipping within moderate distance of the City's centre has been vigorously prosecuted, the construction of the new graving dock, the largest in the country, is advancing, and the Elderslie Rock,

so long a stumbling-block to ships of deep draught, has been removed; it has been resolved still further to deepen the river throughout; the Custom House Quay is being rebuilt, and a spacious goods shed erected upon it; a crane capable of lifting 130 tons is being placed on Finnieston Quay; and the Clyde Navigation Trustees have entered on possession of new administrative Chambers befitting the importance of the Trust.

For freer and fuller locomotion within the City and Suburbs facilities have been and are being lavishly provided within the past six years, during which the City District Railway, the Circle Railway in connection therewith, and the Cathcart District Railway have been constructed and opened for traffic; the Central Station, Bridge Street Station, and lines of the Caledonian Company on the south side of the City, have been greatly widened and extended; the Bridgeton Cross extension of the City District Railway, involving the utilization of the site of the old Barracks in Gallowgate, is nearing completion; the Central Railway passing through the Green, Kelvingrove Park, and Botanic Gardens, is in active progress; the Glasgow District Subway Scheme, which crosses below the Clyde at two different points, is also in progress of construction; powers have also been obtained in the present session for a railway connecting with the Central Railway and passing from Stobercross through Partick and Whiteinch to Dumbarton; new harbour steamboats have been added by the Clyde Trustees to their smart little Clutha passenger fleet; and for the purpose of long desiderated cross river communication below Glasgow Bridge for vehicular traffic a capacious ferry steamer with elevating platform to suit the state of the tide has been placed on the river at the foot of Finnieston Street, and a tunnel under the river is in course of construction at the same place, and when completed a choice of upper and underground passage of the harbour will be presented to the public.

No fewer than six new bridges, spacious and elegant,

have been either erected and opened, or are decided upon—three across the Clyde and three across the Kelvin. The new bridge over the Clyde at Dalmarnock and the Great Western Road Bridge over the Kelvin have been this year opened; the construction of the new Rutherglen Bridge over the Clyde is about to proceed; the re-erection of Glasgow Bridge—the most important and central of all the bridges of the City—and of the Bridge over the Kelvin at Gibson Street have been resolved on; and the old Bridge at Partick falls to be reconstructed by the Lanarkshire and Dumbartonshire Railway Company. Should the new Glasgow Bridge be completed by 1899 the second half of the present century will have the credit of erecting every bridge across the Clyde and the Kelvin within City and Suburban limits for pedestrian, vehicular, and railway purposes.

Improved accommodation for the efficient conduct of the legal business of the City and County has been secured under sanction of Parliament by the incorporation of the vacated Municipal Buildings in Ingram Street with the Sheriffs' Chambers in Wilson Street.

The Post Office is being largely extended, and postal facilities generally have been centralized; the Glasgow Prison in Duke Street, formerly a local, and now a Government institution, has been for the most part reconstructed to meet improved disciplinarian ideas, and will henceforth be used for the penal incarceration of women, and for the lodgment of men before trial; the dimensions of Barlinnie Prison, which is exclusively a prison for males, have been doubled to meet the ideas of the Government for centralizing the prisoners of a wider district than heretofore; the Glasgow District Lunacy Board, which, by the Act of 1857, embraced the City and County of Lanark, was dissolved by the Act of 1888, and has been replaced by four new Boards, embracing respectively the City Parish, Barony Parish, Govan Parish, and the landward part of the county; and three new asylums at Gartloch, Hawkhead,

and Hartwood are in course of erection to overtake more locally the care of the pauper lunatics chargeable to the respective districts.

The Victoria Infirmary at Queen's Park has been erected, equipped, and opened; important additions have been made to both the Royal and Western Infirmaries, including enlarged accommodation for Nurses, and a house for the Western Medical Superintendent; and other ameliorative Institutions of the City have been originated or extended—in particular, the Sick Children's Hospital, the Samaritan Hospital, and the Cancer Hospital; a Convalescent Home has been established at Lanark in connection with the Western Infirmary, gifted and endowed by a much-esteemed county gentleman identified with the city; and another Convalescent Home on a still larger scale, gifted by a city lady, is about to be established at Bearsden in connection with the Royal Infirmary.

Educational and scientific activities have also been conspicuous within the past six years. St. Mungo's College has been founded and equipped with a full complement of competent professors; Anderson's College Medical School has been removed from George Street to a more congenial situation within the precincts of the Western Infirmary; the Glasgow and West of Scotland Technical College has been fully organized; Hutchesons' Educational Trust, the City Educational Endowments Board, the Glasgow General Educational Endowments Board, and the Marshall Trust—all four the creation of private philanthropy—have been put into operation; a Roman Catholic College for the training of the priesthood has been erected by Archbishop Eyre from his own private purse; at Gilmorehill new and imposing physical features have grown up in the completion of our University's noble tower, the erection of its principal gateway, and the foundation of its Students' Union. The School Board too has been busy. Eight new schools, containing 9900 school places, have been opened during the six years under review, and the introduction of free educa-



tion—a dream of the enthusiast six years ago—has given fresh interest and a new stimulus to the vast work of the Board.

Most gratifying efforts for the rescue and upraising of neglected and destitute children of the City have also been manifested. Two additional Day Refuges have been established in Rottenrow on the north and in Rose Street on the south; the Society for the Prevention of Cruelty to Children have organized excellent work; the Poor Children's Fresh-air Fortnight Scheme recently commenced has taken root and may be regarded as a permanent organization; and the great, untiring and unique work of Mr. William Quarrier, carried on without endowment of any kind, has been vastly extended, and gives peculiar interest, not to Glasgow only, but to Scotland at large. Our Roman Catholic brethren have likewise been most energetic in the rescue and upbringing of neglected children of their own persuasion.

Besides these lasting concerns, the City has been quickened by events more fleeting, although charged with enduring influences—in particular by the International Exhibition of 1888, which has stimulated the community in many directions, and by the substantial surplus which it left behind, the nucleus of a fund for Art culture was secured and is being augmented by large voluntary subscriptions; music is also having attention in influential quarters; the freedom of the City has been conferred on distinguished men; congresses of important bodies have been held; and civic hospitalities have been adequately dispensed. The objects of interest engaging the City's attention during these last six years are by no means exhausted by the foregoing enumeration.

Very particularly, and on the principle of withholding the good wine to the last, the loyalty of the citizens was intensely stirred by the gracious State Visit of the Queen in August, 1888, when Her Majesty did the City the honour to open the Municipal Buildings and

to Visit the Exhibition; by the Visit of the Prince and Princess of Wales in May, 1888, for the purpose of opening the Exhibition; by visits from other members of the Royal Family at different times; by a visit from the Shah of Persia, when the first function took place *within* the new Council Chamber, of presenting His Majesty with an address; a large and distinguished representative party from the Colonies and India, the Prime Minister, the Marquis of Salisbury, the Lord Mayor and Sheriffs of London, and other distinguished personages.

It remains to be stated in this general review of work accomplished, work in progress, and work in contemplation by the Corporation and others, that whilst carried out at considerable cost, the expenditure may be regarded with complacency by the ratepayers. For example, for our beautiful Municipal Palace the ratepayer of to-day has no more tax imposed than in any year since 1868 when one penny per £ was levied for the old City Chambers, and has never since been missed from the assessment notice: this penny is continued and suffices; the expenditure of an additional million of pounds on Water Works involves, it is believed, no increase to the present modest water rate of 6d. per £ of domestic rental, the lowest price in the kingdom for the finest supply of water known to exist. The enormous expenditure again for improving inter-city and suburban locomotion has had the effect of cheapening and encouraging movement amongst the people; and the extraordinary philanthropic activity in our midst lessening, as it is unmistakably doing, crime and pauperism, and raising the standard of health and morals, has already done much, and must yet do more, to lessen taxation.



## EXTENSION OF CITY BOUNDARIES.

By "The City of Glasgow Act, 1891," which received the royal assent on 21st July, 1891, the following Suburban Burghs and Districts will, on 1st November, be incorporated with the existing City and Royal Burgh of Glasgow, viz.:—

	Acreage.	Rental 1890-1891.	Population on 5th April, 1891.
I.—Police Burghs of—			
Govanhill, - - -	140	£57,456	14,339
Crosshill, - - -	82	30,388	3,798
Pollokshields, East, -	91	54,586	6,681
Pollokshields, West, -	372	41,312	3,028
Hillhead, - - -	130	89,661	7,738
Maryhill, - - -	1,183	75,804	18,313
II.—Districts of—			
Polmadie, - - -	222	15,368	2,675
Mount Florida, - - -	184	54,551	8,161
Langside, - - -	398		
Crossmyloof, - - -	53		
Shawlands, - - -	200	14,385	2,660
Strathbungo, - - -	62	21,100	2,951
Bellahouston, - - -	334	6,016	144
Kelvinside, - - -	765	89,346	5,526
Possilpark, - - -	404	22,546	7,853
Springburn (including Barnhill), - - -	1,088	23,126	7,350
Westhorn, - - -	42	1,000	15
	5,750	£596,645	91,232

Stated in Parishes the added area is derived as follows:—

	Acreage.	Rental.	Population.
Barony Parish, - -	2,717	£122,476	33,531
Govan Parish, - -	2,116	374,845	43,082
Cathcart Parish, - -	717	84,939	11,959
Eastwood Parish, - -	200	14,385	2,660
	5,750	£596,645	91,232

With this extension of territory the City and Royal Burgh of Glasgow will have the following proportions:—

	Acreage.	Rental 1890-1891.	Population 5th April, 1891.
Existing City, - -	6,111	£3,455,510	565,714
Incorporated Burghs and Districts, - -	5,750	596,645	91,232
	11,861	£4,052,155	656,946

And distributed in Parishes it will stand thus:—

	Acreage.	Rental.	Population.
City Parish (entire), -	988	£1,303,781	} * 642,327
Barony Parish, - -	6,831	1,712,017	
Govan Parish, - -	3,125	937,033	
Cathcart Parish, - -	717	84,939	11,959
Eastwood Parish, - -	200	14,385	2,660
	11,861	£4,052,155	656,946

\* NOTE.—The population has not yet been ascertained in parishes.

In substantial measure an instalment of the City's claim to extended boundaries has at last been conceded by Parliament. The cordial assent of the inhabitants and of their representatives preceded this statutory incorporation, and no misgivings, heartburnings, or jealousies can follow in its train. It is now subject of mutual congratulation that the City's persevering proposals for union have culminated in fruition in so far as concerns these consenting Burghs and Districts. The story of repeated approaches and refusals in the protracted boundaries campaign extending over a score of years, however strong the temptation to narrate them, may very well be committed to oblivion. Happily, treasure only was spilt, and bad blood between City and Suburbs never really entered into the struggle. It would, therefore, be unprofitable to enter into details that contemporaries know sufficiently well, and that posterity will take no particular interest in. Who, for example, can recall or now cares to know the particulars of the struggle that preceded the annexation of Blythwood district—that is the territory westwards of Buchanan Street—so recently as 1831, and of the Burghs of Calton, Anderston, and Gorbals, more recently still, in 1846? The curious may always find such information amongst the *unpublished* chronicles of Gotham. It must here suffice to record that by the recent Act of Incorporation neither side has lost prestige or been humiliated by the settlement; on the contrary, the City has reason to esteem the Burghs more rather than less that they withstood its advances for a time, when even the smallest of them proved redoubtable champions—genuine chips of the parent block. In the natural issue arrived at it is good that no sword has had to be delivered up, and that peace has come by mutual concession and by that alone. This is an extremely happy circumstance. The City gains enormously in having restored to it the youthful vigour and enthusiasm of the Burghs, disciplined as they have been by self-government and by the efforts put forth to prolong their independence;

and the Burghs will freely acknowledge that they are gainers in no small degree by incorporation with Glasgow, which means to them restoration to the citizenship of no mean city—to the traditions and the prestige of the Second City in the United Kingdom.

It is to be regretted that the scheme of annexation is for the present limited to six of the nine Burghs, and that Partick, Govan, and Kinning Park do not yet see their way to consent to incorporation and to share the unquestionable advantages which annexation must yield to them. The City boundaries are altogether incomplete and inadequate without these Burghs, and their inclusion in the parent City must continue to be sought after. Success can only, in the nature of things, be a question of a very short time. As with the consenting Burghs, and in no lower but rather in a much higher sense, they are the outgrowth of the City. Govan and Partick occupy the riverside ground, and have within them many of the more important industrial works of the City requiring such ground. So long as these industries could be accommodated within the City's limits they remained in the City, but the exigencies of extraordinary development necessitated their locating themselves outwith the limited technical area. This riverside ground could have had no particular value but for the enterprise of the Corporation in deepening the river in order to create a navigable water-way to the sea, and in thus making possible the special industries relating to commerce with other countries. Jurisdiction over the harbour, extending into Govan Burgh, has no doubt been confirmed by various Acts of Parliament to the City and Clyde Trustees, and government within the area of Govan is therefore of a very composite order. For example, the total river frontage of the Burgh of Govan extends lineally to 3,767 yards, and of this most important boundary 2,318 yards are controlled by the City, and when completed the Cessnock Docks, occupying  $38\frac{1}{2}$  acres of the heart of the Burgh, with a quaysage of 3,737 lineal yards, will also be entirely under

City control. More amputations must follow in the near future. The growing necessities of the City therefore require control not of the river merely, but of its bordering territory, without serious let or hindrance. Recent legislation for extending harbour accommodation places this consideration beyond dispute, and the fact of the Burgh of Govan, in spite of much strenuous resistance, being now practically divided into two parts by the Cessnock Docks, might very well warrant the Commissioners in demitting their authority. The eastern division of the Burgh has already pronounced for annexation, and will doubtless soon make an unmistakable demand for it. The western portion may hold out without inconvenience a little longer. It must, however, be clear to every open mind in the Commission that its independence as a Burgh can only co-extend with the wants of the City, and particularly of its offspring, the Clyde Navigation Trust. The City authorities are so bound up in the Clyde that they must continue to identify themselves with it as part of the City's being, as indeed its primary organ. On the north side of the river harbour exigencies have not yet been sharply felt, but the day approaches, and cannot be distant, when Partick riverside ground must also be absorbed for public purposes, and it will be extremely pleasant if against that time this territory be freed from the complexities which have attended harbour extension on the south side.

A little more time for reflection and for friendly interchange of views between the City and the Commissioners and residents in the three outstanding Burghs can hardly fail to bring about a union which, it is not for a moment doubtful, will benefit enormously the inhabitants in the Burghs. They are for the most part connected with or dependent on the riverside industries which in the past have had their seasons of deep depression. In such seasons enforced idleness has come to thousands of heads of families, and a strong fraternal tie with the City has been sorely needed.

Can it be doubted that, united to Glasgow with its many and varied industries and large concerns generally, the workmen in the riverside Burghs must be stronger to face a recurrence of such experiences ?

Neither can it be doubted that it will be of great advantage that unoccupied territory within and contiguous to the Burghs is brought within City jurisdiction before being built on. The City authorities have larger territorial interests and necessarily take a wider outlook than bodies dealing with fragmentary territory and out of touch with the central body. More particularly in the matter of main approaches to and connections with the rest of the community would the City see that they were devised on broad and liberal lines.

In short, the outstanding Burghs are from every point of view parts of the body politic of Glasgow. The City recognizes them to be most important parts of itself. It cannot do without them, and meanwhile cannot help, even if it wished, throwing its *Ægis* over them as they stand technically aloof. No distinguishable topographical boundary line separates the City from its Suburbs, both are already united and encompassed in one homogeneous canopy of smoke, the industrial product of City and Burghs in rateable proportion, and the inhabitants of both manifest their close kinship and interest in one another in a thousand practical ways. If only they will contemplate the tranquil espousals consummated with the consenting Burghs and districts, after due experience of the tribulation that makes for lasting happiness, and over the peaceful honeymoon enjoyed and just closing preparatory to the practical duties of a fuller municipal life being entered on, they must be of opinion that they can do no better than follow so excellent and natural an example.

In view of so desirable a consummation to both parties it will be of interest that I tabulate the further territory which the City claims to belong, naturally, to Glasgow in its adequate meaning, and required for its proper industrial

and commercial development and the healthful residential necessities of its inhabitants.

This territory consists of the following:—

	Acreage.	Rental 1890-91.	Population on 5th April, 1891.
Burgh of Govan, - -	1,115	£244,522	61,364
Burgh of Partick, - -	977	172,741	36,538
Burgh of Kinning Park, -	108	57,018	13,679
Govan, Landward, - -	1,598	19,607	1,944
	3,798	£493,888	113,525

When 'conjoined, the City will, upon present rental and population basis, stand thus:—

	Acreage.	Rental.	Population.
Existing City, - - -	6,111	£3,455,510	565,714
Incorporated Burghs and Districts, - - -	5,750	596,645	91,232
Outstanding Burghs, etc., -	3,798	493,888	113,525
	15,659	£4,546,043	770,471



## THE CENSUS OF 1891.

ANOTHER Decennial Census, the tenth in number, and the last of the nineteenth century, was taken on 5th April, 1891, when the population of Glasgow was once more authoritatively enumerated and found to be - 565,714  
 At the preceding census on 3rd April, 1881,  
 the number was - - - - - 511,415

And the advance in the ten years  
 has therefore been, - 54,299  
 Equal to 10·61 per cent.

The distribution over the several Registration Districts of the City was as follows:—

DISTRICT.	Population 1891.	Population 1881.	INCREASE.	DECREASE.
Bridgeton, - -	44,342	39,630	4,712	.....
Camlachie, - -	43,686	37,994	5,692	.....
Dennistoun, - -	55,765	46,118	9,647	.....
Calton, - -	36,154	37,450	.....	1,296
Blackfriars, - -	31,611	33,961	.....	2,350
St. Rollox, - -	48,970	42,490	6,480	.....
Blythswood, - -	29,311	30,521	.....	1,210
Milton, - -	38,733	35,572	3,161	.....
Kelvin, - -	67,634	53,794	13,840	.....
Anderston, - -	42,248	39,006	3,242	.....
Hutchesontown, -	51,681	44,443	7,238	.....
Gorbals, - -	41,611	39,235	2,376	.....
Tradeston, - -	19,500	18,057	1,443	.....
Kinning Park, -	14,468	13,144	1,324	.....
	565,714	511,415	59,155	4,856

Nett Increase in the ten years, - - 54,299



## THE POPULATION ACCORDING TO SEX IN 1891 AND 1881.

DISTRICT.	1891.		1881.	
	Males.	Females.	Males.	Females.
Bridgeton, - -	20,869	23,473	18,379	21,251
Camlachie, - -	21,106	22,580	18,203	19,791
Dennistoun, - -	27,779	27,986	22,812	23,306
Calton, - - -	17,502	18,652	17,734	19,716
Blackfriars, - -	16,245	15,366	16,963	16,998
St. Rollox, - -	24,904	24,066	21,286	21,204
Blythswood, - -	14,584	14,727	14,910	15,611
Milton, - - -	19,505	19,228	17,574	17,998
Kelvin, - - -	31,034	36,600	24,466	29,328
Anderston, - -	21,498	20,750	19,823	19,183
Hutchesontown, -	24,983	26,698	21,434	23,009
Gorbals, - - -	20,720	20,891	19,367	19,868
Tradeston, - -	9,984	9,516	9,007	9,050
Kinning Park, - -	6,942	7,526	6,408	6,736
	277,655	288,059	248,366	263,049
	565,714		511,415	

In other important aspects besides numbers, the census will ultimately reveal the condition of the inhabitants as at census date; but much time is required, under present arrangements, for tabulating these particulars, and by custom they will not be published before 1893. Parliament has limited the time to 21 days in which local authorities may retain the papers, and reckon up the numbers within their bounds. The other aspects of the census are of so much interest, and are so impatiently awaited, that it seems worthy of consideration whether in future, either by a longer local use of the census schedules, or by some other arrangement, the other facts elicited by the census might sooner be tabulated and made known.

It is most satisfactory to find that local official estimates of the population since 1881 have been actually confirmed by the census. A few months before census date,

Dr. Russell estimated the population at - - 567,656  
 and for this year's Edinburgh Almanac  
 (Oliver and Boyd) and independently of Dr.

Russell, I computed it at - - - - 567,792  
 both estimates being based on the number of inhabited  
 dwellings, furnished by our able assessor, Mr. Henry.

It should be explained that on this occasion, differing from 1881, the census was taken when many schools were closed for the Easter recess, a practice not in vogue in 1881. A number of the larger houses were in consequence shut up, and the occupants temporarily removed to coast and country. To take an example easy of ascertainment from the suburb of Kelvinside, no fewer than 69 families of this district had betaken themselves to health resorts over the school holidays, equal to 500 persons, whilst other families had their membership reduced. The same thing happened on an appreciable scale within the city, but to what extent cannot even be guessed. As a rule, it was households of "small" families—using the adjective in its family meaning—that had left the city to swell rural populations.

The reliability of the basis of estimates of the people between census dates is a subject of prime importance in large and expanding communities where the governing body, and others engaged in public work such as School Boards, watch with closest attention and deepest interest the growth of population, and judge of it with reference to the supposed existent number. A true population gauge is therefore of the greatest moment, and it would appear to be pretty closely established. In my last report, and following the reference of my predecessors, I said, "If the last three Census Returns establish anything more clearly than another it is that the average number of inhabitants to a city dwelling is as nearly as may be, 4·80; in 1871 the number was 4·79, and in 1881 it was 4·81. In both instances the inmates of public institutions, hotels, lodging houses, etc., were included in the calculation, and if these be eliminated the average occupants per house is 4·76."

The census now taken confirms entirely this result of the three previous enumerations of the people. Thus, the number of inhabited houses, ascertained by the census, is 117,537, and

Multiplied by 4.76 they give	-	-	-	-	559,476
Add for public institutions, etc.,	-	-	-	-	6,500

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And there is brought out,	-	-	-	-	565,976
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Or within 262 of the actual census population.

It is necessary to point out that the formula of the Registrar General differs materially from local methods of computation, and that it is found inapplicable to large town communities subjected to fluctuations occasioned by the state of trade and other causes. It is still more unsuited as a gauge for an energetic and expanding community like Glasgow, hemmed in by straitened boundaries. The Registrar General's method is to add to a growing population, year by year, within census intervals, one tenth of the increment brought out in the preceding decade. This formula probably approximates to accuracy applied to the whole of Scotland, or to Glasgow in its true and wider meaning, but the following figures demonstrate its unsuitability to Glasgow in its technical sense as adopted by the Registrar General:—

#### CENSUS, 1881.

Actual population of the City, April, 1881,	511,415
Registrar General's estimate, July, 1880,	589,598
Over estimate,	- - 78,183

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#### CENSUS, 1891.

Actual population of the City, April, 1891,	565,714
Registrar General's estimate, July, 1890,	530,208
Under estimate,	- - 35,506

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It will be understood that these observations have no personal reference to the present most capable and courteous holder of the high office of Registrar General for Scotland,

nor to his predecessors in office, who doubtless use a formula prescribed for them for application to all places alike. This formula would approximate to the truth in the first decades of the century, when movement amongst the people was the exception, but now that the world is our oyster, varying circumstances must be taken into account in treating of such energetic communities as occupy the banks of the Clyde.

POPULATION AT EACH DECENNIAL CENSUS SINCE 1801.

Year.	Population.	Increase in Ten Years.	Total Increase per cent. in each Decennary.	Average Annual Increase per cent. in each Decennary.
1801	77,385	—	—	—
1811	100,749	23,364	30·1919	3·0191
1821	147,043	46,294	45·9498	4·5949
1831	202,426	55,383	37·6645	3·7664
1841	255,650	53,224	26·2931	2·6293
1851	329,096	73,446	28·7291	2·8729
1861	395,503	66,407	20·1786	2·0178
1871	477,732	82,229	20·790	2·0790
1881	511,415	33,084	6·9252	0·6925
1891	565,714	54,299	10·6172	1·0617

It thus appears that between the first census and the 10th the increase in the population has been equal to 630 per cent.

POPULATION OF GLASGOW AT PRE-CENSUS DATES.

1610 (7 years after the Plague which seriously reduced the number of citizens), the population was ascertained to be	-	-	7,644
1660, -	-	-	14,678
1688 (the population reduced by religious persecution),	-	-	11,948
1708 (immediately after the Union),	-	-	12,766
1712, -	-	-	13,832
1740, -	-	-	17,034
1755 (including part of suburbs),	-	-	23,546
1763, -	-	-	28,300
1780, -	-	-	42,832
1785, -	-	-	45,889
1791 (including suburbs),	-	-	66,578

## CITY OF GLASGOW IN ITS FULL MEANING.

To the ascertained resident population within city and suburbs there may legitimately be added those who regularly ply their avocations in the city but for the time being reside beyond suburban limits. It has occurred to me to ask returns from the railway companies of the season tickets, of not less than six months duration, issued by them, to enable an approximation to be made. Such returns have been willingly furnished and they show that by the several railways 8,188 season tickets are in use to places beyond the suburbs. Most of those travellers are heads of families in comfortable circumstances, and they may be assumed to average, including domestics, six persons per family; but making allowance for cases where more than one member of a family uses a ticket, and other circumstances, I take the tickets to represent 5 persons each, or in all 40,940 persons, wedded to Glasgow, non-resident for the time, but most of whom are more than likely to return sooner or later within the city's embraces, and all of whom are now identified with it in business.

On these several bases the population of Glasgow in its adequate meaning is as follows:—

City as still existing,	-	-	-	-	565,714
Burghs and districts to be added on 1st November, 1891,	-	-	-	-	91,232
Burghs and districts which have not yet consented to incorporation,	-	-	-	-	113,525
Number dependent on Glasgow but living beyond suburban limits,	-	-	-	-	40,940
Number temporarily at coast and country during easter holidays when census taken, moderately computed at					3,000
In all a population of -					<hr/> 814,411

## OTHER FACTS OF THE CENSUS OF 1891.

Number of separate families in Glasgow, - -	126,422
Number of houses inhabited on 5th April, 1891, -	117,537
Number of houses uninhabited, - - - -	5,342
Number of houses in course of being built, - -	641
Number of rooms with one or more windows, -	275,376

## FAMILIES AND DWELLING-HOUSES IN GLASGOW AT THE LAST FIVE CENSUSES.

Census.	Population.	Separate Families.	Houses Inhabited.	Houses Un-inhabited.	Houses Building.	Percentage of Families beyond Inhabited Houses.
1851	329,096	64,854	63,153	1,547	1,032	2'62
1861	395,503	83,588	82,609	4,002	962	1'17
1871	477,732	106,861	100,876	2,134	1,025	5'60
1881	511,415	112,710	106,238	12,264	377	5'74
1891	565,714	126,422	117,537	5,342	641	7'03

This Table is interesting as showing that the practice amongst the poor of two families living together in one house is on the increase. The practice was found to be largely resorted to in the depressed years, 1878-80; and it would appear as if the temporary expedient was becoming contagious and chronic. It might be highly interesting to learn from the census returns particulars of the families thus living together.

The Table is also interesting as showing that the large surplusage of houses unoccupied at the census of 1881 are being taken up, and the Valuation Tables given further on bring out this fact with much clearness. This is most satisfactory, and offers the cheering prospect of a better time for property and building. Would that builders and dealers in heritage might take the lesson which the past teaches in burning accents, and proceed on safe lines in the future!



## POPULATION OF OTHER TOWNS.—CENSUS 1891.

TOWN.	Inhabitants at Census 1891.	Increase per cent on 1881.
London, - - - - -	4,211,056	10·4
Liverpool, - - - - -	517,951	- 6·3
Manchester, - - - - -	505,343	9·3
Birmingham, - - - - -	429,171	7·1
Leeds, - - - - -	367,506	18·9
Sheffield, - - - - -	324,243	14·0
Bristol, - - - - -	221,665	7·1
Bradford, - - - - -	216,361	11·2
Nottingham, - - - - -	211,989	13·6
West Ham, - - - - -	204,902	58·9
Kingston-upon-Hull, - - - - -	199,991	20·7
Salford, - - - - -	198,136	12·4
Newcastle-on-Tyne, - - - - -	186,345	28·2
Portsmouth, - - - - -	159,255	24·4
Dublin and Suburbs, - - - - -	352,090	3·8
Belfast, - - - - -	255,896	23·0
Edinburgh, - - - - -	261,261	11·46

Some of these towns have had their boundaries enlarged since 1881—notably Manchester, Bradford, Kingston, and Preston—but in striking the percentages of increase the population occupying the extended area at that date is taken into account. It is seen that there has been substantial, in some cases remarkable advance in population in all the towns with the exception of Liverpool, where the population has declined by  $6\frac{1}{4}$  per cent. in the last ten years. But this by no means implies a falling-off in prosperity but the contrary. Liverpool is suffering from the infliction of straitened boundaries and business exigencies are pressing the population over the border. While the city *per se* has declined 6·3 per cent., the entire urban area has gone up 5·9 per cent. since 1881. Manchester is another case in point. At the census of 1881 it showed a decline of 2·8 per cent. over 1871 but now, with its boundaries adequately extended, it exhibits an increase in the last ten years of 9·3 per cent.

NATURAL INCREASE OF THE POPULATION WITHIN THE  
CITY BOUNDARIES.

1856-1890.

Years.	Births.	Deaths.	Natural Increase.	
1856	15,243	10,280	4,963	22,479
1857	15,807	11,371	4,436	
1858	15,897	11,469	4,428	
1859	15,946	10,832	5,114	
1860	15,953	12,415	3,538	
1861	16,536	10,932	5,604	
1862	16,397	11,569	4,828	
1863	16,988	13,327	3,661	
1864	17,434	13,674	3,760	
1865	17,928	13,912	4,016	
1866	18,287	12,826	5,461	46,149
1867	18,356	12,578	5,778	
1868	18,609	13,825	4,784	
1869	18,490	15,640	2,850	
1870	19,359	13,952	5,407	
1871	18,856	15,785	3,071	
1872	20,144	14,047	6,097	
1873	19,493	14,494	4,999	
1874	20,038	15,841	4,197	
1875	20,828	15,357	5,471	
1876	20,963	13,759	7,204	57,572
1877	21,092	13,823	7,269	
1878	20,614	14,148	6,466	
1879	19,684	12,493	7,191	
1880	18,892	13,285	5,607	
1881	19,077	12,902	6,175	
1882	19,691	13,032	6,659	
1883	19,868	14,562	5,306	
1884	20,553	13,929	6,624	
1885	19,861	13,492	6,369	
1886	19,862	13,099	6,763	64,995
1887	19,328	12,135	7,193	
1888	19,314	11,675	7,639	
1889	19,488	13,127	6,361	
1890	19,285	13,379	5,906	
Total of 35 years,	654,161	462,966	191,195	191,195
Average of 35 years,	18,690	13,228	5,462	5,462



“Natural increase” of population is the excess of Births over Deaths within a given area, irrespective altogether of increase or decrease in numbers, which may be caused by the movements of persons into or out of the area. It will be seen that in the last two decades the natural growth exceeded the actual increase as ascertained at the census by no fewer than 35,184 persons. This short-coming admits of the easy explanation that the straitened boundaries of the city proper have been long disregarded by the citizens. To give a broad view of the natural increase of Glasgow, I have made the Table extend backwards to 1856, when compulsory registration was introduced.

The Table also exhibits deviations in the birth rate, death rate, and balance to the good year by year, which those curious on the subject may find full of interest.

## BIRTHS, MARRIAGES, AND DEATHS.

HAVING given a view of the growth of the population under different aspects, I come now to supply details of the births, marriages and deaths of the past six years. The tables are numerous and may at first sight appear redundant, but they do no more than fulfil requirements. They also preserve the continuity of detailed facts that these local records are designed to elicit and furnish.

It is singular to find that the births, which in 1885 and 1886 were 19,861 per annum, had a drop in the next two years of about 550, and in 1890 of nearly 600, and that notwithstanding an advancing population.

The disproportion of the sexes too varies considerably one year with another—thus the preponderance of male births in 1885 was 629 and in 1889 it was only 387.

## SUMMARY OF BIRTHS IN EACH REGISTRATION DISTRICT.

DISTINGUISHING THE LEGITIMATE FROM THE  
ILLEGITIMATE BIRTHS.

1885.

DISTRICTS.	TOTAL BIRTHS.			LEGITIMATE.		ILLEGITIMATE.	
	Males.	Females	Total.	Number.	Per Cent.	Number	Per Cent.
Bridgeton, -	847	789	1,636	1,546	94'5	90	5'5
Camlachie, -	842	830	1,672	1,568	93'8	104	6'2
Dennistoun, -	1,004	923	1,927	1,800	93'4	127	6'6
Calton, -	730	666	1,396	1,293	92'6	103	7'4
Blackfriars, -	632	635	1,267	906	71'4	361	28'6
St. Rollox, -	873	877	1,750	1,605	91'7	145	8'3
Blythswood, -	379	357	736	664	90'2	72	9'8
Milton, -	822	709	1,531	1,387	90'6	144	9'4
Kelvin, -	886	874	1,760	1,679	95'4	81	4'6
Anderston, -	763	730	1,493	1,378	92'3	115	7'7
Hutchesontown, -	1,157	1,069	2,226	2,102	94'4	124	5'6
Gorbals, -	712	608	1,320	1,233	93'4	87	6'6
Tradeston, -	337	317	654	608	93'3	46	6'7
Kinning Park, -	261	232	493	462	93'7	31	6'3
	10,245	9,616	19,861	18,231	91'5	1,630	8'5

1886.

Bridgeton, -	888	824	1,712	1,612	94'2	100	5'8
Camlachie, -	861	793	1,654	1,557	94'1	97	5'9
Dennistoun, -	968	939	1,907	1,780	93'3	127	6'7
Calton, -	650	706	1,356	1,245	91'8	111	8'2
Blackfriars, -	646	593	1,239	898	72'5	341	27'5
St. Rollox, -	897	850	1,747	1,629	93'2	118	6'8
Blythswood, -	378	344	722	644	89'2	78	10'8
Milton, -	796	789	1,585	1,436	90'6	149	9'4
Kelvin, -	899	857	1,756	1,679	95'6	77	4'4
Anderston, -	771	741	1,512	1,411	93'3	101	6'7
Hutchesontown, -	1,169	1,039	2,208	2,094	94'8	114	5'2
Gorbals, -	668	629	1,297	1,200	92'5	97	7'5
Tradeston, -	362	308	670	610	91'0	60	9'0
Kinning Park, -	233	263	496	472	95'2	24	4'8
	10,186	9,675	19,861	18,267	91'5	1,594	8'5

## SUMMARY OF BIRTHS IN EACH REGISTRATION DISTRICT.—CONTINUED.

1887.

DISTRICTS.	TOTAL BIRTHS.			LEGITIMATE.		ILLEGITIMATE.	
	Males.	Females	Total.	Number.	Per Cent.	Number	Per Cent.
Bridgeton, -	823	822	1,645	1,547	94'0	98	6'0
Camlachie, -	811	823	1,634	1,522	93'1	112	6'9
Dennistoun, -	976	886	1,862	1,752	94'1	110	5'9
Calton, -	692	637	1,329	1,220	91'8	109	8'2
Blackfriars, -	650	606	1,256	895	71'3	361	28'7
St. Rollox, -	866	832	1,698	1,566	92'2	132	7'8
Blythswood, -	357	331	688	603	87'6	85	12'4
Milton, -	735	720	1,455	1,320	90'7	135	9'3
Kelvin, -	904	828	1,732	1,647	95'1	85	4'9
Anderston, -	799	728	1,527	1,442	94'4	85	5'6
Hutchesontown, -	1,100	1,094	2,194	2,082	94'9	112	5'1
Gorbals, -	618	619	1,237	1,135	91'8	102	8'2
Tradeston, -	350	305	655	603	92'1	52	7'9
Kinning Park, -	218	198	416	389	93'5	27	6'5
	9,899	9,429	19,328	17,723	91'7	1,605	8'3

1888.

Bridgeton, -	887	793	1,680	1,605	95'5	75	4'5
Camlachie, -	842	846	1,688	1,564	92'7	124	7'3
Dennistoun, -	981	909	1,890	1,777	94'0	113	6'0
Calton, -	648	642	1,290	1,195	92'7	95	7'3
Blackfriars, -	661	591	1,252	890	71'1	362	28'9
St. Rollox, -	897	872	1,769	1,645	93'0	124	7'0
Blythswood, -	375	332	707	619	87'6	88	12'4
Milton, -	761	701	1,462	1,331	91'0	131	9'0
Kelvin, -	938	847	1,785	1,702	95'4	83	4'6
Anderston, -	737	731	1,468	1,388	94'6	80	5'4
Hutchesontown, -	1,031	1,013	2,044	1,905	93'2	139	6'8
Gorbals, -	631	564	1,195	1,111	93'0	84	7'0
Tradeston, -	327	320	647	609	94'1	38	5'9
Kinning Park, -	227	205	432	400	92'6	32	7'4
	9,943	9,366	19,309	17,741	91'4	1,568	8'6

## SUMMARY OF BIRTHS IN EACH REGISTRATION DISTRICT.—CONTINUED.

## 1889.

DISTRICTS.	TOTAL BIRTHS.			LEGITIMATE.		ILLEGITIMATE	
	Males.	Females	Total.	Number.	Per Cent.	Per Cent.	Number
Bridgeton, -	793	824	1,617	1,544	95.5	73	4.5
Camlachie, -	868	839	1,707	1,621	95.0	86	5.0
Dennistoun, -	957	917	1,874	1,762	94.0	112	6.0
Calton, -	642	667	1,309	1,204	92.0	105	8.0
Blackfriars, -	670	569	1,239	917	74.0	322	26.0
St. Rollox, -	864	866	1,730	1,630	94.2	100	5.8
Blythswood, -	349	348	697	609	87.4	88	12.6
Milton, -	733	675	1,408	1,284	91.2	124	8.8
Kelvin, -	921	925	1,846	1,763	95.5	83	4.5
Anderston, -	766	783	1,549	1,450	93.6	99	6.4
Hutchesontown, -	1,138	1,018	2,156	2,050	95.1	106	4.9
Gorbals, -	680	629	1,309	1,199	91.6	110	8.4
Tradeston, -	344	296	640	594	92.8	46	7.2
Kinning Park, -	217	199	416	386	92.8	30	7.2
	9,942	9,555	19,497	18,013	91.8	1,484	8.2

## 1890.

Bridgeton, -	840	870	1,710	1,634	95.6	76	4.4
Camlachie, -	898	846	1,744	1,662	95.3	82	4.7
Dennistoun, -	959	958	1,917	1,814	94.6	103	5.4
Calton, -	580	601	1,181	1,086	92.0	95	8.0
Blackfriars, -	616	598	1,214	849	69.9	365	30.1
St. Rollox, -	904	818	1,722	1,604	93.2	118	6.8
Blythswood, -	361	322	683	608	89.0	75	11.0
Milton, -	733	683	1,416	1,306	92.2	110	7.8
Kelvin, -	913	876	1,789	1,706	95.4	83	4.6
Anderston, -	781	733	1,514	1,413	93.3	101	6.7
Hutchesontown, -	1,078	1,047	2,125	2,016	94.8	109	5.2
Gorbals, -	631	585	1,216	1,129	92.9	87	7.1
Tradeston, -	327	267	594	563	94.8	31	5.2
Kinning Park, -	240	217	457	426	93.2	31	6.8
	9,861	9,421	19,282	17,816	91.9	1,466	8.1

Inappreciable differences occur in the Births and Deaths Tables as given in "Months" and in "Registration Districts,"—thus for the year 1885 the difference in Births is 8 ; for 1886, 1 ; for 1887, 0 ; for 1888, 5 ; for 1889, 9 ; and 1890, 3.

## ILLEGITIMACY.

As regards illegitimacy, which varies but little one year with another, it should be understood that Glasgow is debited with about  $1\frac{1}{2}$  per cent. more than is its due to the relief of a wide surrounding district from which unfortunates come to conceal their condition.

## VACCINATIONS.

## SUMMARY OF VACCINATIONS DURING THE SIX YEARS.

1884-1889.

The Vaccination Returns are necessarily one year later of being prepared than the Birth Returns.

	1884.	1885.	1886.	1887.	1888.	1889.
Successfully Vaccinated,	17,691	17,189	17,243	16,601	16,537	16,477
Vaccination Postponed,	90	129	101	116	111	137
Cases of Constitutional } Insusceptibility, . . }	12	29	19	17	31	47
Cases of Insusceptibility } on the ground of } Previous Successful } Vaccination, . . }	109	96	123	226	221	154
Died before Vaccination,	2,235	2,004	1,964	1,903	1,953	2,088
Removed from District } before Vaccination, or } otherwise unaccounted } for, . . . . }	415	400	406	464	468	597
TOTALS,	20,552	19,847	19,856	19,327	19,321	19,500

The working of the Vaccination Acts in Glasgow during the past six years is illustrated by the foregoing Table. Obedience to the Act is practically universal, and insusceptibility to vaccine treatment is of rare occurrence. Many children are cut off before vaccination age.

## MARRIAGES RECORDED DURING EACH MONTH OF TEN YEARS.

1881-1890.

MONTH.	1881.	1882.	1883.	1884.	1885.	1886.
January, -	747	758	764	676	660	626
February, -	219	266	248	278	247	238
March, -	317	331	286	314	319	338
April, -	329	378	491	478	385	290
May, - -	257	255	227	180	205	257
June, - -	494	571	561	622	593	563
July, - -	587	646	680	630	510	562
August, -	287	238	258	246	234	244
September, -	328	278	324	344	286	295
October, -	400	389	389	337	331	270
November, -	391	435	447	394	421	430
December, -	413	436	523	435	371	365
TOTALS, -	4,769	4,981	5,198	4,934	4,562	4,478

MONTH.	1887.	1888.	1889.	1890.	Total Marriages for Ten Years.
January, -	643	643	590	708	6,815
February, -	250	290	296	267	2,599
March, -	295	240	319	359	3,118
April, - -	304	421	477	465	4,018
May, - -	233	216	197	202	2,229
June, - -	536	527	624	749	5,840
July, - -	550	633	660	735	6,193
August, -	259	247	282	277	2,572
September, -	285	325	346	385	3,196
October, -	386	368	335	336	3,541
November, -	374	439	434	445	4,210
December, -	397	504	524	505	4,473
TOTALS, -	4,512	4,853	5,084	5,433	48,804

Average for Ten Years 4,880 a-year.

The matrimonial barometer continues to reflect the condition of the city; indeed there is no better index to glance

back upon than the marriage register if one wants to learn how trade and employment stood in past years. The year 1883 was prosperous, and the marriages numbered 5,200 ; but 1884, 5, and 6 were depressed, and they went down to 4,500. Last year the register indicated 5,433, employment being good and better wages going.

PERCENTAGE OF PARTIES CONTRACTING MARRIAGE WHO SIGNED  
MARRIAGE SCHEDULE BY WRITING AND BY MARK.

	GLASGOW.				EDINBURGH.			
	MEN.		WOMEN.		MEN.		WOMEN.	
	By Writing.	By Mark.	By Writing.	By Mark.	By Writing.	By Mark.	By Writing.	By Mark.
1875	86·94	13·06	73·59	26·41	96·24	3·76	92·96	7·04
1876	88·53	11·47	74·07	25·93	97·45	2·55	94·36	5·64
1877	87·57	12·43	75·15	24·85	97·56	2·44	94·59	5·41
1878	89·67	10·33	75·14	24·86	97·06	2·94	93·78	6·22
1879	88·31	11·69	74·37	25·63	97·53	2·47	94·96	5·04
1880	88·86	11·14	73·87	26·13	97·28	2·72	95·11	4·89
1881	89·33	10·67	76·34	23·66	97·78	2·22	96·01	3·99
1882	89·39	10·61	78·53	21·47	98·16	1·84	95·85	4·15
1883	90·84	9·16	80·34	19·66	97·57	2·43	96·00	4·00
1884	90·73	9·27	82·48	17·52	97·65	2·35	96·06	3·94
1885	91·75	8·25	84·99	15·01	97·87	2·13	96·67	3·33
1886	92·79	7·21	87·23	12·77	98·51	1·49	96·16	3·84
1887	93·29	6·71	86·31	13·69	98·38	1·62	97·55	2·45
1888	93·69	6·31	88·25	11·75	98·66	1·34	97·64	2·36

This Table shows in a practical way that education, in an elementary degree at least, is now possessed by the mass of marriageable persons in our city. In 1872, when the Scotch Education Act was passed, 15·78 men and 32 women of every hundred entering upon marriage were unable to subscribe the marriage schedule ; but, in 1888, the proportions are found reduced to 6·31 men and 11·75 women. In another decade, with education at once com-



pulsory and free, it will be a curiosity of the matrimonial register to drop upon an illiterate.

I have introduced Edinburgh into the Table, and it shows that to the extent of the three R's, education was more general in the capital than here, under the voluntary system. To some extent the numerous free and wealthy educational foundations in Edinburgh must account for the disparity between the two cities; but the chief explanation doubtless lies in the fact, that Glasgow, with its attractive port and many industries, has been drawing to it in the last four or five decades a large contingent of adult illiterates. Eliminating "foreign" blood and keeping to the purely lowland Scotch element, there could be little difference to mark at any era between the two towns.

The value of compulsory education is being year by year recognized in fuller measure, and it is Lord Young we have to thank for an act that, in spite of much opposition and many failures because of its compulsory clauses, was bravely prosecuted and carried, and is already engrafted on the national conscience as perhaps the wisest measure of the nineteenth century. To this act we owe the position we are steadily attaining to on the marriage register as on every other register in which the masses have a place. Had Lord Young gone beyond the compulsory and promoted "free" education it is hardly doubtful what the fate of his Education Bill would have been in 1872, and most improbable is it that his name would ever have been associated with the passing of so fundamentally important a measure.



## MAY MARRIAGES.

The marriages in the month of May in the past ten years average, according to the Registers, 223 per annum; but it has to be pointed out that this is the number of entries recorded in the books within the month of May, and that a considerable proportion of the entries are of marriages celebrated in the last two or three days of April. The *actual* marriages in May, 1891, in the whole of the Registration districts, numbered 145, as against a monthly average for the other eleven months of the year of 423. The Scotch superstition does not abate, but is rather on the increase, that ascribes evil fortune or “bad luck” to the contracting parties to May marriages. The Scotch proverb, “March birds are aye peeping, May brides are aye weeping,” is of very early Roman origin, and Scotland in importing the Roman Civil Code, including its marriage laws, seems to have also imported this superstition. On this point an esteemed student of classical literature, Dr Paton of the High School, wrote me on 5th December, 1885, as follows:—“On page “22 (Statistics, 1885) regarding marriages in May you say “‘which an ill-defined but deep-rooted superstition regards “‘as unlucky.’ It is interesting to find that the same superstition prevailed among the Romans, for Ovid in the “V. Book of the Fasti, line 489, says:—

“‘Hac quoque de causa, si te proverbia tangunt,

“‘Mense malas Maio nubere volgus ait.’

“For this reason, too, if proverbs have any weight with “you, the common people say that ‘bad prove the wives “‘that are married in May,’—but which an old translator “more *charitably for the wives*, renders :

“‘And let me here remark, the vulgar say :

“‘Unlucky are the wives that wed in May.’”

## AGES AT MARRIAGE STATED IN PER

## I.—IN GLASGOW AND

YEAR.	15-20.		20-25.		25-30.	
	Men.	Women.	Men.	Women.	Men.	Women.
1879	3'51	14'22	39'14	45'82	29'99	21'61
1880	3'24	14'07	38'24	46'13	30'04	22'30
1881	3'37	13'56	38'79	46'30	30'02	22'34
1882	4'13	15'04	38'34	45'83	30'35	22'14
1883	3'68	14'50	38'74	45'90	31'02	22'89
1884	3'79	14'37	37'00	44'71	30'57	22'92
1885	3'51	13'08	36'49	44'97	31'12	23'72
1886	3'01	12'44	35'42	45'35	32'23	24'38
1887	3'11	12'55	34'82	43'93	31'53	25'24
1888	2'92	12'59	35'97	45'44	31'83	24'20
Average, - -	3'43	13'65	37'29	45'44	30'87	23'17

## II.—IN MAINLAND RURAL

YEAR.	20-25.		15-20.	
	Men.	Women.	Men.	Women.
1879	36'45	44'55	2'87	12'33
1880	37'20	45'93	2'16	11'38
1881	36'37	46'10	1'97	11'61
1882	35'17	45'95	1'86	10'86
1883	35'34	45'07	1'97	11'20
1884	35'78	45'34	2'10	11'31
1885	35'58	46'41	2'34	10'55
1886	33'73	45'02	1'95	10'32
1887	34'18	44'91	1'92	10'33
1888	32'35	44'59	1'72	9'44
Average, - - -	35'21	45'39	2'09	10'93

## III.—IN INSULAR RURAL

1879	1'54	6'35	19'72	39'28
1880	0'56	6'92	22'06	39'25
1881	0'39	5'52	16'96	37'48
1882	1'28	5'29	16'06	39'60
1883	0'57	6'29	19'05	37'90
1884	1'02	6'62	20'20	39'39
1885	1'13	5'28	20'19	40'94
1886	2'10	6'29	21'18	43'19
1887	1'36	4'52	15'61	35'07
1888	1'66	4'97	21'33	34'83
Average, - - -	1'16	5'80	19'24	38'69

## CENTAGES TO THE TOTAL MARRIAGES.

## OTHER LARGE TOWNS.

30-35.		35-40.		40-45.		45-50.		50 and above.	
Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
11'11	8'25	6'61	5'14	3'58	2'70	2'86	1'34	3'20	0'92
12'02	7'62	6'99	4'90	3'98	2'45	2'12	1'41	3'37	1'12
12'05	8'14	6'75	4'77	3'67	2'49	2'13	1'50	3'22	0'90
11'96	7'76	6'07	4'52	3'82	2'47	2'39	1'43	2'94	0'81
11'93	7'79	6'00	4'48	3'71	2'38	2'07	1'27	2'85	0'79
12'99	8'33	6'34	4'58	3'82	2'71	2'36	1'32	3'13	1'06
12'77	8'61	6'79	4'62	3'64	2'47	2'57	1'42	3'11	1'11
12'97	8'29	6'96	4'52	3'97	2'68	2'43	1'48	3'01	0'86
13'91	8'63	7'25	4'44	3'69	2'58	2'56	1'64	3'13	0'99
13'78	8'36	6'24	4'38	3'65	2'55	2'51	1'34	3'10	1'14
12'55	8'17	6'60	4'64	3'75	2'55	2'40	1'41	3'11	0'97

## DISTRICTS OF SCOTLAND.

25-30.		30-35.		35 years and upwards.	
Men.	Women.	Men.	Women.	Men.	Women.
31'68	25'63	13'13	8'89	15'87	8'60
31'13	24'60	13'74	9'27	15'77	8'82
32'30	25'67	13'39	8'30	15'97	8'32
34'01	25'86	13'07	9'16	15'89	8'17
33'31	26'73	13'72	9'22	15'66	7'78
33'62	25'76	13'38	9'73	15'12	7'86
34'25	26'54	12'64	8'76	15'19	7'74
34'13	27'47	14'18	8'74	16'01	8'45
33'18	27'85	14'57	9'16	16'15	7'75
34'24	27'53	15'33	10'06	16'36	8'38
33'18	26'36	13'72	9'13	15'80	8'19

## DISTRICTS OF SCOTLAND.

32'79	32'25	20'58	12'18	25'37	9'94
35'33	33'83	19'82	9'72	22'23	10'28
34'92	34'91	23'08	14'01	24'65	8'08
35'40	32'48	25'18	13'14	22'08	9'49
37'52	36'00	21'71	12'19	21'15	7'62
35'99	34'29	21'56	11'21	21'23	8'49
35'47	34'91	21'70	9'62	21'51	9'25
33'33	31'66	20'34	11'74	23'05	7'12
37'57	37'56	23'07	14'71	22'39	8'14
31'28	34'60	21'33	15'17	24'40	10'43
34'96	34'25	21'84	12'37	22'81	8'88

The foregoing Tables illustrate with definiteness the periods of life when the bond of wedlock is entered into by men and women in town and country. To give breadth to them I have, at considerable trouble, introduced ten successive years. It is seen that in all the spheres of city, rural, and island life women enter upon marriage in much greater numbers than men before attaining to 20 years of age. In the cities the proportion of women to men marrying below 20 is as *four* to *one*, and in the rural districts and islands it is as *five* to *one*. The explanation of this inequality doubtless is at least twofold, that the men are restrained by the responsibility laid on them to provide a suitable home before espousal, or adopting Cowper's advice (given to, but now as in the Bachelor Poet's day, not universally esteemed by the fair sex), they (the men) must "choose not alone a proper mate *but proper time* to marry"; and parents are probably still more thoughtful in seeing that the suitor for their daughter's affections has counted the cost, and is provided with the ways and means to raise an independent roof-tree. This position, as a rule, is not reached till 20 years are past, and when attained it is seen that the choice of a life partner most frequently falls on one younger than himself.

Again the Tables show very markedly that proclivity to early marriage is more common in towns than in sparsely populated districts—thus for every *seven* men in towns found marrying below the age of 20 there are *four* in the country and *two* in the islands who follow their immature example. The reason for this disparity doubtless is that town youths reach a settled wage-earning position sooner than in agricultural and fishing districts and have a freer hand, or fancy they have, to take the step described by worthy Dr. Runciman of St. Andrew's parish as carrying with it a "blessing to many, a curse to some, and a venture to all."

## MARRIAGES ACCORDING TO DENOMINATIONAL RITES.

The Registrar General has gone into the total marriages in Scotland for the 34 years, 1855-1888, to ascertain the proportions celebrated according to denominational rites, and I give the results in the following Table. I have also introduced into the Table the marriages in Glasgow in the four years, 1885-88, according to the same denominational rites :—

Established Church, - - - - -	45'56
Free Church, - - - - -	22'29
United Presbyterian Church, - - - - -	13'18
Roman Catholic Church, - - - - -	9'26
Episcopal Church, - - - - -	2'37
Other Denominations, - - - - -	6'10
Denomination not ascertained, - - - - -	0'27
Irregular Marriages, - - - - -	0'97
	<hr/>
	100'00
	<hr/>

IN GLASGOW IN THE FOUR YEARS 1885-1888 INCLUSIVE  
THE PROPORTIONS WERE:—

	1885-88.
Established Church, - - - - -	34'86
Free Church, - - - - -	16'96
United Presbyterian Church, - - - - -	14'20
Roman Catholic Church, - - - - -	15'70
Episcopal Church, - - - - -	2'61
Other Denominations, - - - - -	9'86
Irregular Marriages, - - - - -	5'81
	<hr/>
	100'00
	<hr/>

## MARRIAGE NOTICE (SCOTLAND) ACT, 1878, 41 AND 42 VICT., CAP. 43.

## RETURN OF MARRIAGES REGISTERED IN THE YEARS 1884 AND 1890.

DISTRICT.	REGULAR MARRIAGES.				IRREGULAR MARRIAGES.		TOTAL.	
	After Proclamation of Banns.		After Publication at Registrar's Office.		After Banns and Publication.		On Sheriff's Warrant.	
	1884.	1890.	1884.	1890.	1884.	1890.	1884.	1890.
Anderston, -	129	102	194	307	8	13	20	351
Blackfriars, -	64	58	86	121	4	4	78	232
Blythswood, -	227	274	215	213	8	16	47	497
Bridgeton, -	193	154	140	199	3	5	8	344
Calton, -	218	233	150	199	4	3	372	364
Camlaehie, -	120	101	107	181	3	1	7	438
Dennistoun, -	257	259	251	268	5	5	237	301
Gorbals, -	261	321	377	235	4	6	6	519
Hutchesontown, -	94	84	179	160	—	6	11	653
Kelvin, -	284	244	226	269	8	11	14	287
Kinning Park, -	44	156	24	148	2	14	29	547
Milton, -	78	68	206	236	9	2	9	79
St. Rollox, -	171	117	221	215	7	7	11	304
Tradeston, -	64	70	25	59	3	2	12	411
Totals, -	2,204	2,241	2,401	2,810	68	95	261	4,934
								5,715*

\* This total is 282 above the actual marriages within the city proper in 1890, accounted for by two or three of the registrars including suburban cases which I have not time to get rectified; but the proportions are not materially affected by this difference.

The foregoing Table exhibits the extent to which the Marriage Notice (Scotland) Act, 1878, introduced by Dr. Cameron, has been taken advantage of in Glasgow. In 1879 publication at the Registrar's Office was adopted in the case of 1,642 marriages as against 2,384 proclamations in church. In 1884, publications had risen to 2,401 and proclamations had declined to 2,204, and in 1890 the publications were 2,810 and the proclamations 2,241.

It is further made manifest by the Table that irregular marriages are vastly on the increase, probably occasioned by contracting parties to marriages getting acquainted with the simple, unexciting, and less expensive formulæ gone through before the Registrar and Sheriff. In 1879 the irregular marriages were 129; in 1884 they numbered 261; and in 1890 they had attained to 569.



THE MORTALITY OF GLASGOW RECORDED DURING EACH MONTH AND EACH  
HALF YEAR OF THE TEN YEARS, 1881-1890.

	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	TOTAL.	Average of the 10 Years.
January, -	1,583	1,090	1,383	1,122	1,512	1,153	1,316	1,128	1,214	1,264	12,765	1,277
February, -	1,205	1,033	1,222	1,083	1,170	1,120	1,008	1,084	1,078	1,188	11,191	1,119
March, -	1,231	1,098	1,469	1,123	1,341	1,441	1,269	1,223	1,286	1,258	12,739	1,274
April, -	1,128	1,080	1,430	1,171	1,206	1,058	1,091	1,018	1,286	1,293	11,761	1,176
May, -	1,077	1,209	1,390	1,165	1,097	1,157	1,038	1,054	1,209	1,183	11,579	1,158
June, -	994	1,011	1,287	1,068	1,058	1,021	918	950	942	1,118	10,367	1,037
Total of first half of year,	7,218	6,521	8,181	6,732	7,384	6,950	6,640	6,457	7,015	7,304	70,402	7,040
July, -	900	1,006	1,078	1,124	974	932	802	848	1,050	989	10,703	1,070
August, -	969	912	1,095	1,081	1,063	890	847	813	903	887	8,660	866
September, -	818	973	952	1,079	851	930	795	763	855	993	9,009	901
October, -	1,008	1,045	1,021	1,114	952	986	938	947	1,021	998	10,030	1,003
November, -	954	1,145	1,154	1,194	1,111	1,111	1,023	844	1,012	989	10,337	1,034
December, -	1,035	1,430	1,081	1,605	1,151	1,300	1,083	1,003	1,271	1,219	12,178	1,218
Total of second half of year,	5,684	6,511	6,381	7,197	6,102	6,149	5,488	5,218	6,112	6,075	60,917	6,092
Totals, -	12,902	13,032	14,562	13,929	13,486	13,099	12,128	11,675	13,127	13,379	131,319	13,132



This Table of the total mortality of the city in the last ten years exhibits, when compared with the preceding decade, most gratifying, in truth remarkable results, touching the health of the people of Glasgow, and is eloquent testimony to the success of the great municipal work carried out by the City Improvement Trustees in breaking up the dense and foetid closes in the old and central districts of the city, of the sanitary conditions enforced by the department on health, and of the drastic measures applied for the arrest of infectious disorders.

In the decade 1871-80, with a population averaging 494,574, the deaths per annum were - -	14,303
And in the last decade 1881-1890, when the population averaged 537,000, the yearly number of deaths was - - - - -	13,132
<hr/>	
Giving a diminution per annum to the credit of last decade of - - - - -	1,171
Add for the difference in population, - - -	100
<hr/>	
And we have an annual saving in lives of - -	<u>1,271</u>

Taking the same two decades by quinquennial periods the results are brought out thus:—

1871-75	Population, 495,000	Deaths, 15,105
1876-80	„ 505,000	„ 13,501
1881-85	„ 524,000	„ 13,582
1886-90	„ 550,000	„ 12,682

The feature previously noticed that the first six months of the year is chargeable as a rule with a greater proportion of the annual mortality than the last six months is again in evidence, but two exceptions appear in the last decade, 1884 and 1889, when the rule was reversed. In 1874 also the rule was broken. Doubtless the lower and biting temperature of spring accounts for the disproportion—cutting off many weakened by diseases of the lungs and respiratory organs; and aged persons whose blood circulates sluggishly are particularly sensitive to the east wind.

## COMPREHENSIVE SUMMARY OF BIRTHS, DEATHS,

**1885.**

MONTHS.	BIRTHS.			MARRIAGES.
	Males.	Females.	Total.	
January, - -	928	834	1,762	660
February, - -	783	737	1,520	247
March, - - -	936	811	1,747	319
April, - - -	900	877	1,777	385
May, - - - -	826	801	1,627	205
June, - - - -	877	828	1,705	593
July, - - - -	881	847	1,728	510
August, - - -	798	786	1,584	234
September, - -	813	720	1,533	286
October, - - -	855	782	1,637	331
November, - - -	794	758	1,552	421
December, - - -	846	835	1,681	371
	10,237	9,616	19,853	4,562

**1886.**

January, - -	893	821	1,714	626
February, - -	814	750	1,564	238
March, - - -	939	917	1,856	338
April, - - -	947	841	1,788	290
May, - - - -	889	824	1,713	257
June, - - - -	849	879	1,728	563
July, - - - -	841	825	1,666	562
August, - - -	838	798	1,636	244
September, - -	796	752	1,548	295
October, - - -	814	796	1,610	270
November, - - -	771	696	1,467	430
December, - - -	795	777	1,572	365
	10,186	9,676	19,862	4,478

## AND MARRIAGES REGISTERED IN EACH MONTH.

1885.

DEATHS.						
Males.	Females.	Total.	0 to 5 Years.	5 to 20 Years.	20 to 60 Years.	60 and upwards.
790	722	1,512	708	113	453	238
571	599	1,170	553	111	342	164
690	651	1,341	639	114	399	189
645	561	1,206	578	112	365	151
567	530	1,097	497	131	324	145
547	511	1,058	490	117	309	142
485	489	974	417	126	305	126
559	504	1,063	520	117	292	134
426	425	851	359	104	271	117
479	473	952	412	77	327	136
562	549	1,111	500	99	358	154
565	586	1,151	461	123	383	184
6,886	6,600	13,486	6,134	1,344	4,128	1,880

1886.

574	579	1,153	440	107	398	208
568	552	1,120	429	112	371	208
721	720	1,441	523	140	475	303
514	544	1,058	408	118	356	176
619	538	1,157	484	125	398	150
515	506	1,021	422	123	337	139
467	465	932	397	109	270	156
456	434	890	417	113	257	103
477	453	930	446	95	272	117
485	501	986	479	96	290	121
582	529	1,111	551	105	303	152
652	648	1,300	598	126	401	175
6,630	6,469	13,099	5,594	1,369	4,128	2,008

## COMPREHENSIVE SUMMARY OF BIRTHS, DEATHS,

1887.

MONTHS.	BIRTHS.			MARRIAGES.
	Males.	Females.	Total.	
January, - -	846	809	1,655	643
February, - -	742	709	1,451	250
March, - - -	913	866	1,779	295
April, - - -	864	790	1,654	304
May, - - -	920	829	1,749	233
June, - - -	873	828	1,701	536
July, - - -	802	822	1,624	550
August, - - -	797	814	1,611	259
September, - -	736	729	1,465	285
October, - - -	826	803	1,629	386
November, - -	802	721	1,523	374
December, - -	777	710	1,487	397
	9,898	9,430	19,328	4,512

1888.

January, - -	852	796	1,648	643
February, - -	805	767	1,572	290
March, - - -	835	777	1,612	240
April, - - -	857	833	1,690	421
May, - - -	883	804	1,687	216
June, - - -	883	777	1,660	527
July, - - -	873	821	1,694	633
August, - - -	805	824	1,629	247
September, - -	741	685	1,426	325
October, - - -	847	828	1,675	368
November, - -	799	729	1,528	439
December, - -	773	720	1,493	504
	9,953	9,361	19,314	4,853

## AND MARRIAGES REGISTERED IN EACH MONTH.

1887.

DEATHS.						
Males.	Females.	Total.	0 to 5 Years.	5 to 20 Years.	20 to 60 Years	60 and upwards.
640	676	1,316	576	104	428	208
535	473	1,008	460	112	277	159
621	648	1,269	579	104	373	213
555	536	1,091	465	107	369	150
521	517	1,038	478	113	295	152
473	445	918	402	106	298	112
406	396	802	356	89	253	104
412	435	847	351	94	280	122
407	388	795	321	71	269	134
477	461	938	397	86	305	150
523	500	1,023	473	99	303	148
539	544	1,083	484	90	326	183
6,109	6,019	12,128	5,342	1,175	3,776	1,835

1888.

570	558	1,128	437	87	391	213
535	549	1,084	423	101	355	205
603	620	1,223	502	146	381	194
524	494	1,018	393	96	326	203
542	512	1,054	424	127	329	174
484	466	950	394	101	300	155
428	420	848	320	107	278	143
409	404	813	351	78	261	123
384	379	763	312	66	250	135
467	480	947	430	86	285	146
439	405	844	336	97	298	113
512	491	1,003	428	100	320	155
5,897	5,778	11,675	4,750	1,192	3,774	1,959

## COMPREHENSIVE SUMMARY OF BIRTHS, DEATHS,

1889.

MONTHS.	BIRTHS.			MARRIAGES.
	Males.	Females.	Total.	
January, - -	898	786	1,684	590
February, - -	744	698	1,442	296
March, - - -	847	779	1,626	319
April, - - -	888	889	1,777	477
May, - - -	950	903	1,853	197
June, - - -	807	808	1,615	624
July, - - -	873	857	1,730	660
August, - - -	804	713	1,517	282
September, - -	772	753	1,525	346
October, - - -	818	807	1,625	335
November, - -	775	760	1,535	434
December, - -	767	792	1,559	524
	9,943	9,545	19,488	5,084

1890.

January, - -	858	848	1,706	708
February, - -	744	669	1,413	267
March, - - -	850	807	1,657	359
April, - - -	822	896	1,718	465
May, - - -	861	843	1,704	202
June, - - -	842	795	1,637	749
July, - - -	891	808	1,699	735
August, - - -	778	758	1,536	277
September, - -	800	728	1,528	385
October, - - -	867	791	1,658	336
November, - -	689	685	1,374	445
December, - -	860	795	1,655	505
	9,862	9,423	19,285	5,433

## AND MARRIAGES REGISTERED IN EACH MONTH.

1889.

DEATHS.						
Males.	Females.	Total.	0 to 5 Years.	5 to 20 Years.	20 to 60 Years.	60 and upwards.
595	619	1,214	498	83	392	241
524	554	1,078	511	92	319	156
657	629	1,286	630	125	334	197
646	640	1,286	658	119	336	173
608	601	1,209	599	101	345	164
475	467	942	433	104	267	138
557	493	1,050	480	116	332	122
449	454	903	422	83	265	133
452	403	855	349	92	270	144
535	486	1,021	454	80	325	162
482	530	1,012	456	106	315	135
630	641	1,271	500	108	420	243
6,610	6,517	13,127	5,990	1,209	3,920	2,008

1890

680	584	1,264	506	107	434	217
618	570	1,188	466	93	403	226
659	599	1,258	549	102	404	203
669	624	1,293	573	128	402	190
589	594	1,183	531	111	380	161
545	573	1,118	524	114	312	168
504	485	989	425	82	326	156
466	421	887	406	81	279	121
518	475	993	448	80	324	141
492	506	998	468	80	295	155
496	493	989	427	79	305	178
575	644	1,219	457	108	393	261
6,811	6,568	13,379	5,780	1,165	4,257	2,177

SUMMARY OF BIRTHS AND DEATHS DURING THE LAST TWENTY YEARS.  
1871-1890.

YEAR.	BIRTHS.		DEATHS.		Excess of Male Births.	Excess of Male Deaths.	Excess of Female Deaths.
	Males.	Females.	TOTAL.	Males.	Females.	TOTAL.	
1871	9,632	9,224	18,856	7,905	7,880	15,785	408
1872	10,302	9,842	20,144	7,162	6,885	14,047	460
1873	9,984	9,509	19,493	7,419	7,075	14,494	475
1874	10,343	9,695	20,038	8,116	7,725	15,841	648
1875	10,621	10,207	20,828	7,644	7,713	15,357	414
1876	10,687	10,276	20,963	7,173	6,586	13,759	411
1877	10,730	10,362	21,092	7,071	6,752	13,823	368
1878	10,543	10,071	20,614	7,187	6,961	14,148	472
1879	10,018	9,666	19,684	6,244	6,249	12,493	352
1880	9,646	9,246	18,892	6,813	6,472	13,285	400
1881	9,798	9,279	19,077	6,440	6,462	12,902	519
1882	9,982	9,709	19,691	6,608	6,424	13,032	273
1883	10,193	9,675	19,868	7,452	7,110	14,562	518
1884	10,593	9,960	20,553	7,153	6,776	13,929	633
1885	10,237	9,616	19,853	6,886	6,600	13,486	286
1886	10,186	9,676	19,862	6,630	6,469	13,099	161
1887	9,898	9,430	19,328	6,109	6,019	12,128	468
1888	9,953	9,361	19,314	5,897	5,778	11,675	592
1889	9,943	9,545	19,488	6,610	6,517	13,127	398
1890	9,862	9,423	19,285	6,811	6,568	13,379	439
Totals,	203,151	193,772	396,923	139,330	135,021	274,351	9,379
Average per annum, -	10,157	9,689	19,846	6,966	6,751	13,717	469
							equal to 2.37%.
							equal to 1.57%.
							215
							equal to 1.57%.
							243
							90
							119
							93
							243
							4,405
							off
							96
							4,309
							96



This Table is an extremely interesting one. It shows that over a space of twenty years the male births have exceeded the female births by 2·37 per cent., and that the male deaths have exceeded the female deaths by 1·57 per cent. As regards births there was no exception in the twenty years to the law which provides a margin of male children over female to meet the wear and tear of life—to which men are more subject than women; but as regards the deaths of the sexes there were three exceptions to the general rule that men die in larger numbers than women. Indeed the preponderance of male deaths over female would presumably be equal to the difference in the births and somewhat more but for the fact that men move about the world more than women, become soldiers and sailors, and for many reasons leave their native place and die abroad. The exceptions to the death rule referred to occurred in 1875, 1879 and 1881.

In this connection it will be of interest to refer to the Table which I give of assisted emigration from the Clyde in the last six years, where it will be seen that the unmarried adult male emigrants numbered 88,836, and the unmarried adult female emigrants were only 28,716. A similar disproportion might probably be discoverable could returns be had of the unassisted emigrants who go abroad in search of employment or pleasure.

#### WEATHER OBSERVATIONS.

I introduce, as weather phenomena have a material influence on health, before the specific “causes of death,” tables on the Rainfall in Glasgow during a space of twenty-one years, broken up into septennial periods, and also a brief digest of some of the observations of Dr. Robert Grant, the no less able than courteous Professor of Astronomy in the University. Professor Grant’s observatory is now fairly well equipped with reliable self-registering instruments, and his records are therefore entirely trustworthy. The Table on Sunshine shows with what certainty a given quantity of sunshine is vouchsafed to us within each twelve months but

## THE RAINFALL IN GLASGOW DURING

YEAR.	January.	February.	March.	April.	May.	June.
1870	4'18	6'33	0'93	1'46	3'20	1'84
1871	3'38	4'36	3'05	4'42	1'12	2'72
1872	5'95	3'09	2'61	0'92	3'68	9'04
1873	6'67	2'02	2'52	0'26	3'47	2'54
1874	4'27	1'03	3'45	1'88	2'50	0'90
1875	6'67	1'74	2'13	1'68	1'55	3'57
1876	3'89	5'83	4'84	2'28	0'67	3'16
Average for 7 years.	5'01	3'49	2'79	1'84	2'32	3'40
1877	6'79	4'35	2'06	3'14	1'47	2'38
1878	3'87	1'88	1'61	2'55	3'09	2'73
1879	1'62	1'46	3'38	1'52	2'06	4'95
1880	1'97	2'87	2'83	3'67	0'90	2'25
1881	0'40	3'66	2'44	1'33	3'46	2'26
1882	3'65	3'89	3'50	1'99	2'41	3'32
1883	6'18	2'29	1'25	2'02	2'03	2'54
Average for 7 years.	3'50	2'91	2'44	2'32	2'20	3'03
1884	5'55	5'04	2'29	0'72	2'92	0'77
1885	2'17	3'66	1'22	1'37	3'11	0'70
1886	3'91	1'51	2'58	1'39	2'74	1'17
1887	2'12	1'29	1'91	2'65	1'46	0'61
1888	2'70	0'73	2'85	1'35	2'12	1'79
1889	1'82	1'99	1'21	1'68	3'76	0'74
1890	6'13	0'71	2'13	1'57	2'95	3'29
Average for 7 years.	3'50	2'13	2'03	1'53	2'73	1'31
Average for 21 yrs.	4'00	2'84	2'42	1'90	2'41	2'58

with what irregularity it is distributed over the individual months, and the same remark applies to the rainfall and directions of the winds.

## STORM OF 13TH OCTOBER, 1891.

Professor Grant reports that the cyclonic storm of this date was one of the most violent which has swept over the city for many years. At 9 A.M. the mercury stood at

EACH MONTH OF THE LAST 21 YEARS.

July.	August.	September.	October.	November.	December.	TOTAL FOR YEAR.
2'52	1'76	3'71	4'61	1'84	2'87	35'25
4'51	3'66	1'60	3'10	3'27	4'85	40'54
6'52	5'19	9'80	3'69	5'11	6'00	61'60
5'33	4'56	5'16	6'35	2'39	2'25	43'52
4'03	4'74	4'41	9'12	4'26	2'87	43'46
1'89	2'98	5'45	5'86	5'19	5'58	44'29
2'87	5'32	2'39	6'44	2'55	6'71	46'95
3'95	4'04	4'65	5'60	3'52	4'45	45'09
3'44	6'96	1'41	5'15	6'56	4'04	47'75
0'79	2'67	5'22	3'88	1'55	1'89	31'73
3'67	4'56	2'76	2'05	1'46	2'32	31'81
3'96	0'83	2'94	0'79	5'55	4'09	32'65
3'80	3'33	1'91	2'22	5'03	3'46	33'30
4'03	1'82	3'46	3'36	5'50	4'42	41'35
3'48	4'21	3'47	3'28	5'82	4'30	40'87
3'31	3'48	3'02	2'96	4'50	3'50	37'07
5'38	2'71	2'29	2'95	3'80	6'12	40'54
1'51	2'46	4'58	2'72	2'16	1'45	27'11
2'17	1'65	4'98	2'97	3'36	3'31	32'04
2'73	3'82	3'64	1'84	2'42	2'74	27'23
4'77	1'75	1'32	1'83	5'14	3'17	29'52
2'21	4'55	1'46	3'00	1'76	2'64	26'82
4'05	3'36	3'98	2'80	5'30	1'46	37'73
3'26	2'90	3'18	2'59	3'43	2'98	31'57
3'50	3'47	3'62	3'70	3'81	3'66	37'91

29·023 inches; at 8 P.M. the reading was 28·047, a fall of an inch in eleven hours. So great a depression in so short a time is very rare in temperate climates. About 7 P.M. the wind rapidly passed from south-east to south-west, and it maintained this direction till the storm abated. The average velocity attained over 15 minutes was at the rate of 52 miles per hour, but momentary gusts much exceeded this velocity.

RELATIVE FREQUENCY OF THE DIFFERENT DIRECTIONS OF THE WIND  
AS REGISTERED AT THE GLASGOW OBSERVATORY 1885-1890.

YEAR.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Days.
1880	17'88	76'41	52'78	12'35	30'25	96'65	69'16	10'52	366
1881	25'58	74'14	46'86	15'17	25'12	92'92	64'82	20'39	365
1882	14'51	40'87	61'77	13'90	35'09	98'44	78'12	22'30	365
1883	26'14	34'30	43'81	19'61	37'89	93'60	82'17	27'48	365
1884	16'55	43'19	55'49	23'42	42'71	89'11	71'10	24'43	366
1885	24'01	55'46	48'08	15'01	43'92	102'24	59'97	16'31	365
1886	23'90	79'43	37'29	14'50	43'21	84'29	64'92	17'46	365
1887	26'83	37'95	51'62	11'51	23'90	82'56	101'13	29'50	365
1888	17'20	58'83	75'71	18'18	29'67	67'95	79'42	19'04	366
1889	17'37	72'01	31'76	20'53	32'14	82'41	85'34	23'44	365
1890	15'38	43'04	64'00	13'83	27'75	90'88	87'68	22'44	365

WEATHER OBSERVATIONS  
AGGREGATE HOURS OF SUNSHINE IN EACH

MONTH.	1885.		1886.		1887.	
	Hours.		Hours.		Hours.	
January, - -	11	146	30	119	17	145
February, - -	48		33		50	
March, - -	87		56		78	
April, - -	134	409	149	394	140	509
May, - -	122		93		170	
June, - -	153		152		199	
July, - -	150	378	152	349	146	383
August, - -	122		104		150	
September, - -	106		93		87	
October, - -	78	109	56	138	70	82
November, - -	14		45		4	
December, - -	17		37		8	
TOTALS, - -	1,042		1,000		1,119	

RELATIVE FREQUENCY OF THE DIFFERENT DIRECTIONS OF THE WIND  
IN EACH MONTH OF THE YEAR 1890.

MONTH.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	DAYS
January, -	0'79	1'37	1'29	0'92	6'46	13'67	5'21	1'29	31
February, -	1'50	6'46	10'38	1'04	0'00	2'79	4'79	1'04	28
March, -	1'21	5'46	1'25	1'50	2'00	11'83	6'13	1'62	31
April, -	2'62	3'50	6'96	0'96	2'08	5'21	5'88	2'79	30
May, -	0'42	3'67	14'71	0'58	3'58	3'29	3'63	1'12	31
June, -	0'87	2'13	3'79	1'92	2'21	7'42	11'04	0'62	30
July, -	2'00	1'50	3'46	0'12	1'46	7'92	13'25	1'29	31
August, -	1'46	4'54	2'33	0'71	0'29	10'29	8'54	2'84	31
September, -	0'58	0'96	3'54	1'38	4'54	6'96	10'92	1'12	30
October, -	1'13	1'08	0'00	0'79	0'63	14'50	7'79	5'08	31
November, -	1'88	2'00	5'08	1'12	3'04	5'29	8'42	3'17	30
December, -	0'92	10'37	11'21	2'79	1'46	1'71	2'08	0'46	31
	15'38	43'04	64'00	13'83	27'75	90'88	87'68	22'44	365

AT OBSERVATORY.

MONTH OF THE LAST SIX YEARS.

1888.	1889.	1890.	Average of 6 Years.
Hours.	Hours.	Hours.	Hours.
31 } 57 } 177 89 }	19 } 64 } 172 89 }	26 } 30 } 136 80 }	22 } 47 } 149 80 }
95 } 178 } 486 213 }	100 } 127 } 439 212 }	149 } 178 } 430 103 }	128 } 145 } 445 172 }
94 } 132 } 316 90 }	144 } 114 } 367 109 }	145 } 137 } 375 93 }	139 } 126 } 361 96 }
60 } 15 } 90 15 }	43 } 35 } 101 23 }	65 } 37 } 106 4 }	62 } 25 } 104 17 }
1,069	1,079	1,047	1,059

SUMMARY OF THE CAUSES OF DEATH REGISTERED  
ARRANGED IN FOUR CLASSES

CAUSES OF DEATH.	1885.				
	Under 5.	5 and under 20	20 and under 60	60 and upwards	TOTALS.
Specific Febrile, or					
I. ZYMOTIC DISEASES—					
1. Miasmatic Diseases, -	1,215	239	75	3	1,532
2. Diarrhœal „ -	260	17	41	40	358
3. Malarial „ -	2	...	...	...	2
4. Zoogenous „ -	1	...	...	...	1
5. Venereal „ -	66	...	10	1	77
6. Septic „ -	20	10	72	8	110
II. PARASITIC DISEASES, - -	2	...	...	1	3
III. DIETETIC DISEASES, - -	12	...	27	7	46
IV. CONSTITUTIONAL DISEASES,	540	497	1,283	137	2,457
V. DEVELOPMENTAL DISEASES,	401	...	...	354	755
VI. LOCAL DISEASES—					
1. Diseases of Nervous System,	757	157	323	299	1,536
2. „ Organs of Special Sense,	7	6	...	1	14
3. „ Circulatory System, -	15	58	446	238	757
4. „ Respiratory System, -	1,763	147	925	509	3,344
5. „ Digestive System, -	456	48	294	128	926
6. „ Lymphatic System and Ductless Glands, -	3	2	6	...	11
7. „ Urinary System, -	32	26	128	51	237
8. „ Reproductive System:					
(a) Dis. of Organs of Generation, -	2	1	30	6	39
(b) „ Parturition, -	...	5	76	...	81
9. „ Organs of Locomotion,	10	41	25	3	79
10. „ Integumentary System,	13	3	13	9	38
VII. VIOLENCE—					
1. Accident or Negligence, -	75	56	198	40	369
2. Homicide, - - -	2	...	...	...	2
3. Suicide, - - -	...	...	17	5	22
4. Execution, - - -	...	...	...	...	...
VIII. ILL-DEFINED AND NOT SPECI- FIED CAUSES, - - -	480	31	139	40	690
	6,134	1,344	4,128	1,880	13,486

IN GLASGOW DURING 1885, 1886, AND 1887.

WITH RESPECT TO AGE.

1886.					1887.				
Under 5.	5 and under 20	20 and under 60	60 and upwards	TOTALS.	Under 5.	5 and under 20	20 and under 60	60 and upwards	TOTALS.
1,074	249	67	6	1,396	1,192	213	79	7	1,491
219	14	28	21	282	176	11	29	21	237
...	...	...	1	1	...	...	...	1	1
1	...	...	...	1	...	...	...	...	...
51	...	9	3	63	41	...	9	2	52
21	7	56	11	95	20	11	71	5	107
7	...	...	...	7	3	...	...	...	3
8	...	30	6	44	9	...	22	3	34
509	543	1,306	143	2,501	461	408	1,216	119	2,204
371	...	...	333	704	369	...	...	361	730
687	142	338	384	1,551	586	124	317	339	1,366
6	1	6	1	14	11	2	2	...	15
14	55	466	259	794	16	45	410	255	726
1,578	167	916	565	3,226	1,545	142	785	443	2,915
430	53	284	121	888	364	59	269	113	805
1	3	5	1	10	...	1	4	...	5
29	28	141	49	247	27	39	131	69	266
...	1	27	5	33	2	...	34	7	43
...	2	61	...	63	...	1	50	...	51
17	31	22	5	75	12	41	23	8	84
22	1	8	8	39	17	1	13	6	37
74	44	196	40	354	69	52	183	41	345
2	...	1	...	3	2	...	2	...	4
...	1	17	3	21	...	1	15	3	19
...	...	...	...	...	...	...	...	...	...
473	27	144	43	687	420	24	112	32	588
5,594	1,369	4,128	2,008	13,099	5,342	1,175	3,776	1,835	12,128

SUMMARY OF THE CAUSES OF DEATH REGISTERED  
ARRANGED IN FOUR CLASSES

CAUSES OF DEATH.	1888.				
	Under 5.	5 and under 20	20 and under 60	60 and upwards	TOTALS.
Specific Febrile, or					
I. ZYMOTIC DISEASES—					
1. Miasmatic Diseases, -	867	168	53	3	1,091
2. Diarrhœal „ -	186	13	28	20	247
3. Malarial „ -	1	...	1	...	2
4. Zoogenous „ -	...	...	...	...	...
5. Venereal „ -	49	...	9	3	61
6. Septic „ -	24	7	83	14	128
II. PARASITIC DISEASES, - -	3	...	...	...	3
III. DIETETIC DISEASES, - -	7	...	31	3	41
IV. CONSTITUTIONAL DISEASES,	423	459	1,184	136	2,202
V. DEVELOPMENTAL DISEASES,	382	1	...	346	729
VI. LOCAL DISEASES—					
1. Diseases of Nervous System,	588	116	350	363	1,417
2. „ Organs of Special Sense,	9	3	6	...	18
3. „ Circulatory System, -	16	50	445	293	804
4. „ Respiratory System, -	1,300	143	720	491	2,654
5. „ Digestive System, -	366	57	264	120	807
6. „ Lymphatic System and Ductless Glands, -	3	3	6	2	14
7. „ Urinary System, -	18	33	151	68	270
8. „ Reproductive System,					
(a) Dis. of Organs of Generation, -	2	1	20	1	24
(b) „ Parturition, -	...	3	53	...	56
9. „ Organs of Locomotion,	12	38	25	5	80
10. „ Integumentary System,	11	2	9	10	32
VII. VIOLENCE—					
1. Accident or Negligence, -	68	73	215	41	397
2. Homicide, - - -	...	...	...	...	...
3. Suicide, - - -	...	...	13	5	18
4. Execution, - - -	...	...	...	...	...
VIII. ILL-DEFINED AND NOT SPECIFIED CAUSES, - - -	415	22	108	35	580
	4,750	1,192	3,774	1,959	11,675



IN GLASGOW DURING 1888, 1889, AND 1890.

WITH RESPECT TO AGE.

1889.					1890.				
Under 5.	5 and under 20	20 and under 60	66 and upwards	TOTALS.	Under 5.	5 and under 20	20 and under 60	60 and upwards	TOTALS.
1,609	237	78	8	1,932	1,457	195	93	9	1,754
277	8	32	40	357	223	5	35	16	279
...	...	1	...	1	1	...	1	...	2
1	...	...	...	1	...	...	...	...	...
53	...	10	...	63	52	...	5	...	57
22	16	70	8	116	17	5	77	9	108
2	...	...	...	2	3	...	...	...	3
6	...	28	6	40	10	...	47	5	62
512	414	1,208	141	2,275	509	409	1,296	141	2,355
358	...	...	346	704	379	2	...	394	775
593	104	336	369	1,402	557	118	350	383	1,408
9	5	2	1	17	6	4	8	...	18
16	58	458	282	814	22	57	449	290	818
1,550	145	722	531	2,948	1,511	151	909	596	3,167
395	52	273	108	828	426	55	278	131	890
...	1	10	1	12	...	1	10	4	15
22	26	175	70	293	17	48	187	82	334
...	5	28	...	33	1	3	32	3	39
...	4	50	...	54	...	1	45	...	46
12	29	28	3	72	10	44	24	11	89
6	3	8	6	23	6	...	7	6	19
95	85	268	55	503	101	51	263	51	466
3	...	...	1	4	2	...	1	...	3
...	...	18	3	21	...	...	10	3	13
...	...	...	...	...	...	...	1	...	1
449	17	117	29	612	470	16	129	43	658
5,990	1,209	3,920	2,008	13,127	5,780	1,165	4,257	2,177	13,379

THE MORTALITY IN GLASGOW DURING THE LAST TEN YEARS, 1881 TO 1890, ARISING FROM TWENTY  
OF THE LEADING CAUSES OF DEATH.

CAUSES OF DEATH.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.
Bronchitis, -	2,121	1,628	1,746	1,705	1,842	1,780	1,534	1,375	1,526	1,572
Phthisis, -	1,593	1,587	1,758	1,614	1,584	1,552	1,361	1,285	1,282	1,381
Pneumonia, -	778	812	1,192	1,135	1,190	1,030	897	836	907	1,094
Whooping Cough, -	399	709	857	738	526	698	643	430	850	692
Disease of Heart, -	676	696	712	649	628	647	594	662	653	669
Measles, -	351	227	625	347	436	91	298	211	644	631
Apoplexy, -	332	305	247	280	246	289	263	304	326	310
Cancer, -	239	252	236	274	266	270	275	287	333	308
Cephalitis or Inflammation of Brain, -	411	438	369	412	395	406	315	332	336	305
Diarrhoea, -	208	371	350	448	341	265	235	225	347	272
Convulsions, -	210	223	224	263	272	236	200	214	229	247
Hydrocephalus, -	307	380	196	228	254	215	197	223	224	226
Paralysis, -	246	240	296	250	190	249	236	228	207	218
Tabes Mesenterica, -	260	286	293	239	254	263	204	198	195	196
Enteritis, -	178	205	161	127	130	158	135	108	150	188
Disease of Stomach, -	106	117	110	114	124	134	139	130	168	160
Diphtheria, -	176	194	130	150	114	95	154	168	178	139
Scarlatina, -	261	272	452	428	299	359	235	170	107	127
Disease of Liver, -	103	104	143	144	131	144	114	125	115	127
Old Age, -	308	265	305	310	318	311	323	322	346	394

SUMMARY OF THE CHIEF CAUSES OF DEATH AT FOUR PERIODS OF  
LIFE REGISTERED IN THE LAST TEN YEARS.

YEAR.	APOPLEXY.					BRONCHITIS.				
	Under 5.	5 and under 20.	20 and under 60.	60 and up.	Total.	Under 5.	5 and under 20.	20 and under 60.	60 and up.	Total.
1885	5	8	121	112	246	958	46	434	404	1,842
1886	4	4	134	147	289	833	46	479	422	1,780
1887	7	5	121	130	263	760	60	370	344	1,534
1888	6	4	119	175	304	610	46	356	363	1,375
1889	10	7	150	159	326	703	36	367	420	1,526
1890	9	10	129	162	310	629	37	481	425	1,572
	41	38	774	885	1,738	4,493	271	2,487	2,378	9,629
	CANCER.					CEPHALITIS (Inflammation of Brain.)				
1885	1	2	173	90	266	282	99	13	1	395
1886	1	2	176	91	270	283	82	36	5	406
1887	1	2	178	94	275	224	66	23	2	315
1888	1	2	191	93	287	241	55	31	5	332
1889	2	2	234	95	333	248	56	26	6	336
1890	...	6	216	86	308	195	66	41	3	305
	6	16	1,168	549	1,739	1,473	424	170	22	2,089
	CONVULSIONS.					DIARRHŒA.				
1885	256	9	7	...	272	254	11	39	37	341
1886	219	14	2	1	236	204	14	24	23	265
1887	186	9	4	1	200	176	12	26	21	235
1888	204	4	4	2	214	168	12	22	23	225
1889	223	4	1	1	229	272	8	27	40	347
1890	238	6	3	...	247	217	5	34	16	272
	1,326	46	21	5	1,398	1,291	62	172	160	1,685
	DIPHTHERIA.					DISEASE OF HEART (Endocarditis).				
1885	83	29	2	...	114	11	45	372	200	628
1886	79	13	3	...	95	6	44	389	208	647
1887	123	26	5	...	154	6	38	331	219	594
1888	126	38	4	...	168	8	47	371	236	662
1889	135	40	1	2	178	8	49	371	225	653
1890	102	34	3	...	139	11	53	376	229	669
	648	180	18	2	848	50	276	2,210	1,317	3,853

SUMMARY OF THE CHIEF CAUSES OF DEATH AT FOUR PERIODS OF  
LIFE REGISTERED IN THE LAST TEN YEARS—CONTINUED.

YEAR.	DISEASE OF LIVER.					DISEASE OF STOMACH.				
	Under 5.	5 and under 20.	20 and under 60.	60 and up.	Total.	Under 5.	5 and under 20.	20 and under 60.	60 and up.	Total.
1885	19	2	69	41	131	51	5	50	18	124
1886	24	8	69	43	144	57	6	46	25	134
1887	15	7	69	23	114	54	6	45	34	139
1888	25	4	55	41	125	59	6	45	20	130
1889	19	6	59	31	115	86	6	52	24	168
1890	32	4	56	35	127	66	3	63	28	160
	134	31	377	214	756	373	32	301	149	855
	ENTERITIS.					HOOPING COUGH.				
1885	99	8	14	9	130	491	35	...	...	526
1886	122	5	22	9	158	647	51	...	...	698
1887	96	13	16	10	135	609	34	...	...	643
1888	80	11	13	4	108	402	28	...	...	430
1889	106	12	25	7	150	793	57	...	...	850
1890	139	13	24	12	188	655	36	1	...	692
	642	62	114	51	869	3,597	241	1	...	3,839
	HYDROCEPHALUS.					MEASLES.				
1885	200	46	8	...	254	417	18	1	...	436
1886	160	50	5	...	215	84	7	...	...	91
1887	158	37	2	...	197	281	15	2	...	298
1888	166	51	6	...	223	200	10	1	...	211
1889	194	28	2	...	224	596	45	3	...	644
1890	185	37	4	...	226	590	40	1	...	631
	1,063	249	27	...	1,339	2,168	135	8	...	2,311
	OLD AGE.					PARALYSIS.				
1885	...	...	1	317	318	...	3	68	119	190
1886	...	...	3	308	311	...	4	85	160	249
1887	...	...	1	322	323	6	4	85	141	236
1888	...	...	...	322	322	0	8	85	135	228
1889	...	...	...	346	346	1	3	63	140	207
1890	...	...	...	394	394	1	3	75	139	218
	...	...	5	2,009	2,014	8	25	461	834	1,328

## SUMMARY OF THE CHIEF CAUSES OF DEATH AT FOUR PERIODS OF LIFE REGISTERED IN THE LAST TEN YEARS—CONTINUED.

YEAR.	PHTHISIS.					PNEUMONIA.				
	Under 5.	5 and under 20.	20 and under 60.	60 and up.	Total.	Under 5.	5 and under 20.	20 and under 60.	60 and up.	Total.
1885	119	352	1,072	41	1,584	643	72	378	97	1,190
1886	102	362	1,055	33	1,552	510	89	327	104	1,030
1887	96	251	991	23	1,361	470	58	293	76	897
1888	83	284	891	27	1,285	443	64	250	79	836
1889	97	281	874	30	1,282	535	65	238	69	907
1890	114	259	975	33	1,381	594	81	309	110	1,094
	611	1,789	5,858	187	8,445	3,195	429	1,795	535	5,954
	SCARLATINA.					TABES MESENTERICA.				
1885	191	98	10	...	299	186	53	14	1	254
1886	227	128	4	...	359	178	67	18	...	263
1887	142	87	6	...	235	129	60	13	2	204
1888	113	54	3	...	170	119	59	19	1	198
1889	68	37	2	...	107	143	45	6	1	195
1890	86	38	3	...	127	146	40	10	...	196
	827	442	28	...	1,297	901	324	80	5	1,310

That most sensitive of children's diseases, "measles," carried off in 1889 no fewer than 644 young lives, and in 1890 the mortality was 631. In the preceding four years the average of deaths was only 259 per annum. The rapidity with which measles spreads is remarkable, but it is no doubt largely due to school and playground associations. In this country measles is not dreaded as a virulent disease as in some other and softer climates where it can be a terrible scourge.

Scarlatina, on the other hand, has a better record in the last two years, the deaths being 107 and 127, as against 299 in 1886 and 359 in 1887. Instant isolation would appear to do its almost perfect work with this as with other infectious disorders, and probably were the same measures applied to measles that too could be checked; but, on the other hand, there are doubtless strong and humane reasons for not applying them to infants.

# INFANTILE MORTALITY IN GLASGOW AND RURAL DISTRICTS.

## I.—PERCENTAGE OF DEATHS UNDER 5 YEARS TO THE DEATHS AT ALL AGES.

YEAR.	Glasgow.	Small Towns of 2,000 to 10,000 Inhabitants.	Mainland Rural Districts.	Insular Rural Districts.
Annual Average.				
1855-59	52'20			
1860-64	49'72			
1865-69	47'52			
1870-74	45'48			
1875-79	45'02	35'59	26'77	19'90
1880-84	44'49	34'05	25'73	19'29
1885	45'51	32'86	25'24	19'49
1886	42'65	32'65	24'31	17'67
1887	44'12	33'97	25'66	17'53
1888	40'67	32'11	24'68	18'37
1889	45'63			
1890	43'20			

## II.—PERCENTAGE OF DEATHS UNDER 1 YEAR TO DEATHS UNDER 5 YEARS.

Annual Average.				
1855-59	47'23			
1860-64	45'03			
1865-69	47'51			
1870-74	48'20			
1875-79	49'26	55'89	60'79	63'14
1880-84	48'49	57'54	63'37	64'67
1885	50'50	60'57	65'29	60'00
1886	49'85	61'75	66'30	63'63
1887	49'98	60'48	63'65	58'36
1888	53'88	61'00	65'56	57'14

This Table is presented for the purpose of exhibiting what I may call the datum line of infantile death rate, viz. that of country districts. It gives a range of 34 years to Glasgow, and of 14 years to the small towns and rural and insular districts. It is well to have kept before us,

as a community living under somewhat forced conditions, the standard experienced under more natural circumstances. The first part of the Table shows that under all conditions of residence improvement has been going on, as might be expected, in these days of minute practical research into cause and effect, and of the discovery and application of specifics to counteract disease. In Glasgow for instance during the twenty years from 1855 to 1874, of the total deaths 48·73% were of children under five years of age, and in the sixteen years 1875-90, 43·91% were cut off, being an improvement equal to 11½%. In the small towns the proportion under five years was for the decade 1874-84, 34·82%, and for the four years, 1885-88, it was 32·89%, equal to 5½% of an improvement. In the mainland rural districts for the same periods the reduction was from 26·25% to 24·97%, equal to about 5% of an improvement; and in the islands for the same periods the reduction was from 19·10% to 18·26%, equal to 5% of an improvement.

But while progress is thus manifested throughout Scotland generally, and Glasgow has had more than a rateable share, the enormous disproportion of infantile mortality in Glasgow in comparison with country districts does not materially lessen. The power and remedy clearly does not lie with the medical practitioner, but belongs more probably, and in some considerable measure, to the domain of Government, imperial or civic, acting upon those who, as a consequence of incomplete combustion of coal in their furnaces, discharge, wastefully for themselves, smoke and other deleterious products into the atmosphere, which not only pollutes it, but intercepts in perceptible degree the light and warmth of the sun. Our tall buildings are also responsible factors, throwing as they do long shadows across our streets and creating cold sunless currents. The imperfect combustion of gas in our low ceiled houses, which gives vegetable life no chance, may be regarded as another bad offender. It is well worth the vigilant attention of the Health Committee whether consumers of gas do not



require to be taught correct methods of combustion, and be protected against imperfect fittings. It may also be worthy of consideration whether every man employed either as engineer or stoker in a public work ought not to be certificated by the magistrates, and on repeated default in smoke emission to have his certificate cancelled. Some such method, bringing servant as well as master into a position of responsibility, seems absolutely necessary if the pall under which we are at present forced to live at such terrible risks is to be lifted in any material degree. Other more occult causes incident to crowded city life make child-rearing more precarious than in open districts, and in many respects town and country must continue, under the best administration, to differ widely. While the authorities must continue to strain after the attainment of better vital conditions, the goose that lays for us the golden egg must be respected. But it will be found, I believe, that in the matter of smoke abatement in particular, many of the offenders themselves are most anxious to have it corrected, and have associated themselves together for the purpose of testing methods and appliances adaptable for boilers. It is the case, as may be witnessed at Thornliebank, that boilers can be fired without perceptible detriment to the atmosphere. A comparison between Thornliebank and the Vale of Leven gives remarkable results, and yet visitors to the former place can see that the lowest class of dross is used, that it goes further than the better dross elsewhere used, and that great economy to the proprietors is the result of consuming the smoke. Some years ago, and it may be the case still, in the West Street Flour Mills, 52s. a year to the fireman prevented any escape of black smoke. The fireman was promised this sum at the New Year if there were no complaint of smoke emission, and for years he regularly uplifted the money.

The leading cause of our infantile disorders are affections of the respiratory organs, largely traceable to causes believed to be avoidable ; and as this branch of the mortality record



possesses features of supremely vital importance, I have felt it right to illustrate it by the following short but comprehensive Table.

PERCENTAGE OF DEATHS FROM RESPIRATORY CAUSES AT ALL AGES  
IN THE FOLLOWING TOWNS IN THE LAST TEN YEARS.

YEAR.	Glasgow.	Dundee.	Greenock.	Paisley.	Aberdeen.	Edinburgh.	Perth.
1881	26·11	23·97	17·44	19·94	21·39	17·41	20·28
1882	21·85	22·59	20·00	17·93	17·65	19·21	19·01
1883	22·42	24·88	23·85	21·42	20·65	20·71	15·41
1884	22·26	20·49	16·41	19·81	21·18	18·85	17·57
1885	24·65	23·81	22·77	20·73	18·47	18·20	15·37
1886	24·89	22·67	23·67	20·93	18·00	20·70	17·89
1887	24·01	21·51	21·87	23·26	19·53	18·77	18·44
1888	22·76	25·26	21·46	20·72	19·69	18·72	20·97
1889	22·63	20·92	20·82	20·62	17·31	18·73	16·61
1890	23·89	24·01	21·64	21·02	20·09	19·38	19·22
Average of the Ten Years.	23·55	23·01	20·99	20·64	19·40	19·07	17·99

Average percentage of Deaths during Eight Years, 1881-1888 :—

In small Town Districts of Scotland, - 17·74 per cent.

In Mainland Rural Districts, - - - 16·33 „

In Insular Rural Districts, - - - 13·88 „

FEBRILE DISEASES.

*Typhus*.—This severe scourge of days not very distant is no longer invulnerable. “ Watch and ward ” over it must never, however, be relaxed, for it can incubate as of yore, and unchecked at its first beginning, it may overrun a town, and overleap all the barriers which hygienic science may set up against it, more especially in times of industrial depression when the labouring classes are placed on low diet. The possibility of such a thing happening is now reduced to a minimum, but it is salutary to be reminded that the enemy’s power is only latent. There have been several virulent epidemics of typhus within the century down to 1869-70, but I recall the splendid activity aroused in Glasgow in

1818 over the then severe outbreak. The population then numbered 130,000, and few immigrants from Ireland had as yet found their way to Glasgow. The attack was almost confined to the poorer classes, who had been sorely suffering from want of employment all through the previous year, and the suburban villages of Gorbals, Anderston, and Calton had more than a full share of its ravages. The people, debilitated by insufficient feeding, were pre-disposed to the disease, and, therefore, once generated, the fever suddenly burst into epidemic form. Mr. Kirkman Finlay then reigned as Lord Provost. A committee of energetic citizens was promptly organized, and £7,000 was voluntarily subscribed to meet the expense of suppressive measures. The fever wards of the Royal Infirmary were soon insufficient, but were promptly supplemented by a temporary hospital in proximity for 200 additional beds. Commencing in March, 1818, the fever expended itself early in 1819. 1,929 persons were treated in hospital, of whom 171 died. The committee's exertions were devoted to checking the spread of the disease. They caused upwards of 5,000 apartments to be fumigated, much infected clothing and bedding to be burned, which they replaced, and, still better, they caused a large number of houses within the infected areas, although untouched by the disease, to be lime-washed and fumigated by anticipation, with the result that the plague was largely stayed. Subsequent epidemics have been more fatal, especially that of 1869-70, when the poorer classes, and especially Irish immigrants now become numerous, were living in an overcrowded condition. In that year our valued Health Officer, Dr. Russell, entered the service, and commenced his resolute dealings with this and other infectious diseases. All experience teaches that vigilance to detect, and promptitude to report, a case of typhus, followed up by instant isolation of the patient, and, where necessary, of other members of the affected household, and by fumigation of house clothing, etc., are the sure means of suppressing this and other highly infectious diseases. Those occupying the health watch-towers of the city—our

medical practitioners in particular—must therefore be encouraged to do their duty without fear or favour, as indeed they are already doing most commendably.

*Typhoid or Enteric Fever.*—This fever is common to all countries and all classes alike. Poverty of diet does not seem to generate it as with the more epidemic typhus. Defective drains and cesspools seem to be lively causes of its generation, and its germs rapidly propagate in milk and water, as has been oftentimes demonstrated by Dr. Russell. Enteric germs seem to find a more kindly home in milk than in any other agent, and this possibly may be the reason that it seizes upon young persons much more generally than on adults. Dr. Murchison's investigations showed that more than half the total number of cases admitted into the London fever hospitals during ten years occurred in persons between 15 and 25; more than a fourth under 15 years; one tenth in persons between 25 and 30, and that from the latter age upwards the numbers rapidly diminished. Autumn finds typhus more prevalent than spring, a lowering temperature and possibly a decaying vegetation affecting the water used at dairy farms and otherwise having their influences. The guard which Dr. Russell has set at all our dairies has done more than anything else to stay the plague, but over the wide area of country supplying Glasgow with milk, vigilant local collaborateurs are needed everywhere, and happily these are not wanting. Although a slight outbreak has taken place as I write, there has been a marked diminution of typhoid in the last few years. In 1880 the deaths from it were 279; in 1881, 175; in 1882, 177; in 1883, 176; and in 1884, 199; or on an average, 202 deaths per annum; whereas in the last six years the deaths have been in 1885, 113; in 1886, 90; in 1887, 106; in 1888, 68; in 1889, 121; and in 1890, 117; or, on an average, 102 deaths per annum—a most satisfactory diminution, manifesting it cannot be doubted resolute action in various directions, particularly at the sources of our milk supplies, to remove the generating causes of the disease, and by better acquaintance with the disease when contracted, to combat its severity.

But with fevers more cogently than with other diseases "prevention is better than cure."

*Small-Pox.*—This most hideous of all diseases has also had a wonderfully clean record in Glasgow in recent years, simply because of the incessant watchfulness maintained. Even after vaccination had become general the mortality from small-pox was a factor in the death-rate—thus the deaths were 228 in 1873, and 212 in 1874, but for a number of years past the deaths have been rare. The experience of Leeds only three years ago teaches public authorities the danger of holding the reins placed on infectious disorders loosely. In 1887-88, several thousands of the people were attacked with small-pox, and many hundreds died, and the outbreak into epidemic form might have been prevented by vigilance and resolution, as was when too late bitterly acknowledged.

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#### EXAMPLES OF LONGEVITY IN GLASGOW.

An event in the Mortality Table for 1887 is noteworthy. It was the death of Miss Jean Gibson, daughter of John Gibson, merchant, Glasgow, who died in her house, Blythswood Square, on 25th November of that year, at the age of 102 years and 187 days, with all her faculties well preserved. Mr John Oswald Mitchell, to whom Glasgow is much indebted for his researches and genial sketches, recalled at the time other three instances of female longevity in recent times in Glasgow—Miss Anne Wallace, one of the 21 children of Mr. John Wallace of Kelly, who died on 25th February, 1873, aged 102 years and 239 days; Isabel Ewing, daughter of Bailie Ewing of Glasgow, and wife of Archibald Smith of Jordanhill, who died on 28th September, 1855, aged 100 years and 187 days; and lastly, Jean Brown, daughter of Alexander Brown, Dean of Guild of Glasgow, and wife of Humphrey Ewing MacLae of Cathkin, who died on 27th November, 1874, aged 100 years and 12 days. One other much esteemed lady of the west end of the city, with faculties little impaired, entered her 101st year on 27th October current.

## RENTAL OF THE CITY OF GLASGOW.

I GIVE the rental of the city since 1870, and it will be seen that from this point of view the city within its technical area stands almost precisely where it did in 1878, the slight retrogression entered on in that year, after a period of abnormal inflation of rentals, having been arrested.

YEAR.	Valuation.	Increase.	Decrease.
1870-71	£2,126,324	—	—
1871-72	2,226,465	£100,141	—
1872-73	2,338,743	112,278	—
1873-74	2,504,727	165,984	—
1874-75	2,740,032	235,305	—
1875-76	2,922,151	182,119	—
1876-77	3,117,827	195,676	—
1877-78	3,317,962	200,135	—
1878-79	3,420,697	102,735	—
1879-80	3,432,112	11,415	—
1880-81	3,426,730	—	£5,382
1881-82	3,417,263	—	9,467
1882-83	3,425,653	8,390	—
1883-84	3,432,114	6,461	—
1884-85	3,406,372	—	25,742
1885-86	3,395,804	—	10,568
1886-87	3,390,999	—	4,805
1887-88	3,364,502	—	26,497
1888-89	3,370,736	6,234	—
1889-90	3,404,403	33,667	—
1890-91	3,455,510	51,107	—
		£1,411,647 82,461	£82,461
		£1,329,186	

Nett Increase in 21 years, £1,329,186 or 62½ per cent.

## I.—TOTAL RENTAL OF BURGH OF GLASGOW IN LAST SIX YEARS.

YEAR.	Dwelling-houses including Hotels.	Shops, Ware- houses, Offices, Factories, etc.	Railways, Canals, Water Works, Gas Works, and Tramways.	Totals.
1885-86	£1,316,496	£1,737,747	£341,561	£3,395,804
1886-87	1,317,535	1,717,972	355,492	3,390,999
1887-88	1,325,482	1,711,053	327,967	3,364,502
1888-89	1,337,524	1,711,492	321,720	3,370,736
1889-90	1,342,760	1,718,327	343,316	3,404,403
1890-91	1,356,029	1,757,782	341,699	3,455,510

This Table is gratifying testimony, in particular, to the improved business conditions of the city. The rental in the past year overtopped by £23,398 the great rental record of 1878 and 1879, which was proved to be seriously inflated and unrealizable. As a consequence it had to recede, but the tide of population and of business has been again steadily advancing, with the result that rental has recovered, and there being no spirit of speculation abroad, it may be regarded as thoroughly sound and safe.

## II.—TOTAL RENTAL, DISTINGUISHING BETWEEN PARISHES.

YEAR.	City Parish.	Barony Parish.	Govan Parish.	Totals.
1885-86	£1,301,818	£1,542,215	£551,771	£3,395,804
1886-87	1,306,729	1,536,613	547,657	3,390,999
1887-88	1,299,564	1,524,891	540,047	3,364,502
1888-89	1,293,874	1,535,986	540,876	3,370,736
1889-90	1,300,282	1,552,797	551,324	3,404,403
1890-91	1,303,781	1,589,541	562,188	3,455,510

The same total rental is here given by parishes, and the Table shows (1) that in the City Parish the rental after some retrogression since 1885 has recovered, and is practically



what it was in 1885-86 ; (2) that in the city portion of Barony Parish there has been the substantial advance of £47,000 since 1885-86 ; and (3) that in the city portion of Govan Parish rental has advanced £10,500 in the same time. In all three parishes the advances aggregate £59,706—a most substantial improvement when its solidity is considered.

### III.—TOTAL RENTAL, DISTINGUISHING BETWEEN OCCUPIED AND UNOCCUPIED POSSESSIONS.

YEAR.	Occupied.	Unoccupied.	Totals.
1885-86	£3,173,296	£222,508	£3,395,804
1886-87	3,169,810	221,189	3,390,999
1887-88	3,134,037	230,465	3,364,502
1888-89	3,152,494	218,242	3,370,736
1889-90	3,205,326	199,077	3,404,403
1890-91	3,282,249	173,261	3,455,510

This Table gives the same total rental, distinguishing as between “Occupied” and “Unoccupied” possessions. It is most satisfactory here also to find a most healthy condition of existing property. Occupied rental has advanced since 1885 by £108,953, and unoccupied rental has receded by £49,247. The large amount of surplus property which stood idle for some years following the years of building activity is being gradually absorbed at fair rents.

IV.—TOTAL RENTAL WITHIN EACH PARISH, DISTINGUISHING BETWEEN  
OCCUPIED AND UNOCCUPIED POSSESSIONS IN EACH PARISH.

YEAR.	City Parish.	Barony Parish.	Govan Parish.	Total.	Gross Total.
1885-86 Occupied, Unoccupied,	£1,210,029 91,789	£1,443,193 99,022	£520,074 31,697	£3,173,296 222,508	{ £3,395,804
1886-87 Occupied, Unoccupied,	1,218,946 87,783	1,435,140 101,472	514,208 33,450	3,168,294 222,705	{ 3,390,999
1887-88 Occupied, Unoccupied,	1,211,082 88,482	1,419,428 105,463	503,531 36,516	3,134,041 230,461	{ 3,364,502
1888-89 Occupied, Unoccupied,	1,209,380 84,495	1,439,355 96,630	503,762 37,114	3,152,497 218,239	{ 3,370,736
1889-90 Occupied, Unoccupied,	1,220,665 79,619	1,465,142 87,653	519,520 31,804	3,205,327 199,076	{ 3,404,403
1890-91 Occupied, Unoccupied,	1,239,240 64,539	1,506,817 82,725	536,194 25,995	3,282,251 173,259	{ 3,455,510

This Table exhibits the same general results as Table III., but particularizes them further by parishes. Comparing the first and the last of the six years dealt with it is seen that (1) in City Parish unoccupied rental has receded from £91,789 in 1885 to £64,539, an improvement to the extent of £27,250; (2) in Barony Parish unoccupied rental, which was £99,022 in 1885, was £82,725, an improvement to the extent of £16,297; and (3) in Govan Parish unoccupied rental had fallen from £31,697 in 1885 to £25,995 in 1890—a difference of £5,702.



V.—DWELLING-HOUSES, SHOWING NUMBER AND RENTAL UNDER EACH CLASS.

YEAR.	£4 and under.	Above £4 and under £10.	£10 and upwards.	Hotels and Lodging Houses rented at £50 and upwards.	TOTAL.
1885-86					
No. of Houses,	8,379	76,977	35,001	101	120,458
Rental, - -	£29,602	532,704	713,394	40,796	1,316,496
1886-87					
No. of Houses,	8,526	77,039	35,250	92	120,907
Rental, - -	£30,163	534,728	712,569	40,075	1,317,535
1887-88					
No. of Houses,	8,641	77,448	35,633	93	121,815
Rental, - -	£30,501	538,220	716,573	40,188	1,325,482
1888-89					
No. of Houses,	8,559	77,932	36,113	99	122,703
Rental, - -	£30,235	542,122	723,079	42,088	1,337,524
1889-90					
No. of Houses,	8,609	78,221	36,418	103	123,351
Rental, - -	£30,524	546,255	723,377	42,604	1,342,760
1890-91					
No. of Houses,	8,443	78,605	36,793	110	123,951
Rental, - -	£30,025	552,529	731,050	42,425	1,356,029

This Table exhibits the rental of dwelling-houses under the three classes of rents—£4 and under; under £10; and £10 and upwards; and it also shows the rental of hotels and lodging-houses. It will be found interesting inasmuch as the low rented houses do not increase with the increasing population, the number and rental of such houses being practically what they were in 1885. Let me refer in this connection to my remarks on page 22 on what appears to be a development of the pernicious practice of two families living together. Doubtless it will be found that it is all but exclusively confined to the smaller houses.

VI.—DWELLING-HOUSES IN EACH PARISH, SHOWING NUMBER  
AND RENTAL.

YEAR.	City Parish.	Barony Parish.	Govan Parish.	TOTAL.
1885-86				
No. of Houses,	37,782	55,145	27,531	120,458
Rental, - -	£360,027	680,122	276,347	1,316,496
1886-87				
No. of Houses,	37,770	55,579	27,558	120,907
Rental - -	£361,084	680,588	275,863	1,317,535
1887-88				
No. of Houses,	37,947	56,132	27,736	121,815
Rental, - -	£361,352	686,726	277,404	1,325,482
1888-89				
No. of Houses,	38,016	56,807	27,880	122,703
Rental, - -	£363,204	695,733	278,587	1,337,524
1889-90				
No. of Houses,	37,977	57,377	27,997	123,351
Rental, - -	£363,177	700,784	278,798	1,342,759
1890-91				
No. of Houses,	37,983	57,883	28,085	123,951
Rental, - -	£363,763	712,609	279,657	1,356,029

This Table gives in another form the dwelling-houses, occupied and unoccupied, of the city as distributed in parishes with their rental.

The following is a comparison of numbers and rental for 1885-86 and for 1890-91:—

*In City Parish—*

1885-86.	Number, 37,782	Rental, £360,027
1890-91.	„ 37,983	„ 363,763

Increase,	201	Increase, £3,736
-----------	-----	------------------

*In Barony Parish—*

1885-86.	Number, 55,145	Rental, £680,122
1890-91.	„ 57,883	„ 712,609

Increase,	2,738	Increase, £32,487
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*In Govan Parish—*

1885-86.	Number, 27,531	Rental, £276,347
1890-91.	„ 28,085	„ 279,657

Increase,	554	Increase, £3,310
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## VII.—DWELLING HOUSES, DISTINGUISHING OCCUPIED AND UNOCCUPIED.

PARISHES.	1885-86.			
	OCCUPIED.		UNOCCUPIED.	
	Number.	Rental.	Number.	Rental.
City Parish, -	35,118	£339,810	2,664	£20,217
Barony, -	51,861	646,075	3,284	34,047
Govan, -	26,083	263,331	1,448	13,016
	113,062	£1,249,216	7,396	£67,280
1886-87.				
City Parish, -	35,024	£339,680	2,746	£21,404
Barony, -	52,063	642,739	3,516	37,849
Govan, -	25,891	260,614	1,667	15,249
	112,978	£1,243,033	7,929	£74,502
1887-88.				
City Parish, -	34,757	£337,463	3,190	£23,889
Barony, -	52,272	645,046	3,860	41,680
Govan, -	25,895	260,054	1,841	17,350
	112,924	£1,242,563	8,891	82,919
1888-89.				
City Parish, -	35,069	£342,548	2,947	£20,656
Barony, -	53,343	659,396	3,463	36,337
Govan, -	26,045	261,373	1,835	17,214
	114,457	£1,263,317	8,245	£74,207
1889-90.				
City Parish, -	35,291	£343,869	2,686	£19,308
Barony, -	54,222	666,683	3,155	34,100
Govan, -	26,375	263,718	1,622	15,080
	115,888	£1,274,270	7,463	£68,488
1890-91.				
City Parish, -	35,873	£349,570	2,110	£14,193
Barony, -	55,321	683,006	2,562	29,603
Govan, -	26,941	269,966	1,144	9,691
	118,135	£1,302,542	5,816	£53,487

VIII.—RENTAL OF RAILWAYS, CANALS, ETC., WITHIN THE CITY  
OF GLASGOW.

Undertakings.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.
Railways, -	£ 219,528	235,537	227,906	225,400	233,048	238,314
Tramways, -	£ 23,427	31,043	21,576	20,343	23,320	24,786
Water Works, -	£ 26,027	26,464	25,615	25,347	25,201	23,591
Gas Works, -	£ 72,579	62,448	52,870	50,630	61,747	55,008
Totals, -	£ 341,561	355,492	327,967	321,720	343,316	341,699

This class of subjects is valued by a special assessor, Mr. William Munro, of Edinburgh, who has courteously furnished me with the foregoing Table. The rental varies one year with another, but in last year it stood almost precisely at the figure of 1885-86. The water works, gas works, and tramways are exclusively undertakings of the Corporation, but they all extend beyond the city boundaries. New principles have been from time to time introduced into the allocation of rental amongst the parishes and burghs touched by such public works. The following valuation of the water works shows that of the total rental of £114,017 there is allocated to the rating authorities in

Perthshire (3 parishes), -	-	£19,144
Stirlingshire (6 parishes and 1 burgh), -	-	38,347
Dumbartonshire (2 parishes), -	-	6,921
Lanarkshire—outwith city—(4 parishes and 6 burghs), -	-	12,517
Renfrewshire (7 parishes and 6 burghs), -	-	14,181
City of Glasgow, -	-	22,907
		<hr/>
		£114,017

Considering that the aqueduct for one half its length passes through a rough pastoral region, is underground, and does not interfere with grazing and cropping; that not one penny of revenue is contributed by a number of the parishes, and that no responsibility attaches to the people in connection with

the works, it seems *ex facie* unjust that wayleave through this region should be as highly valued for assessing purposes as is the piping under the streets of the city, where the population bears the entire burden of maintenance and risk.

The method of the assessor, acting upon a judgment of Lords Lee and Fraser in 1883, and contrary to the assessor's own previous practice, is, practically, to ascertain the capital expenditure in each parish, and place a *pro rata* value upon it. In short, a tape line measurement of the aqueduct would produce practically the same result. The operation of the principle may be illustrated by the Parish of Aberfoyle. In this parish the total acreage is 29,215, of which 219½ acres are occupied by the aqueduct, but chiefly by underground tunnelling; and the total assessable rental of the parish is £20,653, of which there is put against the water works £14,709, and against all the other lands and heritages in the parish the sum of £5,944.

All the canals have been assumed by railway companies, and they are now valued as railway works. They have therefore disappeared from the assessor's valuation as special subjects. The Corporation naturally took much interest in the construction of the several canals entering the city, and subscribed liberally to their original capital. They consisted of the Forth and Clyde Canal, opened in 1790, which connected Glasgow with the Firth of Forth; the Glasgow and Ardrossan Canal, opened early in the century, but which stopped short at Johnstone, the Company being discouraged by the progress made with the development of the river Clyde as a navigable water way to the sea; and the Monkland Canal, opened in 1813, which connected the city with the rich mineral fields to the east.

## RENTAL OF THE EXTENDED CITY

FOR

**1891-92.**

THE Valuation Appeal Courts being now over, I am kindly furnished by Mr. Henry the Assessor, to whom I am indebted in many ways, with the Annual Value of the city for the current year. It is as follows:—

## WITHIN PARLIAMENTARY BURGH—

Ordinary Heritages, -	-	£3,135,666	
Railways, Water Works, Gas			
Works, Tramways, -	-	303,081	
		<hr/>	£3,438,747

## PORTION OF CITY BEYOND PARLIAMENTARY

BURGH ADDED BY CITY OF GLASGOW

ACT, 1891—

Ordinary Heritages, -	-	£569,763	
Railways, Water Works,			
etc., - - - -	-	38,216	
		<hr/>	£607,979
Total, - - - -	-		<hr/>
			£4,046,726

RENTAL OF OTHER TOWNS IN SCOTLAND FOR THE PAST  
FIFTEEN YEARS.

YEAR.	EDINBURGH.	DUNDEE.	ABERDEEN.	GREENOCK.
1875-76	£1,419,000	£574,000	£323,000	£322,000
1876-77	1,469,000	608,000	337,000	337,000
1877-78	1,539,000	637,000	357,000	347,000
1878-79	1,617,000	661,000	384,000	365,000
1879-80	1,676,000	646,000	399,000	368,000
1880-81	1,728,000	657,000	415,000	369,000
1881-82	1,773,000	660,000	436,000	369,000
1882-83	1,821,000	672,000	443,000	400,000
1883-84	1,894,000	688,000	456,000	412,000
1884-85	1,909,000	680,000	471,000	409,000
1885-86	1,932,000	669,000	493,000	401,000
1886-87	1,933,000	664,000	506,000	399,000
1887-88	1,964,000	691,000	521,000	390,000
1888-89	2,004,000	683,000	531,000	379,000
1889-90	2,065,000	684,000	551,000	387,000
1890-91	2,106,000	692,000	561,000	390,000
Increase in 16 years	48·41%	20·56%	73·68%	21·12%

# RATING FOR MUNICIPAL, PAROCHIAL, AND SCHOOL BOARD PURPOSES. 1890-91.

## IN CITY PARISH.

ASSESSMENTS.	On Rents £10 and upwards.				On Rents £4 1s. and under £10.				On Rents £4 and under.			
	Payable by Owner.		Payable by Occupier.		Payable by Owner.		Payable by Occupier.		Payable by Owner.		Payable by Occupier.	
	S.	D.	S.	D.	S.	D.	S.	D.	S.	D.	S.	D.
Public Water Rate, -	0	1	0	1	0	1	0	0	0	0	0	0
Police, -	0	0	1	2 $\frac{3}{4}$	0	0	0	7 $\frac{3}{8}$	0	0	0	0
Statute Labour, -	0	0	0	1 $\frac{1}{4}$	0	0	0	1 $\frac{1}{4}$	0	0	0	0
Roads and Bridges, -	0	0	0	1 $\frac{1}{4}$	0	0	0	1 $\frac{1}{4}$	0	0	0	0
Sanitary, -	0	0	0	0 $\frac{3}{4}$	0	0	0	0 $\frac{1}{16}$	0	0	0	0
Public Health, -	0	0	0	2 $\frac{1}{2}$	0	0	0	0 $\frac{1}{16}$	0	0	0	0
City Improvements, -	0	0	0	1 $\frac{1}{4}$	0	0	0	1 $\frac{1}{4}$	0	0	0	0
Parks and Galleries, -	0	0	0	1	0	0	0	1	0	0	0	0
Municipal Buildings, $\frac{1}{16}$ , Registration of Births, etc., $\frac{3}{16}$ , Registration of Voters, $\frac{1}{16}$ , Valuation of Lands, $\frac{3}{16}$ , Contagious Diseases, $\frac{1}{16}$ , and Prison Payment, $\frac{3}{16}$ , Cess, -	0	1 $\frac{1}{8}$	0	1 $\frac{1}{8}$	0	1 $\frac{1}{8}$	0	1 $\frac{1}{8}$	0	0	0	0
Juvenile Delinquency, -	0	0 $\frac{1}{4}$	0	0 $\frac{1}{4}$	0	0 $\frac{1}{4}$	0	0 $\frac{1}{4}$	0	0	0	0
Total Municipal Rates, -	0	5 $\frac{3}{4}$	2	0 $\frac{1}{16}$	0	5 $\frac{3}{4}$	1	10 $\frac{3}{4}$	1	1 $\frac{5}{16}$	1	1 $\frac{5}{16}$
Poor Rate (on 80% of Rental)	0	4 $\frac{1}{2}$	0	9 $\frac{1}{2}$	0	4 $\frac{1}{2}$	5	9 $\frac{1}{2}$	0	4 $\frac{7}{8}$	0	9 $\frac{1}{2}$
School Rate, (do.,)	0	3 $\frac{1}{16}$	0	3 $\frac{1}{16}$	0	3 $\frac{1}{16}$	0	3 $\frac{1}{16}$	0	3 $\frac{1}{16}$	0	3 $\frac{1}{16}$
Lunacy Rate (gr. Rental)	0	0 $\frac{5}{32}$	0	0 $\frac{5}{32}$	0	0 $\frac{5}{32}$	0	0 $\frac{5}{32}$	0	0	0	0
Total Local Assessments,	1	2 $\frac{7}{32}$	2	9 $\frac{1}{32}$	1	2 $\frac{7}{32}$	2	1 $\frac{7}{32}$	1	9 $\frac{5}{8}$	2	6 $\frac{5}{16}$



**YEAR 1889-90.**

YEAR 1889-90.									
Total Municipal Rating,-	0	51½	2	01½	2	6½	0	51½	1
Poor Rate(on 80%of Rental)	0	4½	0	4½	0	9½	0	4½	0
School Rate, (do,)	0	3½	0	3½	0	7½	0	3½	0
Lunacy Rate(on gr. Rental)	0	0¼	0	0¼	0	0½	0	0¼	0
Total Local Assessments,	1	2½	4	9½	2	0	1	2½	2

**YEAR 1888-89.**

[illegible]

**YEAR 1887-88.**

YEAR 1887-88.												
Total Municipal Rates, -												
Poor Rate (on 80% of Rental)												
School Rate, (do.,)												
Lunacy Rate (on gr. Rental)												
Total Local Assessments,												
0	57	2	1	6½	0	57	1	5	3	1	10	1
0	51	0	5	11	0	51	5	11	5	0	11	0
0	3	0	3	6½	0	3	3	6	3	0	6	0
0	0	0	0	0	0	0	0	0	0	0	0	0
1	2½	2	10	0½	1	2½	2	20	3	5	10	2

**YEAR 1884-85.**

YEAR 1884-85.												
Total Municipal Rates, -	0	31 $\frac{3}{16}$	2	24 $\frac{9}{16}$	2	68 $\frac{3}{16}$	0	31 $\frac{3}{16}$	1	61 $\frac{5}{16}$	1	13 $\frac{3}{16}$
Poor Rate (on 80% of Rental)	0	51 $\frac{1}{16}$	0	5 $\frac{3}{16}$	0	111 $\frac{9}{16}$	0	51 $\frac{1}{16}$	0	57 $\frac{1}{16}$	0	111 $\frac{9}{16}$
School Rate, (do.)	0	27 $\frac{1}{16}$	0	2 $\frac{9}{16}$	0	5 $\frac{3}{16}$	0	27 $\frac{1}{16}$	0	24 $\frac{9}{16}$	0	5
Lunacy Rate (on gr. Rental)	0	0 $\frac{1}{16}$	0	0 $\frac{13}{16}$	0	0 $\frac{3}{16}$	0	0 $\frac{1}{16}$	0	0	0	0
Total Local Assessments,	1	0 $\frac{1}{16}$	2	111 $\frac{3}{16}$	3	111 $\frac{5}{16}$	1	0 $\frac{1}{16}$	2	21 $\frac{5}{16}$	3	31 $\frac{1}{16}$



**YEAR 1889-90.**

Total Municipal Rates, -  
 Poor and Lunacy Rates,  
 (on 80 % of Rental,) -  
 School Rate, (do.,) -  
 Total Local Assessments,

0	5 $\frac{7}{8}$	2	0 $\frac{1}{8}$	2	6	0	5 $\frac{7}{8}$	1	4 $\frac{1}{8}$	1	10 $\frac{1}{2}$	1	1 $\frac{3}{8}$	0	0	1	18
0	5 $\frac{3}{8}$	0	5 $\frac{5}{8}$	0	11	0	5 $\frac{3}{8}$	0	5 $\frac{5}{8}$	0	11	0	5 $\frac{3}{8}$	0	5 $\frac{5}{8}$	0	11
0	3 $\frac{5}{8}$	0	3 $\frac{7}{8}$	0	7 $\frac{1}{2}$	0	3 $\frac{5}{8}$	0	3 $\frac{7}{8}$	0	7 $\frac{1}{2}$	0	3 $\frac{5}{8}$	0	3 $\frac{7}{8}$	0	7 $\frac{1}{2}$
1	2 $\frac{7}{8}$	2	10 $\frac{1}{8}$	4	0 $\frac{1}{2}$	1	2 $\frac{7}{8}$	2	2 $\frac{5}{8}$	3	4 $\frac{3}{8}$	1	10 $\frac{3}{8}$	0	9 $\frac{1}{2}$	2	7 $\frac{1}{2}$

**YEAR 1888-89.**

Total Municipal Rates, -  
 Poor and Lunacy Rates,  
 (on 80 % of Rental,) -  
 School Rate, (do.,) -  
 Total Local Assessments,

0	5 $\frac{5}{8}$	2	0 $\frac{1}{8}$	2	6 $\frac{1}{2}$	0	5 $\frac{5}{8}$	1	5 $\frac{1}{8}$	1	10 $\frac{3}{8}$	1	1 $\frac{1}{2}$	0	0	1	1 $\frac{1}{2}$
0	6 $\frac{1}{8}$	0	6 $\frac{3}{8}$	1	0 $\frac{1}{2}$	0	6 $\frac{1}{8}$	0	6 $\frac{3}{8}$	1	0 $\frac{1}{2}$	0	6 $\frac{1}{8}$	0	6 $\frac{3}{8}$	1	0 $\frac{1}{2}$
0	3 $\frac{5}{8}$	0	3 $\frac{7}{8}$	0	7 $\frac{1}{2}$	0	3 $\frac{5}{8}$	0	3 $\frac{7}{8}$	0	7 $\frac{1}{2}$	0	3 $\frac{5}{8}$	0	3 $\frac{7}{8}$	0	7 $\frac{1}{2}$
1	3 $\frac{1}{8}$	2	11 $\frac{3}{8}$	4	2 $\frac{1}{2}$	1	3 $\frac{1}{8}$	2	3 $\frac{5}{8}$	3	6 $\frac{3}{8}$	1	11	0	10 $\frac{1}{2}$	2	9 $\frac{1}{2}$

**YEAR 1887-88.**

Total Municipal Rates, -  
 Poor and Lunacy Rates,  
 (on 80 % of Rental,) -  
 School Rate, (do.,) -  
 Total Local Assessments,

0	5 $\frac{3}{8}$	2	0 $\frac{1}{8}$	2	6	0	5 $\frac{3}{8}$	1	4 $\frac{1}{8}$	1	10 $\frac{1}{8}$	1	1 $\frac{1}{2}$	0	0	1	1 $\frac{1}{2}$
0	6 $\frac{3}{8}$	0	6 $\frac{5}{8}$	1	1	0	6 $\frac{3}{8}$	0	6 $\frac{5}{8}$	1	1	0	6 $\frac{3}{8}$	0	6 $\frac{5}{8}$	1	1
0	3 $\frac{5}{8}$	0	3 $\frac{7}{8}$	0	6 $\frac{1}{2}$	0	3 $\frac{5}{8}$	0	3 $\frac{7}{8}$	0	6 $\frac{1}{2}$	0	3 $\frac{5}{8}$	0	3 $\frac{7}{8}$	0	6 $\frac{1}{2}$
1	2 $\frac{1}{8}$	2	10 $\frac{1}{8}$	4	1 $\frac{1}{2}$	1	2 $\frac{1}{8}$	2	2 $\frac{5}{8}$	3	5 $\frac{5}{8}$	1	10 $\frac{3}{8}$	0	10	2	8 $\frac{3}{8}$

**YEAR 1884-85.**

Total Municipal Rates, -  
 Poor and Lunacy Rates,  
 (on 80 % of Rental,) -  
 School Rate, (do.,) -  
 Total Local Assessments,

0	3 $\frac{9}{8}$	2	2 $\frac{5}{8}$	2	5 $\frac{1}{8}$	0	3 $\frac{9}{8}$	1	6 $\frac{1}{8}$	1	9 $\frac{5}{8}$	1	1 $\frac{3}{8}$	0	0	1	1 $\frac{3}{8}$
0	5 $\frac{1}{8}$	0	6 $\frac{1}{8}$	1	0	0	5 $\frac{1}{8}$	0	6 $\frac{1}{8}$	1	0	0	5 $\frac{1}{8}$	0	6 $\frac{1}{8}$	1	0
0	2 $\frac{3}{8}$	0	2 $\frac{5}{8}$	0	5	0	2 $\frac{3}{8}$	0	2 $\frac{5}{8}$	0	5	0	2 $\frac{3}{8}$	0	2 $\frac{5}{8}$	0	5
0	11 $\frac{1}{8}$	2	11 $\frac{1}{8}$	3	10 $\frac{3}{8}$	0	11 $\frac{1}{8}$	2	21 $\frac{3}{8}$	3	2 $\frac{5}{8}$	1	10	0	8 $\frac{3}{8}$	2	6 $\frac{3}{8}$

# RATING FOR MUNICIPAL, PAROCHIAL AND SCHOOL BOARD PURPOSES. 1890-91.

## IN GOVAN PARISH.

ASSESSMENTS.	On Rents £10 and upwards.				On Rents £4 1s. and under £10.				On Rents £4 and under.			
	Payable by Owner.		Payable by Occupier.		Payable by Owner.		Payable by Occupier.		Payable by Owner.		Payable by Occupier.	
	S.	D.	S.	D.	S.	D.	S.	D.	S.	D.	S.	D.
Public Water Rate, -	0	1	0	1	0	1	0	0	0	1	0	0
Police, -	0	0	1	2 $\frac{1}{2}$	0	0	0	7 $\frac{3}{4}$	0	0	0	0
Statute Labour, -	0	0	0	1 $\frac{1}{2}$	0	0	0	1 $\frac{1}{2}$	0	0	0	0
Roads and Bridges, -	0	2 $\frac{1}{2}$	0	3 $\frac{3}{4}$	0	2 $\frac{1}{2}$	0	3 $\frac{3}{4}$	0	0	0	0
Sanitary, -	0	0	0	0 $\frac{1}{2}$	0	0 $\frac{1}{2}$	0	0 $\frac{1}{2}$	0	0	0	0 $\frac{1}{2}$
Public Health, -	0	1 $\frac{1}{4}$	0	1 $\frac{1}{4}$	0	1 $\frac{1}{4}$	0	1 $\frac{1}{4}$	0	0	0	1 $\frac{1}{4}$
City Improvements, -	0	0	0	1	0	1	0	1	0	0	0	0
Parks and Galleries, -	0	0	0	2	0	0	0	2	0	0	0	0
Municipal Buildings, $\frac{1}{32}$ , $\frac{5}{32}$ , Registration of Births, etc., $\frac{5}{32}$ , Registration of Voters, $\frac{1}{32}$ , Valuation of Lands, $\frac{1}{32}$ , Contagious Diseases, $\frac{1}{32}$ , and Prison Payment, $\frac{3}{32}$ , Cess, -	0	1 $\frac{1}{2}$	0	1 $\frac{1}{2}$	0	1 $\frac{1}{2}$	0	1 $\frac{1}{2}$	0	1 $\frac{1}{2}$	0	1 $\frac{1}{2}$
Juvenile Delinquency, -	0	0	0	0	0	0	0	0	0	0	0	0
Total Municipal Rates, -	0	5 $\frac{1}{2}$	2	6 $\frac{1}{2}$	0	5 $\frac{1}{2}$	1	4 $\frac{3}{4}$	1	2 $\frac{1}{2}$	0	2 $\frac{1}{2}$
Poor Rate (on 80% of Rental)	0	4 $\frac{1}{2}$	0	8 $\frac{1}{2}$	0	4 $\frac{1}{2}$	0	4 $\frac{1}{2}$	0	4 $\frac{1}{2}$	0	8 $\frac{1}{2}$
School Rate, (do.,)	0	3 $\frac{3}{4}$	0	7 $\frac{3}{4}$	0	3 $\frac{3}{4}$	0	3 $\frac{3}{4}$	0	3 $\frac{3}{4}$	0	7 $\frac{3}{4}$
Lunacy Rate (on gr. Rental)	0	0 $\frac{1}{2}$	0	0 $\frac{1}{2}$	0	0 $\frac{1}{2}$	0	0 $\frac{1}{2}$	0	0 $\frac{1}{2}$	0	0 $\frac{1}{2}$
Total Local Assessments,	1	11 $\frac{9}{16}$	2	9 $\frac{1}{8}$	1	11 $\frac{9}{16}$	3	10 $\frac{1}{16}$	1	10 $\frac{1}{2}$	0	8 $\frac{1}{4}$
											2	6 $\frac{1}{2}$

**YEAR 1889-90.**

Total Municipal Rates, -	0	5 $\frac{7}{16}$	2	0 $\frac{9}{16}$	2	0	5 $\frac{7}{16}$	1	4 $\frac{3}{16}$	1	10 $\frac{1}{4}$	1	13	0	0	0	1	98	1
Poor Rate (on 80% of Rental)	0	4 $\frac{1}{4}$	0	4 $\frac{3}{16}$	0	0	4 $\frac{1}{4}$	0	4 $\frac{3}{16}$	0	9	0	4 $\frac{1}{4}$	0	0	4 $\frac{3}{16}$	0	0	0
School Rate, (do.,)	0	3 $\frac{3}{4}$	0	3 $\frac{3}{16}$	0	0	3 $\frac{3}{4}$	0	3 $\frac{3}{16}$	0	7 $\frac{1}{2}$	0	3 $\frac{3}{4}$	0	0	3 $\frac{3}{4}$	0	0	0
Lunacy Rate (on gr. Rental)	0	0 $\frac{1}{4}$	0	0 $\frac{1}{4}$	0	0	0 $\frac{1}{4}$	0	0 $\frac{1}{4}$	0	0 $\frac{1}{2}$	0	0	0	0	0	0	0	0
Total Local Assessments,	1	11 $\frac{1}{16}$	2	9 $\frac{5}{16}$	3	11	11 $\frac{1}{16}$	2	11 $\frac{9}{16}$	3	3 $\frac{1}{4}$	1	98	0	8 $\frac{1}{2}$	2	58		

**YEAR 1888-89.**

Total Municipal Rates, -	0	5 $\frac{5}{16}$	2	0 $\frac{15}{16}$	2	6 $\frac{1}{4}$	0	5 $\frac{5}{16}$	1	5 $\frac{1}{16}$	1	108	1	1 $\frac{1}{4}$	0	0	1	1 $\frac{1}{4}$	1
Poor Rate (on 80% of Rental)	0	4 $\frac{3}{4}$	0	5 $\frac{1}{4}$	0	10	0	4 $\frac{3}{4}$	0	3 $\frac{3}{4}$	0	10	0	4 $\frac{3}{4}$	0	5 $\frac{1}{4}$	0	10	0
School Rate, (do.,)	0	3 $\frac{3}{4}$	0	3 $\frac{3}{16}$	0	7 $\frac{1}{2}$	0	3 $\frac{3}{4}$	0	5 $\frac{3}{8}$	0	7 $\frac{1}{2}$	0	3 $\frac{3}{4}$	0	3 $\frac{3}{8}$	0	7 $\frac{1}{2}$	0
Lunacy Rate (on gr. Rental)	0	0 $\frac{1}{16}$	0	0 $\frac{1}{16}$	0	08	0	0 $\frac{1}{16}$	0	0 $\frac{1}{16}$	0	08	0	0	0	0	0	0	0
Total Local Assessments,	1	2	2	108	4	08	1	2	2	2 $\frac{1}{4}$	3	4 $\frac{1}{4}$	1	9 $\frac{3}{4}$	0	9	2	6 $\frac{3}{4}$	

**YEAR 1887-88.**

Total Municipal Rates, -	0	5 $\frac{3}{16}$	2	0 $\frac{13}{16}$	2	6	0	5 $\frac{3}{16}$	1	4 $\frac{5}{16}$	1	108	1	1 $\frac{1}{4}$	0	0	1	1 $\frac{1}{4}$	1
Poor Rate (on 80% of Rental)	0	4 $\frac{1}{4}$	0	4 $\frac{1}{16}$	0	9	0	4 $\frac{1}{4}$	0	4 $\frac{1}{16}$	0	9	0	4 $\frac{1}{4}$	0	4 $\frac{3}{16}$	0	0	0
School Rate, (do.,)	0	3 $\frac{1}{4}$	0	3 $\frac{1}{16}$	0	6 $\frac{1}{2}$	0	3 $\frac{1}{4}$	0	3 $\frac{1}{16}$	0	6 $\frac{1}{2}$	0	3 $\frac{1}{4}$	0	3 $\frac{1}{16}$	0	0	0
Lunacy Rate (on gr. Rental)	0	0 $\frac{1}{16}$	0	0 $\frac{1}{16}$	0	08	0	0 $\frac{1}{16}$	0	0 $\frac{1}{16}$	0	08	0	0	0	0	0	0	0
Total Local Assessments,	1	0 $\frac{7}{8}$	2	9	3	98	1	0 $\frac{7}{8}$	2	1 $\frac{1}{8}$	3	2	1	8 $\frac{1}{4}$	0	8	2	4 $\frac{3}{8}$	

**YEAR 1884-85.**

Total Municipal Rates, -	0	3 $\frac{9}{16}$	2	2 $\frac{5}{16}$	2	5 $\frac{7}{8}$	0	3 $\frac{9}{16}$	1	6 $\frac{1}{16}$	1	98	1	1 $\frac{3}{8}$	0	0	1	1 $\frac{3}{8}$	1
Poor Rate (on 80% of Rental)	0	3 $\frac{1}{2}$	0	4	0	7 $\frac{1}{2}$	0	3 $\frac{1}{2}$	0	4	0	7 $\frac{1}{2}$	0	3 $\frac{1}{2}$	0	4	0	0	0
School Rate, (do.,)	0	2 $\frac{1}{2}$	0	2 $\frac{1}{16}$	0	5	0	2 $\frac{1}{2}$	0	2 $\frac{1}{16}$	0	5	0	2 $\frac{1}{2}$	0	2 $\frac{1}{16}$	0	0	0
Lunacy Rate (on gr. Rental)	0	0 $\frac{1}{16}$	0	0 $\frac{1}{16}$	0	08	0	0 $\frac{1}{16}$	0	0 $\frac{1}{16}$	0	08	0	0	0	0	0	0	0
Total Local Assessments,	0	9 $\frac{1}{4}$	2	9	3	68	0	9 $\frac{1}{4}$	2	0 $\frac{3}{4}$	2	10 $\frac{1}{2}$	1	7 $\frac{3}{4}$	0	6 $\frac{1}{2}$	2	21	

NUMBER OF OCCUPIERS RENTED AT £10 AND UPWARDS,  
ASSESSED AT MAXIMUM RATES, WITH NUMBER WHO FAILED  
TO PAY.

YEAR.	Central District.		Eastern District.		Southern District.	
	Number of Occupiers Assessed.	Number failing to pay.	Number of Occupiers Assessed.	Number failing to pay.	Number of Occupiers Assessed.	Number failing to pay.
1878-79	34,921	2,037	9,727	436	12,751	837
1879-80	32,799	1,758	9,249	419	11,915	631
1880-81	32,101	1,598	8,933	240	11,700	523
1881-82	32,075	1,220	8,950	215	11,738	421
1882-83	32,431	796	9,015	152	11,902	319
1883-84	32,968	706	9,116	124	12,027	257
1884-85	33,241	798	9,217	98	12,096	290
1885-86	33,475	832	9,171	138	12,067	299
1886-87	33,616	883	9,196	119	12,046	265
1887-88	33,774	674	9,268	90	11,958	266
1888-89	34,378	595	9,403	93	11,992	220
1889-90	34,748	507	9,591	54	12,101	179
1890-91	35,490	497	9,839	60	12,423	172

NUMBER OF OCCUPIERS RENTED UNDER £10 DOWN TO £4,  
ASSESSED AT MINIMUM RATES, WITH NUMBER WHO FAILED  
TO PAY.

YEAR.	Central District.		Eastern District.		Southern District.	
	Number of Occupiers Assessed.	Number failing to pay.	Number of Occupiers Assessed.	Number failing to pay.	Number of Occupiers Assessed.	Number failing to pay.
1878-79	30,537	16,881	23,017	8,268	15,585	6,107
1879-80	31,238	17,042	23,058	8,048	16,061	6,383
1880-81	31,764	15,821	23,241	7,470	16,381	6,269
1881-82	32,389	14,661	23,535	6,553	16,959	5,879
1882-83	32,938	8,281	23,741	4,505	17,263	3,853
1883-84	33,023	7,948	23,953	4,325	17,413	3,867
1884-85	32,684	7,588	24,090	4,469	17,474	4,175
1885-86	32,971	7,883	24,093	4,620	17,334	4,486
1886-87	33,107	7,798	24,087	4,479	17,416	4,647
1887-88	33,223	7,047	24,121	4,329	17,549	4,188
1888-89	33,846	7,098	24,109	4,093	17,565	3,987
1889-90	34,511	6,384	24,027	3,532	17,916	3,929
1890-91	35,006	6,577	24,220	3,902	18,094	3,968

The large number of defaulters in 1879 and three following

years was owing to the deep depression which overtook many branches of trade throughout the country generally, but intensified in Glasgow by the failure of the City Bank, and the sudden collapse of the building trade after a run of unexampled activity. It is pleasant to see that for some years the number has receded to what may be regarded as minimum standard.

RENTAL OF HOUSES, £4 AND UNDER, UPON WHICH OWNERS  
PAY THE POLICE, ETC., TAXES.

YEAR.	Central District.	Eastern District.	Southern District.	Total.
1870-71	£26,074	£22,611	£8,148	£56,833
1871-72	22,213	20,691	7,052	49,956
1872-73	19,534	18,644	6,715	44,893
1873-74	15,897	16,538	5,301	37,736
1874-75	13,391	15,007	4,521	32,919
1875-76	11,976	13,417	3,822	29,215
1876-77	10,449	11,897	3,158	25,504
1877-78	9,426	10,854	2,504	22,784
1878-79	8,503	10,550	2,316	21,369
1879-80	9,500	12,017	2,564	24,081
1880-81	10,518	12,966	2,788	26,272
1881-82	10,484	13,244	2,897	26,625
1882-83	11,145	14,101	3,149	28,395
1883-84	11,064	13,823	3,292	28,179
1884-85	11,758	13,919	3,256	28,933
1885-86	11,292	13,687	3,208	28,187
1886-87	11,760	13,751	3,319	28,830
1887-88	11,819	14,112	3,205	29,136
1888-89	12,035	14,220	3,275	29,530
1889-90	11,745	14,337	3,358	29,440
1890-91	11,657	13,759	3,416	28,832
	Decrease 55'29	Decrease 39'15	Decrease 58'08	Decrease 49'27

This Table shows that the more wretched houses of the city have suffered large diminution, the clearances being chiefly carried out by the Improvement Trustees, but substantially also by the Railway Companies.



## OUTCOME OF ASSESSMENTS IMPOSED ON CITY, 1890-91.

Police, - - - - -	£171,670	0	5
Statute Labour, - - - - -	14,300	12	3
Roads and Bridges, - - - - -	45,211	0	8
County Road Debts, - - - - -	4,955	11	4
Sanitary, - - - - -	10,266	13	5
Public Health, - - - - -	32,294	11	8
City Improvements, - - - - -	12,648	13	3
Parks and Galleries, - - - - -	25,374	7	1
Municipal Buildings ; Registration of Births, etc. ; Registration of Voters ; Valuation of Lands ; Contagious Diseases (Animals) Act ; Lunacy, in City and Govan Parishes only ; and Prison Payment, - - - - -	31,747	17	9
Cess, - - - - -	2,471	16	2
Juvenile Delinquency, - - - - -	8,685	11	1
Public Water Rate, - - - - -	13,287	15	10
Poor and School Rate (on 80 % of Rent)—			
City, - - - - -	£67,527	7	11
Barony (including Lunacy),	93,144	10	10
Govan, - - - - -	49,532	19	11
		210,204	18 8
		£583,119	9 7



LOCAL ASSESSMENTS LEVIABLE IN THE BURGH OF GLASGOW  
FOR THE YEAR 1891-92.

ASSESSMENTS.	Rate per £.		
	On Occupier.		On Owner.
	On Rents at £10 and upwards.	On Rents above £4 and under £10.	
1. Assessments under Police Acts—			
For Police Purposes, - -	1s. 2 $\frac{3}{4}$ d.	7 $\frac{3}{8}$ d.	*7 $\frac{3}{8}$ d.
„ Sanitary Objects, - -	$\frac{3}{4}$ d.	$\frac{3}{8}$ d.	* $\frac{3}{8}$ d.
„ Statute Labour, - -	1 $\frac{1}{8}$ d.	1 $\frac{1}{8}$ d.	*1 $\frac{1}{8}$ d.
„ Sewage, - - - -	$\frac{1}{8}$ d.	$\frac{1}{8}$ d.	$\frac{1}{8}$ d.
„ Cleansing—Leviable only on property bounding with, or having a right of access by or to a private street or court, - - - -	—	—	1d.
Stair Lights, 10s. per Jet; Court Lights, 15s. per Lamp.			
2. Assessments under the Public Health Acts, - - - -	1 $\frac{1}{2}$ d.	1 $\frac{1}{2}$ d.	1 $\frac{1}{2}$ d.
3. Assessments under Roads and Bridges Acts, - - - -	1 $\frac{3}{4}$ d.	1 $\frac{3}{4}$ d.	1 $\frac{3}{4}$ d.
4. Assessment under Roads and Bridges Acts for Road Debt and Interest thereon, - - - -	—	—	$\frac{3}{16}$ d.
5. Municipal, Justiciary and J.P. Buildings, - - - - $\frac{1}{3}\frac{1}{2}$ d.			
6. Valuation of Lands Assessment, - - - - $\frac{7}{32}$ d.			
7. Registration of Voters, - - $\frac{5}{32}$ d.			
8. Prison Payment, - - $\frac{2}{32}$ d.			
9. Lunacy Purposes, - - $\frac{9}{32}$ d.			
10. Registration of Births, Deaths, and Marriages, - $\frac{5}{32}$ d.	1 $\frac{13}{32}$ d.	1 $\frac{13}{32}$ d.	1 $\frac{13}{32}$ d.
11. Contagious Diseases (Animals) Acts, - - - - $\frac{1}{32}$ d.			
12. Improvements Assessment, -	1d.	1d.	—
13. Parks and Galleries, - -	2d.	2d.	—
14. Juvenile Delinquency, - -	$\frac{1}{16}$ d.	$\frac{1}{16}$ d.	—
15. Cess or Land Tax in Royalty or City Parish only, - - -	$\frac{1}{4}$ d.	$\frac{1}{4}$ d.	$\frac{1}{4}$ d.
16. Public Water Rate, - - -	—	—	1d.

\* On Rents at £4 and under.

POOR AND SCHOOL RATES.

ASSESSMENTS.	City Parish.	Barony Parish (including Lunacy).	Govan Parish.
Poor's Rate—Owner, - -	5 $\frac{2}{10}$ d.	5 $\frac{1}{8}$ d.	4d.
Do. Occupier, - -	5 $\frac{6}{10}$ d.	5 $\frac{3}{8}$ d.	4 $\frac{1}{2}$ d.
School Rate—Owner, - -	3 $\frac{7}{10}$ d.	3 $\frac{3}{8}$ d.	3 $\frac{1}{2}$ d.
Do. Occupier, - -	3 $\frac{9}{10}$ d.	3 $\frac{5}{8}$ d.	3 $\frac{1}{2}$ d.

Gas, 2s. 6d. per 1,000 feet. Water, Domestic Rate, 6d. per £ of Rental.

## MUNICIPAL ELECTORS IN EACH OF THE SIXTEEN WARDS ARRANGED IN BIENNIAL PERIODS, 1887-91.

WARD.	1890-91.			1888-89.			1886-87.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
I., - -	6,420	1,375	7,795	6,367	1,319	7,686	6,434	1,307	7,741
II., - -	8,261	1,543	9,804	7,983	1,482	9,465	7,840	1,371	9,211
III., - -	7,028	1,023	8,051	6,448	959	7,407	6,198	939	7,137
IV., - -	3,726	947	4,673	3,642	906	4,548	3,661	880	4,541
V., - -	7,428	1,162	8,590	7,179	1,062	8,241	7,088	1,023	8,111
VI., - -	2,231	538	2,769	2,198	529	2,727	2,264	524	2,788
VII., - -	1,450	130	1,580	1,478	127	1,605	1,459	135	1,594
VIII., - -	1,840	112	1,952	1,774	127	1,901	1,796	127	1,923
IX., - -	2,866	475	3,341	2,731	489	3,220	2,656	505	3,161
X., - -	4,761	961	5,722	4,685	923	5,608	4,684	895	5,579
XI., - -	8,229	2,397	10,626	7,595	2,206	9,801	7,305	2,062	9,367
XII., - -	3,802	1,039	4,841	3,624	1,033	4,657	3,476	1,011	4,487
XIII., - -	4,239	675	4,914	4,034	689	4,723	3,778	654	4,432
XIV., - -	7,121	1,130	8,251	6,578	1,010	7,588	6,869	1,080	7,949
XV., - -	4,565	1,108	5,673	4,312	1,085	5,397	4,349	1,093	5,442
XVI., - -	4,771	833	5,604	4,401	803	5,204	4,647	812	5,459
Total Municipal Constituency,	78,738	15,448	94,186	75,029	14,749	89,778	74,504	14,418	88,922

## PARLIAMENTARY ELECTORS IN EACH WARD DURING TEN YEARS, ARRANGED IN BIENNIAL PERIODS.

WARD.	1882-83.	1884-85.	1886-87.	1888-89.	1890-91.
I. - -	5,609	6,639	6,434	6,367	6,420
II. - -	6,947	7,893	7,840	7,983	8,261
III. - -	3,923	4,387	6,198	6,448	7,028
IV. - -	3,432	3,802	3,661	3,642	3,726
V. - -	4,625	4,844	7,088	7,179	7,428
VI. - -	2,386	2,407	2,264	2,198	2,231
VII. - -	1,555	1,494	1,459	1,478	1,450
VIII. - -	1,742	1,724	1,796	1,774	1,840
IX. - -	2,469	2,660	2,656	2,731	2,866
X. - -	4,046	4,555	4,684	4,685	4,761
XI. - -	5,877	6,561	7,305	7,595	8,229
XII. - -	3,221	3,559	3,476	3,624	3,802
XIII. - -	3,620	3,883	3,778	4,034	4,239
XIV. - -	6,179	7,333	6,869	6,578	7,121
XV. - -	4,072	4,434	4,349	4,312	4,565
XVI. - -	4,003	4,703	4,647	4,401	4,771
Total Parliamentary Constituency.	63,716	70,878	74,504	75,029	78,738

ELECTORS IN EACH MUNICIPAL WARD OF THE EXTENDED CITY  
AND ROYAL BURGH OF GLASGOW, 1891-92.

WARDS.	MALES.	FEMALES.	TOTAL.
1	6,701	1,339	8,040
2	8,429	1,551	9,980
3	7,368	1,074	8,442
4	3,811	929	4,740
5	7,704	1,163	8,867
6	2,221	533	2,754
7	1,492	136	1,628
8	1,873	134	2,007
9	2,885	491	3,376
10	4,779	959	5,738
11	9,030	2,472	11,502
12	3,975	1,006	4,981
13	4,317	678	4,995
14	7,187	1,135	8,322
15	4,716	1,153	5,869
16	4,950	844	5,794
17	2,690	414	3,104
18	666	218	884
19	1,475	294	1,769
20	1,587	453	2,040
21	505	81	586
22	1,149	570	1,719
23	814	166	980
24	2,363	362	2,725
25	2,272	152	2,424
1st Ward beyond Par- liamentary Burgh, }	4	—	4
TOTAL, - - -	94,963	18,307	113,270

## REDISTRIBUTION OF SEATS ACT, 1885.

CITY AND ROYAL BURGH OF GLASGOW (UNEXTENDED) AS  
DIVIDED INTO SEVEN PARLIAMENTARY DIVISIONS.

*One Member for each Division.*

NAMES, CONTENTS, AND BOUNDARIES OF DIVISIONS.

No. 1.—THE BRIDGETON DIVISION. The 1st and 4th Municipal Wards.

Constituency, 10,512.

No. 2.—THE CAMLACHIE DIVISION. The 2nd Municipal Ward and so much of the 3rd Municipal Ward as lies south of a line drawn along the centre of Duke Street.

Constituency, 9,716.

No. 3.—ST. ROLLOX DIVISION. The 5th Municipal Ward, and the 3rd Municipal Ward, except so much as is comprised in Division No. 2, as herein described.

Constituency, 13,785.

No. 4.—THE CENTRAL DIVISION. The 7th, 8th, 9th, 12th, and 13th Municipal Wards.

Constituency, 14,542.

No. 5.—THE COLLEGE DIVISION. The 10th and 11th Municipal Wards.

Constituency, 13,809.

No. 6.—THE TRADESTON DIVISION. The 15th and 16th Municipal Wards.

Constituency, 9,666.

No. 7.—THE BLACKFRIARS AND HUTCHESONTOWN DIVISION. The 6th and 14th Municipal Wards.

Constituency, 9,408.

Total number of Voters in the Seven Divisions,

81,438.

SCHOOL BOARD ELECTORS IN TRIENNIAL PERIODS  
FROM 1885 TO 1891.

WARD.	1885-88.	1888-91.	1889-94.
I. - - -	11,653	11,416	11,917
II. - - -	13,656	13,635	14,028
III. - - -	10,212	10,385	11,309
IV. - - -	7,739	7,587	7,633
V. - - -	11,065	11,283	11,848
VI. - - -	5,456	5,069	4,988
VII. - - -	2,229	2,184	2,185
VIII. - - -	2,662	2,736	2,792
IX. - - -	5,203	5,159	5,298
X. - - -	9,126	8,909	8,969
XI. - - -	12,891	13,520	14,860
XII. - - -	6,682	6,616	6,758
XIII. - - -	6,658	6,658	7,067
XIV. - - -	13,181	13,009	13,657
XV. - - -	9,103	9,972	9,244
XVI. - - -	8,559	8,375	8,599
Total, - - -	136,075	135,513	141,152
And there voted,	58,770	No Contest.	50,553

The preceding Tables exhibit the progress of the electorate in each of the City Wards entitled to vote during some years by-past at Municipal, Parliamentary, and School Board elections. In all the Wards there has been a progressive increase.

For the information of those unacquainted with the fact, it may be explained that every owner or occupier of a heritable subject of the annual value of £4 and upwards has a qualification to vote for members of the School Board, irrespective of sex, place of residence, or payment of rates.

GROWTH OF THE  
FROM 1844, WHEN ONLY THE COMMON GOOD ESTATE

YEAR.	Corporation or Common Good.	Police, Statute Labour, etc.	Water.	Parks.	Markets.
1844	£15,340	—	—	—	—
1845	15,717	£32,984	—	—	—
1846	15,711	36,673	—	—	—
1847	16,155	51,263	—	—	—
1848	19,267	57,600	—	—	—
1849	20,248	68,255	—	—	—
1850	20,706	75,253	—	—	—
1851	20,491	70,467	—	—	—
1852	20,646	72,551	—	—	—
1853	20,437	75,797	—	—	—
1854	19,664	83,254	—	—	—
1855	20,124	86,681	—	—	—
1856	20,611	92,282	—	—	—
1857	22,432	93,626	£62,336	—	—
1858	23,034	89,395	65,940	—	—
1859	23,154	91,450	68,497	—	—
1860	22,747	107,937	71,449	£13,288	—
1861	18,480	113,759	75,699	13,323	—
1862	15,655	111,072	80,262	12,738	—
1863	14,446	116,029	87,191	12,766	—
1864	16,711	114,431	91,208	12,963	—
1865	16,086	124,759	90,733	13,379	£7,770
1866	16,458	136,010	90,936	13,706	7,761
1867	17,373	146,324	95,709	15,337	9,966
1868	17,248	165,002	99,090	15,552	11,625
1869	19,258	197,681	104,350	15,759	12,893
1870	16,580	206,661	111,486	16,557	11,367
1871	15,916	209,762	108,153	17,210	11,990
1872	16,055	232,301	110,781	18,197	12,593
1873	16,744	239,175	111,302	19,865	13,449
1874	17,226	257,372	118,505	17,696	13,730
1875	16,762	282,865	126,357	17,415	14,845
1876	19,654	325,258	131,222	19,619	17,439
1877	30,362	326,957	136,204	20,689	16,842
1878	21,089	345,653	138,292	20,095	16,938
1879	20,397	348,542	140,579	21,608	17,379
1880	22,683	341,946	140,897	22,109	23,576
1881	23,916	344,334	147,301	30,518	19,501
1882	25,183	408,693	150,504	30,899	20,432
1883	23,302	367,475	155,748	26,779	19,845
1884	26,178	393,140	161,502	27,056	19,802
1885	25,818	413,760	162,572	26,725	19,846
1886	21,316	415,863	162,405	26,965	20,953
1887	20,584	406,793	163,473	27,321	21,452
1888	20,343	418,732	163,924	26,322	22,213
1889	27,718	420,878	167,915	36,710	22,259
1890	23,042	426,569	173,825	27,627	19,816
1891	33,111	439,496	168,409	28,834	19,803

CORPORATION REVENUES.  
 WAS ADMINISTERED BY THE TOWN COUNCIL.

Improve- ments.	Gas.	Tramways.	Municipal Buildings.	TOTAL.
—	—	—	—	£15,340
—	—	—	—	48,701
—	—	—	—	52,384
—	—	—	—	67,418
—	—	—	—	76,867
—	—	—	—	88,503
—	—	—	—	95,959
—	—	—	—	90,958
—	—	—	—	93,197
—	—	—	—	96,234
—	—	—	—	102,918
—	—	—	—	106,805
—	—	—	—	112,893
—	—	—	—	178,394
—	—	—	—	178,369
—	—	—	—	183,101
—	—	—	—	215,421
—	—	—	—	221,261
—	—	—	—	219,727
—	—	—	—	230,432
—	—	—	—	235,313
—	—	—	—	252,727
—	—	—	—	264,871
£39,485	—	—	—	324,194
33,639	—	—	—	342,156
42,133	—	—	—	392,074
55,071	£235,701	—	—	653,423
58,131	252,357	—	—	673,519
58,750	269,976	—	—	718,653
59,191	289,621	£5,136	—	754,483
71,207	357,702	18,557	—	871,995
53,377	378,393	22,377	—	912,391
61,388	364,896	23,552	—	963,028
63,120	342,909	24,839	—	961,922
63,397	327,430	25,513	—	958,407
66,110	337,964	25,507	£13,052	991,138
72,852	341,275	25,603	13,013	1,003,954
65,464	353,812	26,946	12,815	1,024,607
65,801	378,134	27,988	12,825	1,120,459
73,293	406,978	28,246	12,933	1,114,599
74,489	418,775	28,744	12,743	1,162,429
68,015	428,227	28,675	12,740	1,186,378
65,868	401,307	28,546	12,561	1,155,784
64,430	386,246	28,963	12,498	1,131,760
57,744	383,566	30,078	12,868	1,135,790
58,986	392,897	29,992	12,657	1,170,012
57,146	417,589	29,848	20,246	1,195,708
58,337	483,576	29,704	24,995	1,286,265



THE REVENUE AND EXPENDITURE, AND THE ASSETS AND DEBTS OF THE CORPORATION OF GLASGOW  
AND ITS VARIOUS TRUSTS FOR THE YEAR.

1890-91.

	REVENUE.		EXPENDITURE.		ASSETS.		DEBTS.	
	£	s.	£	s.	£	s.	£	s.
Corporation, - - -	33,111	0	3	30,033	13	5	878,319	12
Improvement Trust, - - -	58,336	14	7	53,024	16	4	1,013,488	10
Markets Commissioners, - - -	19,803	8	3	17,284	14	4	172,375	4
Parks and Galleries Trust, - - -	28,834	5	7	29,687	3	11	265,906	19
Municipal Buildings Act, - - -	24,994	12	4	27,115	11	5	513,981	1
Gas Trust, - - -	483,576	13	1	435,358	14	9	561,234	13
Water Trust, - - -	168,408	11	4	165,774	11	0	586,121	19
POLICE—Police Department, - - -	293,818	18	1	294,783	10	11	2,047,585	0
Statute Labour Department, - - -	79,650	17	3	77,600	13	2	342,271	5
Sanitary, - - -	44,314	12	8	45,721	0	9	358,205	10
Street Improvement, - - -	21,711	17	0	22,356	2	11	79,739	3
Sewage Purification, - - -	—			346	10	10	261,317	14
Corporation Tramways, - - -	29,713	14	9	189	13	0	7,529	12
Mitchell Library, - - -	1,397	8	0	2,234	13	7	345,462	3
Town Clerk's Fee Fund, - - -	7,909	10	2	7,081	14	10	202	9
Contagious Diseases (Animals) Act, - - -	20,475	8	11	12,999	11	11	302	13
Gas Measures Act, - - -	688	9	4	553	1	8	54,936	13
Lamb's Bequest, - - -	805	17	5	805	16	10	12	11
Mitchell's Mortification, - - -	114	2	11	142	4	0	427	8
Maclean's Trust, - - -	696	8	6	537	2	9	—	
							2	15
							6	



The Stewart Bursaries, -	55	2	2	45	0	0	1,595	3	6	—	—
Buchanan's Aged Persons' Mort., -	278	17	9	241	2	11	5,047	16	3	81	14 11
Coulter's Mortification, -	54	0	0	51	1	0	1,212	17	6	—	—
St. Nicholas Hospital, -	56	5	6	56	11	0	961	11	9	—	—
Shuna Bequest, -	150	14	9	198	11	3	10,568	1	10	369	0 6
Prison Payment, -	2,715	5	7	1,119	7	4	2,207	13	10	43,897	18 2
Registration of Births, etc., Act, -	5,528	5	6	4,420	10	7	312	7	7	—	—
Registration of Voters Act, -	3,776	1	6	3,800	6	2	—	—	—	24	4 8
Valuation of Lands, etc., Act, -	7,114	6	0	5,705	10	8	1,618	4	3	1,215	7 1
Clyde Embankments, -	—	—	—	—	—	—	4,359	17	2	8,165	10 7
Moir's Bequest, -	323	9	0	354	6	9	11,220	17	10	27	7 2
Cook & Macfarlan Bursaries, -	42	0	0	42	0	0	1,006	6	8	—	—
Admiral Duff's Bequest, -	40	0	0	40	0	0	1,068	12	11	—	—
Gibson's Mortification, -	5	0	0	5	0	0	134	12	2	—	—
Tennent's Mortification, -	46	13	3	46	13	3	1,166	13	3	—	—
Gilhagie Bursary, -	6	6	0	6	6	0	126	7	10	—	—
Govan's Mortification, -	6	10	0	6	10	0	162	2	2	—	—
Gray's Mortifications, -	50	0	0	50	0	0	1,000	0	0	—	—
Kippen Bursary, -	21	3	6	21	3	6	605	0	0	—	—
Leadbetter Bursary, -	9	0	0	9	0	0	197	1	5	—	—
Leighton Bursaries, -	18	0	0	18	0	0	430	11	8	—	—
Leighton's Mortification, -	13	12	10	6	15	0	315	12	7	—	—
St. John's Sessional School Mort., -	25	0	0	25	0	0	500	0	0	—	—
High School Medals Funds, -	7	11	0	7	11	0	151	0	0	—	—

COMPLETION OF THE NEW MUNICIPAL BUILDINGS  
OR "CITY CHAMBERS."

THIS new official residence of the Corporation was completed and fully occupied by the Town Council and its various departmental officers early in 1890—having been commenced on 12th March, 1883, when the first spadeful of earth was lifted. Most fortunate have the Corporation been in their highly accomplished architect, Mr. William Young, and in their contractors, Messrs. Morrison & Mason, known individually to the citizens as Mr. John Morrison and Deacon Convener Thomas Mason. In their hands the work has progressed without let or hindrance, without disputings, and without serious misadventure; and now the ideal of the Town Council, and of their exponent, Mr. Young, stands embodied in an edifice whose stately proportions and beauty, without and within, are the pride of the citizens and the admiration of strangers from all quarters of the globe. Over a space of seven years cotemporary citizens watched its progress with ever growing interest as it rose from the ground course by course and story by story, the interest intensifying as it effloresced into domes and towers. From the annalist's point of view, it might be of some little interest to the generations following "to tell the towers thereof," and mark them with the dates on which, one by one, they reached completion, and how later on the interior of the edifice assumed befitting form and splendour. Suffice it to say that the style of the building is Italian Renaissance; the form is almost a square, 230 feet long by 245 feet deep; it occupies upwards of 6,000 square yards, and the total floorage measures 210,000 square feet, and the principal tower rises to a height of 237 feet. In the structure seen and hidden from sight are embedded 350,000 cubic feet of stone, 19,000 cubic feet of granite, and ten million bricks—the latter largely

produced from ground belonging to the Corporation. Further description is unnecessary. The fabric stands revealed to the world in substantial stone and granite without, and in marble and alabaster within, realizing the conception of its authors in fullest measure.

But the electric lighting of the building is only seen by the few and a brief description of it may be given. The installation consists of about 1400 incandescent lamps, ranging from 16 up to 350 candle power. The Ferranti high pressure alternating current system is employed, the current being brought overhead to the towers of the building at a pressure of 2,400 volts, and there reduced by induction transformers to 100 volts for feeding the lamps. The machinery generating the current consists of two 2,500 light Ferranti alternators with exciters, driven by rope gearing from two compound slow speed engines of the Putnam type. In the distribution of the current throughout the building many fine electroliers are used. The three large ones in the Banqueting Hall are splendid specimens of artistic brass work, and are probably the largest in the world, measuring 33 feet from ceiling to lowest point of pendant, and each carries 50 lamps. The three electroliers weigh nearly three tons. A novel arrangement has been made for raising and lowering these immense fittings with ease. Like all the rest of the pendants and brackets they are constructed for gas as well as electricity. Attached to the ceiling is a brass tube, 8 inches diameter, and about 12 feet long; round this are coiled two small brass tubes, through which the gas is led to a corona of jets. The coiled tubes give the whole the appearance of a thick brass cable. Passing up through the large tube is a steel chain, which is led round a differential windlass fixed in the attic roof. To this chain the electrolier is attached, flexible electric connections being provided. One man can lower, clean, and raise each pendant in a few hours, whereas if no provision of the kind existed the fitting up and dismantling of scaffolding would take several days to carry out, apart from the inconvenience

of such an operation. The lamps in the Banqueting Hall exceed 200.

But it is needful and befitting to mention the names of those who took prominent part in the conception and in the execution in its manifold details of this impressive structure, and to note with brevity the suitable functions with which the building was inaugurated.

Lord Provost William Rae Arthur, on 10th November, 1870, moved that the ground on the east side of George Square be acquired, and municipal buildings erected thereon, but by a small majority this motion was not then carried.

Lord Provost Bain, now Sir James Bain, M.P. for Whitehaven, on 7th July, 1877, moved "That it be remitted to a committee, consisting of the Magistrates and members of the Finance Committee, the Conveners and Sub-Conveners of the several other committees, and the Deacon Convener, to consider and report on the expediency of acquiring property in a central position of the city with a view to the erection thereon at some future period of a building in which the various departments of the city service may be carried on with efficiency and economy." The resolution was now cordially adopted, and on 4th October following Lord Provost Bain had again the honour of moving "That a bill be promoted in the next session of Parliament for authority to acquire the east side of George Square, and to erect thereon suitable buildings for the Municipality." The motion was unanimously agreed to, and the Act was obtained without opposition on 17th June, 1878.

Lord Provost Collins, now Sir William Collins, on 1st August, 1878, moved "That it be remitted to a special Committee, consisting of the following gentlemen, viz.:—The Lord Provost, Bailies James Torrens and John Ure, the Dean of Guild (Sir James

Watson), Treasurer Osborne, Councillors James Hamilton, T. A. Mathieson, William Miller, James Morrison, and William Walls, to take such action as may be necessary to carry into effect the provisions of the Glasgow Municipal Buildings Act, 1878, and in the meantime to acquire the property between George Square and John Street.

Lord Provost John Ure laid the foundation stone in the central tower of the edifice at its street level on 6th October, 1883, with full masonic rites, when, in high holiday and in brilliant weather, over half a million of citizens, including the entire trades of the city, formed into a most imposing procession, and tens of thousands from the provinces took part in the function, as has been elsewhere fully narrated.

Lord Provost M'Onie, now Sir William M'Onie, throughout his three years occupancy of the civic chair, took a lively share in the carrying out of the details of the edifice.

Her Majesty the Queen, as before more fully and appropriately noticed, on 22nd August, 1888, graciously performed the inaugural function of opening the building with regal ceremony.

His Majesty the Shah of Persia was presented with an address of welcome in presence of the Town Council, within their new Council Chamber, on 18th July, 1889, being the first function performed within an edifice which combines the solid purposes of a Western business city with Oriental ideas of splendour.

The citizens of Glasgow during nine days, extending from 2nd to 11th September, 1889, had the building thrown open to them for inspection, and it was estimated that 400,000 persons passed through it.

A brilliant conversazione to 7,000 representative citizens, ladies and gentlemen, was given by the Corporation on 7th October, 1889, when the entire building was thrown open, and brilliantly lit with the electric light.

The Town Council held their first meeting for the dispatch of business within the Council Hall on 10th October, 1889, when Lord Provost Sir James King, Baronet, presided. The meeting was opened by an impressive dedicatory prayer, offered up by the Reverend David Brown of St. Enoch's Parish, and by the following congratulatory words from the Lord Provost:—

“ Before beginning the business of the meeting, you will allow me to offer my hearty congratulations and good wishes for all the members of the Town Council. It is, indeed, an important epoch in its history. There are many memories that cluster about the Council Chamber, where for 15 years the business of the town has been carried on. Within it many plans have been proposed, matured, and carried into effect for the good of the city. Within it many lasting friendships have been formed among the members; and if, in the heat of debate, any unkind or hasty expression was uttered, I am sure it never lingered in the mind of the person to whom it was addressed any more than it did in the mind of the person who spoke it. But, while there is a mingled feeling of regret in parting with the old Council Chambers as in parting from an old friend, the preponderance is certainly one of gladness and joy in finding every branch of the service of the city for the first time accommodated within one building, and in having as a home for the Town Council a building worthy alike of the importance of the duties which they are called upon to discharge and of the great city over which they preside. Gentlemen, at a time when we are entering upon this new departure the sunshine of prosperity is returning to our city as regards commerce and manufactures, and I trust that there is before our city a long and continuous term of prosperity. As regards the Council itself, I feel sure that it will ever be animated by those principles which have guided it in the past, and which have led it in the most uncompromising manner to set its face against anything that was low or self-seeking or dishonourable; and I am sure that, although the duties are becoming more and more onerous every year, the time will never arrive when there will not be citizens ready and able to discharge all the duties of governing the city.”

The Lord Provost's words were warmly cheered. At the conclusion of this first sederunt of the Town Council, on the invitation of the City Treasurer, Mr. David Richmond, all the members partook of luncheon in the Crush Salon.



Lord Provost Sir James King gave a splendid banquet within the Banqueting Hall, on 23rd October, 1889, to the members of the Town Council, city and county dignitaries, members of Parliament, Lords of Session, and others.

And to complete the inaugural celebrations, Lord Provost John Muir and Mrs. Muir gave a ball, within the Banqueting Hall, on 11th March, 1890, to 1,200 ladies and gentlemen—the most magnificent spectacle of the kind ever witnessed in our city, to which the ample marble and alabaster staircases and corridors, lit by the electroliers, lent themselves with imposing effect, and with all the charm of novelty.

“Our rebels now are ended.”

Not so the “gorgeous palace.” It remains steadfast in massive beauty; a dream, but not alone of the poet,—of the architect imbued with the true poetic spirit, provided, besides, in rich abundance, with materials brought from many lands, and with artificers, not a few, cunning in all manner of workmanship.

But while the fabric will remain by human computation during many generations, those “our actors” engaged in its design and construction must sooner disappear. It is most fitting, therefore, that their names and their work be kept in remembrance—practical work involving unnumbered details.

First and foremost come the members of the Municipal Buildings Committee from the passing of the Act until the completion of the edifice in February, 1890.—This committee was presided over by the successive Lord Provosts viz:—Lord Provosts Collins, Ure, M’Onie, King and Muir, all already identified with it. The sub-conveners and virtual chairmen of the committee during the operations of building were Ex-Bailie John Laing from Nov. 1883 to Nov. 1887, and Ex-Bailie Alexander Osborne from Nov. 1887 till the entire completion and occupation of the build-

ing. And the members of the committee other than those named were :—

Patrick Playfair, Dean of Guild.	William M'Ewen, Dean of Guild.
James Hamilton, City Treasurer.	Councillor Wm. Renny Watson.
Ex-Bailie Thomas A. Mathieson.	Alex. Waddel, City Treasurer.
William Miller, City Treasurer.	Ex-Bailie Archibald Dunlop.
Ex-Bailie James Morrison.	„ James Thomson.
„ James Torrens.	„ William Wilson.
Thomas Reid, Deacon Convener.	Hugh Kennedy, Deacon Convener.
William Walls, City Treasurer.	Bailie Thomas Cumming.
Ex-Bailie Edward J. Scott.	„ James Henderson Martin.
„ Hugh MacBean.	Councillor Arthur Meehan.
„ Hugh Colquhoun.	Bailie James M'Farlane.
Andw. M'Onie, Deacon Convener.	„ Alexander M'Laren.
Ex-Bailie James Brown.	„ Michael Simons.
„ Hugh Lamberton.	Thomas Watson, City Treasurer.
James Buchanan Mirrlees, Dean of Guild.	Bailie Robert Graham
Ex-Bailie John Mowat.	„ Walter Paton.
„ George Jackson.	„ James M'Lennan.
Councillor James Reid.	Councillor John Ure Primrose.
Alexander Stephen, Dean of Guild.	„ Thos. Cochrane Guthrie.
David Richmond, City Treasurer.	Wm. M'Lean, Jr., Deacon Con- vener.
Ex-Bailie James Shaw.	Councillor Robert Murdoch.
Councillor William Rae Wilson Smith.	Bailie John Shearer.

The principal officials connected with the erection of the Buildings were :—

Sir James David Marwick, L.L.D., Town-Clerk, and James George Monro, Deputy Town-Clerk, acting as Clerks and Legal Advisers.

James Nicol, City Chamberlain, acting as Treasurer.

William Young, Architect of the Buildings.

Henry D. Walton, Resident Assistant Architect.

John Carrick, City Architect, Designer of Block Plans, and Joint Arbiter in the selection of the most meritorious designs for Building.



Charles Barry, Architect, London, Arbiter on Designs.

E. C. Morgan, Clerk of Works.

David Cook, Superintending Electrician.

The principal Contractors for the Building were the following :—

Mason, Brick, Concrete, and	
Iron Work, - - -	Morrison & Mason, Glasgow.
Digger Work for Foundations,	James Watson & Son, Glasgow.
Jubilee Sculpture on Pediment,	G. A. Lawson, London.
Wright, Joiner, and Carpenter	Morrison & Mason, Glasgow, and
Work, - - - -	Jas. Morrison, Sub-Contractor,
Plaster Work, - - -	D. & J. Mackenzie, Glasgow.
Glazier Work, - - -	R. L. Paterson & Co., Glasgow.
Plumber Work, - - -	Brown & Young, Glasgow.
Marble Work of Principal Stair-	
case, - - - -	Galbraith & Winton, Glasgow.
Council Chamber Staircase, -	Morrison & Mason, Glasgow.
Faience and Mosaic Work, -	Galbraith & Winton, Glasgow.
Wall Tiling, - - - -	James Duncan, Glasgow.
Heating and Ventilating, -	G. N. Haden & Son, Trowbridge.
Iron Gates, - - - -	Starkie, Gardner & Co.,
Iron Grills, - - - -	George Adam, Glasgow.
Electric Installation, - -	Muir, Mavor & Coulson, Glasgow.
Electric and Gas Fittings, Piping, etc., - - -	William Ramsay & Co., Glasgow.
	John Finlay & Co., Glasgow.
	A. Clark & Co., Lim., Glasgow.
	Moir & Kemp, Glasgow.
	Buchans & Macintyre, Glasgow.
	James Milne & Son, Glasgow.
	F. Anderson, Glasgow.
Painting and Decorative Work,	Chas. Carlton & Son, Glasgow.
Cabinet Work of Salons, etc.,	{ Wylie & Lochhead, Lim., Glas.
	{ Alex. Mackenzie & Co., Glasgow.
Blinds and Electric Bells, -	William Bryden & Son, Glasgow.
Speaking Tubes and Bells, -	J. W. Black, Glasgow.
Kitchen Fittings and Utensils,	Buchans & Macintyre, Glasgow.
Hydraulic Passenger Elevator,	American Elevator Co.
Hydraulic Hoists, - - -	A. & P. Steven, Glasgow.

Grates, Fenders, etc., -	{	Moir & Kemp, Glasgow.
		Alex. Davie & Sons, Glasgow.
		Buchans & Macintyre, Glasgow.
		Mark Feetham & Co., London.
Furniture and Upholstery Work,	{	Wylie & Lochhead, Lim., Glas.
		James Morrison, Glasgow.
		Alexander & Howell, Glasgow.
		Alex. Mackenzie & Co., Glasgow.
Carpets and Upholstery Work,	{	Alex. Bisset & Sons, Glasgow.
		Alexander & Howell, Glasgow.
Clocks, Timepieces, Cutlery, etc., - - - - -	{	Wylie & Lochhead, Lim., Glas.
		R. & W. Sorley, Glasgow.
	{	George Edward & Sons, Glasgow.

## COST OF THE BUILDING.

Site, - - - - -	£172,953	12	10
Digging for Foundations, - - - - -	2,292	11	6
Sewering, - - - - -	132	12	1
Mason, Brick, Concrete, Iron, and Sculpture Work (payments to date), - - - - -	170,806	19	7
Jubilee Sculpture on Pediment, - - - - -	1,500	0	0
Joiner and Carpenter Work (payments to date), - - - - -	46,500	0	0
Plaster Work, - - - - -	18,209	13	8
Glazier Work, - - - - -	2,405	2	8
Plumber Work, - - - - -	2,274	19	1
Marble Work, Banqueting Hall Staircase, - - - - -	10,590	0	2
Council Chamber Staircase, - - - - -	5,640	8	10
Faience Work—South Corridor, - - - - -	1,557	12	0
Wall Tiling, - - - - -	2,922	13	7
Mosaic Ceiling of Loggia, - - - - -	981	5	7
Heating and Ventilating Apparatus, - - - - -	8,755	5	6
Iron Gates and Grills, - - - - -	372	15	6
Iron Ladders for Roof, - - - - -	40	10	0
Gas Piping, Siemen's Gas Lamps, etc., - - - - -	2,150	0	2

Electric Installation, - - - -	£2,149	5	2
Electric and Gas Light Fittings, - -	3,870	9	11
Painting and Decorating Work, - -	3,738	16	9
Internal Finishings of Council Chamber, -	4,378	8	3
„ Satin-wood Salon, -	2,155	6	2
„ Octagon Salon and Crush Salon, - -	2,554	9	4
Window Blinds and Electric Bells, - -	255	3	2
Speaking Tubes and Bells, - - -	210	4	8
Kitchen Fittings and Utensils, - -	280	7	5
Grates, Fenders, Fire Irons, and Tile Hearths,	939	12	3
Furniture and Upholstery Work for principal apartments, - - - -	2,067	18	5
Furniture for Council Chamber, - -	581	5	6
New Furniture, and Renovating Old Furni- ture of Offices, - - - -	4,038	5	7
Carpets and Upholstery Work, - -	647	2	7
Bookcases for Library and Lord Provost's Room,	690	15	6
Passenger Elevator and Hoists, - -	1,047	9	5
Clocks, Timepieces, Silver-plate, and Cutlery,	136	0	0
India-Rubber Door Mats, - - -	64	10	9
Drawing Contracts, - - - -	198	6	5
Two Milner's Safes, - - - -	139	9	9
Miscellaneous, - - - -	363	15	10
Architects', Measurers', and Inspectors' Fees,	22,564	8	6
	<hr/>		
	£503,157	14	1
Add—Probably required to complete payments, - - - -	16,842	5	11
	<hr/>		
	£520,000	0	0
	<hr/>		

This expenditure may appear large, but it is no more than, on the most economical lines, was needful to produce a creditable Hotel de Ville for the Second City in the kingdom.

Finally, and in a single sentence, let me tell the rate-payers what they have to pay for an edifice of which, I may venture to say, they are all proud. They will probably

be surprised to learn that it is practically an invisible quantity. The penny per pound imposed in 1868—one halfpenny on owners and one halfpenny on occupiers—for the vacated City Chambers in Ingram Street has never since been missed from the assessment papers. It defrayed the entire cost of the old buildings, and has also for the greater part met the interest on the cost of the new City Chambers while being erected. A continuance of these two halfpennies in the pound, and moderate contributions from the Water, Gas, Police, and Assessor's Departments, which previously maintained separate establishments in different parts of the city and are now accommodated within the new edifice, will suffice to meet the interest, maintenance, and also the Sinking Fund, when the latter comes into operation at Whitsunday 1895.

## WATER SUPPLY.

## I. ITS INTRODUCTION INTO THE CITY.

THE Water Committee continue their benign function of supplying to the citizens, and to others outwith the city, in great abundance the purest water known to exist, for which we cannot be too thankful nor be too often reminded. It is suitable for every personal and domestic use. It possesses besides the qualities wanted by manufacturers, bleachers, dyers, etc., for their most delicate processes ; and for steam boilers, so numerous in the city, it is simply perfect. It is delivered at a pressure adaptable as a motor for minor power purposes, for the extinction of fire, and for cleansing and sweetening our courts and closes, and in the aspect of price it will probably long remain unapproachable. The citizens have the happiness, moreover, of knowing that the fountain-head is inexhaustible, and that the deliverable resources, while controlled in a general way by Parliament, are really controlled only by the means of conveyance provided, and which are in the hands of the citizens to regulate. With adequate aqueduct and service reservoir provision maintained, as is being done by the Commissioners and their thoughtful engineer, Mr. Gale, no alarmist fears need hamper the citizens in their *legitimate* enjoyment of the health-giving stream from Loch Katrine under the most prolonged drought.

## II. ITS DISCHARGE INTO THE RIVER.

But it is not enough that Loch Katrine be brought into the city—provision must likewise be made for its safe and decent exit when it has cleansed our persons and dwellings, driven our looms, and performed the multifarious utilitarian offices for which its purity, softness, coolness, and pressure are so eminently fitted. So irreproachable a supply of water, abstracted from one of the upper sources of the Forth, deserves to be turned into the Clyde in as innocuous

a condition as is possible. With the soil products from our houses and industries eliminated, and happily the accomplishment of this municipal duty is near at hand, a long-standing reproach to our noble river and to the city will be removed. Then, but not till then, can we rest entirely satisfied with our water supply.

Only the first and most obvious portion of a complete scheme of water works was laid on the Commissioners by Parliament. The second branch of the scheme—which might or might not be needed according as the water was used—its safe and becoming discharge into the Clyde, has, after long but probably needful delay, been entrusted to the department most closely in touch with the inhabitants, conversant with their domestic modes of life and environments, their industrial occupations, and with the physical conditions of the city as affecting the general and individual well-being.

It was politic in our rulers of 1853 to promote only the *primary* section of the scheme. Even the limited powers asked for to bring water into the city through a mountainous region, from a source 35 miles distant from Glasgow Bridge, was looked on as a very bold step to take, and not a few were of opinion that it must involve the citizens in serious obligations and heavy increase to the then existing and immovable rate of fourteen pence per pound. Had the secondary treatment of the water after use formed part of the scheme of 1853, it is conceivable, may indeed be taken as certain, that Loch Katrine would have remained to this day untapped by Glasgow.

No citizen of that time, familiar with the impure and limited supply pumped from the river, and familiar, too, with the fourteen-penny standing rate charged for it, was prepared to grudge that rate *in perpetuity* for a purer and more plentiful supply from whatever source it might be brought. In 1891, the water delivered to us, caught within cloudland, is purity itself. The supply is practically unlimited, and the price is sixpence per pound of our

domestic rental, with no probability of increase in time to come, and the price to traders is on a like scale.

The present generation of ratepayers of the city have therefore year by year been succeeding to a saving which already amounts to *eightpence* in the pound per annum. Moreover, the water possesses qualities which, compared with the earlier supply, or with the supply of London and many other towns at the present time, actually neutralizes the rate altogether. For example, a householder occupying a £15 house has for 7s. 6d. per annum delivered into kitchen, wash-house, and lavatory an unfailing stream of clear soft water. Contradiction may safely be challenged to the statement that in the wash-tub alone the entire rate is saved by the introduction into it of the extremely pure and soft water of Loch Katrine.

I direct attention to this fact, most obvious in the experience of every householder in Glasgow, in view of the *secondary* portion of our water scheme, which is now happily engaging its proper measure of attention, and is in fair process of accomplishment. An assessment for this part of the scheme must be imposed to appease the righteous Nemesis which has so long reproached us for our apathy. It must be a substantial assessment, for a time at least. But I have shown that the rating for the first portion of our water system is absolutely nominal to traders and householders alike. No excuse, therefore, for delaying the completion of the entire scheme of our great and growing city can very well be advanced. Problems have to be solved, but their solution has been entrusted to an energetic committee, and it is not improbable from what has been seen elsewhere that they may find in course of time that what are now waste products in our sewage may become bye products of commercial value. Be this as it may, the purification work of the committee should be a most popular one. At the worst, were the rate fixed at 3d. in the pound of domestic rental, it ought not and will not be grudged.



The Clyde is a cherished stream, enriched by nature from its source to its confluence with the sea. It is not to be hoped for that under the most perfect scheme of interception and treatment of our sewage its waters shall pass through the city without scathe, but it is so precious a possession to the city that only insurmountable difficulties can excuse its conversion into a foetid sewer, offensive to every sense, and opposed to the most elementary dictates of nature. Its purification must be of inestimable value to our long-suffering Clyde Trustees and shipowners.

When purified, and its redemption draweth nigh, the working man and his family may enter upon their trip to the coast at the Broomielaw without hesitation, with an enjoyable feeling, and save their sewage rate to boot.

REVENUE AND EXPENDITURE STATED TRIENIALLY.

YEAR.	Growth of Capital Expenditure.	Annual Revenue.	Annual Expenditure.	Growth of Sinking Fund.	Domestic Rate per Pound.			
					North Side of Clyde.		South Side of Clyde.	
					s.	d.	s.	d.
1856-57	£752,693	£62,335	£58,605	...	1	2	1	0
1859-60	1,428,452	71,449	85,866	...	1	2	1	0
1862-63	1,576,812	87,190	84,651	...	1	4	1	0
1865-66	1,611,126	90,935	88,780	...	1	0	1	0
1868-69	1,677,749	104,349	91,883	...	1	0	1	0
1871-72	1,706,306	110,780	97,262	£23,000	0	8	0	8
1874-75	1,797,505	126,356	101,240	85,906	0	8	0	8
1877-78	2,026,108	138,292	115,450	149,639	0	8	0	8
1880-81	2,148,140	147,300	121,902	212,405	0	8	0	8
1881-82	2,161,316	150,504	127,659	238,652	0	8	0	8
1882-83	2,170,634	155,748	129,012	265,387	0	8	0	8
1883-84	2,184,687	161,501	121,287	305,601	0	8	0	8
1884-85	2,202,789	162,572	126,242	341,931	0	8	0	8
1885-86	2,245,184	162,404	125,556	376,124	0	8	0	8
1886-87	2,290,270	163,473	123,793	431,770	0	8	0	8
1887-88	2,344,886	163,923	118,911	470,041	0	7	0	7
1888-89	2,415,116	167,914	121,359	518,692	0	7	0	7
1889-90	2,501,717	173,824	122,729	568,522	0	7	0	7
1890-91	2,620,267	168,408	125,055	609,934	0	6	0	6

## COMPARATIVE VIEW OF THE WATER SUPPLIES OF GLASGOW AND OTHER TOWNS.

TOWN.	Population Supplied.	Rateable Value within Water area.	Daily Quantity Supplied.	Capital Cost.	Dom. Rate per £.	Trade per 1,000 Gallons.	Public Water Rate.	Gross Revenue.
GLASGOW, - - -	810,000	£ 4,500,000	Gallons. 41,960,000	£ *2,620,267	6d	4d	1d	£ 168,408
Manchester, - - -	925,000	4,500,000	22,510,285	4,868,692	9d inside 1/ outside	7½d to 1/6	3d on City 6d	232,675
Liverpool, - - -	829,250	3,078,424	18,431,620	4,572,000	7½d in. 10½d out.	7d to 10½d	None	234,904
Birmingham, - - -	536,000	2,200,000	13,400,000	2,039,385	1/2½, Baths ex.	1/2	None	136,964
Bradford, - - -	391,250	1,052,468	10,000,000	2,268,650	1/6, Baths, W.C. ex.	6½d to 9d	None	115,427
Leeds, - - -	400,000	1,300,000	12,500,000	1,641,000	1/ W.C.	6d	None	97,652
Newcastle, - - -	350,000	not ascertained	12,743,000	1,197,415	1/ W.C. extra	1/	None	98,753
Dublin, - - -	345,000	—	12,000,000	655,432	4d 6d in., 9d out.	6d	3d	42,841
Edinburgh, - - -	393,000	2,229,718	15,123,000	1,123,893		6d to 9d	1d	84,470
Dundee, - - -	175,000	732,881	9,622,233	829,677	1/ in., 1/2½ out.	7d	1d	43,212

\* Includes considerable instalments of the cost of new aqueduct in progress.

By the courtesy of the officials of other large towns in the United Kingdom I have been supplied with information which enables me to present the foregoing Table of particulars for the year 1890. There are variations in the charges for water in some of the towns, but where such exists I have adopted what appears to be a fair average rate.

The Table is of special interest to the citizens of Glasgow, and to accentuate their favoured circumstances I extract from it the following figures to determine the position of our city in comparison with the other nine great towns of the United Kingdom similarly supplied:—

TOWN.	Daily Quantity of Water Delivered.	Annual Revenue from all Sources.	Price per Gallon per annum.
	Gallons.	£	Pence.
GLASGOW, - -	41,960,000	168,408	0·963
Manchester, - -	22,510,000	232,675	2·476
Liverpool, - -	18,431,000	234,904	3·062
Birmingham, - -	13,400,000	136,964	2·453
Bradford, - -	10,000,000	115,427	2·770
Leeds, - - -	12,500,000	97,652	1·875
Newcastle, - -	12,743,000	98,753	1·860
Dublin, - - -	12,000,000	42,841	0·857
Edinburgh, - -	15,123,000	84,470	1·340
Dundee, - - -	9,622,000	43,212	1·077

Dublin it is seen takes the lead in over head cheapness, being 0·857 of a penny per gallon per annum. Glasgow comes next at 0·963<sup>d</sup>; Dundee third at 1·077<sup>d</sup>; and Edinburgh fourth at 1·340<sup>d</sup>. In Dublin the domestic rate is extremely low, only 4d. per £ of the rental; but the public water rate on owners is 3d. per £, and the trade rate 6d. per 1,000 gallons against Glasgow's 1d. and 4d. respectively. For each penny paid by the citizens of Glasgow 379 gallons of pure water are delivered.

Extension of Main and Distributing Piping in City and District (not including piping relaid for various purposes).

1884-85—Length of Piping, -	-	10,451	yards.
1885-86—	„	-	8,877 „
1886-87—	„	-	10,218 „
1887-88—	„	-	11,058 „
1888-89—	„	-	10,572 „
1889-90—	„	-	11,010 „
1890-91—	„	-	9,830 „
			<hr/> 72,016 yards. <hr/>

Equal to 41 miles in seven years.

#### DAILY QUANTITY OF WATER SENT INTO CITY AND DISTRICT.

YEAR.	From Loch Katrine.	From Gorbals Works.	Total.
1878-79	34,223,000	3,413,000	37,636,000
1881-82	34,590,000	3,797,000	38,387,000
1884-85	35,716,000	4,697,000	40,413,000
1885-86	36,020,000	4,695,000	40,715,000
1886-87	36,734,000	4,642,000	41,376,000
1887-88	35,207,000	4,368,000	39,575,000
1888-89	36,483,000	4,381,000	40,864,000
1889-90	37,303,000	4,262,000	41,565,000
1890-91	37,193,000	4,764,000	41,957,000

#### NEW WORKS.

The supplementary works, which form practically new and independent Water Works for the city, have steadily progressed without being pressed. Great difficulties and delay have been encountered in obtaining a water-tight bottom for the new Service Reservoir at Craigmaddie, and in one part the puddle trench had to be excavated to a depth of 165 feet. The total length of puddle trench is 2,800 feet. This new reservoir has one and a half times

the capacity of the original Mugdock Reservoir. It will have a surface of  $86\frac{1}{4}$  acres and contain 700 million gallons, being a supply at 40 million gallons per day for 18 days. Mugdock Reservoir has a supply for  $12\frac{1}{2}$  days. The inlet and outlet works are being so arranged that either or both reservoirs may be drawn upon at pleasure. The land purchased for this new reservoir extends to  $215\frac{1}{2}$  acres, part of which was acquired to obviate the chance of pollution. The contractors are Morrison and Mason.

Mugdock Tunnel was completed in October, 1890, and has since been used. It is 2,674 yards long, 12 feet wide, 9 feet high, and 250 feet below the top of the hill. The contractors were Morrison and Mason.

Proceeding northward from Mugdock Tunnel, the Blane Valley Contract includes about  $5\frac{1}{2}$  miles of the new aqueduct, of which about  $\frac{3}{4}$  of a mile is to be a double line of cast iron pipes, 48 inches diameter, across the Valley of the Blane. The remaining  $4\frac{3}{4}$  miles consist of (1) Ballewan Tunnel, 1,689 yards long; (2) Dumgoyne Tunnel, 2,283 yards long; (3) Sauchie Tunnel, 882 yards long; (4) Lettre Tunnel, 1,011 yards long; (5) Killearn Tunnel, 2,077 yards long; and (6) Junctions with the existing aqueducts and access chambers. Good progress is being made by the contractor, Mr. James Young.

The Kelty Tunnel Contract consists of (1) a junction with the present aqueduct; (2) a bridge across the Lossnaugh Burn; (3) Lossnaugh Tunnel, 476 yards long; (4) Corrie Burn Tunnel, 440 yards long; (5) Kelty Tunnel, 4,594 yards long and 350 feet below the tops of the hills. The material passed through in this contract is the lower beds of the old red sandstone, including the conglomerate and the upper and softer beds of the silurian clay slate. Mr. George Lawson is contractor, and the whole work is expected to be finished early next year.

Duchray Contract in continuation northwards of the Kelty Contract consists chiefly of (1) Blairvaich Tunnel, 1,613 yards long; (2) Meadhonach Tunnel, 610 yards long;

(3) a bridge across the Meadhonach Burn of 42 feet span and a bridge across the Duchray Water,  $57\frac{1}{2}$  feet span; (4) Coire-Eirigh Tunnel, 2,035 yards long, and (5) a junction with the existing aqueduct at the north end of the last mentioned tunnel. This junction, enables both the Kelty and the Duchray Sections of the aqueduct to be brought into use, as soon as the works are completed. Mr. George Lawson is also contractor.

The Loch Chon Contract, which extends northwards from the Duchray Contract consists of the following:—(1) Blaruskin Tunnel, 1,328 yards long; (2) Dow of Chon Tunnel, 1,673 yards long; (3) South Frenich Tunnel, 833 yards long; (4) North Frenich Tunnel, 1,447 yards long; (5) some short tunnels and a junction with the existing aqueduct at the north end of the contract. Messrs. John Waddell and Sons, Edinburgh, are the contractors.

The portions of the new aqueduct not yet contracted for, are the following:—

- (1) The piping across the Endrick Valley,  $2\frac{1}{2}$  miles.
- (2) The Black Rigg Contract chiefly tunnelling, 3 miles.
- (3) The Loch Katrine Tunnel, which will probably be the last contract to be let,  $1\frac{1}{2}$  miles long.

The total length of the new aqueduct from Loch Katrine to Craigmaddie Reservoir will be about  $24\frac{1}{4}$  miles. Of this  $16\frac{3}{4}$  miles is in process of construction, and will be of sufficient dimensions to discharge 70 million gallons of water per day.

The other works embraced in the Water Works Act are—

*First.*—The raising of the level of the water in Loch Katrine 5 feet above the present top water level, giving a command when at top level of 12 feet of the surface of the lake. Under the Act of 1855, the ordinary summer level of Loch Katrine was fixed and powers given to raise the Loch 4 feet above that level, and to draw it down to the extent of 3 feet below that level, in all a range of 7 feet; and the Act of 1885, thirty years later, extends the power of raising the loch 5 feet higher still.



*Second.*—The raising of Loch Arklet 25 feet, and the forming of a tunnel to lead the water from it into Loch Katrine.

An interesting ceremony took place on 19th August last, far up in the valley of the Duchray, when Mrs. Muir, the estimable wife of the Lord Provost, laid the last stone of the handsome bridge which spans that rugged mountain stream. The function was attended by the Lord Provost and Members of the Water Committee, Lord Ruthven, the Lord Mayor of London, Sir Joseph Savory, Bart., and the Lady Mayoress, Sheriff Sir William Farmer, and Lady Farmer, Sheriff Sir Augustus Harris and Lady Harris, the Mayor of Manchester, Mr. Marks, Sir James D. Marwick, Mr. Nicol, Mr. Gale, C.E., Mr. Robert Wilson, Mr. Bowers, Mr. Lawson, contractor, and others.

#### BARONY PARISH PUMPING STATIONS.

The Works erected by the Local Authority of the Barony Parish in 1878 for the supply of water to the grounds within their district, which were beyond the limits of the municipality and above the level to which the water would rise by gravitation from the Reservoir at Mugdock, have been by agreement transferred to the Water Commissioners under the Extension of Boundaries Act, and are now a portion of the Corporation Water Works. Two pumping stations were erected by the Barony Local Authority, and the sum expended by them upon reservoirs and pumping engines was about £25,000, involving an annual expenditure of about £3,000.

A considerable part of the district for which these works were erected becomes part of the city on 1st November, and the water supply will for the future be carried on in the same way as for the rest of the city.



## VALUATION OF WATER WORKS.

YEAR 1890-91.

COUNTY.	Parish or Burgh.	Parish or Burgh.	COUNTY.
		£	£
Perth, - -	Callander, - -	2,566	
	Aberfoyle, - -	14,563	
	Port of Menteith,	2,015	19,144
Stirling, -	Buchanan, - -	659	
	Drymen, - - -	12,840	
	Balfron, - - -	1,172	
	Killlearn, - - -	7,135	
	Strathblane, - -	7,361	
	New Kilpatrick,	7,665	
	<i>Milngavie</i> , - -	1,515	38,347
Dumbarton,	New Kilpatrick,	6,910	
	Old „	<i>Clydebank</i> , 11	6,921
Lanark, - -	<i>Rutherglen</i> , - -	456	456
	Rutherglen, - -	63	
	<i>Maryhill</i> , - - -	3,487	
	Barony, - - -	1,373	
	Old Monkland, -	102	
	<i>Govanhill</i> , - -	242	
	<i>Govan</i> , - - -	1,529	
	<i>Hillhead</i> , - - -	539	
	<i>Partick</i> , - - -	1,995	
	<i>Govan</i> , - - -	2,731	12,061
Lanark and	<i>Glasgow</i> {	10,745	
Renfrew,		9,328	
		2,834	22,907
Renfrew, -	<i>Pollokshields</i> , -	373	
	<i>Pollokshields, E.</i> ,	187	
	<i>Kinning Park</i> , -	220	
	<i>Govan</i> , - - -	473	
	<i>Mearns</i> , - - -	2,922	
	<i>Neilston</i> , - - -	3,758	
	<i>Abbey</i> , - - -	130	
	<i>Pollokshaws</i> , - -	350	
	<i>Eastwood</i> , - -	4,250	
	<i>Crosshill</i> , - - -	175	
	<i>Catheart</i> , - - -	917	
	<i>Renfrew</i> , - - -	205	13,960
	<i>Renfrew</i> , - - -	221	221
		114,017	114,017

## RAIN-FALL IN THE LOCH KATRINE

	AMONG THE HILLS ROUND LOCH KATRINE.				
	At Glengyle, head of Loch Katrine. — Elevation 380 feet.	On summit of hill above Tunnel at Loch Katrine. — Elevation 830 feet.	On hills between Loch Ard and Loch Katrine. — Ledard. — Elevation 1,500 feet.	At Loch Dhu. — Elevation 325 feet.	Head of Duchray Valley. — Ben Lomond. — Elevation 1,800 feet.
Year when Gauges were fixed, - - -	1854	1861	1854	1861	1854
Averages since Gauges were fixed, to 1873 inclusive, - - }	Ins.	Ins.	Ins.	Ins.	Ins.
	92·80	80·50	83·20	85·60	91·50
Averages from 1874 to 1890 inclusive, - }	90·83	73·02	62·69	78·59	79·13
1890—					
January, - -	15·60	15·50	6·00	16·20	15·60
February, - -	1·10	1·80	0·75	1·90	2·40
March, - -	9·40	7·60	2·75	6·40	8·00
April, - -	3·30	3·10	1·80	3·00	3·50
May, - -	4·70	4·30	4·75	4·20	4·80
June, - -	10·00	8·30	7·15	7·40	6·70
July, - -	9·20	6·10	5·90	5·50	6·70
August, - -	7·40	4·50	4·90	5·10	5·90
September, - -	9·80	9·50	6·60	8·30	8·70
October, - -	9·20	6·40	3·45	5·80	6·70
November, - -	14·20	13·90	9·90	13·20	13·90
December, - -	1·20	1·80	0·80	1·50	1·90
TOTALS, - - -	95·10	82·80	54·75	78·50	84·80

This Table is interesting, and it affords assuring evidence that our water supply comes from a copious and perennial source. The main feeder of Loch Katrine is the Gyle, at the head of the loch, and it is seen that in that district the rainfall one year with another never falls short of 90 inches

## AND GORBALS DISTRICTS.

ON THE LOWER GROUND BY LOCH VENNACHAR.					At Mugdock Re- servoir.	GORBALS DISTRICT.			
Between Glen Finlas and Ben Ledi.	At Bridge of Turk.	At Loch Drunkie	At Loch Vennach- ar.	At the Inn at Aber- foyle.		No. 1. — Waulk Glen Re- servoir.	No. 2. — Ryat Linn Re- servoir.	At Middle- ton.	At Nether Cairn. — Black Loch.
— — — — —	— — — — —	— — — — —	— — — — —	— — — — —	— — — — —	— — — — —	— — — — —	— — — — —	— — — — —
Elevation 1,800 ft.	Elevation 275 feet.	Elevation 420 feet.	Elevation 275 feet.	Elevation 60 feet.	Elevation 320 feet.	Elevation 280 feet.	Elevation 310 feet.	Elevation 550 ft.	Elevation 700 ft.
1854	1854	1861	1861	1854	1862	1854	1854	1855	1854
Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.
58'50	61'60	66'80	59'50	56'60	48'70	47'07	45'71	52'73	54'80
52'30	68'60	63'20	57'93	54'74	47'44	45'62	48'01	54'52	57'60
5'70	12'40	12'45	9'70	11'15	7'40	9'00	9'20	9'40	8'65
1'75	1'20	1'15	0'80	1'20	0'95	1'20	1'25	1'40	1'20
2'60	4'65	5'15	4'20	4'35	3'50	4'25	4'35	4'70	6'10
1'85	2'50	2'20	2'10	1'75	2'20	2'05	2'10	2'15	2'00
3'70	3'50	3'50	3'10	3'60	3'25	3'60	3'65	3'60	3'45
6'00	6'45	6'40	5'70	4'95	5'35	4'80	4'95	5'80	6'00
5'00	5'40	5'00	4'55	4'25	5'30	3'85	3'95	4'75	4'90
5'40	4'75	5'00	4'20	3'55	4'05	3'90	4'05	4'70	4'80
5'50	6'60	7'70	6'40	6'55	7'65	5'90	6'10	6'95	8'00
3'20	4'20	4'80	3'75	3'45	4'65	4'45	4'70	5'40	6'40
9'30	10'65	10'05	9'00	9'80	8'20	8'50	8'70	9'30	10'35
1'50	1'45	1'60	1'40	1'55	1'30	1'55	1'60	1'80	1'70
51'50	63'75	65'00	54'90	56'15	53'80	53'05	54'60	59'95	63'55

All abroad over the gathering ground of Loch Katrine the rainfall is fully double the rainfall of Glasgow. The purity of the water is accounted for by the general shallowness of whatever peaty land there is within the 25,000 acres forming the gathering area.

## GAS SUPPLY.

THIS invaluable illuminant continues to be used in increasing measure and it is largely used also for heating, cooking and power purposes. Gas was first introduced into the city in 1818, and on 5th September the first street lamp was lit with it, and excited no little wonder and delight. The supply continued in private hands until 1869, when it was assumed by the Corporation. At the date of transfer the productive power of the works was 5 million cubic feet per diem; in 1874 it had reached 9 millions; in 1886 it was 16 millions, and now, in October, 1891, it is  $24\frac{3}{4}$  millions. The three works of Dawsholm, Dalmarnock, and Tradeston are about equal in productiveness—thus there are at

Dawsholm Works,	-	-	-	832	retorts
Dalmarnock Works,	-	-	-	826	„
Tradeston Works,	-	-	-	816	„

---

Together                    -       -       -       2,474 retorts  
—each capable of producing 10,000 cubic feet of gas daily.

Considerable extensions have recently been necessary to overtake this great production. Tradeston Works have been entirely rebuilt at a cost of £110,000; Dalmarnock and Dawsholm Works have been extended at a cost of £50,000, and preparations are being made for the erection of another large gas holder on the ground acquired from the Partick Company, to contain 6 million cubic feet.

The borders of the gas supply area of the Corporation have also been largely extended by the purchase of the works of the Partick and Pollokshaws companies, and the gas of the Corporation of Glasgow is now delivered at Mount Vernon in the east and Bowling in the west, a geographical distance of sixteen miles, and at Bearsden in the north-west, and Burnside, Rutherglen, in the south-east, a distance of nine miles.

Glasgow has been greatly favoured in its gas supply as in other respects, by proximity to the coalfields, which so far have been fairly equal to requirements ; but it is yearly becoming a very patent fact that at present output rate the outlook for a very long continuance of our home supplies is not a cheering one.

Already the Gas Committee have to go further a-field for a suitable quality and sufficient quantity of gas-yielding coal, and by reason of scarcity and distance combined we have to pay 50 to 75 per cent. more for it than five years ago, and, as a consequence, consumers may have very soon to face a higher price for their gas. In view of the drain of coal to foreign countries, particularly of the highest quality (increased in the last six years by 40 per cent.), which costs no more for carriage than the lowest quality, it would seem necessary in the urgent and immediate interest of ourselves and our children, no very selfish object, that inquiry be instituted into the duration of our coal supplies, to see whether as a prudent people we can afford to send away this very precious, unrenovable substance to countries believed to have supplies of their own, if they will only take the trouble and be at the expense of working and distributing it. It is to be feared too that we ourselves are contracting habits in its use that cannot be maintained unless at much heavier cost.

#### ELECTRIC LIGHTING.

Under the Electric Lighting Act of 1882 a Provisional Order has been obtained, and by this authority extensive works are in contemplation by the Corporation Gas Department for supplying electric lighting throughout the city. But it is premature to enter into a subject that the Corporation, under the skilful advice of Sir William Thomson and other experts in this occult science, are only maturing. When ripe for introducing this light of the future—and happily there are other energies besides coal to requisition for its production—the citizens may trust to the wisdom of the Committee adopting the very best known system.

## GLASGOW CORPORATION GAS.

QUANTITY OF GAS MANUFACTURED, QUANTITY SOLD, LEAKAGE,  
AND ILLUMINATING POWER, SINCE 31ST MAY, 1885.

YEAR.	Quantity Made.	Quantity Sold.	Leakage or Unaccounted-for Gas.	Average Illuminating Power.
	Cubic Feet.	Cubic Feet.	Per cent. of Production.	Candles.
1885-86	2,442,880,000	2,166,179,000	11'3	25'71
1886-87	2,596,470,000	2,285,136,000	11'9	23'75
1887-88	2,705,444,000	2,427,078,000	10'2	23'22
1888-89	2,905,796,000	2,611,806,000	10'1	23'04
1889-90	3,058,277,000	2,752,989,000	9'9	22'87
1890-91	3,508,633,000	3,125,981,000	10'9	21'71

INCOME, EXPENDITURE, AND CAPITAL ACCOUNT, SINCE  
31ST MAY, 1885.

## INCOME.

YEAR.	From Sale of Gas.	Price per 1,000 Cubic Feet.	From Coke.	From Ammoniacal Liquor.	From Sundries.	Total Income.	Borrowed Money and Annuity Stock.
	£		£	£	£	£	£
1885-86	346,455	3/3	14,149	38,303	2,399	401,306	555,472
1886-87	337,568	3/	14,662	32,383	1,633	386,246	514,645
1887-88	338,498	2/10	16,106	26,637	2,325	383,566	514,900
1888-89	343,159	2/8	18,661	29,676	1,400	392,896	479,502
1889-90	339,505	2/6	27,200	49,426	1,458	417,589	463,100
1890-91	385,102	2/6	36,767	60,257	1,450	483,576	528,100

## EXPENDITURE.

YEAR.	In Manufacture of Gas.	In Distribution, General Management, etc.	Written off for Depreciation on Works, Pipes, and Meters.	Annuities, Interest, and Sinking Fund.	Total Expenditure.	Capital Account.
	£	£	£	£	£	£
1885-86	224,144	58,971	67,151	66,464	416,730	670,375
1886-87	226,914	58,546	47,896	52,346	385,702	643,255
1887-88	227,083	58,043	49,379	46,686	381,191	611,269
1888-89	224,044	60,352	58,397	50,131	392,924	605,249
1889-90	255,602	62,224	52,720	48,970	419,516	637,132
1890-91	359,820	63,975	11,564	50,769	486,128	700,475

## PURCHASE OF PARTICK WORKS.

The purchase, as on 1st July, 1891, of the works of the Partick, Hillhead, and Maryhill Gas Company, at the price of £202,500, is of considerable importance to the inhabitants of that area. In the first place, it removes a cause of friction that was inevitable so long as the Corporation and the Company had powers of supply within the same territory; and, in the next place, the entire supply is assumed by the non-dividend-earning party to the bargain. Had parties been reversed, and the Company been purchaser, considerable anxiety might have been entertained by consumers. As it is, the inhabitants of Hillhead, Maryhill, and Kelvinside have reason to rejoice. The following Table shows the extent of the late Company's business:—

Year ending June 30.	No. of Meters in use.	AMOUNT OF ANNUAL SURVEYS.					Gas Made.
		Stair Lights.	Lamps.	Total Public Lighting	Private Lighting.	TOTAL.	
		£	£	£	£	£	Cubic Feet.
1874	5,015	360	1,007	1,367	10,650	12,017	67,054,200
1877	7,772	931	1,585	2,516	14,812	17,328	102,381,400
1880	9,254	1,270	1,948	3,218	17,993	21,211	134,989,700
1883	10,437	1,418	2,085	3,503	22,836	26,339	175,997,700
1884	10,871	1,474	2,111	3,585	24,042	27,627	189,764,000
1885	11,170	1,519	2,143	3,662	25,269	28,931	200,618,200
1886	11,300	1,506	2,165	3,671	25,694	29,365	223,612,400
1887	11,019	1,556	2,205	3,761	25,994	29,755	236,151,000
1888	11,248	1,657	2,256	3,913	27,602	31,515	263,322,800
1889	11,732	1,788	2,294	4,082	27,265	31,347	283,837,900
1890	12,003	—	—	—	—	—	301,754,200

The quantity of gas made in 1890 at the Partick works was about the quantity made in Glasgow half a century ago.



SUMMARY OF PARTICULARS RELATING TO GAS SUPPLY,  
NUMBER OF CONSUMERS, CONSUMPT,

	CAPITAL EMPLOYED.						COAL carbonized. — Tons.	GAS  Total Cubic Feet.
	Total	Per Ton of Coal carbonized.			Per 1000 Cubic Feet Sold.			
	£	£	s.	d.	s.	d.		
Glasgow, - -	1,065,999	2	16	2	6	9	379,130	3,508,633,000
London— Gas Light and Coke Coy., -	11,362,500	5	16	3	12	3	1,954,429	19,941,066,000
Commercial Gas Coy., - -	832,166	3	19	5	8	7	209,545	2,078,488,000
South Metropoli- tan Gas Coy., -	2,949,351	4	12	6	9	11	637,583	6,304,947,000
Manchester, - -	1,370,000	3	18	11	8	7	346,915	3,304,542,000
Liverpool, - -	1,629,457	5	9	11	10	10	296,493	3,193,973,000
Birmingham, -	2,324,998	5	10	3	12	4	421,709	4,089,990,000
Edinburgh, - -	1,073,698	8	10	7	18	9	128,183	1,273,165,000
Dundee, - -	394,720	9	12	5	20	4	41,031	421,611,000

NOTE.—Number of Gas Engines in use in Glasgow Gas Supply District, 826. Num-

Councillor M'Laren, in placing the last annual accounts and balance-sheet on the table, mentioned that the cost of manufacture of gas in the past year as compared with the immediately preceding year was £104,217, which was accounted for as follows :—

Coals, - - - - -	£66,269
Purifying Materials, - - -	1,712
Wages, - - - - -	16,120
Repairs, - - - - -	18,441
Carting, - - - - -	1,671

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£104,217

EMBRACING CAPITAL, COAL CARBONIZED, GAS MADE,  
LAMPS, ANNUAL REVENUE, ETC.

MADE. Per Ton carbon- ized. Cub. Feet.	Number of Consum- ers.	Gas Sold per Con- sumer. — Cubic Feet.	Number of Public Lamps.	Gas con- sumed per Public Lamp. Cubic Feet.	Illuminat- ing Power Candles.	Price per 1,000 Cubic Feet.	Total Annual Revenue.
9,518	139,013	21,217	17,414	8,616	21'71	s. d. 2 6	£ 483,576
10,203	213,833	82,031	50,946	19,535	<div> Cannell 20'92 Common 16'43 </div>	<div> Cannell 3/1-3/5* Common 2/3-2/9 </div>	3,397,866
9,919	21,323	85,875	5,229	21,922	16'32	2 4*	337,308
9,889	74,385	74,581	18,292	22,088	16'50	2 3*	988,838
9,526	79,479	—	—	—	19'26	2 6*	488,424
10,773	63,700	43,030	17,461	15,807	21'50	2 8*	509,642
9,699	55,122	64,841	12,186	16,221	17'21	2 4 Average	579,872
9,932	61,117	17,045	11,494	6,566	26 to 28	3 6	219,253
10,275	31,179	11,560	4,554	6,161	26 to 27	3 6*	75,415

ber of Gas Stoves on hire at 31st May, 1891, 7,965. \* Meter charged in addition.

Apart from the increased quantity of coals carbonized, the price of the coal was higher to the extent of about 2s. per ton. The increase on the item of wages was due to the adoption of the eight hours shift; and the heavy item of repairs was largely owing to the explosion of gasholders at Dawsholm, their replacement costing £7,000.

The increase in revenue, on the other hand, in the past year was phenomenal, being no less than  $16\frac{3}{4}$  per cent. upon that of the year before.

The manufacture of gas has grown apace in the hands of the Corporation, being now 170 per cent. greater than in 1869, when the supply was taken over.

## VALUATION OF GAS WORKS.

YEAR 1891-92.

County.	Parish or Burgh.	Rental.	
		Parish or Burgh.	County.
Lanarkshire,	Rutherglen Parish,	£ 255	34,481
	Rutherglen Burgh,	83	
	Old Monkland Parish,	76	
	Barony Parish,	75	
	Partick Burgh,	755	
	Govan Burgh,	1,017	
	Govan Parish,	61	
	Glasgow. { Govan Parish,	12,126	32,159
	Barony Parish,	14,695	
	City Parish,	4,851	
Renfrewshire,	Cathcart Parish,	401	
	Eastwood Parish,	86	
	Kinning Park Burgh,	247	838
	Pollokshaws Burgh,	368	
	Cathcart Parish,	97	
	Govan Parish,	33	
	Eastwood Parish,	68	
	Renfrew Parish,	25	
Dumbarton-shire,	New Kilpatrick Parish,	15,334	15,861
	Old Kilpatrick Parish.	348	
	Clydebank Burgh, Old Kilpatrick Parish,	179	
		51,180	51,180

## CITY IMPROVEMENT TRUST.

THE Improvement Trust, in its scope and methods, has never been very well comprehended by the general citizens, and it has therefore been the happy hunting ground of the critic of municipal government. I do not attempt the task of satisfying the citizens that the scheme has been, in all respects, beneficial and economical—quite as much if not more so than the Water Scheme, about which there is the most perfect agreement. The Improvement Trust was instituted to let air, light and, if possible, a little sunshine into dismal closes and courts of the city, where not fewer than 75,000 human beings were crowded together amidst surroundings that had become moral and physical “plague spots,” a danger and disgrace to civilization, and it has largely succeeded. The conditions of the older city referred to came down to us from the seventeenth and eighteenth centuries. They could never be very wholesome, but would be tolerable with a moderate Scotch population. But we have evidence that even then the dark places of the city were far from free of the hygienic and moral evils begot of such conditions, which the persuasions and terrors of the magistrates and the Church were, in the absence of police and of street and stair lighting, little able to repress. When, therefore, our great railway works came to be constructed, and other industries were stimulated in the West of Scotland, Ireland, teeming with an over population, which sorely needed depletion, rushed upon Glasgow with its tempting port, when no preparation had been made for it. The immigrants took possession of the older and denser parts of the town, and the authorities were face to face with an exigency that only a drastic remedy could relieve.

The building defects were owing to the straitened lines within which our frugal ancestors lived. So long as the city remained within narrow compass and the green fields were at no point distant, compactness of building was not seriously

inconvenient unless when epidemics or fire occurred. Originally built in village fashion, the houses to the street and vegetable gardens in rear, our thrifty sires, in place of breaking new ground as families and population grew up, built up their gardens and heightened their houses. These High Street, Saltmarket, Gallowgate, Trongate, Gorbals, Calton and other gardens developed gradually therefore into the "closes" and vennels which fell to be broken up under the Improvement Scheme of 1866. A bold and serious thing it was on the part of the authorities of 1865 to face the promotion of a bill that necessitated the purchase of all this densely crowded, and then heavily rented property, much of it too divided and subdivided by legal writs into flats and half-flats. The Improvement Act was passed by both Houses of Parliament and it gave assessing powers during 15 years—five years at 6d. per £, and ten years at 3d. per £—and the tax was laid on occupiers exclusively. Immediate progress was made with the purchase of the property, and the Town Council resolved to impose the maximum rate of 6d. per £. Being an entirely new tax, and being laid on on the eve of the November election of 1866, occasion was taken to rouse the citizens against the scheme and its principal author Lord Provost John Blackie, Junior. Mr. Blackie was standing for re-election as a Councillor with a view to presiding over the practical work of the scheme, and he was slightly outvoted at the poll, to the deep and abiding regret of the general community. The convictions of its authors in the urgency of the work of redeeming the city from the reproach into which it had fallen, and their straightforward policy were cogently shown firstly, in satisfying Parliament that a maximum sixpenny rate might be necessary, and secondly, in the Town Council determining that the maximum be levied in the first year at least.

In going to Parliament the sum estimated as necessary to be raised by taxation was placed at half a million of pounds and the tax was based on that calculation. The sum which has been raised to date is £556,000, and may be something more. But it must be kept in view that, as time wore on,

more liberal ideas than those of 1866 were advocated, with the result that many more streets, wider thoroughfares generally, and more efficient sewerage operations have been carried out than was contemplated in 1866, at an additional cost in ground and works of probably £200,000 ; and also that the number and the paying power of the ratepayers have greatly increased.

Ex-Bailie Archibald Dunlop has been Chairman of Committee since 1884, and he and his predecessors in the office have been supported at one time and another by the best men in the Town Council, who find in the complex affairs of the Trust an excellent training school, which serves them in good stead in other departments of the public service. Bailie Dunlop retires from the Council next month, leaving it with the Improvement Tax at 1d. per £, and the prospect of this rate sufficing until the Trust is wound up.

Only older citizens, familiar with the older city, can realize the vast improvements wrought by the scheme in many ways. Even its supposed failures have been sanitarily beneficial. For example, ground in various quarters, cleared of its buildings, failed to sell, but the health of the district has been thereby immensely benefited. There has, indeed, been no property market for ten full years for the reason that overbuilding in the preceding ten years and depression in trade arresting the growth of population had left many proprietors with a heavy handful of unlettable property. The Committee have had to submit to some temporary unpopularity because of this state of matters, yet there is no scheme of the Corporation that has excited and continues to excite more general interest, has its various points more crucially examined into by intelligent strangers in search of ideas, and is more extensively imitated by other great centres than the City Improvement Scheme of Glasgow. The local unpopularity, whatever it amounts to, will pass away. The finance difficulty will probably soon be solved, as may be gathered on reference to the valuation tables, particularly Table 1, which shows that the unlet property of the city is being now steadily absorbed. At the worst it is only a finance question



that very many private owners of ground have suffered from and with immensely more real hardship than the body corporate. And on this point of finance let me refer to a few words I have written under "Parliamentary Expenses," pages 174-5, where I point out that it was the thrift of our ancestors that created the Common Good Estate of the city, now grown to £518,726 besides much unvalued property. But this thrift bred contracted ideas in other directions, and in particular the ancestral mistake was committed of density of building, which the Improvement Trust was specially created to rectify. Rectification of others' mistakes is never a gracious and seldom a popular task, especially when it involves a tax. But let it be put to the credit of our revered ancestors that, in leaving us unconsciously something to correct, they bequeathed also a fund which has proved about equal to the cost of correction. Parliament had not this simple view of the matter put forward in 1866, and therefore it is that a special tax was authorised. What is the same thing to the ratepayers, the Common Good, fostered diligently by the Corporation, enables much necessary expenditure to be defrayed that, but for its existence, would require to be raised by assessment.

Many points of interest in the Improvement Trust administration might be touched on, but I content myself with giving (1) a general view of the Trust's operations, and (2) of its Lodging House Scheme, as I have for some years been accustomed to append them to the Annual Accounts.

Information regarding the Lodging Houses Scheme of the Trust is much in demand by other towns grappling with difficulties attending their floating populations and wayfarers. Except for such people, who must have accommodation of some sort provided, it is perhaps not desirable that lodging houses should be maintained by the Authorities; but for them they are a necessity, and conducted under Municipal authority they have a salutary, moral, and hygienic influence. They are self-supporting and most orderly,—commendable qualities in themselves.



## SUMMARY OF COST TO THE RATEPAYERS OF IMPROVEMENT SCHEME.

The Total Cost of Property acquired by the Trust has been—

1. Within Compulsory Areas, - - - - -	£1,616,027	6	1
2. At Oatlands (including cost of laying off for Feuing), -	42,284	0	9
3. At Overnewton (including cost of laying off for Feuing),	42,927	1	4
4. Cost of Erection of the Two Model Tenements of Dwellings in Drygate, and Site thereof, - - - - -	3,426	1	4
5. Expenditure on Formation of Streets, Squares, Sewers, covering over of Molendinar and Camlachie Burns, etc.,	103,533	0	8
6. Lands of Kennyhill, and cost of forming same into "Alexandra Park," - - - - -	40,000	0	0
7. Cost of Seven Lodging-houses, Sites, and Moncrieff Street Ground, - - - - -	87,212	13	7
8. Cost of Saltmarket and other New Tenements, to date, -	24,998	9	3
	<u>£1,960,408</u>	<u>13</u>	<u>0</u>

Of which there has been disposed of—

1. For Prices and Feu-duties within Central Areas, - - - - -	£909,094	4	1
2. For Prices and Feu-duties at Oatlands, - - - - -	47,360	18	8
3. " " at Overnewton, - - - - -	50,109	13	0
	<u>1,006,564</u>	<u>15</u>	<u>9</u>

Giving as the nett cost of the Heritable Subjects at 31st May, 1891, - - - - -	£953,843	17	3
For which the Trustees have still on hand Property valued at -	517,405	12	9

Showing a deficiency upon realization, if Mr. A. B. M'Donald's valuation be sustained, of, - - - - -	£436,438	4	6
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The total Assessment received from the Ratepayers since 1866 is	£556,858	2	10
And the excess of Liabilities over Assets as at 31st May, 1891, which will have to be met by Assessment if Mr. M'Donald's valuation is sustained, is - - - - -	155,855	16	0

The total cost to the Ratepayers from first to last would therefore be stated at - - - - -	£712,713	18	10
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For which they have obtained—

1. The Alexandra Park;
2. 97,162 square yards of Ground applied in the formation of 29 new streets and in the improvement of 25 existing streets, being 32,492 square yards of street surface beyond what was contemplated in the original Scheme; and
3. The Sanitary and Social Amenities produced by the Street, Sewer, and other Public Works, which cost, as above stated, £103,533 0s. 8d.



## LODGING-HOUSES.

COMPARATIVE VIDIMUS OF REVENUE AND EXPENDITURE DURING THE  
LAST TWO YEARS.

	REVENUE.		EXPENDITURE.		NETT REVENUE.	
	1889-90	1890-91	1889-90	1890-91	1889-90	1890-91
Drygate, - -	£1,633	£1,636	£1,048	£993	£585	£643
Greendyke Street,	1,567	1,589	914	1,027	653	562
Portugal Street, -	1,862	1,942	1,093	906	769	1,036
Clyde Street, -	1,797	1,810	837	1,479	960	331
Woodside Road, -	1,771	1,872	1,044	1,164	727	708
Hydepark Street,	1,827	1,900	1,020	1,189	808	712
E. Russell Street,	429	542	292	369	136	172
	£10,886	£11,291	£6,248 *	£7,127 *	£4,638 *	£4,164 *

Increase of Revenue, - - - - £405 2 1

Increase of Expenditure, - - - - 879 4 0

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 Nett Increase of Expenditure, - - - - £474 1 11

Nett Return in 1881-82, £4,293 1 8 = £4 18 6 per cent. on cost.

„ 1882-83, 3,954 2 6 = 4 10 8 „

„ 1883-84, 3,680 11 1 = 4 4 5 „

„ 1884-85, 4,691 3 8 = 5 7 7 „

„ 1885-86, 4,495 14 1 = 5 3 2 „

„ 1886-87, 3,736 2 4 = 4 5 8½ „

„ 1887-88, 3,999 2 2 = 4 11 8½ „

„ 1888-89, 4,555 15 0 = 5 5 5 „

„ 1889-90, 4,638 11 3 = 5 7 2 „

„ 1890-91, 4,164 9 4 = 4 15 11 „

as under :—

Drygate, - - - - £5 17 11½ per cent. on cost.

Greendyke Street, - - - - 5 1 7 „

Portugal Street, - - - - 6 9 6 „

Clyde Street, - - - - 2 4 9¾ „

North Woodside Road, - - - - 4 7 6¾ „

Hydepark Street, - - - - 4 14 8¾ „

East Russell Street, - - - - 4 12 2 „

 \* For the sake of comparison with results of previous years, these amounts are  
 exclusive of the sums written off as Depreciation between 1883 and 1891.

## PUBLIC PARKS.

THESE beautiful health resorts of the citizens do not lose any of their attractiveness. They are most tastefully kept, and, considering the smoke and soot in our atmosphere, the flowers are a marvel, producing blooms and carrying them in regular country style, although may be for a briefer season. It was a happy thought that led to the formation of ponds, however limited in area, as water and water fowl, pretty objects in themselves, unfailingly delight the children. The music, too, has charms to draw out the people, and its quality improves with time.

Glasgow Green, Kelvingrove Park, and the Botanic Gardens which may now be classed with them as a Parks Trust possession, are for the present largely in the hands of the contractors of the Central Railway; but they will emerge, it is to be hoped, unscathed and ultimately improved. The railway will give additional and inexpensive transit for their fuller enjoyment. When completed, all the Parks and the Botanic Gardens will have inter-city communication at their very gates.

The laying out of the recreation ground at Clayslaps and Overnewton, and inclusion of it with Kelvingrove and Gilmorehill for purely parks purposes, is a marked West-End improvement; and the filling up of Flishers' Haugh on the Green with the excavated material from the Central Railway will also be a decided improvement to the East-End. As regards the latter, the arrangement with the company is for the deposit of a minimum quantity of 200,000 tons and a payment of £10,000 for the privilege, with a rateable payment for whatever excess quantity may be deposited.

The gift by Sir Henry Doulton of the beautiful artistic fountain in terra-cotta, which formed so conspicuous an object in the esplanade of the Exhibition, and its re-erection on the Green at Sir Henry's expense lends a new feature to the People's Park. It was formally presented by the donor in person to the Town Council on 27th August, 1890,

in an eloquent speech, and due appreciation of the gift was expressed by the Lord Provost. Sir Henry was afterwards entertained by the Town Council to luncheon in the City Chambers.

But yet another embellishment is in store for the "People's Park." By the generosity of Bailie James McLennan, the central portion of the imposing Assembly Rooms elevation to Ingram Street, pulled down for Post Office enlargement, is to be re-erected and adapted as the London Street or Monteith Row entrance. The Assembly Rooms were erected on the Tontine principle from a design of the celebrated Robert and James Adam. From a rusticated basement story a bold projection is formed at the centre, as a support to four Ionic columns, pilasters, and entablature; and various ornaments are introduced on the front, which terminate in a balustrade. The foundation-stone was laid on 11th March, 1796, by the Hon. John Dunlop, Lord Provost, assisted by Bailies Laurence Craigie, George Lothian, and John Paul, Dean of Guild John Lawrie and Deacon Convener Robert Robertson, the contractor being Mr. John Brown.

The river bank improvements, being carried out under the powers of the "Glasgow Corporation Act, 1890," and under the energetic supervision of ex-Treasurer Richmond, will greatly enhance the amenity of the Green. The river bed and banks being of sedimentary formation to a great depth, they are sensitive to the severe scour caused by the removal of the Weir in 1879—a very different force from that of ante-Weir times before the harbour was dredged so deeply. In consequence, the banks have got abraded to an unsightly and dangerous extent; but the piling and embankment operations in progress will reinstate them to a very much finer condition than before.

With Rutherglen Bridge rebuilt to Mr. Crouch's handsome design, and another vehicular bridge intermediate to the Albert Bridge erected, as seems to be required; with the river purified and again made suitable for boating; and with its pall of smoke transmuted, as is being thought out by offenders themselves, Glasgow Green will indeed be an

attractive resort. Its area might be advantageously extended to the south of the Clyde if terms could be arranged.

The addition of 40 acres contiguous to Alexandra Park, with entry at Martinmas, 1891, at a price of £8000, gives an extended boundary to Cumbernauld Road of much value in itself. The national game of golf in this Park grows in favour, and many hard brain-workers resort to its breezy slopes for recuperative exercise.

The gift of 50 acres of Cathkin Braes by our most esteemed fellow-citizen, Mr. James Dick, on 31st August, 1886, was a genuine surprise, and no wiser condition could have been attached to it than was made, that it should in all time be retained in its natural state. This gift will get more and more appreciation as facilities for visiting the "braes" develop.

The purchase of Ruchill Estate, consisting of 91 acres, with entry at Whitsunday, 1892, and the laying off of the major portion of it for a park to meet the expanding wants of the north-western district, is a most commendable undertaking, and worthy the paternal mind of the Corporation and its prompter in this behalf—Ex-Bailie James Gray. Barring the patent fact that to the south and south-east the horizon is "nothing to speak of," to the north, the west, and south-west it is unsurpassed in clear range and beauty—the green slopes of the nearer Kilpatrick and Campsie Hills vieing with the blue enchantment which distance lends to the mountain peaks of Perth, Argyle, and Bute. It offers also another most perfect observatory to the Health Committee for studying the atmospheric effects of our city's very free use of coal, and vantage ground for philosophers on "town and country" seeing both sides of the picture.

George Square with its pretty flower-beds and statues, framed in by imposing architecture, is a favourite spot to linger in, and owes much to the Parks Committee.

But Cathedral Square, now that it has been opened up, is Glasgow's valhalla. Circumscribed though it be, it is a marvel in its objects of interest. The old Barony Church, built in 1798 and removed in 1889, no longer exists, it is true, but Norman Macleod must ever remain rooted to the spot. The Cathedral, now as through the centuries bygone,



dreaming not of change, presides over the scene; St. Mungo's Churchyard, where lies the dust of generations of his faithful dignitaries and patrons; the Necropolis, where many of modern times closely identified when in vigorous life with our city's development, repose; the Royal Infirmary, which ministers mercifully to our severer ailments; the Prison, where punitive treatment is administered; churches, schools, and other public institutions, all these converge round this truly historic spot. Thanks to Messrs. Steven of Milton Ironworks, it has been enriched by the gift of a fine fountain (also removed from the Exhibition grounds), to refresh pedestrians. This fountain was formally presented to the Town Council on 27th August, 1890, by Mr. Hugh Steven, who was afterwards entertained to luncheon in the City Chambers. The Parks Committee and their esteemed convener, Bailie Henry Shaw Macpherson, do well to embellish fittingly Cathedral Square.

From no Corporation department do the citizens derive more real enjoyment or recuperation from irksome toil. They are taxed, it is true, but the artizan gets it all—parks, squares, music, and picture galleries, if they will only go to them—for 2s. per annum, or the labouring man for 1s., and his wife and children can go scot-free, be heartily welcomed, and be all the better of going.

## ANNUAL REVENUE OF PARKS AND GALLERIES.

YEAR.	Assessment.	Fees, Rents, Grazing Parks.	Extra- ordinary Receipts.	Total Annual Receipts.	Money Borrowed.
1880-81	£19,312	£4,607	£6,599	£30,518	£243,627
1881-82	22,433	4,931	3,520	30,884	211,643
1882-83	23,637	2,129	551	26,317	210,013
1883-84	24,329	2,377	—	26,706	197,704
1884-85	24,164	2,211	—	26,375	261,805
1885-86	24,335	2,630	—	26,965	245,932
1886-87	24,200	3,121	—	27,321	242,682
1887-88	24,099	2,223	—	26,322	228,881
1888-89	24,256	2,504	9,950	36,710	213,431
1889-90	24,767	2,860	—	27,627	207,731
1890-91	25,401	3,311	123	28,835	203,044



## ANNUAL EXPENDITURE ON PARKS AND GALLERIES.

YEAR.	On Parks, Glasgow Green, and Minor Spaces.	On Galleries and Museum.	Music.	Interest and Sinking Fund.	Management and Sundries.	Extraordinary Expenditure.	Total Annual Expenditure.	Capital Account or Assets.
1880-81	£5,662	£3,281	£820	£12,143	£1,080	£7,147	£30,133	£273,020
1881-82	6,106	3,888	655	11,425	1,019	4,501	27,594	244,820
1882-83	6,403	3,761	627	10,977	1,223	2,823	25,814	239,972
1883-84	7,943	5,331	779	11,993	1,340	793	28,179	226,197
1884-85	7,032	3,768	717	11,506	1,196	2,358	26,577	289,946
1885-86	7,635	3,580	770	11,971	2,154	1,880	27,990	297,211
1886-87	7,272	3,799	742	11,495	2,258	755	27,321	295,941
1887-88	7,103	3,085	557	11,808	1,764	2,370	26,687	283,857
1888-89	7,205	3,544	460	11,367	1,809	*12,326	36,711	284,062
1889-90	7,986	3,904	593	11,223	1,950	1,970	27,626	287,492
1890-91	8,092	3,533	677	11,413	2,270	3,707	29,692	282,198

\* Includes £10,853 of Extraordinary Receipts placed to Sinking Fund.

## THE ROYAL BOTANIC GARDENS.

These gardens have been for the past four or five years *de facto*, and on 1st November they become *de jure*, a possession of the city. As a park-garden they will be maintained from the Parks rate. There is also about to be incorporated with the gardens the opposite or east bank of the Kelvin, so that with both banks embraced, the river, at its most umbrageous reach, will be enclosed within the gardens. With the water clarified and sweetened, this Kelvin glade should, at little expense, be made the most attractive spot within the city bounds and be exquisitely adapted for musical promenades. With a railway station close to it, it must become a popular resort of the citizens.

Now that the gates are thrown open the citizens cannot fail to take very full use of the gardens. For studious persons they are a rich botanical store-house. The collection of hardy plants is of great scientific and educational value, and it is arranged in natural families, for the better use of students and others interested in botany. There is also an extensive collection of plants used in medicine, the arts, and in commerce, and altogether, the gardens are a school that has given and will continue to yield precious results to thoughtful youths. With a good supply of decorative and flowering plants maintained at every season of the year which all can admire, the gardens should be a favourite resort in winter and in summer without distinction.

The Winter Garden, or "Kibble Palace," as we like to hear it named, is of itself a great attraction. Originally built by Mr. John Kibble, native of our city, as an adjunct to his pretty residence at Coulport on Loch Long, it was about eighteen years ago re-erected on its present site on a somewhat enlarged scale. At first used as a concert and lecture hall, it has seen some historic gatherings. Here the great opening meeting of the British Association took place in 1875, and in it Benjamin Disraeli and William Ewart Gladstone delivered their addresses as Lord Rectors of the University. Now with its splendid collection of tall foliage plants and flowers the Winter Garden is put to more appropriate use.

## MARKET TRUST.

## BUTCHER MEAT SUPPLIES.

THE vastly important trade in butcher meat may be looked at from several points of view. I shall give some facts for the past six years, and make a few explanatory remarks upon the following departments of city economics.

1. The Cattle Market.
2. The Importation of American Live Animals.
3. The Abattoirs of the City.
4. The Dead Meat Market.
5. The Veterinary Inspection of Animals, Dairies, etc.

## 1. CATTLE MARKET.

This market, opened in 1818 on ground originally intended for an east end square, and since enlarged from time to time, continues to do a large business, although subject to sudden fluctuations. The following table shows the number of animals of all kinds which have passed through the market since 1885:—

YEAR.	Cattle.	Milch Cows.	Horses.	Pigs.	Sheep.	Calves.
1886	87,814	2,567	10,284	10,132	301,674	720
1887	76,392	—	9,610	6,937	304,438	619
1888	61,207	—	6,849	5,469	286,975	463
1889	60,184	—	7,326	5,134	393,832	512
1890	65,212	—	6,379	5,962	300,921	479

The Cattle Market has been for many years let to tacksmen on triennial leases on payment of a sliding-scale rent. The volume of business is now chiefly affected by two causes—the American importations and the presence or absence of pleuropneumonia and other infectious diseases in country districts, which restrict the movement of animals. A shipment of cattle to Yorkhill is known to cattle dealers over the country, and the number of home-fed animals sent to the Cattle Market is accordingly regulated by the requirements of butchers in view of the arrival of such shipments. The

tables given below show that the home animals do not increase, and for the simple reason that grazing resources are limited, and the limit has long ago been reached.

When, in addition to the North British Railway lines already connected, the Caledonian Company have completed their connections with the Market from both the north and south sides of the city, the business of the Market will be conducted unobtrusively, and without the danger attending the driving of cattle through the streets.

## 2. AMERICAN IMPORTATIONS.

I give tables which exhibit the large trade in States oxen, now apparently firmly established:—

### IMPORTATION OF LIVE ANIMALS FROM CANADA AND THE UNITED STATES.

POINTHOUSE WHARF. For United States Cattle.				SHIELDHALL WHARF. For Canadian Cattle.			
Date.	Cattle.	Sheep.	Pigs.	Date.	Cattle.	Sheep.	Pigs.
From opening of Wharf, June, 1879, till May 31, 1880	5,065	1,053	—	From opening of Wharf, Oct., 1879, till May 31, 1880	2,395	1,769	407
Year to May 31,				Year			
1881	9,221	1,126	219	1881	14,591	8,675	327
1882	7,906	2,841	—	1882	11,549	11,524	—
1883	8,860	1,330	—	1883	11,515	9,879	—
1884	19,443	682	—	1884	17,585	12,622	—
1885	16,957	—	—	1885	22,685	10,514	73
1886	9,986	1,697	—	1886	22,646	5,949	—
1887	10,279	776	—	1887	26,036	9,654	—
1888	13,083	—	—	1888	21,090	2,448	—
1889	21,569	3,832	—	1889	22,824	3,926	—
1890	37,732	670	—	1890	28,665	622	—
1891	37,976	2,488	—	1891	39,618	610	—
Totals,	198,077	16,495	219		241,199	78,192	807

The volume of States cattle landed at Yorkhill, and every one of which fell to be slaughtered there, rose in 1890 and 1891 to three times the number imported in 1888, and to four times that of 1886. In 1884 the number imported was 19,443, which was regarded as phenomenal; but in the past two years this high figure was actually doubled. There

is reason to believe that this trade will more and more become a settled one.

As a rule, animals land at Yorkhill in excellent condition. Whatever cruelties, arising from want of proper "middle passage" arrangements, may be suffered by cattle shipped to other ports in the United Kingdom, these do not seem in any material or avoidable degree to be chargeable to Clyde shipments. To prove this palpable fact I extract the following figures for the year 1890 from the report of Mr. Fyfe, than whom the Corporation has no more zealous official.

#### INSPECTION OF DEAD MEAT AT YORKHILL WHARF, 1890.

The total number of larger animals landed and slaughtered and inspected as dead meat was as follows:—

Bullocks,	-	-	-	35,748
Bulls,	-	-	-	5,393
Cows,	-	-	-	494
				<hr/>
				41,635

Averaging 7 cwts. 10 lbs. per carcase or 33,057,920 lbs.  
*Of this number of animals 111 were condemned.*

#### INSPECTION OF LIVE ANIMALS AT SHIELDHALL, 1890.

The total number of cattle landed was 39,593. Of this number of animals 59 were dead or disabled and 52 were condemned as unfit for human food. Those losses are an extremely low proportion, considering the liability to accidents on board ship.

These figures show that Transatlantic casualties are extremely few. The shipowners and cattle owners in their own interest, if on no higher ground, are careful of the lives and condition of their freights, providing a separate stall for each animal and ample supplies of food and water. The result has been that the animals disembark in quite as good form as Irish cattle. Sales at Yorkhill attract butchers of the best standing. The prejudice against American beef, when the trade was in its infancy, has long ago been removed. Consumers do not now concern them-

selves with inquiries, and, even if they did, the butcher needs not to blush in admitting the soft impeachment.

The importations to Shieldhall from Canadian provinces have also largely advanced, reaching to 40,000 in last year, as against an average of 24,000 in the five preceding years. Canadian animals having been free from restrictions as regards movement in this country, they are not slaughtered at the port. The fat animals intended for slaughter are taken to city or country abattoirs, but a large proportion of the animals are young, and are brought across for store purposes. The United States never made sheep a factor in their shipments. Canada did during some years, but the traffic in sheep is fast disappearing from Canadian records also. Their flesh does not compare quite favourably with Scotch and English mutton fed in a more humid climate, and, besides, sheep are more sensitive than cattle to the exigencies of the "middle passage." Attempts have been made to bring live sheep from Buenos Ayres, but they have not been a success, the animals deteriorating at sea.

### 3. CITY SLAUGHTER-HOUSES.

These are three in number, the principal abattoirs being in Moore Street, contiguous to the Cattle Market. There are two subsidiary ones—Milton in the North quarter and Victoria Street on the South side—but the volume of business is done at Moore Street. The following tables give full details, and will be of interest to the trade, although of no very general interest; but it is desirable to maintain continuity, and by the kindness of the superintendent, Mr. Hamilton, I am enabled to supply the particulars. It is seen that trade has been fickle, reflecting the business done in the Cattle Market, upon which some comments have been already made.



## ANIMALS SLAUGHTERED IN GLASGOW SLAUGHTER HOUSES.

1885-86.

QUARTER.	OXEN.			CALVES.			SHEEP.			LAMBS.			PIGS.		
	Moore Street.	Milton.	Victoria Street.	Moore Street.	Milton.	Vic. Street.	Moore Street.	Milton.	Victoria Street.	Moore Street.	Milton.	Victoria Street.	Moore Street.	Milton.	Vic. Street.
June-Aug.,	7,075	930	784	112	105	163	20,999	5,080	3,794	19,597	7 206	6,200	2,268	136	6
Sept.-Nov.,	13,607	1,944	1,655	102	179	155	46,173	12,142	7,374	9,129	3,639	2,560	2,771	181	15
Dec.-Feb., -	12,312	1,827	1,371	121	108	89	40,817	9,024	5,732	92	29	16	3,906	217	25
Mar.-May,	11,812	1,767	1,520	187	202	173	22,507	5,469	4,119	449	158	263	3,222	200	72
Total of each class,	44,806	6,468	5,330	520	594	580	130,396	31,715	21,019	29,267	11,032	9,039	12,167	734	118
-	56,604			1,694			183,130			49,338			13,019		

1886-87.

June-Aug.,	9,298	1,238	1,253	172	143	197	20,054	4,539	3,629	16,293	5,754	5,822	2,273	116	7
Sept.-Nov.,	13,191	1,951	1,924	148	182	147	39,276	8,862	7,257	7,404	2,702	2,738	3,282	111	26
Dec.-Feb.,	14,376	1,874	1,928	90	130	73	37,728	7,600	6,603	209	4	5	3,752	163	38
Mar.-May,	14,102	2,022	1,669	139	148	134	27,821	4,916	4,482	575	228	400	3,578	134	12
Total of each class,	50,967	7,085	6,774	529	603	551	124,879	25,917	21,971	24,481	8,688	9,015	12,885	524	83
-	64,826			1,683			172,767			42,184			13,492		



## 1887-88.

QUARTER.	OXEN.			CALVES.			SHEEP.			LAMBS.			PIGS.		
	Moore Street.	Milton.	Victoria Street.	Moore Street.	Milton.	Vic. Street.	Moore Street.	Milton.	Victoria Street.	Moore Street.	Milton.	Victoria Street.	Moore Street.	Milton.	Vic. Street.
June-Aug.,	10,713	1,296	1,335	159	120	150	22,337	3,919	4,053	17,304	5,536	5,744	2,798	106	2
Sept.-Nov.,	13,362	1,984	2,131	98	238	137	37,996	8,302	6,036	9,252	3,349	3,144	2,432	91	10
Dec.-Feb.,	14,597	1,903	1,735	78	146	76	39,858	6,694	5,782	90	34	25	5,166	225	76
Mar.-May,	10,868	1,394	1,044	203	163	157	25,356	4,562	4,329	504	234	453	5,532	241	24
Total of each class,	49,540	6,577	6,245	538	667	520	25,547	23,477	20,200	27,150	9,153	9,366	16,938	653	112
	62,362			1,725			169,224			45,669			17,793		

## 1888-89.

June-Aug.,	10,231	1,109	1,024	192	103	201	24,947	4,243	3,987	17,955	4,895	5,812	3,638	137	25
Sept.-Nov.,	13,438	1,491	1,502	145	121	139	44,942	7,572	7,306	9,207	2,404	2,188	4,908	184	14
Dec.-Feb.,	12,269	1,638	1,475	82	57	67	34,635	5,676	5,986	284	72	2	5,997	194	47
Mar.-May,	6,137	896	888	174	100	134	21,625	3,339	3,771	405	182	236	5,023	125	29
Total of each class,	42,075	5,144	4,889	593	393	541	126,139	20,830	21,050	27,851	7,553	8,238	19,666	640	115
	52,108			1,527			168,019			43,642			20,421		

## 1889-90.

QUARTER.	OXEN.			CALVES.			SHEEP.			LAMBS.			PIGS.		
	Moore Street.	Milton.	Victoria Street.	Moore Street.	Milton.	Vic. Street.	Moore Street.	Milton.	Victoria Street.	Moore Street.	Milton.	Victoria Street.	Moore Street.	Milton.	Vic. Street.
June-Aug.,	5,564	433	524	137	70	167	22,559	3,469	3,391	17,255	4,926	5,280	4,361	122	22
Sept.-Nov.,	6,960	428	623	120	90	135	39,680	6,082	5,706	54,52	1,764	1,637	4,873	100	29
Dec.-Feb.,	8,315	704	792	57	83	60	30,181	4,307	4,409	87	8	3	5,223	135	39
Mar.-May,	5,539	448	579	193	124	163	28,096	3,524	3,811	670	210	378	6,025	129	23
Total of each class,	26,378	2,013	2,518	507	367	525	120,516	17,382	17,317	23,464	6,908	7,298	20,482	486	113
	30,909			1,399			155,215			37,670			21,081		

## 1890-91.

QUARTER.	OXEN.			CALVES.			SHEEP.			LAMBS.			PIGS.		
	Moore Street.	Milton.	Victoria Street.	Moore Street.	Milton.	Vic. Street.	Moore Street.	Milton.	Victoria Street.	Moore Street.	Milton.	Victoria Street.	Moore Street.	Milton.	Vic. Street.
June,	2,367	135	216	48	33	64	7,948	928	1,101	2,349	496	830	1,536	39	1
July,	1,336	65	125	45	14	50	6,756	757	882	4,667	779	1,357	1,292	25	1
August,	1,799	71	155	73	38	70	10,647	1,216	1,402	10,230	1,891	2,612	1,855	31	5
Sept.,	1,728	80	241	55	24	52	10,177	1,282	1,397	5,814	1,100	1,568	1,650	25	15
October,	2,764	131	222	49	18	38	14,376	1,671	2,369	1,297	403	124	2,007	39	142
Nov.,	3,080	154	293	68	26	44	17,588	2,346	1,895	357	124	510	2,849	59	8
Dec.,	3,635	136	239	73	23	18	13,323	1,701	1,728	127	28	56	2,560	50	402
January,	3,038	155	211	42	27	19	14,836	1,780	1,922	1	5	9	2,607	122	474
February,	3,020	268	334	35	23	12	12,108	1,371	1,644	1	12	10	2,268	39	155
March,	1,271	121	201	59	33	19	10,857	1,378	1,558	13	8	9	2,423	32	164
April,	2,264	168	260	50	27	55	10,126	1,238	1,601	41	22	21	2,176	49	200
May,	4,747	434	544	77	30	71	12,595	1,478	1,735	638	185	387	2,781	52	364
Total of each class,	31,049	1,918	3,041	674	316	512	141,397	17,146	19,234	25,535	5,053	7,493	26,004	562	1,931
	36,008			1,502			177,687			38,081			28,497		

## 4. DEAD MEAT MARKET.

CARCASSES EXPOSED FOR SALE IN DEAD MEAT MARKET, MOORE STREET.

For Year Ending.	CATTLE.	SHEEP.	LAMBS.	PIGS.	CALVES.	
					Fed.	Slink.
May, 1886	41,743	89,022	14,420	8,942	283	523
„ 1887	42,450	80,896	12,955	8,766	357	438
„ 1888	40,993	73,133	12,342	12,678	323	705
„ 1889	41,573	81,332	11,783	13,939	354	770
„ 1890	40,508	83,427	11,615	15,430	236	819
„ 1891	39,706	85,961	14,288	9,615	187	731

The carcasses of oxen have fallen from an average of 46,200 per annum in the four years, 1881-85, of the market to an average of 41,000 in the past six years, and this in face of increasing consumpt; but Yorkhill, with its heavy deliveries from the States, has made up for the deficient record in Moore Street. The two places, although technically under separate management, and regulated by separate statutory enactments—Moore Street by the Markets Commissioners under private Acts, and Yorkhill by the Local Authority under Privy Council legislation—are practically conducted by the same gentlemen, and conflict or competition is avoided. The two departments may indeed be considered as one harmonious concern acting in the public interest.

The important subject of Meat inspection, to secure to the public wholesome supplies of butcher meat has been receiving very close attention in the past three or four years. Interest was excited over the question of Tuberculosis in animals, and the possible mischievous effects, to consumers, of eating the flesh or drinking the milk of animals affected by that disease. Experts were known to differ widely on the question, and a test case was fought out before the learned Sheriff of Lanarkshire before whom much evidence was led, with the result that Sheriff Berry decided that the preponderance of evidence was against the use of any portion of a tuberculosis carcase, and that it ought not to be exposed

for sale. The inspection of dead meat was in the hands of the police authorities till 1889, and it had been skilfully and honestly conducted in the public interest, but it was felt that so vitally important a duty ought also to be in the hands of the Department of Health of the City, and statutory powers were obtained to this end by the Corporation Act of last year.

I append Statement of the Finances of the Market Trust.

YEAR.	ANNUAL RECEIPTS.				CAPITAL.
	From Markets.	From Slaughter Houses, etc.	From Rents, etc.	Total.	Money Borrowed.
1885-86	£11,290	£7,606	£2,057	£20,952	£187,707
1886-87	11,393	7,949	2,110	21,452	188,737
1887-88	11,793	8,233	2,187	22,213	175,222
1888-89	12,464	7,821	1,974	22,259	172,364
1889-90	11,426	6,661	1,727	19,815	172,075
1890-91	10,702	7,279	1,822	19,803	172,375

YEAR.	ANNUAL EXPENDITURE.						CAPITAL ACCOUNT or Assets.
	On Markets.	On Slaughter Houses, etc.	Management and Sundries.	Interest and Sinking Fund.	Extraordinary Expenditure.	Total Annual Expenditure.	
1885-86	£2,357	£5,279	£1,272	£7,152	£1,594	£17,655	£258,520
1886-87	2,768	5,449	1,229	7,756	1,296	18,499	262,641
1887-88	3,235	5,686	1,240	7,664	641	18,467	253,000
1888-89	2,694	5,269	1,307	7,255	688	17,213	255,345
1889-90	2,588	5,127	1,557	7,126	1,358	17,757	257,177
1890-91	2,793	5,167	1,562	7,121	643	17,284	260,012

##### 5. VETERINARY INSPECTION OF ANIMALS, DAIRIES, ETC.

This department is administered by the Magistrates as Local Authority, and it has been professionally conducted during a quarter of a century by Professor M'Call under their appointment and supervision. Energetic vigilance is maintained over the Cattle Market and over city dairies, piggeries, etc. Outbreaks of infectious disorders have been speedily detected and drastically dealt with. The compensation allowed to owners of animals destroyed, of two-thirds

their value, secures their coadjutorship. This compensation was found by the Local Authority from local rates until last year, when it was assumed by the Government and laid on the imperial rates. For some years prior to the transfer inappreciable sums were disbursed, and so free from disease has been the city of late that the Government have as yet had nothing at all to pay as regards Glasgow. Edinburgh on the other hand had an unhappy experience last year, costing something like £8,000 in compensation.

## FISH MARKET RETURN FOR SEVEN YEARS.

YEAR.	Fresh White Fish.	Findon Haddocks.	Fresh Herrings.	Cured Herrings.	Totals.
	Boxes.	Barrels.	Boxes.	Barrels.	
1885	83,714	81,257	89,559	2,896	259,426
1886	92,437	81,239	88,954	5,441	268,071
1887	89,922	88,567	92,038	6,431	276,958
1888	101,542	94,095	81,524	6,090	283,251
1889	107,708	99,472	99,366	4,329	310,875
1890	107,730	91,015	108,394	4,061	311,200
1891	107,085	90,631	108,731	3,853	310,300

The last three years show an all but stationary supply of white fish and herrings passing through the market. On the West Coast the herring fishing is prosecuted with vigour, but the question is frequently put—Are not our white fisheries in the West capable of cultivation on a wider scale? We hear from the Hebrides and from the Orkneys and Shetlands of the fishermen being discouraged by the low prices they can get from Southern buyers, while at same time prices do not rule so very low to consumers. Encouragement to our hardy fishermen who follow a hazardous calling is much wanted, and if given in practical measure by better boats and harbours at shorter distances apart, the industry might be stimulated, and steady employment found for many now dragging out a precarious living.

Over all these important concerns Bailie Wm. Stevenson has presided during seven years with much acceptance.

## GLASGOW TRAMWAYS.

THE lease of twenty-three years' duration, which was entered on at 1st July, 1871, terminates on 30th June, 1894. The lines were constructed by the Corporation and leased to the Glasgow Tramway Company upon the following terms :—

1. That recouping interest be paid by the Company to the Corporation on the total expenditure, including the expenses of obtaining the Acts of Parliament.

2. That a sum equal to 3 per cent. upon this total expenditure be paid to the Corporation, and be set aside for the purpose ultimately of redeeming the same.

3. That a sum equal to 4 per cent. on the cost of construction of the lines, but exclusive of Parliamentary and other incidental expenses, be paid by the Company for the purpose of meeting renewals of the lines, such renewals to be executed by the Company at the sight of the Corporation and its officers. At the end of the lease any unappropriated balance belongs to the Company.

4. That a sum of £150 per mile of city streets be paid annually by the Company to the Corporation, and

5. That all other expenses incurred by the Corporation in necessary management be recouped by the Company.

These terms applied to the lines originally laid, but extensions of the system have since been made under agreements which differ in terms from the foregoing. On next page I give vidimus of the total expenditure and the terms attaching to agreements subsequent to the original one.

I append Tables showing the lengths of tramways made, and dates of opening; payments by the Company under agreements; and progress of the Company's traffic from the beginning to 31st December, 1890. I also append Table of the traffic and plant of the Vale of Clyde Company.

In last Session the Corporation obtained an Act authorizing the Tramways to be worked by mechanical power. This term includes electrical, steam, cable haulage, or any motive power other than animal power, subject to such conditions as are defined in the Act, or may be required by the Board of Trade.



## STATEMENT OF THE CAPITAL EXPENDITURE OF THE CORPORATION ON TRAMWAYS, AS AT 31st MAY, 1891.

I. To Expenditure on basis of Original Agreement and Lease with the Company of 1871, - - - - -	£223,583	8	0
II. To Expenditure under Agreement of 1879, on which neither Sinking Fund nor Renewal Fund is paid, - - -	72,533	14	6
III. To Expenditure under Agreement of 1881, upon which payment of Interest, at the same rate as under Original Agreement, was postponed until the lapse of four years from date of opening the lines for traffic, viz., till 15th September, 1886, - - - - -	9,844	4	0
IV. To Expenditure upon the re-laying of the Lines along Tobago Street, upon which a Sinking Fund of five per cent. per annum and Interest at rate fixed from time to time under Original Agreement is chargeable, - - -	362	11	6
V. To Expenditure under Agreement of 1882, in extension of Lines to Pollokshaws, as sanctioned by "The Glasgow Corporation Act, 1884," upon which Interest at four-and-a-half per cent. per annum is chargeable, - - -	4,260	12	4
VI. To Expenditure under Agreement of 1885, as sanctioned by "The Glasgow Corporation Tramways Act, 1885," including proportion of Parliamentary Expenses, upon which Interest at four per cent. per annum is chargeable, -	18,360	16	2
VII. To Expenditure in connection with Construction of Lines to Springburn, under Agreement of 1886, including proportion of Parliamentary Expenses, upon which Interest at four per cent. per annum is chargeable, as at last Balance, - - -	£17,991	15	0
Less—Sum realized from Sale of Rails and Fish Plates, - - -	2,074	2	5
VIII. Expenditure upon Alterations of Lines,	15,917	12	7
	102	19	3
	£344,965	18	4



TABLE SHOWING LENGTHS OF TRAMWAYS AND DATES OF OPENING.

	Miles.	Fur.	Yds.	Date opened to Public.
1. St. George's Cross to Eglinton Toll,	2	2	2	19th August, 1872.
2. Crescents to Cambridge Street, -	0	7	116	7th October, „
3. Bridgeton to Candleriggs, - -	1	0	0	2nd December, „
4. Bridge Street to Paisley Road Toll,-	0	6	40	16th „ „
5. St. George's Cross to Belhaven Terr.,	1	2	39	27th „ „
6. Whiteinch to Crescents, - - -	2	4	20	27th „ „
7. St. Vincent Place Branch, - -	0	1	20	27th „ „
8. Elderslie Street to Derby Street, -	0	3	130	3rd March, 1873.
9. Jamaica Street to Elderslie Street, -	0	6	105	1st May, „
10. Jamaica Street to Candleriggs, -	0	3	67	13th June, „
11. St. Vincent Place to Dennistoun, -	1	4	60	22nd November, „
12. Great Hamilton Street to Bellgrove,	0	4	61	1st December, „
13. Bellgrove to Camlachie Burn, - -	0	4	75	19th „ „
14. Port-Eglinton Toll to Butterbiggins Road <i>via</i> Pollokshaws Road, - -	0	1	66	16th March, 1874.
15. New City Road <i>via</i> Cowcaddens to Sauchiehall Street, - - -	0	3	178	18th April, „
16. The Cross to Kent Street, - - -	0	2	56	27th June, „
17. Camlachie Burn to Camlachie Toll,-	0	1	160	3rd July, 1875.
18. Bridgeton Cross along London Road,	0	3	186	25th August, „
19. Port-Eglinton Toll to Queen's Park,	0	5	68	29th November, „
20. Queen's Park Gate to Langside Road,	0	0	153	29th June, 1876.
21. Belhaven Terrace westward, - -	0	2	84	20th March, 1880.
22. Butterbiggins Road to Shawlands, -	1	0	21	15th May, „
23. St. Vincent Place to Glassford Street,	0	2	166	20th August, „
24. St. George's Cross to near Garscube Road Toll, - - - -	0	5	212	20th „ „
25. The Cross to Queen Mary Avenue, -	1	6	78	27th „ „
26. Near Camlachie Toll to Parkhead, -	0	3	136	30th December, „
27. Rutherglen Rd. and Rutherglen Loan,	0	5	36	1st January, 1881.
28. Norfolk and Govan Streets, - -	0	3	146	12th „ „
29. Garscube Road Toll to Burgh Build- ings, Maryhill, - - - -	0	7	176	23rd May, „
30. Burgh Buildings, Maryhill, to Terminus,	0	4	192	13th March, 1882.
31. Bridgeton Cross along D'marnock Rd.,	0	5	126	15th September, „
32. Shawlands to Pollokshaws, - - -	0	6	166	15th „ „
33. Cowcaddens along Garscube Road, -	0	4	128	15th „ „
34. Crosshill <i>via</i> Queen's Drive to Gov'hill,	0	4	121	14th March, 1886.
35. Mitchell Street <i>via</i> Bothwell Street to Kelvinbridge and St. George's Cross,	1	6	209	26th July, „
36. Junction of St. George's Rd. and Mary- hill Lines etc. at St. George's Cross,	0	0	40	26th „ „
37. Mitchell Street to Kennedy Street, St. Rollox, including Sauchiehall Street, and St. Vincent Street connections,	1	1	118	30th September, „
38. Kennedy Street to Springburn, -	1	2	69	8th December, „
39. Exhibition Lines in Sandyford St. etc.,	0	2	21	6th April, 1888.
40. Junction of Springburn and Sauchie- hall Street Lines at West Nile St.,	0	0	33	6th „ „
41. Branches and Stable line connections,	1	1	135	Various times.
Total Length of Lines - -	31	3	55	

## PAYMENTS BY COMPANY TO THE CORPORATION.

YEAR.	INTEREST.	SINKING FUND.	RENEWAL FUND.	Mileage Rate of Streets within City.	Total Payments to Corporation.
1873 to 1885	£125,325 18 7	£77,700 16 8	£87,946 15 11	£20,659 4 2	£311,632 15 4
1886	11,698 11 6	6,725 12 6	7,456 0 0	2,666 5 0	28,546 9 0
1887	12,114 18 8	6,725 12 6	7,456 0 0	2,666 5 0	28,962 16 2
1888	13,230 10 0	6,725 12 6	7,456 0 0	2,666 5 0	30,078 7 6
1889	13,129 11 2	6,725 12 6	7,456 0 0	2,680 13 4	29,991 17 0
1890	12,958 0 1	6,725 12 6	7,456 0 0	2,708 7 0	29,847 19 7
1891	12,813 15 3	6,725 12 6	7,456 0 0	2,708 7 0	29,703 14 9
Totals, -	£201,271 5 3	£118,054 11 8	£132,682 15 11	£36,755 6 6	£488,763 19 4

## PARTICULARS OF TRAMWAY COMPANY'S AFFAIRS.

HALF-YEAR ENDING	Miles run. — Daily Average.	Gross Receipts by Cars, Omnibuses, Hiring, Carriage of Mails and Cabs and General Receipts.	Average per mile by Cars and Omnibuses.	Total Ex- penditure per mile including Corporation Charges.	Net Available Balance.	Amount of Dividend paid.	Rate p. cent. per annum on Capital called up.
		£		d.	£	£	
30th June, 1872,	—	34,712	—	—	4,098	2,916	5
31st Dec., „	—	46,604	—	—	2,971	—	nil.
30th June, 1873,	—	51,933	—	—	3,073	—	nil.
31st Dec., „	—	55,913	—	—	5,289	—	nil.
30th June, 1874,	—	53,976	—	—	1,730	—	nil.
31st Dec., „	5,210	52,972	1/3 $\frac{1}{2}$	16 $\frac{1}{2}$	724	—	nil.
30th June, 1875,	5,439	54,744	1/3 $\frac{1}{2}$	16 $\frac{1}{5}$	557	—	nil.
31st Dec., „	5,856	63,010	1/4 $\frac{1}{3}$	15	3,887	4,375	3 $\frac{1}{8}$
30th June, 1876,	6,888	67,579	1/3	14 $\frac{1}{2}$	4,337	4,375	3 $\frac{1}{8}$
31st Dec., „	7,922	75,006	1/2 $\frac{1}{2}$	13 $\frac{1}{2}$	6,557	5,833	4 $\frac{1}{8}$
30th June, 1877,	8,134	79,354	1/3	13 $\frac{1}{2}$	9,451	7,875	5
31st Dec., „	8,370	83,494	1/3 $\frac{1}{4}$	13 $\frac{1}{2}$	13,535	9,625	6 $\frac{1}{2}$
30th June, 1878,	8,271	81,792	1/3 $\frac{1}{2}$	12 $\frac{3}{4}$	11,834	9,187	5 $\frac{5}{8}$
31st Dec., „	8,460	81,315	1/2 $\frac{3}{4}$	12 $\frac{3}{4}$	12,415	9,187	5 $\frac{5}{8}$
30th June, 1879,	8,452	72,463	1/1 $\frac{1}{4}$	11 $\frac{1}{2}$	12,136	8,312	5 $\frac{1}{4}$
31st Dec., „	8,546	73,518	1/1	11 $\frac{1}{2}$	12,393	9,187	5 $\frac{1}{2}$
30th June, 1880,	8,415	77,376	1/2 $\frac{1}{2}$	11 $\frac{1}{2}$	15,471	11,375	7 $\frac{3}{8}$
31st Dec., „	9,321	83,685	1/1 $\frac{1}{2}$	11 $\frac{1}{2}$	18,088	14,437	9 $\frac{1}{8}$
30th June, 1881,	9,874	85,102	1/1 $\frac{1}{2}$	11 $\frac{1}{8}$	17,553	14,437	9 $\frac{1}{8}$
31st Dec., „	10,756	95,188	1/1 $\frac{1}{2}$	11 $\frac{1}{8}$	20,085	15,750	10
30th June, 1882,	11,074	98,740	1/1 $\frac{1}{2}$	11 $\frac{1}{2}$	21,427	19,937	11 $\frac{1}{3}$
31st Dec., „	11,741	102,444	1/1 $\frac{1}{2}$	11 $\frac{1}{2}$	19,069	15,750	10
30th June, 1883,	11,782	101,533	1/1 $\frac{1}{4}$	11 $\frac{1}{6}$	21,151	17,062	10 $\frac{5}{8}$
31st Dec., „	12,268	104,821	1/1	10 $\frac{1}{2}$	22,565	17,937	11 $\frac{1}{3}$
30th June, 1884,	12,593	102,433	1/0 $\frac{1}{2}$	10 $\frac{1}{2}$	20,428	16,625	10 $\frac{5}{8}$
31st Dec., „	13,051	104,420	1/0 $\frac{1}{4}$	10 $\frac{1}{2}$	20,292	15,750	10
30th June, 1885,	12,795	105,157	d.	11'974	19,744	15,750	10
31st Dec., „	13,204	108,615	11'872	10'239	20,740	15,750	10
30th June, 1886,	13,088	103,317	11'288	10'113	17,282	12,687	8
31st Dec., „	13,821	107,788	11'134	9'902	18,825	13,562	8 $\frac{11}{18}$
30th June, 1887,	13,680	106,928	11'033	9'975	18,177	13,562	8 $\frac{11}{18}$
31st Dec., „	13,776	110,227	11'242	10'232	18,617	13,562	8 $\frac{11}{18}$
30th June, 1888,	14,901	117,168	11'129	10'091	19,436	14,437	9 $\frac{1}{8}$
31st Dec., „	15,880	137,019	s. 1/0'431 d.	10'874	24,766	18,958	12 $\frac{2}{7}$
30th June, 1889,	13,927	114,066	11'687	10,582	18,265	13,125	8 $\frac{1}{3}$
31st Dec., „	14,201	122,369	s. 1/0'345	11'304	18,013	13,125	8 $\frac{1}{3}$
30th June, 1890,	14,073	126,032	1/0'824	11'694	19,048	13,125	8 $\frac{1}{3}$
31st Dec., „	14,656	133,642	s. 1/1'122	1/0'025	19,037	13,125	8 $\frac{1}{3}$

\* The International Exhibition year.

YEAR.	Average Number of Horses.	Number of Cars.	Number of Omnibuses, Brakes, etc.	Miles run in Year.	Passengers Carried.
1885	2,445	233	115	4,055,905	41,588,322
1886	2,607	233	119	4,197,969	40,622,701
1887	2,767	233	123	4,283,187	41,466,764
1888	3,037	233	151	4,801,983	46,851,162
1889	2,750	233	150	4,388,019	45,812,940
1890	2,873	230	162	4,481,825	50,237,995

## SERVANTS OF THE COMPANY.

Office Staff,	-	-	-	-	-	-	31
Car Drivers,	-	-	-	-	-	-	342
Car Conductors,	-	-	-	-	-	-	342
Stable Foremen and Inspectors,	-	-	-	-	-	-	26
Strappers and Feeders,	-	-	-	-	-	-	263
Skilled Workmen,	-	-	-	-	-	-	164
Cab and Carriage Drivers, Loftmen, Carters, etc.,	-	-	-	-	-	-	199
Females employed,	-	-	-	-	-	-	52
Total,	-	-	-	-	-	-	<u>1,419</u>

as against 1,030 in the year 1885.

THE VALE OF CLYDE TRAMWAYS COMPANY.—PLANT AND  
ROLLING STOCK ON GOVAN SECTION.

YEAR.	Number of Engines.	Number of Cars (Large).	Number of Cars (Small).	Miles run in year.	Passengers carried.	Receipts.
1885	9	10	3	176,814	1,935,291	£9,064
1886	9	10	2	152,746	1,865,052	8,584
1887	9	10	2	148,134	1,706,175	7,877
1888	9	10	1	165,941	2,065,161	8,886
1889	9	10	1	173,866	2,561,100	10,673
1890	9	10	1	177,098	2,410,366	11,887

The length of line is  $2\frac{1}{4}$  miles;  $1\frac{3}{4}$  miles are used for the regular runs, and the rest of the line is used for a few special runs daily.

THE POLICE COMMISSIONERS.—VIDIMUS  
ORDINARY

	1885-86.
Assessments collected, - - - - -	£289,467
Government Grant for Police Force, - - -	37,870
Fines recovered in Police Courts, etc., - - -	9,142
Manure Sales including Sums recovered for Rail- way Carriage, - - - - -	24,399
Rents of Property and Ground Annuals, - - -	10,163
Repairing, etc., Streets and Sewers, including Grants from H.M. Treasury, - - - - -	1,551
Receipts from Baths and Wash-houses, - - -	6,801
Receipts from Public Weighing Machines, - - -	1,997
Fire Brigade Expenses recovered from Owners of properties, - - - - -	2,205
Costs on Assessments delayed in payment, - - -	1,280
Other Municipal Departments for Services ren- dered to them, - - - - -	14,213
Other Municipal Departments for Interest, - - -	9,662
Minor sources of Revenue, - - - - -	7,113
	£415,863

## ORDINARY

	1885-86.
Police Establishment, - - - - -	£96,028
Cleansing Establishment, including Cleansing of Courts, - - - - -	76,659
Lighting Establishment, including Lighting of Courts and Common Stairs, - - - - -	45,833
Fire Establishment, - - - - -	11,361
Public Baths and Wash-houses, - - - - -	10,661
Repairs of Streets and Sewers, - - - - -	26,673
Payment to County Road Trustees, - - - - -	10,382
Fever Hospitals and Reception House, - - - - -	16,727
General Sanitary Operations, - - - - -	10,761
Salaries, including Master of Works' Office which is partly recouped by other Departments, - - -	10,833
Expenses of Assessment Collection, - - - - -	4,087
Repairs of Properties yielding Rents, - - - - -	4,321
Interest to Bondholders and others, - - - - -	42,040
Sinking Funds, - - - - -	17,775
Minor sources of Expenditure, - - - - -	10,836
	£394,976

## OF ACCOUNTS FOR YEARS 1885 TO 1891.

## REVENUE.

1886-87.	1887-88.	1888-89.	1889-90.	1890-91.
£281,010	£287,242	£288,969	£295,898	£303,289
37,682	39,259	38,115	38,528	42,261
9,459	9,891	10,911	12,548	12,896
22,022	23,278	23,585	19,719	16,975
10,055	9,984	9,902	8,562	8,378
2,414	5,307	3,593	2,260	2,745
7,285	7,232	7,291	8,676	9,138
2,064	1,997	1,914	1,845	1,878
1,973	2,215	2,586	2,411	2,868
1,263	1,441	1,528	1,729	1,317
14,124	13,331	14,156	15,783	18,468
10,030	10,201	9,310	10,593	10,519
7,412	7,354	9,019	8,017	8,764
£406,793	£418,732	£420,878	£426,569	£439,496

## EXPENDITURE.

1886-87.	1887-88.	1888-89.	1889-90.	1890-91.
£96,683	£101,026	£99,941	£98,970	£98,758
73,463	74,004	75,704	80,271	80,217
44,617	43,869	43,365	43,173	44,644
11,088	11,471	12,180	11,903	12,085
11,053	11,133	12,114	12,158	12,046
46,642	42,545	33,468	27,992	33,375
10,382	10,382	10,382	10,382	10,382
17,830	19,353	19,568	19,500	23,364
11,373	11,546	12,126	13,176	14,366
10,604	11,162	11,086	12,560	12,259
4,057	4,032	4,001	4,500	4,865
4,463	4,617	4,131	3,267	2,887
37,221	35,855	38,409	35,093	34,885
17,825	26,190	34,862	35,616	38,171
9,516	11,957	10,117	11,049	18,504
£406,817	£419,142	£421,454	£419,610	£440,808

## FIRE BRIGADE.

The Fire Brigade of the city is the most interesting and popular of all our municipal organizations. Its work is performed in the midst of danger and excitement, elements in themselves which appeal powerfully to the imagination.

The following Table gives some idea of the work performed by Captain Paterson's gallant brigade in the last ten years:—

YEAR.	Fires Within the City.	Fires Outside the City.	Total Fires.	Number of Fires by Street Alarms.	Malicious Alarms.	Good Intent, Contacts, etc.	Number of Fires attended by Engines, etc.	Fires extinguished without Engines.	Estimated Loss by Fires Within the City.
1881	397	8	405	166	19	37	238	167	£ 121,000
1882	370	9	379	152	21	24	224	155	153,000
1883	384	8	392	160	12	26	225	167	234,000
1884	388	15	403	182	16	37	262	141	72,000
1885	362	15	377	163	16	68	235	142	85,000
1886	365	7	372	194	22	50	244	128	141,000
1887	368	18	386	172	17	37	237	149	74,000
1888	405	17	422	239	8	58	272	150	206,000
1889	443	29	472	290	23	58	311	161	150,000
1890	413	15	428	200	29	43	270	158	43,500
Total,	3,895	141	4,036	1,918	183	438	2,518	1,518	1,279,500
Average,	389.5	14.1	403.6	191.8	18.3	43.8	251.8	151.8	127,950

Every improvement in fire extinguishing appliances is introduced by the Corporation whenever proved to be of practical utility. At the present moment two new and powerful steam fire engines of an improved type are being built, and four fire escapes, two of them 60 feet and two 40 feet in length; facilities for the rapid transmission of intelligence of an outbreak of fire become more complete every year; the Water Commissioners plant innumerable hydrants and supply water for fire extinction purposes in great abundance and under magnificent pressure: all these, combined



with a fine *esprit de corps* in the brigade itself, place Glasgow in the van for fire extinguishing facilities.

It is here shown that in last year the fire losses were extremely low, totalling to £43,500, whilst over the ten years the annual average was £128,000. I find it is impossible in this publication, at least, to distinguish between property covered and uncovered by insurance; but it is probably the fact that Glasgow does remarkably well by the insurance companies, and that these could, in return, give more consideration than is done to the splendid facilities for fire extinction maintained at the expense of the citizens, and which serves the companies' interest in a supreme degree, although, no doubt, primarily instituted in the public interest. I believe it is the case that Glasgow has no advantage over places less thoroughly equipped for the extinction of outbreaks of fire.

The leading appliances in use at present are:—8 steam fire engines, capable together of discharging with great force about 4,000 gallons of water per minute; 9 manual engines; 18 hose carriages; upwards of 4,000 fire cocks and hydrants; and 40,000 feet of hose on machines and in store; while 26 horses are used solely for fire department purposes. As stated, two new steam fire engines and four fire escapes are being built.

There are eleven fire stations in the city, and at present the brigade consists of 88 permanent and 46 auxiliary firemen. In view of the approaching extension of the city area, a proportionate strengthening of the brigade and its appliances will doubtless take place. One of the weaknesses and dangers of burghal isolation has been the important one of means for fire extinction.

## CLEANSING DEPARTMENT.

THE Department has three refuse Despatch Works—the first at St. Rollox, in the north quarter of the city, opened in 1881; the second in Crawford Street, Tradeston, on the south side, opened in 1884; and the third at Kelvinhaugh, in the western district, opened in December, 1890.

The work of the Department embraces :—

- (1) The scavenging and watering of all public streets ;
- (2) The collection, removal, and disposal of all night soil and general city refuse, including street sweepings ;
- (3) The scavenging of all private streets and courts common to two or more occupiers.

These sections, although organized under one management, are accounted for separately. The two first sections are a charge on the general police rate. The last is met by a special assessment of one penny per £ payable by the proprietors benefited.

In the beginning of 1890 the cleansing of the harbour, etc., was by request undertaken by the Cleansing Department and the nett outlay is debited to the Clyde Navigation Trustees.

The following Table gives the figures under the various headings for year 1890-91 :—

Nett cost of night soil and refuse removal,	
including street detritus,       -   -   -	£35,656
Nett cost of public street scavenging,   -   -	£14,144
Nett cost of private street and court scavenging,   -   -   -   -   -   -	£10,807
Mileage of streets,               -   -   -   -	180
Average number of men employed,       -   -	844
Average stud of horses,           -   -   -	184
Cost of feeding and litter per week for each horse,   -   -   -   -   -	10/10½
Average cartage (exclusive of water) per working day,       -   -   -   -	779

The street sweeping of the city is chiefly done by horse-drawn sweeping machines. This work, as also the removal of the detritus and the collection of night soil and general domestic refuse from ashpits, bins, etc., is for the most part done during the night. The whole of the heterogenous city refuse is carried to the several Despatch Works and Stations, where special mechanical and other appliances have been provided for summarily dealing with and disposing of it. The result is that by 10 o'clock every morning, the whole night's collection has been despatched in one form or other to the country in railway wagons, 700 of which are owned by the department. The larger portion of the material goes as prepared manure direct to farmers. A cheap statutory rate enables the department to send this manure to railway stations scattered over fourteen counties.

The macadamised road detritus and surplus manure are sent chiefly to Fulwood Moss farm.

This farm was reclaimed from bog in 1879, when employment was scarce in the city, and it is profitably cropped by the department. At the Despatch Works the rougher rubbish screened from the refuse is burned. The clinkers from the furnaces and other unsaleable refuse go to make up moss lands. The increase in the number of water closets and the more frequent removal of domestic refuse have gradually lowered the manurial value of the refuse. This fact, taken in conjunction with the agricultural depression and cheap prices of ammoniacal and other chemical manures which has prevailed of late years, has seriously reduced the revenue from city manure. Public health is, however, the first and chief consideration of the committee on cleansing.

The committee are guardians, too, of the health of their employees.

At the various Despatch Works and workshops of the department lavatories, baths with hot and cold water, and cooking facilities are provided, and summer excur-

sion and winter soiree, in which their families participate, enliven the lives of workers who minister to the healthful conditions of city residence.

## PUBLIC AND PRIVATE LAMPS AND STAIR LIGHTS.

YEAR ENDING 31st MAY, 1891.

	Number of Lights.	Quantity of Gas Consumed.	Rate per 1,000 c. f.	Amount.
Public Street Lamps (defrayed from Rates), - -	9,858	99,922,900	2/6	£12,490 7 3
Private Street and Court Lamps (paid by Proprietors of Property), - -	3,340	17,640,445	2/6	2,205 1 1
Private Lamps paid by their Owners, -	617	6,540,074	2/6	817 10 2
	13,815			
Jets on Common Stairs, - -	29,966	78,560,726	2/6	9,820 1 10
Total Number of Lights, - -	4,3781	202,664,145		£25,333 0 4

Lamplighters, -	114	Wages, -	£7,642 2 10
Stairlighters, -	257	„ -	9,242 7 2
	<u>371</u>		<u>£16,884 10 0</u>

This Table illustrates an amenity of town life which commenced not so very long ago. The first street lamp was lit by gas in Trongate in 1818, although some oil lamps were in use a few years earlier. Opinions may differ on the question of who should pay for the lighting of common stairs, whether the landlord, the tenants, or the general community from the rates, but all are agreed that the benefits of such lighting are unquestionable. Before compulsory and systematic lighting was introduced many were the strange adventures and complexities of life in tall tenements

entered by unlighted and narrow stairs, bad enough in Glasgow with its four-flatted buildings, but infinitely worse in Edinburgh with double the number. The guardians of the peace have the best of all auxiliaries in the lamp and stair lighters. The gas consumed and the wages paid appear large, but they only show in another form that the city is a populous place. On 1st November the duties of the Watching and Lighting Committee will be extended to the new area.

## PUBLIC BATHS AND WASH HOUSES, 1885-86.

There are five baths in operation, situated at Greenhead Street, North Woodside Road, Cranstonhill, Townhead (off Cathedral Square), and Main Street, Gorbals, and the following Table exhibits the patronage bestowed on them in the past six years :—

YEAR.	Bathers.	Washings of Clothes.	Receipts.	Working Expenses.
1885-86	386,570	76,718	£6,792 5 4	£10,479 12 5
1886-87	420,963	92,773	7,275 19 9	10,885 10 0
1887-88	412,673	96,832	7,220 0 2	10,984 5 9
1888-89	360,643	108,883	7,283 0 4	11,956 0 5
1889-90	464,804	133,006	8,666 12 5	12,101 3 7
1890-91	453,718	155,221	9,110 14 11	11,992 4 4

CITY OF GLASGOW  
CASES TREATED IN LAST FIVE

	1885-86.			1886-87.		
	Cases Treated.	Recoveries	Deaths per cent.	Cases Treated.	Recoveries	Deaths per cent.
Typhus Fever, - -	145	131	9'66	87	70	19'54
Enteric Fever, - -	240	204	15'00	204	172	15'69
Scarlet Fever, - -	812	729	10'22	1,266	1,110	12'32
Measles, - - -	93	87	6'45	504	462	8'33
Whooping Cough, -	164	138	15'85	177	138	22'03
Febricula, - - -	27	—	—	20	—	—
Diphtheria, - - -	8	3	62'50	4	1	75'00
Erysipelas, - - -	94	87	7'45	68	65	4'41
Other Infectious Diseases, - - -	—	—	—	31	30	3'23
Other Diseases, -	295	256	13'22	419	396	5'70
Total Cases, - - -	1,878	1,662	11'50	2,780	2,464	11'37

By the kindness of Dr. Allan, the excellent resident physician at Belvedere Hospital, I am able to present a Table of great interest. It largely explains the reduced mortality in the city from infectious diseases. Such diseases, amongst adults at least, are now all treated in the hospital, unless where the patient is in circumstances to secure isolation at home or too ill to be removed, in which case the other members of the household are removed, if poor, to the reception home provided for emergency cases.

The erection of another hospital in the north quarter of the city, and near to a large body of the population, will

FEVER HOSPITAL.  
YEARS AND RECOVERIES.

1887-88.			1888-89.			1889-90.		
Cases Treated.	Recoveries	Deaths per cent.	Cases Treated.	Recoveries	Deaths per cent.	Cases Treated.	Recoveries.	Deaths per cent.
188	168	10·64	81	69	14·81	76	62	18·42
276	231	16·30	293	252	13·99	389	319	18·00
1,265	1,166	7·83	1,113	1,031	7·37	903	844	6·53
338	319	5·62	893	805	9·85	815	727	10·80
166	130	11·69	327	256	21·71	286	230	19·58
22	—	—	7	—	—	4	—	—
12	7	41·67	38	17	44·74	51	27	47·06
104	99	4·81	79	66	16·46	141	126	10·64
52	49	5·77	15	13	13·33	22	—	—
316	289	8·54	318	297	6·60	351	318	9·40
2,739	2,480	9·46	3,164	2,817	10·97	3,038	2,679	11·82

give increased facilities for the treatment of infectious diseases.

The next Table shows the work in the Health Department in relation to the discovery of infectious diseases, and the working of the Notification of Infectious Diseases Act. To the honour of the medical profession the practice of notification was all but universal before the passing of the Act. The watch towers of the city are fully manned to descry the first appearance of "the pestilence that walketh in darkness," and "the destruction that wasteth at noonday."



## INFECTIOUS DISEASES, NOTIFICATION, AND INSPECTION.

YEAR.	Reported by Medical Men and others.	Discovered by Officers of Health Department.	Total.	Dealt with thus --		
				Removed to Hospitals.	Treated at Home.	Total.
1885	4,013	4,071	8,084	1,938	6,146	8,084
1886	3,630	3,138	6,768	2,098	4,670	6,768
1887	5,230	3,769	8,999	2,273	6,726	8,999
1888	3,974	4,184	8,158	2,506	5,652	8,158
1889	5,452	5,923	11,375	2,796	8,579	11,375
1890	8,046	3,230	11,276	3,514	7,762	11,276
Total,	30,345	24,315	54,660	15,125	39,535	54,660

The foregoing cases were registered as follows :—

	1885.	1886.	1887.	1888.	1889.	1890.	Total in Six Years.
Typhus Fever, -	173	79	113	169	73	99	706
Enteric " -	610	427	505	449	575	757	3,323
Undefined Fever,	37	34	36	60	30	39	236
Smallpox, -	46	7	1	2	2	4	62
Puerperal Fever,	39	24	39	53	43	81	279
Erysipelas, -	131	127	131	150	158	850	1,547
Scarlet Fever, -	2,287	2,848	2,479	2,782	1,570	2,753	14,719
Measles, -	3,133	1,479	4,077	3,141	6,939	4,813	23,582
Whooping Cough,	1,066	1,263	1,045	738	1,501	1,221	6,834
Croup and Diph- theria, -	273	276	381	399	404	576	2,309
Diarrhœal Dis- eases, -	215	165	134	152	37	3	706
Chicken-pox, -	74	39	58	63	43	80	357
Total, -	8,084	6,768	8,999	8,158	11,375	11,276	54,660

In each of these years a large number of houses were fumigated and white-washed, and a very large quantity of bedding and clothing was washed and disinfected by the Health Department.

## STATUTE LABOUR.

THE paving and causeways of our streets are, perhaps more than any other feature of the city, admired by strangers, and it is a common pronouncement that few, if any, towns compare with us in this respect. Of all the manifold statutory duties of the Police Commissioners this section of their work gives much satisfaction to the ratepayers. The following is a note of the new streets sanctioned by the Dean of Guild Court during the ten years to 31st August, 1891.

		Lineal Yards.				Lineal Yards.	
1881-82	-	-	391 $\frac{1}{3}$	1886-87	-	-	718 $\frac{1}{3}$
1882-83	-	-	1,271 $\frac{2}{3}$	1887-88	-	-	622
1883-84	-	-	125	1888-89	-	-	1,193
1884-85	-	-	395	1889-90	-	-	340
1885-86	-	-	1,094	1890-91	-	-	794

Total—6,845 $\frac{1}{2}$  = 3 miles 7 fur. 25 yards.

## WEIGHTS AND

Mr. Walker, the recently appointed Inspector of Weights and Measures, but long the *alter ego* of the late Mr. Richmond, whose sudden death on 30th June, 1891, is deplored,

## AVOIRDUPOIS

DATE.	POUNDS.						
	56	28	14	7	4	2	1
1882	14,510	2,198	3,629	4,991	5,650	6,431	7,765
1886	12,548	1,919	3,092	4,816	5,090	5,809	6,980
1887	14,302	2,079	3,253	4,917	5,373	6,097	7,122
1888	12,305	1,692	2,721	4,242	4,693	5,288	6,327
1889	12,596	2,058	3,128	4,679	5,176	5,879	6,730
1890	12,444	1,742	2,737	4,240	4,563	5,007	5,937

## IMPERIAL

DATE.	BUSHEL.		PECKS.	GALLONS.					
	1	$\frac{1}{2}$		5	4	2	1	$\frac{1}{2}$	$\frac{1}{4}$
1882	49	—	—	64	271	209	500	424	1,621
1886	52	—	—	69	260	169	487	801	1,752
1887	102	7	—	62	245	214	407	641	1,308
1888	84	1	6	60	227	182	368	531	1,193
1889	98	3	—	65	224	211	421	422	1,746
1890	62	—	—	57	248	181	411	330	1,406

Previous to 1881 no systematic outdoor inspection of weights and measures was carried out.\* The inspectors on

\* Our trade and commerce require the use of a very large number of weighing and measuring instruments, and it is all important that they be correct, but until the beginning of the present century little official attention had been paid to their condition.

While we find as far back as the reign of King David I. (1124-53) that an assizes was issued for regulating weights and measures in use in Scotland, and subsequent Acts were passed in the reign of Robert I. (1306-60), in 1393, 1426, 1457, and 1587, it was not till the reign of James VI. of Scotland and I. of England, in 1618, that a

## MEASURES.

has furnished me with the scope of the work in this important department during some years.

## WEIGHTS.

OUNCES.				DRAMS.				TOTALS.
8	4	2	1	8	4	2	1	
6,945	6,024	4,798	3,889	3,240	2,244	181	—	72,495
6,546	5,572	4,116	3,371	2,408	1,326	109	15	63,717
6,585	5,796	4,516	3,565	2,382	1,341	149	36	67,513
5,749	5,042	3,825	3,108	2,145	1,244	89	104	58,574
6,184	5,352	4,017	3,201	2,146	1,151	85	1	62,383
5,418	4,713	3,542	2,689	1,704	924	42	1	55,703

## MEASURES.

PINTS.		GILLS.			YDS.	FEET.				TOTAL.
1	$\frac{1}{2}$	1	$\frac{1}{2}$	$\frac{1}{4}$		12	6	5	4	
2,100	2,269	2,905	1,552	1,528	4,703	—	6	19	17	18,237
2,227	1,104	1,302	1,247	1,585	91	1	—	—	1	11,148
2,341	1,428	1,470	1,497	1,527	312	—	—	—	—	11,561
1,751	1,246	1,566	1,746	2,252	67	—	—	1	1	11,282
2,578	1,555	1,635	1,434	1,724	163	—	1	2	8	12,290
2,908	1,516	1,869	2,080	3,108	87	—	—	—	1	14,264

three or four days each month visited such places of business as was thought necessary, with the invariable

regulation was issued and an attempt made to introduce uniformity in their use.

In 1617 the Scottish Parliament appointed Commissioners—one of whom was Provost Hamilton of this city—to inquire into the matter, and from time to time commissions were issued and bills introduced with the object of improving matters, but it was not till 1825 that an Act was passed establishing a uniform system of weights and measures, being that which now prevails.

In 1821 the weights, measures, and weighing machines in use in the

result that some incorrect weights or measures were found, and a prosecution followed. By this means careful traders were put in mind of the propriety of having their weights and measures sent in to be proved.

In 1881 the magistrates organized an efficient system of inspection, which insured that every place of business should be visited once each year by the inspector. The result of the first year's visits was that a much larger number of weights were submitted for verification than on any previous year. This system of inspection has since been carried out with the very best results, and comparatively few prosecu-

city had got into such an unsatisfactory condition, and were so unsuitable for the increasing commerce that the Dean of Guild Court issued a public intimation, and requested Mr. Cleland, the Superintendent of Public Works, to investigate. The result was so unsatisfactory that the Magistrates, Dean of Guild, and Convener of the Trades' House, made an official inspection within the city, with the result that 1,167 weights and 3,137 measures were found deficient. These were all confiscated and the traders fined in small sums. Mr. Cleland was awarded the thanks of the Magistrates and Council for his zeal in the matter.

This was the beginning of a regular system of inspection, which has been extended and improved on from time to time, a large staff of inspectors and workmen being now employed by the magistrates in the carrying out of the Acts and regulations now in force for the protection and convenience of our merchants and the public.

The foregoing tables, showing the number of weights and measures verified and stamped at the inspector's office, will convey some idea of the extent of the trade and commerce of our city. The demand for a rapid means of weighing has been the means of causing makers to produce improved compound instruments by which the weight is determined by a small counterpoise attached to a lever, and, as these machines have been gradually replacing the slower—if more accurate—beam and scales, the number of heavy weights in use is being reduced from year to year.

The Act requiring weighing instruments to be stamped by the inspector only came into force in 1890, so no earlier account of the number of these is available. In 1890-91 the inspectors examined and stamped 18,189 weighing instruments, and as this by no means included the total number in use in the city, the importance of careful supervision will at once be apparent.

tions are now found to be necessary, as most of the traders act on the suggestion of the inspectors and have their weights and measures regularly re-verified.

The almost universal adoption of the metric system has induced some of our merchants to make use of metric weights and measures for making up parcels for foreign markets, and in many export warehouses the metre and kilogram are already as familiar as our yard and pound. The greater number, however, prefer to convert our Imperial system to the metric by calculation. Our local inspector is not permitted to *stamp* metric weights or measures, but may—if provided with standards of that denomination, approved by the Board of Trade—verify such, to be used for the purpose of science or manufacture only.

PARLIAMENTARY EXPENSES PAID BY THE CORPORATION  
AND DEPARTMENTS SINCE 1864.

THE following Table, made up with much care and labour to ensure accuracy, and from a mass of details, shows the expenses incurred by the Corporation and its several Departments in promoting, opposing, or otherwise in connection with Bills before Parliament, since 1864:—

(1.) Corporation or Common Good, - -	£39,385	9	10
(2.) Police, - - - - -	47,883	6	10
(3.) Water, - - - - -	23,790	18	5
(4.) Parks and Galleries, - - - - -	3,848	5	2
(5.) Markets, - - - - -	6,951	5	7
(6.) Improvement Trust, - - - - -	20,522	8	11
(7.) Gas, - - - - -	42,838	9	10
(8.) Tramways, - - - - -	43,513	16	6
(9.) Municipal Buildings, - - - - -	2,237	3	11
(10.) Bridges, - - - - -	27,300	17	8
(11.) Court Houses, - - - - -	5,274	9	7
(12.) Juvenile Delinquency, - - - - -	3,267	19	7
(13.) Clyde Embankments, - - - - -	1,378	4	3
(14.) Sundries, - - - - -	658	11	0
	<hr/> £268,851 7 1 <hr/>		

This appears a large expenditure for one Corporation to make, and members of Council may have their minds exercised on the subject of private bill legislation, and as to whether local consideration of bills might be less expensive and equally satisfactory. Lord Salisbury dropped some weighty words in that direction when here in May.

The Corporation, strong in possession of its Common Good Estate, has taken quite a parental view of its duty to the citizens, and through it has been the means of promoting the bold measure of bringing water from Loch Katrine, acquiring the Kelvingrove and Queen's Parks, prior to the promotion of a Parks Act, and of performing like offices in relation



to City Improvements, Tramways, and in other ways. Indeed, the Corporation has assumed the rôle of nursing mother to all Municipal schemes in their initial stages, undertaking liability, advancing expenses, and taking the risk of recoupment should an Act be obtained, and of loss in the event of failure. It has, besides, been constantly watchful of the interests of the citizens, to see them protected from inimical legislation on the part of other promoters of bills affecting the city.

But of what does this Common Good consist, and whence has it come? Briefly put, it originated in the thrift of our Municipal forefathers and nowhere else. Prior to 1846 dues were imposed,—and in modern days the imposts would be considered perhaps burdensome,—on all articles of meat and drink entering the city, and it was contrived, after meeting the expenses of Municipal government, that the annual balance should be mostly on the right side. In the present day, ends are met, but surpluses are eschewed. Our sires judiciously invested their surpluses chiefly in land, within or in proximity to the city, and in this way the Common Good Estate of the Corporation has been built up.

But it would be a mistake to suppose that because balances have sometimes been on the wrong side in recent years the Common Good has degenerated. An opposite view will be taken when it is pointed out that while in 1851 the free assets of the Corporation amounted to £173,783; in 1861, to £208,373; in 1871, to £242,195; and in 1881, to £462,331; they now, in 1891, stand at £518,726. Some of the larger assets are only as yet very partially productive, but the future will doubtless reap advantages from their development as has been the case with like investments in the past. The citizens may rest satisfied that it is the desire and pride of successive City Treasurers and their Committees on Property and Finance to leave the Common Good Estate better than they found it on entering office, and I have given the data that will enable a judgment to be passed on their actings.

## GLASGOW CORPORATION LOANS ACT, 1883.

The issues of Stock under this Act amount to £2,948,275, and the following classification has been made of the holders :—

Trustees, Factors, and Curators,	-	£1,098,243
Widows and Maiden ladies,	- -	397,894
Banks,	- - - - -	100,500
Savings Banks and Friendly Societies,		183,280
Shopkeepers,	- - - - -	91,060
Artizans and Skilled Operatives,	-	46,130
Clerks and Salesmen,	- - - -	36,300
Church and Educational Funds,	- -	51,740
Sinking Funds, Police Pension Funds, and sums held in security,	- -	17,582
Landed Proprietors, Merchants, and professional men,	- - -	373,270
Holder not designated or not included in above numeration,	- - -	552,276
		<hr/> £2,948,275

When the Act was promoted it was believed that artizans and other thrifty wage earners would take considerable advantage of its security and rate of interest, and to be helpful in this direction, the minimum issue has been fixed as low as £50; but it will be observed that of the three million pounds issued, only £46,130, or one and a half per cent., has been taken up by this class of investors. It should perhaps be more widely made known that the unlimited security of the Loans Act is to be had by investors of small sums.

Of the three millions of stock disposed of, £219,000 is held outwith Scotland.

SINKING FUNDS OF CORPORATION DEPARTMENTS  
AT 31st MAY, 1891.

The following Table gives the present position of these Sinking Funds, and it will be found to be extremely satisfactory. The Sinking Fund applicable to the City Improvement Trust does not technically come into play until the assets of the Trust are realized; but in reality it is now in operation, inasmuch as the penny per pound of assessment imposed yields in each year a substantial surplus of £6,000 on an average. The Sinking Fund under the Municipal Buildings Act does not become operative till 1895, but realizations from vacated property fall to be placed to that account, and £14,908 was so credited in last year.

DEPARTMENT.	Sinking Fund and Accumulations to 31st May, 1890.			Added during year ending 31st May, 1891.			TOTAL.		
	£	s.	d.	£	s.	d.	£	s.	d.
Police—									
Police Department (General), - -	39,587	14	1	2,486	8	8	42,074	2	9
Do. (Municipal Act, 1879), - - -	22,229	14	6	2,438	8	8	24,668	3	2
Do. (Corporation and Police Act, 1882), -	16,278	12	2	3,636	11	8	19,915	3	10
Do. (Act, 1885). -	2,500	0	0	1,250	0	0	3,750	0	0
Statute Labour Department (Acts 1866 and 1872), -	100,565	18	3	4,525	3	4	105,091	1	7
Do. (Act, 1885) -	13,159	10	0	6,729	15	0	19,889	5	0
Streets Improvement Department,	82,285	7	9	25,033	11	1	107,318	18	10
Roads and Bridges (Scot.) Act, 1878,	11,237	14	5	1,914	14	4	13,152	8	9
Sanitary Department (Public Health Act), -	43,290	2	6	625	0	0	43,915	2	6
Water Commissioners, Markets and Slaughter-Houses Trust, -	513,684	13	10	29,919	6	7	543,604	0	5
Public Parks Trust, -	17,723	16	9	1,867	5	6	19,591	2	3
Municipal Buildings Trust, - - -	159,498	1	0	3,886	9	3	163,384	10	3
Gas Trust, - - -	...			14,908	15	3	14,908	15	3
Corporation Tramways, Contagious Diseases (Animals) Act, 1878,	224,123	2	5	11,858	10	3	235,981	12	8
Prison Payment Act,	152,978	19	8	11,374	19	3	164,353	18	11
	20,456	0	8	1,880	0	0	22,336	0	8
	12,141	16	9	1,595	18	3	13,737	15	0
	1,431,741	4	9	125,930	17	1	1,557,672	1	10

## BAZAAR, HALLS, ETC.

THE functions of the Bazaar Committee, presided over by Bailie Pettigrew, are multifarious, embracing not only the Bazaar itself but also St. Andrew's Halls, the City Hall, the steeples, clocks, and bells of fourteen churches throughout the city, the street clocks of the city, the Cheese Market, the Old Clothes Market, and the Bird and Dog Market.

This Committee also conducts the much appreciated concerts given in the City Hall on Saturday afternoons in winter.

## BAZAAR.

This market is fully occupied at all seasons, and in the fruit season, in particular, its accommodation is taxed to the utmost. Lighted by electricity it is greatly improved for the conduct of business.

## ST. ANDREW'S HALLS.

The acquisition by the Corporation of these halls with the fine organ and furniture at Whitsunday, 1890, for the sum of £37,500, or about one-third the original cost, and their improvement and renovation at a cost of £6,000, was a most judicious arrangement. The halls are admirably adapted for every description of gathering, having numerous salons and other apartments suitable for meetings of from 4,000 down to 100 persons. The first year's letting experience, although of eight months' duration only, on account of the improvements carried out, has been most encouraging from a financial view point. The halls were inaugurated on 7th October, 1890, under the new Corporation auspices by being thrown open for public inspection, when many thousands took the opportunity of walking through them and by a grand concert given by the Glasgow Choral Union. There was a crowded attendance, and Treasurer Richmond, who presided, congratulated the citizens on the halls being secured by the Corporation.

## CITY HALL.

This central hall, now fifty years old, has been recently greatly improved. An imposing new front to Candleriggs has been erected, and the accesses both by Albion Street and Candleriggs have been made more spacious and attractive. As a concert room, or for public speaking, there is no finer hall in the city—the acoustics being perfect. It has also, along with the Bazaar, been lighted by electricity. The installation consists of about 40 arc lamps of the Thomson Houston type. The machinery comprises a Robey engine and multitubular boiler, with two Thomson Houston arc light dynamos, all of which are located in a specially constructed engine-room in the basement. Quite recently it was decided to replace the arc lamps in the City Hall by series incandescent lamps, the circumstances occasioning the change being rather interesting. It is well known that arc lamps have a tendency to make a hissing noise when there is any inequality in the carbon rods, or when the lamp mechanism fails to act with sufficient accuracy. On several occasions this hissing has occurred during concerts, and more than once ladies when singing solos have mistaken the electrical sibilations for manifestations of disapproval on the part of the audience. Such untoward noises had of course a disconcerting effect on singers of both sexes. Consideration of these peculiar effects, combined with questions of ventilation, induced the Town Council to discard the arcs in favour of incandescents. In the Bazaar, where the light has been in use nearly four years, it has been most successful, a greatly increased volume of light being provided at a lower figure than gas cost in former years.

## MITCHELL LIBRARY.

After persevering effort this valuable collection of books has got suitably housed in the building in Miller Street, erected in 1860 as offices for the Water Commissioners. The library, such as it is, is now very well equipped, and in its new location it will probably suffice for the wants of the remainder of the century, no very long period certainly.

The growth in books has been remarkable. When opened on 1st November, 1877, the library had in all 13,000 volumes, and now, fourteen years afterwards, the number has increased to 89,000 volumes, and the increase goes on in augmenting ratio. Of the number, 11,500 volumes belong to the Moir Collection; 5,700 to the Poets' Corner, of which 1,060 are books of or relating to Robert Burns; 4,500 comprise the Glasgow Collection; and 1,300 are examples of early Glasgow Printing. A legacy of £500, bequeathed by the late Councillor David Logan, who died in office in 1886, and while a member of the Libraries' Committee, is being applied in the purchase of books by testator's instructions.

By arrangement with the Corporation the library was accommodated in the vacated City Chambers in Ingram Street from May, 1890, till 12th October, 1891, on which day complete possession was taken of the Miller Street premises, and the public were once more admitted to the privileges of the library. The formal re-opening by the Marquess of Bute took place on 7th October in presence of a large representative gathering of ladies and gentlemen, including the members of the Town Council, the Marchioness of Bute, Principal Caird, and Archbishop Eyre. The Lord Provost presided, and having introduced and paid a becoming compliment to the Marquess of Bute for his love of learning and generous bestowal of his means for its advancement, the Marquess proceeded to deliver a thoughtful address, and at its close declared the library open. Councillor James Colquhoun, Chairman of the Libraries' Committee, in a few graceful sentences thanked the Marquess for his kindness in perform-



ing the inaugural function, and for his scholarly tribute to learning, and Bailie Robert Graham, vice-chairman, thanked the Lord Provost for presiding. At the conclusion of the proceedings the Marquess and Marchioness were entertained to luncheon by the Lord Provost at 6 Park Gardens.

The services already rendered by the library, under Government appointment, as an office for affording trustworthy information to intending emigrants will, it is to be hoped, lead to one of the provincial branches of the Imperial Institute being established in this city.

The library is lit by electricity, and the installation consists of several hundred incandescent lamps fed from two dynamós of the Goolden type placed in the basement. These are driven by two gas engines, one an "Otto" the other an "Acme." Secondary batteries are also used. The special feature of this installation consists in the system of conductors employed. The Corporation required that the very safest system, from a fire point of view, be provided. The concentric system was employed, and special cables were constructed by the Silvertown Company, the insulation consisting of vulcanized rubber, the whole being lead covered. This cable is attached by neat brass saddles to a wooden ground laid flush with the plaster, and painted same as its surroundings: it is in full view everywhere, except where passing through walls. The chief advantage of this installation is said to be that any fault in the conductors will immediately develop into a "short circuit," and prevent damage of any kind by instantly stopping the flow of current in the faulty circuit. The concentric principle is carried down to each lamp, most of which are suspended by flexible concentric pendants.

This installation, and others of the Corporation, were carried out under the supervision of Mr. David Cook, E.E.



## STIRLING LIBRARY.

The Stirling Library is on the eve of the celebration of its centenary which takes place next month under influential auspices. The library has been of immense value to the three generations of citizens who have had free access to its stores as readers on the premises, and also the use of the books in their homes for a small annual subscription. I entered with some detail in my last report on the stock of books and the extent to which the library is patronized, and I shall not travel again over the same ground. This, indeed, is the less necessary that full particulars of the career of the library and its present position are doubtless being prepared against the centenary occasion.

## BAILLIE'S INSTITUTION FREE LIBRARY.

Mr. George Baillie, writer in Glasgow, afterwards Sheriff-Substitute at Dunblane, founded this library, to aid the self-culture of the operative classes of his native city. The governing body consist of the Dean, Council and Clerk of the Faculty of Procurators. The library was opened on 29th September, 1887, in premises at 48 Miller Street, rented from the Directors of Stirling's Library.

The three free libraries of the city are thus centred in Miller Street.

Mr. Baillie lived a bachelor. He divested himself of his means, about £18,000, during his lifetime, retaining only enough of the income as met his modest domestic and personal wants. His remains are buried at the left side of the south door of the Cathedral, the brothers Hutcheson occupying the right side. Mr. Baillie superintended the excavating of his own grave and erection of the mural tablet over it, with the excellent portrait bust carved upon it.

## THE CLYDE NAVIGATION.

THE progress of the harbour and river and the progress of the city are the complement the one of the other, or, more properly put, the one is the offspring and generous child of the other. Discerning qualities in the river that would respond to labour and expenditure intelligently bestowed the Town Council courageously risked on it much of both, with the result that through the century an undertaking has been created of truly national importance to Scotland.<sup>1</sup> Energetic management has so far developed powers that there is no reason to suppose will not assume still greater dimensions. It is most desirable to keep the harbour in close touch with the city and its warehouses, and the construction of docks is therefore a vital necessity. The new Cessnock Dock can hardly fail speedily to repay the trustees their outlay, enormously to economise the working of the harbour, and in a hundred ways to benefit the parent city, its traders, labouring men, and all concerned in the trade of the port, as compared with long drawn out river quayage, which interferes, besides its inconvenience, seriously with the traffic of the harbour. It is quite needful too that we keep pace, in docks, harbour, and river, with the proportions of our ships, whether in draught, length or beam, and it may be safely left to the trustees to develop all needful resources to this end. They have much encouragement from the enterprise of the promoters of the Manchester Canal, who, with a less promising foundation to start with, and consequently at much greater expenditure, have created a splendid water-way to the Mersey and sea, twice the length of our entire river-way, of an equal, if not greater uniform depth, with docks and river quayage longer than ours, and with considerable river wharfage besides. The success of the Manchester scheme has still to be proved, but it must have its reward in many ways.

<sup>1</sup>The kettle and lamp mentioned in my last report as presented by the Corporation to "Mr. James Stirling, mathematician," in 1752, has been traced by Mr. J. O. Mitchell to Mr. Stirling's lineal descendant, Mr. James Stirling of Garden, Stirlingshire. It was exhibited in the Bishop's Palace in 1888.

## ANNUAL REVENUE.

	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.
	£	£	£	£	£	£
Tonnage Dues, -	64,574	66,210	67,524	69,829	73,642	74,924
Goods Dues, - -	160,933	162,762	179,083	190,341	202,066	194,299
Crane Dues, - -	7,001	7,406	8,276	9,816	10,678	10,010
Weighing, - - -	1,592	1,582	1,530	1,202	1,345	1,408
Planks, - - - -	1,349	1,184	1,197	1,179	1,211	1,163
Water, - - - -	3,508	3,570	4,076	4,478	4,999	4,932
Rents from Timber Yards and Offices,	1,893	2,076	2,034	2,150	2,039	3,638
Quay Rents, - -	132	122	113	80	212	190
Harbour Tram- ways, - - - -	895	975	986	1,094	940	1,148
Graving Docks, -	6,519	7,920	9,849	9,365	11,902	12,862
Coaling and Min- eral Cranes, - -	5,947	5,659	7,090	7,743	9,647	8,823
Lower Stages of River, - - - -	1,515	1,440	1,559	1,651	1,734	1,927
Swinging Buoys in Gareloch, - - -	28	26	22	33	10	4
Ferries, - - - -	11,590	11,586	13,284	15,984	17,001	19,255
Harbour Steamers,	5,261	5,614	6,732	8,058	9,158	11,022
Rents, - - - -	6,694	7,860	6,991	7,396	8,081	7,474
Miscellaneous, -	3,481	1,942	1,149	1,094	1,538	1,502
	282,912	287,934	311,495	331,493	356,203	354,581

The following table exhibits the progress of the ordinary Revenue of the Clyde Trust during a long series of years:—

THE REVENUE IN		THE REVENUE IN	
1770 amounted to	£ 147	1881 amounted to	£ 248,061
1780        "        "	1,515	1882        "        "	264,549
1790        "        "	2,239	1883        "        "	283,998
1800        "        "	3,319	1884        "        "	291,182
1810        "        "	6,676	1885        "        "	291,658
1820        "        "	6,328	1886        "        "	282,912
1830        "        "	20,296	1887        "        "	287,933
1840        "        "	46,536	1888        "        "	311,495
1850        "        "	64,243	1889        "        "	331,492
1860        "        "	97,983	1890        "        "	356,203
1870        "        "	164,093	1891        "        "	354,581
1880        "        "	223,709		

## ANNUAL EXPENDITURE.

	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.
	£	£	£	£	£	£
General Management and Office Expenses, - -	14,245	14,282	14,187	14,840	11,031	11,349
Harbour Expenses, - -	20,009	17,924	29,884	26,202	31,607	30,722
General Expenses, - -	7,931	6,605	5,046	6,641	9,974	6,834
Law and Parliamentary Expenses, - -	466	216	1,546	2,810	6,110	1,573
Sheds, - - - -	1,056	587	476	852	568	637
Taxes, - - - -	15,125	14,556	14,721	16,242	17,651	19,290
Lighthouses on River, - - -	303	250	220	303	267	105
Dykes and Beacons	747	1,036	1,098	1,084	964	1,246
Graving Docks, -	1,425	1,784	1,976	1,649	1,972	2,497
Cranes, - - - -	3,501	3,254	3,945	3,139	4,127	3,588
Cranes, Coaling, and Mineral, -	5,671	3,710	3,948	4,696	7,276	6,083
Ferries, - - - -	9,253	8,995	8,589	9,477	11,595	13,922
Harbour Passenger Steamers, - -	5,350	4,794	5,292	5,255	6,192	9,400
Planks and Rhones, - -	956	966	559	1,523	1,834	881
Water, - - - -	1,591	1,644	1,774	1,809	1,767	1,503
Weighing Machines	349	179	249	270	648	463
Properties, - - -	—	—	—	—	670	1,999
Dredging Account (Maintenance), -	9,346	14,733	10,837	13,954	24,966	25,779
Ground Annals and Feu-Duties, -	13,092	13,092	13,107	14,431	14,501	13,195
Interest on Borrowed Money, -	168,597	171,133	172,618	173,143	173,067	173,126
	279,013	279,740	290,072	298,320	326,787	324,192

## MATERIAL DREDGED AND REMOVED SINCE 1870.

1870-74	4,537,646	cubic yards.
1875-79	5,879,836	"
1880-84	6,434,252	"
1885-89	6,557,212	"
1889-90	1,413,512	"
1890-91	1,293,680	"
Total, -	26,116,138	cubic yards.

STATEMENT SHOWING THE PROGRESS OF THE HARBOUR  
THEREAFTER

Year ended June 30.	Quayage in Yards.	Tonnage of Vessels Accommodated.	Tonnage of Vessels per yard of Quayage.	Revenue from Vessels.			Tonnage of Goods.
				£	s.	d.	
1860	4,376	1,448,869	331	19,196	16	5	1,192,475
1865	4,396	1,719,058	391	24,589	3	5	1,450,846
1870	5,604	1,992,110	355	34,896	16	7	1,921,221
1875	6,708	2,249,857	335	42,627	19	6	2,346,842
1880	7,464	2,994,051	401	48,529	9	4	2,653,088
1881	8,442	3,057,533	362	56,421	4	5	3,053,113
1882	9,947	3,049,237	307	57,135	13	3	3,366,866
1883	10,320	3,299,700	320	64,114	11	5	3,724,678
1884	10,779	3,361,187	312	67,007	19	7	3,708,672
1885	10,779	3,200,658	297	65,761	19	9	3,732,220
1886	10,835	3,081,472	284	64,574	4	9	3,736,283
1887	10,835	3,118,515	288	66,210	5	8	3,723,058
1888	10,956	3,337,670	304	67,523	13	4	4,084,309
1889	10,956	3,410,591	311	69,829	0	0	4,383,345
1890	10,956	3,496,848	320	73,642	3	8	4,794,562
1891	10,956	3,375,109	308	74,923	18	4	4,477,506

## CLYDE TRUSTEES FERRY SERVICE.

PASSENGERS AND VEHICLES USING THE FERRIES DURING EACH  
OF THE SIX YEARS ENDING 30TH JUNE, 1891.

YEARS.	PER CROSS-RIVER STEAMERS.		PER CLUTHA FLEET.
	Passengers.	Vehicles.	Passengers.
1886	6,792,932	44,037	1,262,615
1887	6,681,758	42,422	1,347,302
1888	7,338,876	52,151	1,582,224
1889	8,754,640	58,389	1,934,008
1890	9,344,192	69,473	2,177,974
1891	9,539,440	201,524	2,625,243

The Vehicular Ferry, "Finnieston," commenced to ply at the end of July, 1890, and as will be seen from the Table it is taken advantage of to a very large extent to the enormous saving of streets, bridges, and horse flesh.

AT INTERVALS OF FIVE YEARS, FROM 1860 TO 1879, AND ANNUALLY.

Tonnage of Goods per yard of Quayage.	Revenue from Goods.			Revenue from Other Sources.			Total Revenue.		
	£	s.	d.	£	s.	d.	£	s.	d.
272	62,528	9	5	16,252	12	3	97,983	18	1
330	74,444	10	5	22,553	18	1	121,587	11	11
343	101,773	0	1	27,423	6	2	164,093	2	10
349	114,924	4	3	38,774	15	1	196,326	18	10
355	134,769	0	2	40,410	11	2	223,709	0	8
362	148,309	18	11	43,330	10	8	248,061	14	0
338	156,476	16	9	50,936	18	3	264,549	8	3
361	164,375	14	2	55,508	2	10	283,998	8	5
344	164,379	12	8	59,794	12	8	291,182	4	11
346	165,074	2	0	60,822	3	2	291,658	4	11
345	160,933	6	5	57,404	10	1	282,912	1	3
343	162,761	16	11	58,961	15	2	287,933	17	9
373	179,082	15	10	64,888	12	4	311,495	1	6
400	190,340	13	10	71,323	4	11	331,492	18	9
437	202,066	7	3	80,494	0	4	356,202	11	3
409	194,298	18	9	85,357	4	7	354,580	11	8

The following Table gives list of the floating Machinery and Plant in use for the maintenance and safety of the Navigation, and for purposes of Cross-river traffic :—

- 2 Double Dredging Machines.
- 3 Single Dredging Machines.
- 1 Floating Steam Digger Barge.
- 3 Diving Bells.
- 16 Steam Hopper Barges.
- 1 Tug Steamer.
- 207 Punts for transporting dredgings and for sundry purposes.
- 57 Boats of various descriptions.
- 15 Ferry Passenger Row Boats.
- 10 Steam Ferry Boats.
- 2 Carriage Ferry Boats.
- 1 Do., with elevating platform, S.S. "Finnieston."
- 10 Passenger Steamers for up and down harbour passenger traffic.
- 55 Buoys.



## CESSNOCK DOCKS.

In my last publication these new docks, designed by Mr. Deas, C.E., authorised but not then commenced, were fully described. Their construction was delayed in consequence of the deep depression of trade that prevailed for two or three years after the passing of the Act, but the postponement has not proved to be regrettable. It allowed the trustees time to reconsider and improve their plans, and to approach Parliament for authority to adopt a simpler design of docks by which the two swing bridges and connecting basin and the two graving docks of the 1883 design will be done away with, and the Renfrew Road will be carried round the east, south and west sides of the docks without the intervention of swing bridges. Notwithstanding a smart opposition from the Govan Burgh Commissioners, and no wonder, because it seriously altered and deranged burghal conditions, Parliament sanctioned the changes submitted, in the interest of the city, and a solid road by a short detour will be made to accommodate the Vale of Clyde Tramways and all other descriptions of traffic. The docks as now authorised consist of three basins parallel with each other, and a wide canting basin immediately inside the entrance, where a vessel 850 feet long can with ease be turned. The width of each dock is 200 feet, and the width of the quay between each, 250 feet. The extreme length of the water area is 2,000 feet, and the extreme width 1,100 feet. The total available quayage will be 3,737 lineal yards, against 3,520 lineal yards in the first design, and the area of water space will be  $35\frac{1}{4}$  acres.

The new design provides a graving dock nearly 900 feet in length parallel with and adjoining the two existing graving docks at Govan.

The entrance and both quays of the northern basin have been completed, and the diversion of the Renfrew Road and the entrance to the new graving dock are in course of construction, as is also a two storey goods shed 1,376 feet long by 70 feet wide, on the north quay of the northern basin.



## ELEVATING FERRY STEAMER "FINNIESTON."

Messrs. Wm. Simons & Co., the inventors and constructors of this novel craft, have kindly furnished me with the following description of it :—

The elevating ferry steamer "Finnieston," which has now been at work on the river Clyde for over a year, may be fittingly styled a unique specimen of naval architecture. It has, in addition to the ordinary deck, another which can be raised or lowered with its cargo as occasion requires. This deck is supported by six strong steel upright columns of box section, and extends the whole length of the hull and about two-thirds of its breadth. When the elevating deck is at its lowest position it rests on the main deck, and it can be raised as much as fifteen feet by means of large steel screws and gearing inside each of the six columns. Thus, when the tide is low, the deck with its load is raised to the level of the quay, and as the tide rises the deck is lowered in a corresponding degree, so enabling all passenger and heavy traffic to be embarked and landed on the same level as the quay, whatever the state of the tide. By this means the great wear and tear, loss of time, and difficulties arising from inclines having to be ascended and descended are obviated. The "Finnieston" is 80 feet in length, 43 feet beam, the width on deck-line being the same at the ends as at amidships. The machinery is placed in the centre of the vessel and a boiler on each side. The hull is built of steel, and the lines of both ends are of the same design, two propellers being provided for each end, driven by triple expansion engines, an independent set of engines of the same type being provided for elevating or lowering the deck. This deck is 78 feet in length, 32 feet wide, 20 feet of the width being set apart for the vehicles and the remainder for passengers, 300 in number.

Eight loaded carts and horses can be carried, but if the vessel be wholly given up to passengers it has accommodation for 700.

## SHIPBUILDING ON THE CLYDE.

THE following Tables of Clyde shipbuilding, most ample details of which have been most courteously furnished to me by every builder separately, and which I gratefully acknowledge, embrace the yards on the river and estuary from Rutherglen to Campbeltown. They exhibit seasons of activity and depression, and reflect pretty clearly the fickleness of commerce. The greatest output of shipping yet attained was in 1883, when 404,383 tons were launched from Clyde yards. A paucity of orders was felt in the beginning of 1884, and continued for a space of three years, till near the close of 1887, when an enormous rush of orders was experienced and generally distributed, and the yards again became fully manned. In 1888 the tonnage launched amounted to 273,631 tons, as against 184,794 in 1887, and included several of the finest developments of naval architects and marine engineers, including the *City of New York* and *City of Paris*, from the Clydebank yard, the *Normannia* from the Fairfield yard, and many fine vessels for the Transatlantic passenger trade. Many fine ships have also been turned out for the Cape, India, Australia, and South America steamship lines, and quite a number of warships for the Admiralty and for foreign countries have been built or are in process of construction. A short description of the first class line of battle ship, *Ramillies*, at present building at Clydebank, and also of the *City of Paris*, is given below.

Great improvements in design have been made both in the outward form and internal structure of ships to meet the desire of shipowners for comfort and speed, and for a vessel that under almost every conceivable condition of strain or casualty will meet the requirements of safety. And for this end, should the worst happen, the lifeboat provision required by the Board of Trade is now as perfect as can as yet be thought of. Water-tight compartments on improved plans are now universally adopted in all large passenger ships, and water-ballast tanks where full cargoes outward and homeward cannot be trusted to. The Transatlantic

passenger ships in particular have tasked the naval architect and engineer beyond all others. In this ever-expanding trade the Clyde shipbuilder has to face a keen competition which has sprung up elsewhere in the building of fast ships, and has also to satisfy the imperious demands of rival companies to be placed in the forefront for comfort and safety, and in the matter of engine power to be also in the van for speed and for economy in coal consumpt. This latter condition is a crucial one. Already, thanks to our townsman, Dr. Kirk, vast improvements on the marine engine have been developed, and doubtless his and other able minds continue at work to bring it still nearer to perfection. We all—and none more ardently than the enterprising and dividend-seeking shipowner—grudge the heavy burden of coal at present required to drive a ship across the Atlantic with greyhound fleetness. Probably all concerned, and certainly the passengers, might have better results to themselves with slower transit, but this is not the order of the day.

It will be seen from the tables that steel has now all but entirely displaced iron. In 1881, when 327,013 tons were launched, only 66,100 were of steel, and in last year, 1890, of a tonnage of 352,124, there was 347,807 of steel, and only 4,317 tons of iron. The article which I give on the Scotch Steel Trade indicates the very low price at which steel has been ruling, arising from the simplicity of its manufacture, and the great competition which has sprung up in its production.

The Clyde continues to be far ahead of other shipbuilding centres in its output. In 1890, a little over one and a quarter million of tons were launched in the United Kingdom, and of this the Clyde produced 352,124 tons; the Tyne, 235,000 tons; the Wear, 197,000 tons; the Tees, 128,000 tons; Hartlepool, 99,000 tons; Belfast, 67,000 tons; the Mersey, 31,000 tons; Barrow, 25,000 tons; and Dundee, 24,500 tons.

But the industry is indeed fickle in the extreme. Thus, in 1883, the output in the United Kingdom was 1,250,000

tons; in 1884 it fell to 750,000; in 1885 to 540,000; in 1886 to 473,000. It rose in 1887 to 578,000; in 1888 to 904,000; in 1889 to 1,301,000; and in 1890 it was 1,271,000 tons.

These experiences of the still recent past may well make both employer and employee thoughtful and prudent. The suddenness with which depression follows a great boom was terribly seen in 1884. It was then sorrowful to find that very many of the workmen, notwithstanding the three busy years preceding, had made no provision whatever to meet a severe decline that lasted for precisely the same space of time. Indeed, the cry for bread was immediate and urgent, and on a scale that staggered the benevolent instincts of those in the community ever ready to help the destitute, but who are not disposed to encourage palpable improvidence. It is evident that the three years' prosperity we have again experienced is for the present at least once more arrested, and no forecast of the future is possible. What is profoundly to be hoped is that lessons have been learned from the past, and that come what may to the trade, no such general distress will ever again be witnessed. There is an uncomfortable outlook, but let it be confronted by frugal living while wages are earned, and the evil day will not come an hour sooner than it is provided for, and may indeed by that very preparation be averted. Mutual confidence between masters and men should, if possible, be permanently established, both being bound up in the one great but fickle industry which has made the Clyde and its splendid and honestly-built ships respected and honoured throughout the globe. It is by the good name, influence, and capital of the master builder that orders are secured. The men should ever have this patent fact in their view, and they may depend upon it that in proportion as they enable the master creditably to implement his contracts when he has them will their own best interests be served. Neither should it be forgotten that continental countries are not only entering into vigorous competition with this country in commerce, but are also rising to the position of building first-class ships for themselves.

One feature of the following Tables of output of special interest is the proportion of sailing to steam vessels built. Thus:—

YEAR.	Total Tonnage Launched.	Steam Tonnage.	Sailing Tonnage.	Percentage of Sailing Tonnage to Total.
1885	192,392	92,940	99,452	51·69
1886	172,765	113,238	59,527	34·45
1887	184,794	149,840	34,954	18·91
1888	273,631	221,511	52,120	19·00
1889	336,065	258,506	77,559	23·00
1890	352,124	274,616	77,508	22·00
	1,511,771	1,110,651	401,120	26·56

YEAR.	Total Tonnage Launched.	Steam Tonnage.	Sailing Tonnage.	Percentage of Sailing Tonnage to Total.
1879	157,605	148,779	8,826	5·60
1880	248,656	230,354	18,302	7·36
1881	327,013	292,243	34,770	10·63
1882	382,671	315,168	67,503	17·64
1883	404,383	348,078	56,305	13·90
1884	262,022	228,906	33,116	12·64
	1,782,350	1,563,528	218,122	12·28

We have here exhibited a remarkable advance in the production of sailing tonnage. In the first period, 1879-84, the percentage was 12·28, and it attained in the second period to 26·56 of the total output. And from official sources I learn that for the current year the proportion will most likely exceed 30 per cent. This is probably not a regrettable circumstance. We have perhaps been rather neglectful of the forces of nature, which served our fathers very well. Many of the sailing vessels now built are of large proportions and they make very good passages, carrying their freights with satisfactory speed.

## NEW VESSELS LAUNCHED UPON THE CLYDE DURING THE YEAR

1885.

	No.	Tons.	No.	Tons.
Steel Steamers under 100 Tons,	14	651		
"    from 100 to 250 "	25	5,231		
"    "    250 " 500 "	10	3,600		
"    "    500 " 750 "	10	5,451		
"    "    750 " 1,000 "	11	10,066		
"    "    1,000 " 1,500 "	8	9,849		
"    "    1,500 " 2,000 "	7	11,087		
"    "    2,000 " 2,500 "	1	2,466		
"    "    2,500 " 3,000 "	1	2,998		
"    "    3,000 " 3,500 "	3	9,807		
"    "    3,500 " 4,000 "	—	—		
"    "    4,000 " 5,000 "	2	8,993		
"    "    5,000 " 6,000 "	1	5,500		
"    "    6,000 " 7,000 "	—	—		
"    "    7,000 and upwards,	—	—		
Steel Sailing Ships under 500 Tons,	5	1,076	93	75,699
"    "    "    1,000 "	2	1,440		
"    "    "    1,500 "	6	7,773		
"    "    "    2,000 "	11	15,160		
"    "    "    2,500 "	2	5,267		
"    "    3,000 and upwards,	—	—		
Iron Steamers under 100 Tons,	2	120	26	30,716
"    from 100 to 250 "	8	1,354		
"    "    250 " 500 "	7	2,730		
"    "    500 " 750 "	5	3,060		
"    "    750 " 1,000 "	2	1,615		
"    "    1,000 " 2,000 "	2	3,568		
"    "    2,000 " 2,500 "	2	4,794		
Iron Sailing Ships under 500 Tons,	2	420	28	17,241
"    "    "    1,500 "	22	27,435		
"    "    "    2,000 "	19	32,381		
"    "    "    2,500 "	4	8,500		
			47	68,736
			194	192,392

## NEW VESSELS LAUNCHED UPON THE CLYDE DURING THE YEAR

1886.

	No.	Tons.	No.	Tons.
Steel Steamers under 100 Tons,	20	1,050		
„ from 100 to 250 „	16	3,217		
„ „ 250 „ 500 „	20	9,333		
„ „ 500 „ 750 „	5	3,126		
„ „ 750 „ 1,000 „	4	3,462		
„ „ 1,000 „ 1,500 „	5	5,905		
„ „ 1,500 „ 2,000 „	12	19,779		
„ „ 2,000 „ 2,500 „	7	15,789		
„ „ 2,500 „ 3,000 „	3	8,390		
„ „ 3,000 „ 3,500 „	2	6,876		
„ „ 3,500 „ 4,000 „	—	—		
„ „ 4,000 „ 5,000 „	2	9,478		
„ „ 5,000 „ 6,000 „	3	15,962		
„ „ 6,000 „ 7,000 „	1	6,117		
„ „ 7,000 and upwards,	—	—		
Steel Sailing Ships under 500 Tons,	3	477	100	108,484
„ „ 1,500 „	3	3,579		
„ „ 2,000 „	6	9,939		
„ „ 2,500 „	5	11,495		
Iron Steamers under 100 Tons,	5	270	17	25,490
„ from 100 to 250 „	3	609		
„ „ 250 „ 500 „	3	1,169		
„ „ 500 „ 750 „	2	1,062		
„ „ 750 „ 1,000 „	2	1,644		
Iron Sailing Ships under 500 Tons,	1	200	15	4,754
„ „ 1,500 „	4	5,173		
„ „ 2,000 „	8	13,431		
„ „ 2,500 „	7	15,233		
			20	34,037
			152	172,765



## NEW VESSELS LAUNCHED UPON THE CLYDE DURING THE YEAR

1887.

	No.	Tons.	No.	Tons.
Steel Steamers under 100 Tons,	20	1,051		
„ from 100 to 250 „	11	2,132		
„ „ 250 „ 500 „	21	9,129		
„ „ 500 „ 750 „	9	5,806		
„ „ 750 „ 1,000 „	8	5,650		
„ „ 1,000 „ 1,500 „	11	14,545		
„ „ 1,500 „ 2,000 „	9	15,112		
„ „ 2,000 „ 2,500 „	5	11,333		
„ „ 2,500 „ 3,000 „	7	19,779		
„ „ 3,000 „ 3,500 „	3	9,609		
„ „ 3,500 „ 4,000 „	3	11,637		
„ „ 4,000 „ 5,000 „	2	9,800		
„ „ 5,000 „ 6,000 „	2	10,856		
„ „ 6,000 „ 7,000 „	2	12,525		
„ „ 7,000 and upwards,	—	—	113	138,964
Steel Sailing Ships under 500 Tons,	5	1,780		
„ „ 1,000 „	—	—		
„ „ 1,500 „	—	—		
„ „ 2,000 „	3	5,688		
„ „ 2,500 „	1	2,058		
„ „ 3,000 „	—	—		
„ 3,000 and upwards,	—	—	9	9,526
Iron Steamers under 100 Tons,	5	447		
„ „ 250 „	5	890		
„ „ 500 „	18	7,179		
„ „ 1,500 „	2	2,360		
Iron Sailing Ships under 1,500 Tons,	1	1,027	30	10,876
„ „ 2,000 „	4	6,963		
„ „ 2,500 „	7	14,913		
„ „ 3,000 „	1	2,525		
			13	25,428
			165	184,794

## NEW VESSELS LAUNCHED UPON THE CLYDE DURING THE YEAR

1888.

	No.	Tons.	No.	Tons.
Steel Steamers under 100 Tons,	26	1,336		
„ from 100 to 250 „	9	1,578		
„ „ 250 „ 500 „	17	5,260		
„ „ 500 „ 750 „	16	9,224		
„ „ 750 „ 1,000 „	9	6,926		
„ „ 1,000 „ 1,500 „	14	17,905		
„ „ 1,500 „ 2,000 „	12	20,617		
„ „ 2,000 „ 2,500 „	10	23,253		
„ „ 2,500 „ 3,000 „	16	40,575		
„ „ 3,000 „ 3,500 „	10	32,372		
„ „ 3,500 „ 4,000 „	2	8,762		
„ „ 4,000 „ 5,000 „	4	19,678		
„ „ 5,000 „ 6,000 „	1	5,200		
„ „ 6,000 „ 7,000 „	—	—		
„ „ 7,000 and upwards,	2	21,000		
Steel Sailing Ships under 500 Tons,	13	3,257	148	213,686
„ „ 1,000 „	12	7,547		
„ „ 1,500 „	6	7,634		
„ „ 2,000 „	6	10,016		
„ „ 2,500 „	4	8,766		
„ „ 3,000 „	1	2,625		
Iron Steamers under 100 Tons,	6	421	42	39,845
„ from 100 to 250 „	4	771		
„ „ 250 „ 500 „	16	6,115		
„ „ 500 „ 750 „	1	518		
Iron Sailing Ships under 500 Tons,	11	457	27	7,825
„ „ 1,000 „	1	885		
„ „ 1,500 „	1	1,385		
„ „ 2,000 „	1	1,742		
„ „ 2,500 „	2	4,406		
„ 3,000 and upwards,	1	3,400		
			17	12,275
			234	273,631

## NEW VESSELS LAUNCHED UPON THE CLYDE DURING THE YEAR

1889.

	No.	Tons.	No.	Tons
Steel Steamers under 100 Tons,	17	1,185		
„ from 100 to 250 „	16	2,312		
„ „ 250 „ 500 „	23	9,342		
„ „ 500 „ 750 „	12	7,311		
„ „ 750 „ 1,000 „	5	4,434		
„ „ 1,000 „ 1,500 „	12	14,685		
„ „ 1,500 „ 2,000 „	16	27,798		
„ „ 2,000 „ 2,500 „	14	31,635		
„ „ 2,500 „ 3,000 „	12	32,570		
„ „ 3,000 „ 3,500 „	17	51,440		
„ „ 3,500 „ 4,000 „	2	7,205		
„ „ 4,000 „ 5,000 „	4	18,568		
„ „ 5,000 „ 6,000 „	5	26,499		
„ „ 6,000 „ 7,000 „	—	—		
„ „ 7,000 and upwards,	1	7100		
Steel Sailing Ships under 500 Tons,	5	1,235	156	242,084
„ „ 1,000 „	6	4,466		
„ „ 1,500 „	3	4,045		
„ „ 2,000 „	12	20,706		
„ „ 2,500 „	7	15,424		
„ „ 3,000 „	7	18,351		
„ 3,000 and upwards,	2	6,315		
Iron Steamers under 100 Tons,	3	300	42	70,542
„ from 100 to 250 „	3	560		
„ „ 250 „ 500 „	4	1,611		
„ „ 500 „ 750 „	3	1,744		
„ „ 2,500 „ 3,000 „	2	5,542		
„ „ 3,000 „ 3,500 „	1	3,091		
„ „ 3,500 „ 4,000 „	1	3,574		
Iron Sailing Ships under 500 Tons,	1	1,144	17	16,422
„ „ 2,000 „	2	3,561		
„ „ 2,500 „	1	2,312		
			4	7,017
			219	336,065

## NEW VESSELS LAUNCHED UPON THE CLYDE DURING THE YEAR

1890.

	No.	Tons.	No.	Tons.
Steel Steamers under 100 Tons,	8	386		
„ from 100 to 250 „	24	3,831		
„ „ 250 „ 500 „	34	13,295		
„ „ 500 „ 750 „	25	16,385		
„ „ 750 „ 1,000 „	14	14,163		
„ „ 1,000 „ 1,500 „	17	22,606		
„ „ 1,500 „ 2,000 „	10	17,182		
„ „ 2,000 „ 2,500 „	5	10,957		
„ „ 2,500 „ 3,000 „	17	46,685		
„ „ 3,000 „ 3,500 „	14	45,947		
„ „ 3,500 „ 4,000 „	4	14,501		
„ „ 4,000 „ 5,000 „	4	17,358		
„ „ 5,000 „ 6,000 „	6	31,910		
„ „ 6,000 „ 7,000 „	1	6,844		
„ „ 7,000 and upwards,	1	8,249		
Steel Sailing Ships under 500 Tons,	18	3,966	184	270,299
„ „ 1,000 „	4	3,248		
„ „ 1,500 „	4	5,621		
„ „ 2,000 „	15	26,207		
„ „ 2,500 „	14	32,051		
„ „ 3,000 „	1	2,631		
„ 3,000 and upwards,	1	3,784	57	77,508
Iron Vessels under 100 Tons,	10	1,000		
„ from 100 to 250 „	2	367		
„ „ 250 „ 500 „	1	450		
„ „ 500 „ 750 „	3	1,500		
„ „ 750 „ 1,000 „	1	1,000		
			17	4,317
			258	352,124

## T. S. S. "CITY OF NEW YORK" AND "CITY OF PARIS.

The dimensions of these vessels are as follows:—

Length over all, - - - -	560 ft. 0 in.
Length on load water-line, - -	525 „ 0 „
Breadth extreme, - - - -	63 „ 3 „
Depth moulded to upper deck, -	42 „ 0 „
Gross tonnage, - - - -	10,500 tons.

The material used in the construction of the hulls is Siemens' Martin Steel, made chiefly by the Steel Company of Scotland, and the Mossend Steel Company—about 6,500 tons being used for each vessel. A double bottom is fitted for the whole length of the steamers, which is available for carrying about 1600 tons of water ballast, and is an element of safety in the event of the ship getting aground.

In addition there are 16 main watertight compartments, five of which are utilized for containing the engines and boilers, and the remainder for cargo, coals, and stores. In the event of any three of these compartments being flooded the ships would still remain afloat.

There are five complete decks. The uppermost or promenade deck, affords an unbroken promenade, and upon it there are 25 large state-rooms, or suites of rooms, the fittings being of a specially luxurious description. The library and drawing-room are also on this deck.

On the next deck below (the upper deck), and forward of the machinery, is the main saloon, the central part of which is formed by a dome, which gives a clear height of about 23 feet, and allows free scope for the artistic decoration of the saloon. On this deck there are also 15 large staterooms, as well as pantries, smoking-room, children's dining-room, lavatories, second class saloon, and officers' accommodation. The remainder of the first and second class accommodation, as well as the emigrants' sleeping quarters, is on the main and lower decks. There is accommodation in all for about 700 1st class passengers,

300 2nd class, and 370 emigrants. The total complement of officers and men numbers 350, thus making the total number of persons on board about 1720.

The machinery consists of two sets of triple expansion engines, supplied with steam at 150 lbs. pressure by nine double-ended boilers; the engines are in two separate compartments, separated by a bulkhead on the centre line of the ship, and the boilers occupy three other compartments in groups of three in each.

#### H. M. S. "RAMILLIES."

The first class battleship "Ramillies" is one of a class of eight similar ships, the construction of which was begun during the year 1889, the keels of four being laid down in the Royal dockyards, while of the remaining four two are being constructed at Jarrow-on-Tyne, and one at Liverpool, the "Ramillies" being the eighth.

The dimensions are as follows :—

Length between perpendiculars,	-	380 ft. 0 in.
Breadth extreme, - - - -	-	75 " 0 "
Depth moulded to upper deck,	-	44 " 6 "
Mean draught of water;	- -	27 " 6 "
Displacement, - - - -	-	14,300 tons.

The protection consists of an armour belt of compound steel plates 250 feet long,  $8\frac{1}{2}$  feet wide, and having a maximum thickness amidships of 18 inches, tapering slightly towards the ends of the belt. At the ends of the belt transverse armour bulkheads are fitted, and the protection of the machinery and magazines is completed by a steel deck 3 inches thick, which is worked at the level of the top of the belt, and gives protection against fragments of shells or falling shots.

The top of the belt will be 3 feet above the waterline, and the bottom  $5\frac{1}{2}$  feet below it. The ends of the ship are also protected by a strong underwater steel deck. A feature of some novelty in the design is the secondary

belt of 4-inch steel plates, which extends for a length of 150 feet amidships, and is situated above the main belt. The top of the secondary belt is  $9\frac{1}{2}$  feet above the water-line, and thus a high freeboard is secured impervious to the attacks of machine guns.

The heavy guns are four in number, each of 67 tons weight, and  $13\frac{1}{2}$  inches calibre. They will be mounted in pairs in the two barbettes, which are formed of compound steel armour plates 18 inches thick, extending from the belt deck to a few feet above the upper deck. The freeboard at the ends of the ship is exceptionally great, the centre of the guns being about 23 feet above the water-line. The secondary armament consists of ten 6-inch quick-firing guns, four of which are mounted in armoured casemates on the main deck, and six in the open on the upper deck and protected by shields.

The propelling machinery consists of two sets of triple expansion engines driving two screws. The cylinders are in diam. as follows: h.p. 40", i.p. 59", l.p. 80", the stroke being 4' 3". The boilers are 8 in number of the single-ended type, working at a pressure of 150 lbs. per square inch. The estimated full speed is  $17\frac{1}{2}$  knots.

The "Ramillies," as a flagship, will have a total complement of about 665 officers and men, and when completed with machinery, armament, and outfit, will cost one million.

#### NEW SHIPS LAUNCHED UPON THE RIVER CLYDE, 1864 TO 1890.

Year.	New Tonnage Launched.	Year.	New Tonnage Launched.	Year.	New Tonnage Launched.
1864	- 178,505	1873	- 232,926	1882	- 382,671
1865	- 153,932	1874	- 262,430	1883	- 404,383
1866	- 124,513	1875	- 211,482	1884	- 262,022
1867	- 108,024	1876	- 164,824	1885	- 192,392
1868	- 169,571	1877	- 169,383	1886	- 172,765
1869	- 192,310	1878	- 211,989	1887	- 184,794
1870	- 180,401	1879	- 157,605	1888	- 273,631
1871	- 196,229	1880	- 248,656	1889	- 336,065
1872	- 230,347	1881	- 327,013	1890	- 352,124



TONNAGE OF VESSELS BUILT IN THE UNITED KINGDOM,  
UNITED STATES, AND IN FRANCE.

YEAR.	In United Kingdom.	On Sea Coast of United States.	In France.
1883	892,216	210,349	35,223
1884	588,274	178,419	57,162
1885	441,012	121,010	15,930
1886	331,528	64,458	27,075
1887	377,198	83,061	15,247
1888	573,947	105,125	31,936
1889	854,729	111,852	32,502
1890	812,638	169,091	—

The shipbuilding at German ports has not been ascertained with sufficient definiteness to warrant publication, but there has been considerable activity in the industry at Bremen and Hamburg where some high-class ships have been turned out.

The Clyde shipbuilders have to face the possibility of considerable activity in continental shipbuilding, but so long as our local coal and iron supplies hold out there need be little fear of the competition being conducted on equal terms. Abroad, however, the bounty system, introduced in regard to sugar, may extend to other products, but such an expedient is obviously too weak a device to last.

## PASSENGER TRAFFIC BY RIVER AND RAIL TO THE COAST.

The passenger traffic by river to our beautiful firth was some years ago a more enlivening feature of the harbour than in the present day. Two causes have been operating to its detriment—the railway promoter, who offers more rapid transit, and the unbearable limit which the pollution of our noble stream has reached.

So long as the Caledonian line to Greenock, opened on 31st March, 1841, was the sole competitor with the river the steamboats held their own. But the railway promoter is nothing unless aggressive. Not content with the left bank of the river, the right bank must also be appropriated and have its railway, and the Glasgow and Helensburgh line was made, and opened on 31st May, 1858. Soon thereafter it was discovered that a railway connection with Wemyss Bay would better serve the lower reaches of the firth, and a line, utilizing so far the original Greenock line, was made, and opened on 15th May, 1865. At this stage, in the estimation of sensible people, railway enterprise could do no more for the coast, for now with a selection between the river itself and a railway on either bank, and connecting steamers to every pier on the firth, the citizens, in their coasting, might already be classed among the Epicureans. But the railway promoter was not satisfied, and setting aside, as appeared, the chance of earning a decent dividend, other bids for our coasting proclivities were made. First was constructed the Glasgow and South-Western line to Princes Pier, opened on 23rd June, 1869; next the projection from Ardrossan to Fairlie by the same Company, opened on 1st June, 1880; next the Craigendoran projection of the North British Railway Company, opened on 15th May, 1882, Helensburgh having rejected the company's proposals; then the further projection from Fairlie to Largs, opened on 1st June, 1885; and, lastly, of completed undertakings, the original line of 1841 was, after the

lapse of half a century, carried to its natural termination at Gourock, and was opened on 3rd June, 1889.

These are all completed projects; but they by no means close the list of railway enterprise to the Firth of Clyde and its inlets. The West Highland Scheme, sanctioned on 12th August, 1889, and under construction, is designed *inter alia* to carry passengers to Row, Shandon, Garelochhead, Portincaple, and Arrochar, and will when opened change the present steamboat relations with the Gareloch, Loch Long (above Ardentinn), and Loch Goil. Then there has been passed in Session 1891 another railway to Dumbarton, promoted by the Lanarkshire & Dumbartonshire Company which will doubtless in time reach the salt water and gratify repentant Helensburgh; and if rumour does not belie the railway promoter he has his eye on the low level shore stretching from Ashton to Wemyss Bay, and for anything known to the contrary he may be in consultation with Sir William Arrol for annexing the peninsula of Rosneath.

No longer content with carrying passengers to the terminal piers of their railways and there handing them over to private steamboat owners, the several companies have embarked on steamboat enterprises too, and now convey passengers to their destinations in elegant and swift saloon boats, which ply ferry fashion with frequency between the terminal pier of each railway and the piers at all resorts on the firth. The result has been that river steamboats in private ownership plying within the confines of the Cumbræes have disappeared from river and firth. It is not wonderful, in view of the tempting facilities of speed, comfort, and cheapness offered by the railway companies, that the development of traffic to the coast in late years has been phenomenal. Sorrowful, however, it is, that unless at holiday time, and for large excursion parties, the river wots not of it for the greater part.

But with all due respect to the railways and time-saving transit they offer, it is not doubted by any one that the

terribly offensive burden of city sewage poured into the river—and nowhere is the discharge worse than in proximity to the passenger wharf—has been a serious factor in diverting passengers from river to rail. Did the pollution end with the harbour it might be borne with considerable equanimity by travellers, who could speedily dismiss it from their minds as they threaded the windings of our otherwise attractive stream; but it must needs bear the shame and reproach of it right on to the firth. Can it be questioned for a moment that with its waters sweetened and purified, happily no longer a mere visionary prospect, the great scenic attractions of the river must bring travellers back to the Broomielaw. The reinstatement in its good name to this most natural and beautiful highway to the most bountiful health resorts ever city was blest with has long been felt to be a paramount duty of the offending communities, but a duty dripping with difficulties, scientific and financial, requiring time to solve and no little courage to face when the solution is understood. But is there to be no solution to the terrible emission of smoke on river and firth. Surely Dr. Kirk and the Institution of Engineers, if they will set themselves the task, can contrive to engine a river steamer with digestive organs capable of consuming its fuel properly, and be the better able for its work that it does so. We will certainly count such an one a benefactor to his species.

Believing implicitly that a brighter day is close at hand for the Clyde, when a fleet of well-appointed steamers will reappear on its bosom, freighted with buoyant passengers, I recall the names of boats familiar to our fathers and grandfathers, or warmly, almost affectionately, remembered by many amongst ourselves as friends of our youth.

PASSENGER STEAMERS PLYING ON THE RIVER AT  
VARIOUS DATES.

## In 1828.

NAME OF VESSEL.	Tonnage.	Sailed to	Average Hours on Voyage.
Albion, - - -	69	Millport, - -	5 $\frac{1}{2}$
Largs, - - -	83	Do. - - -	5
Rothsay Castle, -	67	Rothsay, - -	4 $\frac{1}{2}$
Toward Castle, -	79	Do. - - -	4 $\frac{1}{2}$
Maid of Islay, -	74	Do. - - -	4 $\frac{1}{2}$
George Canning, -	80	Do. - - -	4 $\frac{1}{2}$
Ewing, - - -	77	Do. - - -	5
Caledonia, - -	57	Helensburgh, -	3 $\frac{1}{2}$
Waverley, - -	70	Do. - - -	3 $\frac{1}{2}$
Helensburgh, -	88	Do. - - -	3 $\frac{1}{2}$
Clarence, - -	70	Do. - - -	3 $\frac{1}{2}$
Sovereign, - -	68	Do. - - -	3 $\frac{1}{2}$
Sultan, - - -	69	Do. - - -	3 $\frac{1}{2}$
Bangor Castle, -	36	Dumbarton, -	2
Dumbarton, - -	50	Do. - - -	2
New Dumbarton, -	72	Do. - - -	1 $\frac{3}{4}$
Leven, - - -	71	Do. - - -	1 $\frac{3}{4}$
Lady of the Lake, -	62	Do. - - -	1 $\frac{3}{4}$
Oscar, - - -	43	Gourock, - -	3 $\frac{1}{2}$
Robert Bruce, -	48	Do. - - -	3 $\frac{1}{2}$
St. Catherine, -	73	Arrochar, - -	5
St. George, - -	73	Lochgoilhead, -	4 $\frac{1}{2}$

## In 1842.

Arran Castle.	Inveraray Castle.	Rob Roy.
Ayrshire Lass.	Helen MacGregor.	Rothsay Castle.
British Queen.	Lady Brisbane.	Royal Tar.
Dumbarton Castle.	Lady Kelburne.	Shandon.
Dunoon Castle.	Loch Gail.	Superb.
Duntroon Castle.	Loch Long.	Sovereign.
Earl Grey.	Luna.	Sultan.
Eagle.	Maid of Bute.	Tartar.
Emperor.	Maid of Leven.	Toward Castle.
Engineer.	Monarch.	Victor.
Favourite.	Prince.	Warrior.
Flambeau.	Prince Albert.	Windsor Castle.

**In 1851.**

Dunoon Castle.	Lady Brisbane.	Star.
Cardiff Castle.	Lady Kelburne.	Duchess of Argyle.
Craignish Castle.	Monarch.	Queen.
Dunrobin Castle.	Pioneer.	Pilot.
Breadalbane.	Ardentinnny.	Merlin.
Gourock.	Petrel.	Eclipse.
Emperor.	Prince.	Culloden.
Koh-i-Noor.	Sovereign.	Mars.
Eagle.	Victoria.	Venus.
Invincible.		

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**In 1861.**

Nelson.	Mail.	Emperor.
Vulcan.	Venus.	Craignish Castle.
Rothsay Castle.	Sultan.	Lady Brisbane.
Express.	Mary Jane.	Vesta.
Star.	<u>Iona.</u>	Dolphin.
Juno.	Petrel.	Jupiter.
Eagle.	Spunkie.	Ruby.
Lady Kelburne.	Gem.	Loch Goil.
Loch Long.	Cardiff Castle.	Celt.
Neptune.	Alma.	Druid.
Pearl.	Chancellor.	

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**In 1871.**

Guinevere.	Athole.	Sultana.
Bonnie Doon.	Lorne.	Dunoon Castle.
Iona.	Undine.	Vale of Clyde.
Lady Mary,	Ardencaple.	Vesta.
Hero.	Craigrownie.	Eagle.
Lancelot.	Rothsay Castle.	Vulcan.
Marquis of Lorne.	Vivid.	Mary Jane.
Carrick Castle.	Marquis of Bute.	Petrel.
Sultan.	Elaine.	Princess Louise.
Balmoral.		

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**In 1881.**

Hero.	Elaine.	Sultan.
Columba.	Eagle.	Athole.
Lord of the Isles.	Edinburgh Castle.	Vivid.
Guinevere.	Benmore.	Marquis of Lorne.
Dunoon Castle.	Lough Foyle.	Scotia.
Windsor Castle.	Marquis of Bute.	Balmoral.
Vesta.	Viceroy.	Sultana.

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**In 1891.**

Sultan.	Iona.	Vivid.
Sultana.	Benmore.	Lord of the Isles.
Viceroy.	Eagle.	Guinevere
Meg Merrilees.	Edinburgh Castle.	Shandon.
Madge Wildfire.	Windsor Castle.	Marquis of Bute.
Columba.		

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But only twelve of these sail daily.

## THE SHIPPING ON THE CLYDE.

THE following tables present in various aspects the shipping on the Clyde for a number of years past. There are given—

1. An abstract of the shipping registered in the Port of Glasgow, as at 31st December, 1890.

2. The number and tonnage of the vessels on the Register in each year from 1810 to 1890.

3. The draught of water of the vessels which sailed from Glasgow in each of the past six years.

4. The number and tonnage of the sailing and steam vessels for the past six years, arranged in groups according to tonnage.

5. The number and tonnage of arrivals from 1864 to 1890, distinguishing sailing from steam vessels; and

6. The number and tonnage of arrivals, detailed in groups as to tonnage, from 1864 to 1890, steam and sailing vessels combined.

The first of these tables exhibits the changes on the Register of ships belonging to the Port of Glasgow within the past six years, arising on the one hand from the addition of 737 vessels built, purchased, and transferred from other ports; and on the other hand, there have been struck off, from being wrecked, abandoned, burned, or amissing, no fewer than 249 vessels; and from being sold, transferred, and registered anew, 345 vessels; together, 594 vessels removed from the Register. The net result of the last six years' new entries and cancelments is an increase of 143 vessels and of 255,545 of tonnage.



RECORD OF THE SHIPPING REGISTERED AT THE PORT OF GLASGOW,  
AS AT 31st DECEMBER, 1890.

			No.	Tons.
<b>Total Amount as at 31st December, 1884, - -</b>			1,428	1,018,476
	No. of Vessels.	Tonnage.		
<b>Added in the Six years to date:</b>				
New Vessels, - - - -	579	485,387		
Vessels registered anew, -	22	15,707		
„ transferred from other ports, - - -	112	90,472		
„ purchased from foreigners, - - -	17	9,336		
Other Vessels, - - -	7	4,172		
Tonnage added by re-measurement		5,571		
			737	610,645
<b>Struck off in the Six years ending 31st December, 1890:—</b>				
Wrecked, abandoned, burned, missing, etc., - - -	249	163,067		
Sold to foreigners, - - -	118	54,636		
Registered anew, - - -	22	15,383		
Transferred to other ports, -	154	101,662		
Other Vessels, - - - -	51	11,818		
Tonnage lost by re-measurement,		8,534		
			594	355,100
<b>Total remaining on Register, 31st December, 1890, - -</b>			1,571	1,274,021
<b>Composed of Sailing Ships, -</b>	569	492,055		
„ <b>Steam „ -</b>	1,002	781,966	1,571	1,274,021

SHIPS ON THE REGISTER AT GLASGOW ON 31st DECEMBER,  
OF THE YEARS 1810 TO 1890.

YEAR.	No.	Total Tonnage.	Average Tonnage per Ship.
1810	24	1,956	82
1820	77	6,131	80
1830	217	39,432	172
1841	431	95,062	220
1851	508	145,684	287
1861	679	218,684	322
1871	895	433,016	484
1874	926	511,414	512
1875	998	582,191	584
1876	1,037	618,011	597
1877	1,088	652,154	647
1878	1,130	700,077	619
1879	1,183	760,913	643
1880	1,207	776,780	644
1881	1,258	827,435	658
1882	1,321	920,726	697
1883	1,378	979,538	711
1884	1,428	1,018,476	714
1885	1,453	1,069,505	736
1886	1,445	1,062,395	735
1887	1,487	1,141,037	767
1888	1,533	1,178,720	768
1889	1,549	1,224,022	790
1890	1,571	1,274,021	810

This Table shows steady progress. A Register was first ordered by the Corporation to be kept in 1667, when it was ordained that "a book be made and to lie in the Clerks' Chamber," in which should be recorded every ship, with its cargo, coming into the river. Previous to this time Rutherglen, Port-Glasgow, and Greenock were more important ports than Glasgow.

THE DRAUGHT OF WATER OF THE SAILING VESSELS LEAVING THE  
HARBOUR OF GLASGOW DURING 1885-1890.

DRAUGHT OF WATER.	1885.	1886.	1887.	1888.	1889.	1890.
10 feet, and not } under 6 feet, }	896	756	826	863	814	769
11 feet, - -	91	83	98	117	89	97
12 „ - -	119	109	105	99	114	102
13 „ - -	80	75	75	65	68	74
14 „ - -	36	34	32	34	31	21
15 „ - -	13	19	27	21	17	18
16 „ - -	14	12	25	19	10	25
17 „ - -	18	23	31	19	12	23
18 „ - -	32	34	28	30	19	26
19 „ - -	29	22	16	21	18	20
20 „ - -	38	40	33	33	36	36
21 „ - -	12	19	9	21	18	17
22 „ - -	6	2	4	5	7	3
23 „ - -	1	1	2	2	1	4
24 „ - -	—	—	—	—	—	1

It has not been considered necessary to record the draught of water of the Steam Vessels arriving at the Harbour as they are mostly regular traders, and may be put into three classes :—

- 1st. River Steamers with maximum draught, 5 feet.  
 2nd. Coasting Steamers do. do., 17 „  
 3rd. Sea-going Steamers do. do., 24½ „

The resolution of the Clyde Trustees, as explained by ex-Lord Provost Ure at the October meeting of the Trust, to still further deepen the river throughout its entire length, is a very important one. Elderslie rock was prudently removed to a depth likely to meet the utmost requirements of the navigation in all time to come.

THE ARRIVAL OF STEAM AND SAILING SHIPS DURING 1885-1890,  
ARRANGED IN GROUPS WITH RESPECT TO THEIR TONNAGE.

TONNAGE.	SAILING VESSELS						STEAM VESSELS.					
	1885.	1886.	1887.	1888.	1889.	1890.	1885.	1886.	1887.	1888.	1889.	1890.
Under 40 { tons }	358	345	411	382	394	417	5,899	5,018	6,221	6,217	6,307	6,406
40 to 60	317	294	251	351	314	223	2,390	2,189	2,382	2,354	2,186	1,968
60 to 80	128	108	83	111	98	111	745	697	487	389	409	301
80 to 100	169	131	149	157	101	119	616	654	507	474	603	564
100 to 150	108	114	96	103	115	95	1,204	1,277	1,070	1,375	1,268	1,393
150 to 200	52	59	54	48	52	53	952	890	897	783	933	1,023
200 to 250	19	22	11	9	6	10	334	468	305	417	558	497
250 to 300	17	15	11	8	17	16	389	395	338	368	368	291
300 to 350	21	14	19	16	12	18	574	595	618	624	493	441
350 to 400	20	18	21	12	14	16	292	322	203	270	440	674
400 to 450	18	8	14	11	4	16	775	751	749	780	569	369
450 to 500	17	18	14	14	14	14	111	125	221	251	260	146
500 to 600	23	27	28	18	17	14	268	232	178	188	179	173
600 to 700	12	12	14	10	11	11	60	69	103	81	96	92
700 to 1000	42	39	43	33	25	47	283	268	219	261	278	295
1000 & up.	64	78	60	57	74	64	562	526	549	634	685	768
	1,385	1,302	1,279	1,340	1,268	1,244	15,454	14,476	15,047	15,466	15,632	15,401

SHIPPING ARRIVALS AT GLASGOW FROM 1864-1890  
(DISTINGUISHING STEAM VESSELS FROM SAILING VESSELS).

YEAR.	SAILING VESSELS.		STEAM VESSELS.		TOTAL.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
1864	4,569	483,305	9,962	1,044,934	14,531	1,528,239
1865	4,499	457,774	11,856	1,261,284	16,355	1,719,058
1866	4,113	463,736	12,612	1,400,464	16,725	1,864,200
1867	3,732	448,419	11,433	1,334,453	15,165	1,782,872
1868	3,711	482,168	11,710	1,366,970	15,421	1,849,138
1869	3,452	475,653	12,255	1,440,854	15,707	1,916,507
1870	3,372	502,517	12,721	1,489,593	16,084	1,992,110
1871	3,087	461,009	12,713	1,588,699	15,800	2,049,708
1872	3,337	462,972	12,125	1,665,407	15,462	2,128,379
1873	3,116	395,800	11,517	1,800,401	14,633	2,196,201
1874	2,870	369,267	11,176	1,832,154	14,046	2,201,421
1875	2,768	423,553	11,213	1,826,304	13,981	2,249,857
1876	2,816	431,522	11,770	1,866,554	14,586	2,298,076
1877	2,866	471,873	11,997	1,956,743	14,863	2,428,616
1878	2,727	457,290	13,210	2,154,733	15,937	2,612,023
1879	2,213	393,681	14,052	2,286,876	16,268	2,680,857
1880	1,862	321,721	14,948	2,350,478	16,810	2,672,199
1881	1,948	369,563	15,815	2,687,970	17,763	3,057,533
1882	1,825	286,119	15,468	2,760,378	17,293	3,046,497
1883	1,794	327,686	15,857	2,972,014	17,651	3,299,700
1884	1,576	292,825	16,298	3,068,362	17,872	3,361,187
1885	1,385	259,296	15,454	2,941,362	16,839	3,200,658
1886	1,302	259,354	14,576	2,822,118	15,878	3,081,472
1887	1,279	234,954	15,047	2,883,561	16,326	3,118,515
1888	1,340	221,440	15,466	3,116,230	16,806	3,337,670
1889	1,268	223,850	15,632	3,186,741	16,900	3,410,591
1890	1,244	240,405	15,401	3,256,443	16,645	3,496,848

DETAILED NUMBER AND TONNAGE OF SHIPPING ARRIVALS (STEAM AND SAILING  
COMBINED) 1864-1890.

YEAR.	Under 40 Tons.	40 to 60.	60 to 80.	80 to 100.	100 to 150.	150 to 200.	200 to 250.	250 to 300.	300 to 350.	350 to 400.	400 to 450.	450 to 500.	500 to 600.	600 to 700.	700 to 1,000.	1,000 and up.
1864	4,547	2,592	2,781	1,252	645	590	363	432	393	101	355	202	85	37	86	70
1865	4,962	2,388	3,804	1,640	767	534	339	427	371	244	313	244	127	45	62	88
1866	4,949	2,610	3,446	1,454	1,149	641	390	439	321	247	272	420	175	36	75	101
1867	4,332	2,796	2,568	1,349	963	565	432	405	470	193	638	128	107	35	88	96
1868	4,575	2,702	2,499	1,643	893	363	484	390	516	184	654	87	156	50	111	114
1869	4,274	2,845	2,922	1,800	807	286	421	422	537	133	601	176	170	50	131	132
1870	4,599	3,165	2,855	1,543	717	313	462	359	495	130	660	269	128	79	146	164
1871	4,339	2,923	2,899	1,552	770	325	424	398	543	137	651	259	146	70	173	191
1872	4,209	2,521	2,822	1,477	901	339	424	419	613	420	408	261	170	100	176	202
1873	3,776	2,372	2,570	1,190	992	384	498	286	371	439	556	274	160	117	186	262
1874	3,728	2,515	2,213	1,079	1,035	351	498	293	389	478	375	348	226	70	138	310
1875	3,405	2,728	2,206	1,017	935	394	485	435	424	441	398	409	173	78	156	297
1876	3,579	2,822	2,110	1,436	852	392	515	402	430	491	428	416	239	67	140	267
1877	3,698	2,828	1,890	1,545	931	444	437	469	454	529	401	439	249	82	167	300
1878	3,969	3,237	1,972	1,626	1,027	453	524	426	491	386	453	470	281	89	184	349
1879	4,461	3,096	2,203	1,383	885	389	737	474	335	501	448	423	290	84	158	398
1880	4,999	3,395	2,219	1,168	790	430	579	497	276	617	416	488	282	87	190	377
1881	5,205	3,386	2,348	1,175	926	650	627	419	372	660	450	432	328	101	222	462
1882	5,874	3,462	1,034	871	1,124	370	370	515	592	286	620	270	274	106	246	517
1883	6,416	3,114	934	883	1,118	1,001	351	619	693	248	692	260	295	94	318	615
1884	6,944	2,839	1,094	844	1,103	963	310	564	651	272	748	215	320	89	298	620
1885	6,257	2,707	873	785	1,312	1,004	353	406	595	312	793	128	291	72	325	626
1886	5,463	2,483	805	785	1,391	949	490	410	609	340	759	143	259	81	307	604
1887	6,632	2,633	570	656	1,166	951	316	349	637	224	763	235	206	117	262	609
1888	6,599	2,705	500	631	1,478	831	426	376	640	282	791	265	206	90	294	691
1889	6,701	2,500	507	704	1,383	985	564	385	505	454	573	274	196	107	303	759
1890	6,823	2,191	412	683	1,488	1,076	507	307	459	690	385	160	187	103	342	832

## TONNAGE OF MERCHANT NAVIES OF PRINCIPAL MARITIME COUNTRIES.

	1840.	1850.	1860.	1875.	1886.	1889.	1890.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
United Kingdom, -	2,724,000	3,505,000	4,587,000	6,089,000	7,322,000	7,724,000	7,945,071
Norway, -	277,000	298,000	559,000	1,419,000	1,524,000	1,611,000	—
Sweden, -	—	—	—	507,000	500,000	505,000	—
Denmark, -	—	—	—	244,100	272,000	289,000	—
Germany, -	—	—	—	1,085,000	1,285,000	1,321,000	—
France, -	663,000	688,000	996,000	1,028,000	993,000	933,000	—
Italy, -	—	—	—	1,044,000	946,000	824,000	—
United States (exclusive of Lake and River Vessels),	899,000	1,586,000	2,546,000	1,554,000	1,111,000	1,022,000	947,000

## TONNAGE OF STEAM VESSELS OF MERCHANT NAVIES OF PRINCIPAL COUNTRIES.

	1840.	1860.	1870.	1880.	1885.	1888.	1890.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
United Kingdom, -	88,000	452,000	1,111,000	2,721,000	3,970,000	4,345,000	4,713,000
Norway, -	—	—	13,715	58,000	114,000	138,000	168,000
Sweden, -	—	—	—	81,000	110,000	125,000	135,000
Germany, -	—	—	82,000	216,000	421,000	503,000	618,000
France, -	9,500	68,000	154,000	278,000	492,000	510,000	493,000
Italy, -	—	—	32,000	77,000	125,000	175,000	182,000
United States (exclusive of Lake and River Steamers),	4,000	97,000	193,000	147,000	184,000	183,000	194,000



NUMBER OF SEAMEN ENGAGED AND DISCHARGED AT MERCANTILE  
MARINE OFFICES, WITH NUMBER AND TONNAGE OF SHIPS.

YEAR.	Seamen Engaged.			Seamen Discharged.		
	Ships.	Tonnage.	Men.	Ships.	Tonnage.	Men.
1885	1,188	1,348,594	28,870	883	977,688	22,314
1886	1,116	1,302,383	28,126	834	982,732	22,384
1887	1,263	1,404,189	29,962	983	1,130,735	24,902
1888	1,333	1,494,332	30,728	1,060	1,211,690	26,597
1889	1,279	1,476,691	30,177	1,131	1,292,276	27,454
1890	1,339	1,572,960	31,314	1,118	1,334,809	28,510

TRANSACTIONS CONDUCTED FOR SEAMEN AT MERCANTILE  
MARINE OFFICE FREE OF EXPENSE.

MONEY ORDERS.

YEAR.	Orders Issued.	Orders Paid.	TOTALS.
1885	£20,603 15 11	£39,239 14 2	£59,843 10 1
1886	22,703 11 3	32,920 3 5	55,623 14 8
1887	22,061 17 10	29,368 17 3	51,430 15 1
1888	21,945 3 8	29,783 0 2	51,728 3 10
1889	22,925 12 5	29,993 18 8	52,919 11 1
1890	23,673 11 10	31,329 1 6	55,002 13 4

SEAMEN'S SAVINGS BANK.

YEAR.	Deposits.	Withdrawals.	TOTALS.
1885	£5,064 13 7	£4,625 18 10	£9,690 12 5
1886	4,378 18 5	4,418 1 8	8,797 0 1
1887	4,077 8 5	4,359 8 7	8,436 17 0
1888	4,055 18 11	4,327 8 9	8,383 7 8
1889	4,469 19 4	4,653 2 2	9,123 1 6
1890	5,158 3 9	4,374 11 11	9,532 15 8

TRANSMISSION.

YEAR.	Wages received for Transmission.	Wages paid by Transmission.	TOTALS.
1885	£7,236 4 4	£16,850 3 6	£24,086 7 10
1886	5,658 7 0	15,514 9 7	21,172 16 7
1887	6,429 12 2	15,236 2 4	21,665 14 6
1888	7,052 18 3	13,578 16 9	20,631 15 0
1889	8,186 15 2	16,464 5 4	24,651 0 6
1890	11,572 13 11	17,246 7 1	28,819 1 0

## A BRIDGE BUILDING EPOCH IN GLASGOW.

CITIES blessed with rivers of moderate breadth flowing through them take as a rule a riverine configuration. They adapt themselves to the windings of the stream, and occupy both banks, throwing connecting bridges across, which, while designed for utility, become also an ornamental feature of the town. London and Paris furnish conspicuous examples of river and bridge effects, and Glasgow owes no less to her river and bridges.

Bishop Rae's bridge erected in 1345, and only removed in 1850 to make way for the Victoria Bridge, opened on 1st January, 1854, is the first bridge over the Clyde that Glasgow has had ocular knowledge of, although there is documentary evidence that a bridge existed in 1285 on or in immediate proximity to the same site, connecting "Bridgend," now known as Gorbals, on the south with "Fishergate," now known as Stockwell, on the north. No other bridge existed on the Clyde below Bothwell until 1768 when the Broomielaw, or Glasgow Bridge, was erected. A tough tyke was this bridge of the practical Christian prelate with whom in its erection was associated Glasgow's Lady Bountiful of the time, Lady Lochow.

Spanning the river alone during more than four centuries, it withstood the tear and wear of tempest, flood, and ice drift for full five centuries. But times on the Clyde were advancing in the latter half of the 18th century, the inhabitants and their commerce were now rapidly augmenting, and bridge building became a more familiar feature. First, of modern structures, came the Broomielaw Bridge in 1768-72, which lasted till 1833, when it was removed to make way for the present fine structure of Telford, opened in 1836. Next the Rutherglen Bridge was built in 1775-6, but its piers getting undermined by the scour of the river it is about to be replaced by a handsome

new bridge. Next there was commenced in 1794 the first Hutchesontown Bridge, and it was well advanced towards completion when a heavy flood in 1795 brought it down. A foot bridge took its place in 1803, but its inadequacy led to its replacement by a vehicular stone bridge in 1829, which did good work until 1869, and then it gave place to the present most graceful Albert Bridge, opened on 21st June, 1871, at a cost of £65,000. It was over the erection of this bridge that the prolonged "battle of the Weir" was fought out in Parliament at an expenditure of £25,000. Lastly, Dalmarnock Bridge, built of timber in 1821, was re-erected of same material in 1848, and it has now been replaced by the handsome steel bridge opened on 6th May, 1891, at a cost of £30,500, including the temporary accommodation bridge.

The Suspension Bridges at Portland Street and Glasgow Green were opened in 1853 and 1856 respectively.

The bridge of the Union Railway was opened for traffic in 1870; the Caledonian Railway bridge across the harbour in 1879; and the Caledonian Railway Bridge at Dalmarnock in 1861.

Like activity in bridge building marks the same period as regards the Kelvin. The elegant Great Western Bridge has just been opened on 29th September, 1891, costing £45,000, and both above and below it numerous bridges are completed or projected. *Above*, the Belmont bridge was opened in 1870; the Queen Margaret bridge in the same year; the foot bridge at Kirklee in 1886; and a new high level bridge is talked of to connect both banks at the Botanic Gardens. And *below* Great Western Road, the bridge at the north gate of Kelvingrove Park, opened in 1853, is about to be replaced by a more commodious structure by the Caledonian Railway Company; the Prince of Wales bridge within the park was constructed in a space of three weeks in 1868; the iron lattice carriage bridge below the museum was erected in 1881; the new Partick road bridge was opened in 1877; whilst the old one it replaced was taken into Kelvingrove Park and adapted by the park

trustees as a cross river promenade; the old Kelvinhaugh road bridge is also about to be replaced with a handsome structure by the Lanarkshire and Dumbartonshire Railway Company, and the railway bridge of the North British Company near Pointhouse was opened in July, 1875.

Should therefore the Glasgow Bridge, decided by the Town Council as necessary to be rebuilt, and the bridge at Cambuslang resolved on by the County Council, be completed by 1899, the latter half of the century will have the credit of erecting every existing bridge over the Clyde below Uddingston, and every bridge over the Kelvin within the extended city bounds.

The growth of the city, numerically and in business energy, can be illustrated from many standpoints, but perhaps from no one more cogently than from its Bridges can its development be better understood. But bridges do not meet all the cross river wants of the present day. The harbour must be respected and kept free from serious interruption of its traffic, yet the exigencies of the city require that it shall be crossed by vehicles below the Broomielaw. Intense thought has been given to this problem during many years, and now it is being solved by tunnels and vehicular ferries with elevating platform to suit tidal conditions. A tunnel is in progress at Finnieston, to consist of three cast-iron tubes 16 feet internal diameter each, two for vehicles and one for passengers, and other two tunnels are about to be driven in connection with the Subway at Dixon Street and Govan, near to the Ferry. Doubtless more elevating vehicular ferries will follow the "Finnieston," which has done excellent work since placed on her station in July, 1890.

#### DALMARNOCK BRIDGE.

This bridge crosses the Clyde in continuation of the Dalmarnock Road in the eastern district of the City and forms the most direct connection between that district and Rutherglen. A very ancient ford known as Dalmarnock or Farme Ford existed at the site of the bridge in days gone by.

This ford was on the road from the ancient and royal burgh of Rutherglen to what was probably at one time considered its suburb of Glasgow and to Sheddinstown where the road from Stirling and the north was “shed” or divided, one road leading to Rutherglen, and the more southern districts of Scotland by the “Farme Ford,” the other proceeding westwards into Dumbarton on the north of the river and into Renfrewshire by “Bishop Rae’s” Bridge. Remains of a causeway leading to this ford were found in excavating for the foundation of one of the abutments of the present bridge.

In the year 1821, in consequence of the Farme Ford being often dangerous and impassable by reason of floods, the Cambuslang and Muirkirk Road Trustees erected a timber bridge which did service till 1848, in which year another timber bridge was built, the old one having fallen into decay. This latter bridge in its turn also gradually decayed and, though repaired from time to time, it finally became necessary to take steps for building a new bridge. The extension of the City Boundaries had brought the northern side of the river within the City, and, looking to the importance of the traffic of the district, it was decided by the authorities interested, viz., the Corporation of Glasgow, the Counties of the Lower and Middle Wards of Lanark and the Royal Burgh of Rutherglen, to erect a substantial and convenient structure. The bridge as erected is about 320 feet long and 50 feet wide; it is divided into five spans of 54 feet 8 inches each, formed of steel girders resting on stone piers and abutments, with ornamental fascies and parapets of cast iron.

The most interesting point in connection with the construction of the bridge was that the foundations for the piers were sunk through about 60 feet of muddy clay and sand down to the rock by what is known as the “pneumatic” or compressed air system, being the first time that this method of constructing foundations

has been adopted in the bed of the Clyde which, as is well known, consists of a great depth of silt.

This bridge was designed and erected under the superintendence of Messrs. Crouch & Hogg, C.E.; the foundation stone was laid by Bailie Cumming, Chairman of the Joint Bridge Committee, on 11th October, 1889; and it was opened for traffic on 6th May, 1891, and cost in all £30,500.

#### RUTHERGLEN BRIDGE.

This Bridge, which was erected in the year 1775, crosses the Clyde at the southern end of Main Street, Bridgeton. It is a stone structure of five arches, but inconveniently narrow, and the roadway, owing to the height of the arches, is very steep. The growth of this district of the City and the increase of traffic would in any event have very soon rendered it necessary to replace the old bridge by a more convenient structure, but the ascertained condition of the foundations has rendered rebuilding absolutely necessary.

The removal of the weir had the effect of producing a considerable scour for some distance up the river, and it soon became very perceptible in the neighbourhood of this bridge, and though steps were taken to protect the foundations pending arrangements being completed for the erection of a new bridge, these precautions could only be of a temporary character. The authorities interested, who (although they contribute in different proportions) are the same as in the case of Dalmarnock Bridge, with the County of Renfrew in addition, have appointed a Joint Committee to deal with the erection of a new bridge, and under their instructions a service bridge has been built. This service bridge was opened for traffic in April, 1890, and the old bridge was closed.

Plans for the new bridge, which it has been decided to build of stone, are being prepared by Messrs. Crouch and Hogg, Civil Engineers, and it is expected that the



work will be commenced early in 1892. This bridge is to span the river with three arches; its total length will be about 330 feet and it will have a clear width of 60 feet. The gradients of the roadway will be very easy compared with the "hog-back" of the old bridge, and as the foundations will, as in the case of the Dalmarnock Bridge, be carried down to the rock, it will when completed form a thoroughly solid addition to the bridges of the City.

#### GREAT WESTERN BRIDGE.

This bridge spans the Kelvin on the site of a crossing or ford which has existed for centuries in continuation of North Woodside Road and Dobbie's Loan. The first bridge was the low level bridge in course of being removed. It was built by Mr. James Gibson of Hillhead, about 1825, to develop his estate as a feuing property. So beneficial was it to the entire district east and west of the Kelvin, that in 1836 an Act was obtained "for making and maintaining a turnpike road from Anniesland Toll Bar to St. George's Road," and the Act appoints Trustees. This new road included the erection of a high level bridge, which was built above the low level bridge in such a way as did not interfere with it. It consisted of two arches of 92 feet span, with small dry arches at each end, and was 27 feet wide between parapets. The foundation stone was laid on 2nd November, 1838, with masonic honours by Sheriff Alison, and it was opened in 1840. In 1858-59 the Corporation Water Commissioners, after discovering that the bridge was of doubtful stability to carry their main pipes, erected an iron bridge 14 feet wide along and contiguous to its north side, and the parapet of the stone bridge being removed, the two surfaces were united into one roadway of 40 feet width. Ever since 1878, when the Roads and Bridges Act was passed, the question of still further widening the bridge has been discussed, and plans were prepared, but fortunately, as it appears, opinions amongst the bodies interested conflicted and delays resulted. Fresh reports and plans were called for,



and ultimately it was decided to erect an entirely new bridge of 60 feet width and with improved gradients. Messrs. Morrison & Mason's contract for it was accepted in February, 1889. The foundation-stone was laid on 9th April, 1890, by Bailie Thomas Cumming, and it was opened for traffic on 29th September, 1891. The bridge is of 60 feet width, and consists of two large spans of 91 feet each and two small spans—one on the north side of 34 feet and the other on the south side of 20 feet. There are three piers which occupy the site of the piers of the old bridge, and they, as well as the abutments and wing walls, are faced with granite. The piers are finished at the top with handsome capitals bearing lamps. The arches are of iron, and a handsome iron balustrade runs between the piers forming the parapet of the bridge. The footpaths are 12 feet in breadth, and the roadway 36 feet. The mains of the Water Commissioners are carried underneath, and the tramways are laid on the surface of the roadway. The total cost of the new bridge, including the timber accommodation bridge, has been £45,000, Messrs. Bell & Miller, who also designed the Albert Bridge, being the engineers.

The Bridge was opened with imposing ceremony, as was meet, from the circumstance that it consummates in practical fashion the union between Glasgow and the important suburbs of Hillhead and Kelvinside. The members of the Town Council of Glasgow, the Commissioners of the Burgh of Hillhead, the County authorities, and a large company of residents on both sides of the Kelvin witnessed the opening. After prayer by the Rev. Dr. Strong, the Lord Provost, at the request of Bailie Cumming, Chairman of the Bridges Committee, laid the cope stone on the south-westmost pier, and so completed the structure, and thereafter the Bridge was formally opened through the gentle offices of Miss Fleming of Kelvinside cutting the ribbon, the only obstacle that remained to give the public free passage along this new and elegant pathway. At the conclusion of this interesting ceremony the public functionaries lunched in the City Chambers under Bailie Cumming's presidency.

# ADMISSIONS TO BURGESS ROLL IN LAST FIFTEEN YEARS.

Year.	Merchant Rank.	Trades Rank.	Total.	Net Fees or "Fines" paid by Entrants. Divided thus—			
				To Corporation.	To Merchants' House.	To Trades' House.	Total.
1840	63	115	178	£182	£106	£101	£389
1850	12	50	62	57	13	40	110
1860	14	64	78	82	28	53	163
1870	5	95	100	113	19	79	211
1876	7	170	177	194	40	139	373
1877	7	256	263	369	46	262	677
1878	5	233	238	332	41	237	610
1879	4	152	156	192	34	135	361
1880	5	152	157	211	34	151	396
1881	2	231	233	311	42	220	573
1882	1	192	193	260	34	184	478
1883	4	200	204	288	35	200	523
1884	2	252	254	382	42	269	693
1885	1	209	210	301	25	214	540
1886	2	208	210	218	31	157	406
1887	1	144	145	191	18	136	345
1888	1	166	167	209	22	147	378
1889	3	220	223	245	37	173	455
1890	1	170	171	208	23	146	377
Average over 15 years,	46	2,955	3,001	£3,911	£504	£2,770	£7,185
	3	197	200	£261	£34	£184	£479

This Table shows that entrants to the ancient Burgh Roll of the city are now almost exclusively confined to the trades rank. The Merchants' House have, during twenty or more years, allowed the qualification of burgess-ship—*aforetime a sine qua non* of admission—to drop into abeyance. The Trades' House, on the other hand, continue to uphold the qualification of burgess-ship before admitting to the privileges of their House.

## DEAN OF GUILD COURT—LININGS GRANTED IN LAST FIFTEEN YEARS.

YEAR.	DEAN OF GUILD.	HOUSES.				SHOPS.	Public Buildings Churches, Halls, and Schools.	Ware-houses, Work-shops, Stores, Stables, etc.	Alterations and Additions	Estimated Cost.
		One Apartment.	Two Apartments.	Three Apartments.	Above Three Apts.					
1876	Sir James King, Bart.,	965	2,803	1,248	730	899	26	205	224	£1,125,249
1877	Sir James Watson, -	851	2,190	643	279	879	20	172	120	2,564,360
1878	Do. -	194	531	187	121	120	17	149	148	755,717
1879	Mr. Jas. Stevenson, and } Mr. Patrick Playfair,	78	243	95	85	52	13	65	66	431,970
1880	Mr. J. B. Mirrlees, -	38	227	106	121	22	9	86	112	355,430
1881	Do. -	123	153	97	46	28	14	79	98	307,640
1882	Mr. Alex. Stephen, -	40	287	114	71	7	20	93	115	378,690
1883	Do. -	41	199	95	56	19	13	89	114	594,943
1884	Mr. Wm. M'Ewen, -	97	258	196	36	27	15	99	88	697,005
1885	Do. -	114	425	203	22	33	22	59	61	349,015
1886	W. G. Blackie, LL.D.,	151	620	345	146	52	15	66	71	394,540
1887	Do. -	139	508	283	91	79	17	77	99	424,730
1888	Mr. William Walls, -	233	693	192	84	85	16	60	111	390,320
1889	Do. -	230	905	274	136	54	19	103	94	685,520
1890	Mr. John Ure, -	321	666	191	75	72	22	162	47	427,760
	Totals, -	3,615	10,708	4,269	2,099	2,428	258	1,564	1,568	£9,882,889

## LICENSING COURT.

Year.	Hotels.	Public Houses.	Grocers.	Total.	Average Rental.
1853	—	—	—	2,053	£31 6 0
1858	44	1,414	164	1,622	40 16 0
1873	37	1,560	272	1,869	69 3 9
1878	29	1,519	266	1,814	97 6 0
1881	26	1,497	271	1,794	103 13 9
1882	26	1,492	270	1,788	104 10 6
1883	28	1,485	265	1,778	104 12 0
1884	24	1,471	263	1,758	104 12 6
1885	23	1,465	258	1,746	103 3 0
1886	20	1,465	261	1,746	99 3 0
1887	22	1,459	259	1,740	100 1 6
1888	23	1,462	256	1,741	101 14 6
1889	23	1,457	256	1,736	101 15 6
1890	23	1,450	250	1,723	101 10 10

This Table shows with perspicuity that the licensed houses have been reduced numerically from 2,053 in the year 1853, when the population stood at 350,000, to 1,723 in 1890, when it had risen to 560,000; in other words, that 330 licenses have been withdrawn in the last 38 years. On the scale of the year 1853, the licenses in 1890 should have numbered 3,284, or about double the actual number. If no more were given than the numerical column the inference might be drawn that bibulous habits are very largely on the decline in Glasgow, and there can be little question that great improvement is manifest; but the rental column moderates or qualifies any general deduction to be drawn from the other columns of the Table. The modest little "Change-house," so common in the earlier years of the century, no longer exists; and our hotels, if reduced by one half their number, have increased enormously in their accommodation, although to no greater extent than is wanted by the yearly increasing tourists and visitors to our city. Clubs, largely a creation of the period covered by the Table, do not require a license.

## CITY POLICE COURTS.

## CRIMES REPORTED, AND HOW DISPOSED OF.

YEAR.	Crimes Reported.	Number of Persons taken into Custody.	No Proceedings taken.	Acquitted.	Convicted.	Remitted to Sheriff.	Remitted to other Places.	Sent to Reformatory and Industrial Schools.
1870	8,702	5,205	1,681	209	2,491	696	128	101
1880	9,581	6,393	2,040	537	2,591	1,039	186	92
1885	9,101	5,612	1,609	385	2,122	1,383	113	49
1886	9,243	5,391	1,572	396	2,060	1,248	115	66
1887	8,906	5,462	1,635	366	2,094	1,253	114	36
1888	8,539	5,679	1,700	361	2,184	1,312	122	52
1889	6,666	5,019	1,359	319	1,932	1,285	124	31
1890	6,858	5,050	1,134	385	2,077	1,342	112	41

Crime shows substantial diminution in the past two years. The persons arrested by the City Police in 1890 were 5,050, of whom 2,077 were convicted, and 1,454 were remitted to a higher court, whereas, in 1880, there were 6,393 persons arrested, of whom 2,591 were convicted and 1,225 remitted. In last year and the year before work was plentiful, whereas in 1880 there was a dearth of employment, which may partly account for the improvement, although the spread of education and, doubtless, the interest taken in the young are having their natural influence.

## ITEMS FROM CHIEF CONSTABLE'S RETURNS.

YEAR.	Fatal Accidents Deaths in Public Places, Suicides, &c.	Non-fatal Accidents	Strayed Children Found.	Dogs Destroyed	Shut Houses left in Charge of Police	Houses found Insecure.	Butcher Meat Destroyed as Unfit for Human Food.	Smoke Prosecutions.
	Number.	Number.	Number.	Number.	Number.	Number.	Weight in Lbs.	
1885	280	274	2,943	398	3,711	1,773	433,751	78
1886	279	271	2,557	437	3,781	1,663	477,374	135
1887	284	269	2,961	426	3,772	1,373	447,573	85
1888	307	310	3,597	500	3,392	1,605	569,070	69
1889	381	272	4,000	481	3,894	1,889	489,273	83
1890	385	374	3,816	367	4,109	2,094	509,457	136
	1,916	1,770	19,874	2,609	22,659	10,397	2,926,498	586

## MARINE POLICE COURT.

YEAR.	Crimes.	Offences.	Contraventions of Regulations.	TOTAL.
1885	218	420	750	1,388
1886	242	564	650	1,456
1887	152	397	600	1,149
1888	134	430	442	1,006
1889	147	470	1,160	1,777
1890	180	620	1,146	1,946

Here, too, crime shows a marked tendency to decline, but minor offences and contraventions of regulations seem enormously on the increase, whatever may be the reason for it.

## PERSONS INJURED ON BOARD SHIPS AND ON QUAYS.

	1885	1886	1887	1888	1889	1890
Injured on Quays, - -	106	72	57	70	71	57
„ on Board Ships, -	43	66	57	74	116	79
„ by Falling into Rivers and Docks, - -	45	34	39	77	60	48
Attempted Suicide by Jumping into River, - - -	6	2	1	—	1	—
	200	174	154	221	248	184

## JUSTICE OF PEACE COURT.

## FOR LOWER WARD OF THE COUNTY.

YEAR.	Small Debt Cases, £5 and under.	Cases under Special Statute, e.g., Excise, Customs, Education, Cruelty, etc.	Board of Trade Inquiries.	Police Cases.	Total.
1885	7,446	427	—	673	8,546
1886	8,140	413	—	571	9,124
1887	5,902	377	—	691	6,970
1888	7,265	315	—	543	8,123
1889	6,866	260	—	593	7,719
1890	6,858	316	—	710	7,884



## SHERIFF COURTS.

THE accommodation for the administration of justice in Glasgow has within the last dozen years been receiving considerable attention. The Central Police Chambers and all the district police offices have been either reconstructed or enlarged; the Justiciary Courts have been renovated; and the Sheriff Court Houses and along with them the Justice of Peace Courts were likewise some years ago remodelled and the accommodation largely augmented.

But already both these last-mentioned judicial departments are feeling pinched for room, and "The Glasgow Court Houses Act, 1890," was obtained, which authorized "the Glasgow Court Houses Commissioners to acquire additional land and buildings for enlarging and improving the "Sheriff and Justice of Peace Court Houses," and under the powers of that Act the vacated Municipal Buildings in Ingram Street are being acquired for incorporation with the existing accommodation in Wilson Street, giving to the Sheriffs and Justices of the Peace the entire block bounded by Ingram Street, Hutcheson Street, Wilson Street, and Brunswick Street. Only the manner or method of adaptation remains to be carried out. Here there may be room for some difference of opinion, and the Faculty of Procurators may think that they have a status and interest in the question. Their comfort, convenience, and dignity in only a lesser degree than the sheriffs they may consider should be consulted when additional accommodation is being given. They may be left to plead their own cause; and while they do so, and the plans are being considered, a backward glance at the sheriff's accommodation may be taken.

Mr. Archibald Alison, to us better remembered as Sheriff Sir Archibald Alison, entered on the duties of the sheriffship in December, 1834, in succession to Mr. William Rae Robinson, the sheriff-principal from 1821, and the first required to take up his residence in Glasgow. Sheriff Alison on entering office found two substitutes there, Mr. Walter Moir and Mr. James Watson, and during twenty-one



years no additional substitute was appointed. Mr. Henry Glassford Bell succeeded Mr. Moir in 1839 and Mr. George Skene, afterwards Professor of Law in Glasgow University, succeeded Mr. Watson in 1841. At this time and down to 1844 the Sheriff's Chambers and the Sheriff Clerk's offices were situated in a single flat of tenement, No. 60, on the west side of Stockwell Street, entered by a "pend," and since swept away for the Union Railway. This flat contained eight apartments of very modest size, three of which were occupied by the sheriff and his substitutes. One dark water closet did duty for the entire establishment, and no such convenience as a washhand basin existed. If the sheriffs required to wash hands an officer contrived to borrow a basin and water from a neighbour, but it may be taken as certain that the procurators were not indulged in such a luxury. No doubt in those days written pleadings were in vogue, and the procurators of to-day may make a point of that distinction in Court practice. And a serious difference it makes.

In 1855 a third substitute was appointed, and since then a fourth and fifth have been added.

The popular Court in Glasgow during a great many years was the *Burgh* Court, in which Mr. James Reddie, advocate and senior town-clerk, acted as assessor, and was in all knotty cases virtually the judge. After Mr. Reddie's death the Burgh Court became gradually deserted, and cases were taken to the Sheriff Court. It is questionable if Sheriff Alison would have become Historian of Europe had he had to face Mr. Berry's work.

Sheriff Sir Archibald Alison died in 1867, and was succeeded by Mr. Henry Glassford Bell, author of the fine poetical tribute to Mary Queen of Scots; Mr. Bell died in January, 1874, and was succeeded by Mr. William Gillespie Dickson, author of the standard work on "Evidence"; Mr. Dickson died in October 1876, and was succeeded by Mr. Francis William Clark, the genial chief of Ulva's Isle; Mr. Clark died in November, 1886, and was succeeded by Mr. Robert Berry, Advocate, LL.D., Professor of Scots Law in the University, now the learned Sheriff of the County.

The present Sheriffs-Substitute are Mr. Alexander Erskine Murray, Advocate; Mr. William Guthrie, LL.D., Advocate; Mr. Walter Cook Spens, Advocate; Mr. David Balfour, Procurator; and Mr. J. B. L. Birnie, Advocate. Mr. P. T. Young, the esteemed Auditor of Court, entered the service in 1834 when the Chambers were in Stockwell.

## I.—CIVIL CASES.

## FOR THE LOWER WARD OF LANARKSHIRE.

YEAR.	Ordinary Court Cases.	Debts Recovery Cases.	Small Debt Cases.	Summary Ejectments against Tenants paying rents under £30 where tenure for less than a year.	Cessio Cases.	Miscellaneous Proceedings under the Bankruptcy and other Statutes.	Total.
	No limit to amount.	£12 to £50.	£12 and under.				
1885	1,515	1,465	15,759	1,647	252	3,712	24,350
1886	1,462	1,609	16,373	2,001	329	3,999	25,773
1887	1,636	1,586	15,665	1,943	305	3,752	24,887
1888	1,511	1,507	14,888	1,940	287	3,800	23,933
1889	1,402	1,381	15,149	1,900	267	3,866	23,965
1890	1,489	1,291	14,515	2,059	243	3,896	23,493
	9,015	8,839	92,349	11,490	1,683	23,025	146,401

## II. COMMISSARY CASES.

## (1.) FOR THE WHOLE COUNTY OF LANARK.

YEAR.	Number of Inventories of Deceased's Estate.			Amount of Estates,		Total.
	Testate.	Intestate.	Total.	Testate.	Intestate.	
1885	508	349	857	£2,289,082	£204,572	£2,493,654
1886	512	428	940	2,501,476	283,032	2,784,508
1887	486	356	842	2,375,187	264,338	2,639,525
(2.) FOR THE LOWER WARD ONLY.						
1888	380	339	719	£1,748,130	£372,167	£2,120,297
1889	358	286	644	2,247,775	212,577	2,460,352
1890	403	318	721	1,825,434	331,108	2,156,542

The last Table shows that in the past six years no less than £13,000,000 have been left by deceased persons in Glasgow and County. It may be taken that fully three-fourths of the whole is of Glasgow making. Many personal estates left in other neighbouring counties are also of city origin. It is surprising to find that of the estates in the Table there are so many as 44 per cent. intestate.

## CRIMINAL CASES.

The jurisdiction of the Glasgow Sheriff Court, besides the City proper, includes the Police Burghs of Maryhill, Hillhead, Partick, Govan, Govanhill, and the Royal Burgh of Rutherglen, as well as a portion of the county. The following Table (I) shows the numbers of the accused persons remitted from the City Police Courts and the outlying districts to the Sheriff Court and disposed of there.

By the Glasgow Extension Act of 1891, the Burgh of Maryhill and part of the Lower Ward of the County, including the Burghs of Govanhill and Hillhead, will become part of the City in November, and the Statistics for these places will thenceforward be included in those for the City. As in the Police Returns, the present Tables by no means represent the actual number of individuals dealt with, because many persons appear before the Sheriff Court oftener than once in a year.

Under the "Criminal Procedure (Scotland) Act, 1887," cases of robbery which formerly could only be tried at Circuit or in the High Court at Edinburgh, may now be and frequently are disposed of in the Sheriff Court. This no doubt accounts for some of the increase in the Sheriff Criminal work, and the decrease of the work of the Justiciary Court.

TABLE I.

1885.

POLICE AUTHORITIES.	Total Remitted.	No Proceedings.
Glasgow City, - - - - -	1,500	264
Govan, - - - - -	38	4
Partick, - - - - -	17	4
Maryhill, - - - - -	10	2
Lanarkshire County—including Hill-head, Govanhill, and Rutherglen, -	} 36	1
	101	11
Grand Total, - - - - -	1,601	275

1886.

Glasgow City, - - - - -	1,331	251
Govan, - - - - -	24	3
Partick, - - - - -	4	1
Maryhill, - - - - -	12	3
Lanarkshire County—including Hill-head, &c., - - - - -	} 43	10
	83	17
Grand Total, - - - - -	1,414	268

1887.

Glasgow City, - - - - -	1,372	265
Govan, - - - - -	31	7
Partick, - - - - -	15	3
Maryhill, - - - - -	15	4
Lanarkshire County—including Hill-head, &c., - - - - -	} 50	5
	111	19
Grand Total, - - - - -	1,483	284

TABLE I.

1885.

Sheriff Summarily.	Sheriff and Jury.	Circuit and High Court.	Total Tried.	Convicted.	Acquitted.
557	405	274	1,236	1,130	106
16	16	2	34	32	2
8	3	2	13	13	—
2	4	2	8	7	1
22	9	4	35	35	—
48	32	10	90	87	3
605	437	280	1,326	1,217	109

1886.

504	334	242	1,080	1,002	78
11	9	1	21	21	—
2	—	1	3	3	—
3	5	1	9	8	1
17	8	8	33	26	7
33	22	11	66	58	8
537	356	253	1,146	1,060	86

1887.

567	332	208	1,107	1,007	100
9	5	10	20	20	4
3	7	2	12	12	—
8	2	1	10	10	1
28	8	9	39	39	6
48	22	22	81	81	11
615	354	230	1,088	1,088	111

TABLE I.—CONTINUED.

1888.

POLICE AUTHORITIES.	Total Remitted.	No Proceeding.
Glasgow City, - - - - -	1,416	272
Govan, - - - - -	21	1
Partick, - - - - -	17	2
Maryhill, - - - - -	22	4
Lanarkshire County—including Hill- head, &c., - - - - -	} 35	3
	95	10
Grand Total, - - - - -	1,511	282

1889.

Glasgow City, - - - - -	1,393	252
Govan, - - - - -	29	5
Partick, - - - - -	21	1
Maryhill, - - - - -	15	1
Lanarkshire County—including Hill- head, &c., - - - - -	} 31	1
	96	8
Grand Total, - - - - -	1,489	260

1890.

Glasgow City, - - - - -	1,484	238
Govan, - - - - -	25	2
Partick, - - - - -	24	1
Maryhill, - - - - -	18	2
Lanarkshire County—including Hill- head, &c., - - - - -	} 55	3
	122	8
Grand Total, - - - - -	1,606	246

TABLE I.—CONTINUED.

1888.

Sheriff Summarily.	Sheriff and Jury.	Circuit and High Court.	Total Tried.	Convicted.	Acquitted.
501	469	174	1,144	1,045	99
12	7	1	20	16	4
5	7	3	15	14	1
4	10	4	18	17	1
18	11	3	32	24	8
39	35	11	85	71	14
540	504	85	1,229	1,116	113

1889.

498	474	169	1,141	1,029	112
11	13	—	24	22	2
18	2	—	20	18	2
6	7	1	14	14	—
23	7	—	30	26	4
58	29	1	88	80	8
556	503	170	1,229	1,109	120

1890.

632	563	151	1,246	1,126	120
12	10	1	23	22	1
10	11	2	23	21	2
9	7	—	16	13	3
42	10	—	52	47	5
73	38	3	114	103	11
705	601	154	1,360	1,229	131



By the operation of the "Criminal Procedure (Scotland) Act, 1887," combined with the abolition of the smaller prisons, the criminal work of the Glasgow Sheriff Court has been largely increased.

Prior to October, 1887, proceedings against persons accused in the Sheriff Criminal Courts at Hamilton, Lanark, Airdrie, Paisley, Dumbarton, Stirling and Alloa, were entirely confined to these local courts. Since then, however, the Pleading or first diet of cases against all persons from these places who are confined in Glasgow Prison is taken in the Glasgow Sheriff Court—when they plead guilty they are sentenced by the Presiding Sheriff or remitted to the High Court for sentence.

The persons pleading not guilty are of course tried in the Sheriff Court of the district where the crime is committed.

Table II. shows the numbers of persons from the districts mentioned who have been since October, 1887, brought up at Pleading diets of the Glasgow Sheriff Court and sentenced there.

TABLE II.

NUMBER OF PERSONS FROM OTHER JURISDICTIONS DISPOSED OF IN THE SHERIFF CRIMINAL COURT UNDER CRIMINAL PROCEDURE (SCOTLAND) ACT, 1887.

OTHER JURISDICTIONS.	1887.	1888.	1889.	1890.
Airdrie, -	2	15	9	13
Hamilton, -	—	16	6	5
Lanark, -	2	—	2	4
Dumbarton, -	1	15	8	11
Paisley, -	1	15	19	28
Stirling, -	—	1	2	1
Alloa, -	—	—	—	2
Total, -	6	62	46	64

Table III. shows the numbers of persons from these districts brought up in the first instance in the Glasgow Sheriff Court, and who, pleading not guilty, were remitted for trial in the Court of the jurisdiction where the crimes were committed.

TABLE III.

PERSONS BROUGHT UP AT PLEADING DIETS IN SHERIFF COURT WHO, PLEADING NOT GUILTY, WERE REMITTED TO THE COURTS OF THE JURISDICTIONS WHERE CRIMES COMMITTED.

OTHER JURISDICTIONS.	1887.	1888.	1889.	1890.
Airdrie, -	1	3	4	2
Hamilton, -	—	9	3	11
Lanark, -	—	—	2	2
Dumbarton, -	1	5	5	8
Paisley, -	—	4	2	2
Stirling, -	—	3	5	2
Alloa, -	—	3	—	1
Total, -	2	27	21	28

Besides the cases referred to in the foregoing tables, the following Table shows the numbers of sudden and unexplained or suspicious deaths, accidents, and fires occurring in the city and outlying districts referred to in said tables, that were inquired into and reported upon by the Procurator Fiscal of the Sheriff Court, in the last four years.

	1887.	1888.	1889.	1890.
Deaths, -	667	774	901	967
Accidents, -	158	163	170	165
Fires, -	61	55	46	45

## CIRCUIT COURT.

By the Criminal Procedure Act already mentioned, all sittings of the Court of Justiciary are declared to be sittings of the High Court, and there are therefore now no Circuit Courts so called. There are six diets of the Justiciary Court held in Glasgow during the year.

The provisions of the Act mentioned enable the authorities to have cases disposed of at any convenient sitting of the Justiciary Court. The necessity which formerly existed for holding a court for the disposal of say one case in a distant town, such as Dumfries or Stirling, is thus obviated. Under the new system serious offences committed in the Counties of Ayr, Argyll, Clackmannan, Dumbarton, Dumfries, Kirkcudbright, Stirling and Wigtown, have been tried and disposed of at sittings of the High Court in Glasgow.

The Vidimus of the High Court business given below includes cases from all the counties mentioned.

## CIRCUIT COURT TRIALS IN THE LAST SIX YEARS.

DATE OF CIRCUIT.	JUDGES.	Dura- tion of Court.	Number of Indict- ments.	Number of Accused Persons.
1885.		Days.		
24 February, -	Lords Young and Adam, - -	3	35	69
7 May, -	„ Young and Adam, - -	3	34	52
24 June, -	„ Young and Adam, - -	2	22	37
27 August, -	„ Mure and M'Laren, - -	3	39	64
27 October, -	„ Mure and M'Laren, - -	3	39	61
22 December,-	„ Adam and M'Laren, - -	3	43	57
1886.				
23 February, -	Lords Mure and Craighill, - -	3	43	64
20 April, -	„ Young and Craighill, - -	1	20	35
22 June, -	„ Young and M'Laren, - -	2	32	44
26 August, -	„ Adam and M'Laren, - -	2	27	51
26 October, -	„ Craighill and Adam, - -	2	33	51
20 December,-	„ Young and Craighill, - -	3	42	61

DATE OF CIRCUIT.	JUDGES.	Duration of Court.	Number of Indictments.	Number of Accused Persons.
1887.				
22 February, -	Lords Young and Mure, - -	3	38	67
20 April, -	„ Mure and Craighill, - -	2	27	53
28 June, -	„ Adam and M'Laren, - -	3	36	47
25 August, -	„ Adam and M'Laren, - -	1	23	39
25 October, -	„ Mure and Craighill, - -	2	29	40
26 December, -	„ M'Laren and Rutherford Clark, - - - -	2	26	42
1888.				
28 February, -	Lords Fraser and Trayner, - -	2	37	45
9 May, -	„ Young and Craighill, - -	3	35	47
5 July, -	„ Adam and Kinnear, - -	2	21	27
11 September, -	„ Craighill and M'Laren, - -	3	28	42
24 October, -	„ Shand and Fraser, - -	2	20	25
27 December, -	„ Justice Clerk and Wellwood, - -	3	24	42
1889.				
21 February, -	Lords Adam and Trayner, - -	2	17	38
9 May, -	„ Adam and M'Laren, - -	2	23	38
28 June, -	„ Young, - - - -	2	15	17
14 August, -	„ Young, - - - -	3	17	27
16 October, -	„ M'Laren and Rutherford Clark, - - - -	2	22	37
26 December, -	„ Justice Clerk and Kincairney, - - - -	2	35	53
1890.				
25 February, -	Lords Shand and Lee, - -	3	31	44
7 May, -	„ M'Laren and Wellwood, - -	2	28	39
2 July, -	„ Young, - - - -	3	16	25
2 September, -	„ Adam and M'Laren, - -	2	28	38
28 October, -	„ Adam and Kyllachy, - -	2	27	38
26 December, -	„ Justice Clerk and Lord Stormonth Darling, - -	3	35	44

Capital Sentences were passed as follows:—

22nd February, 1889, on John Curran (respited).

8th May, 1890, on John Findlay (respited).

2nd September, 1890, on Henry Devlin (executed in Glasgow Prison, 23rd September).

3rd September, 1890, on Thomas Gribbin (respited).

29th December, 1890, on Loretto Palombo (respited).

## GLASGOW PRISON.

INTEREST in our fellow-men and women is deepened when they happen to be secluded from the outer world, whether of their own choice or by the restraining powers of the law. We are curious to know the kind of lives they lead, and occasion may be taken of the recent reconstruction of Glasgow Prison, to lift the veil just a little by a few notes on the subject of prison accommodation and prison life, as presided over most efficiently and kindly by Governor Alston.

This Prison is now mainly set apart for female prisoners. The Drygate wing only is appropriated for male prisoners whilst awaiting trial, and as a receiving depot for convicted prisoners of the Landward District, who are here collected and drafted off in batches to Barlinnie General Prison. The Landward District, it may be explained, comprises Lanark, Hamilton, Airdrie, Motherwell, Coatbridge, Stirling, Alloa, Falkirk, Renfrew, Paisley, Pollokshaws, Clydebank, etc., etc.

In the last four years the prison has been practically reconstructed, and new residences for the governor and other administrative officers, male and female, have been provided immediately without or within the prison walls. A fine chapel has also been built to accommodate over 300 persons.

The Bridewell built in 1808, with the east and west blocks fronting Duke Street, more recently built, and the building in which administrative affairs were formerly conducted, have been pulled down and a new central wing has been built upon their site, with a spacious wing running out from it southwards. This block now embraces the north-east and north-west wings, and has cell accommodation for 400 female prisoners. The central part, pentagonal in shape, is of four stories in height, and from this centre the three wings branch out. Each cell is of 800 cubic feet

capacity. The most improved heating and sanitary arrangements have been introduced. All the unskilled and a considerable portion of the skilled labour employed in reconstruction was done by male prisoners.

Convenient to the male and female departments are new reception blocks, containing 100 alcoves for females and 27 for males. Prisoners are passed on to these on entry, and after the necessary formula has been gone through, they, *nolens volens*, enter a bath of tepid water; on emerging from these, other alcoves are entered where the prison garb is put on, and they next pass into the cells.

Prisoners are employed during ten hours of the day in mat-making, ship fender-making, tailoring, shoemaking, shirt-making, knitting, oakum teasing, cotton picking, Manilla hair teasing, carpet beating, plumber work, smith work, mason work, joiner work, etc. As has been stated, most of the building done in the prison has been carried out by prisoners, the well-built reception blocks being entirely erected by them.

As a means of encouragement, and small provision on liberation, a mark system, calculated on a systematic record of their industry, has been introduced, and prisoners may earn a gratuity, which is handed over to them or to a discharged prisoners' aid society for their behoof, as circumstances dictate.

The chaplain holds a service every day except Saturday, when all Protestant prisoners are assembled in the chapel. Prisoners are regularly visited by the appointed visiting clergymen in their cells. Divine service is conducted by the chaplain on Sundays, Mass is celebrated by the Roman Catholic visiting clergyman, and the visiting Episcopalian clergyman holds an evening service for the members of his persuasion.

The younger prisoners are instructed in reading, writing, and arithmetic, and a school register is kept to mark the progress and standard attained at the end of each quarter. Some of the prisoners make good progress.



There is a library with a large and excellent assortment of well-selected books under the chaplain's management.

Female prisoners are visited by a committee of devoted ladies connected with the various denominations, the Sisters of the Franciscan Convent visiting the Roman Catholic portion of them. They exhort and endeavour to get the younger women to return to their parents, get others into houses of shelter and into service, and every means are used to prevent them following a course of crime. It is found that these benevolent influences tend much to the reformation of women on the downward path.

In connection with the conversion of Duke Street Prison into a female detention house, it will be of interest to recall the fact that the first Bridewell in Glasgow was instituted in 1635 as a House of Correction for dissolute females. The building acquired for it was originally the residence of the Prebend of Cambuslang, Sacrist of the Cathedral; it became after the Reformation the property of the Earl of Glencairn, and from him it was purchased by the Magistrates in the year named for the purpose stated. In those days, in addition to detention, *the Kirk Session* directed the women to be whipped every day during pleasure. A House of Correction truly was this first Bridewell, and a good illustration of the methods of "Mother Church" to reform her rebellious daughters in the olden time.

## CRIMINAL DEPARTMENT.

YEAR.	No. of Cells.	Average Daily Number of Prisoners during Year.			Gross Expenditure for Year.	Gross Annual Cost per Prisoner.	Profit on Work done by Prisoners.		
		Male.	Female.	Total					
1885-86	651	378	257	635	£ 11,804 10 4	£ 18 11 10	£ 606 3 6		
1886-87	660	371	263	634	11,075 3 0	17 9 3	619 4 6		
1887-88	660	212	280	492	9,670 18 0	19 13 2	906 10 10		
1888-89	476	152	321	473	7,833 1 9	16 11 3	693 9 7		
1889-90	373	136	242	378	7,595 12 2	20 1 11	442 19 9		



The variation in cell accommodation is owing to the structural alterations going on during the five years, and to cells being occupied as stores. The decrease in male prisoners is due to cell accommodation being now provided at Barlinnie Prison for all male prisoners on conviction, including prisoners convicted before the police courts.

## CIVIL DEPARTMENT.

Total Number Incarcerated.				Average daily number during Year.			Aliment of Wife & Child.
Year.	Male.	Female.	Total.	Male.	Female.	Total.	Average Number.
1885-86	4	—	4	—	—	—	4
1886-87	6	—	6	—	—	—	
1887-88	5	—	5	—	—	—	
1888-89	4	5	9	—	—	—	
1889-90	5	—	5	—	—	—	

Since the passing of the Debtors (Scotland) Act, 1880, and the Civil Imprisonment Act of 1882, which abolished imprisonment for civil debt, except taxes, fines or penalties due to Her Majesty, and rates and assessments lawfully imposed, and substituted a special kind of imprisonment in cases of *aliment*, the number of civil prisoners has been small, and they were detained under the following warrants:—

Meditatione fugae; Ad factum præstandum.

## BARLINNIE GENERAL PRISON.

## EXCLUSIVELY FOR MALES.

Year.	Number of Cells.	Average Daily No. of Prisoners during Year.	Gross Expenditure for Year.			Gross Annual Cost per Prisoner.			Profit on Work done by Prisoners.		
			£	s.	d.	£	s.	d.	£	s.	d.
1885-86	402	371	7,951	10	1	21	8	8	148	1	9
1886-87	401	372	8,230	11	6	22	2	6	515	5	9
1887-88	615	492	8,766	17	2	17	16	5	523	5	3
1888-89	825	654	10,170	0	8	15	11	0	301	14	7
1889-90	812	581	10,037	9	5	17	5	6	1,128	13	0

This prison, as originally designed, is now composed of four large blocks, each with cell accommodation for 200 prisoners. These blocks are all connected by a long corridor on the ground floor.

It was considered that they would suffice for the male criminal population "thirled" to Barlinnie for many years; but already they have been found inadequate, and to ease the pressure transfers have to be made to the General Prison at Perth. The closing of the smaller prisons in the neighbouring counties satisfactorily accounts for this condition of the prison. Happily the general record of crime, especially of serious crime, diminishes with the spread of education and the great voluntary labours of our philanthropists amongst the young. Glasgow *per se* is improving every year. It is only because of its importance as a centre that it is chosen as a convenient place for converging the criminal population of a wide area, for the sake of economy to the national purse.

## OUR DEFENDERS.

I GIVE tables exhibiting the strength of the forces on which the citizens may depend for the protection of their homes, their property, and their commerce.

First and foremost, and at the further outposts of the city, is our first line of defence, the guardships (usually two in number), stationed at the Tail of the bank. The turret ship "Ajax," a familiar feature of the roadstead from its peculiar form and unwonted sojourn, was replaced in April last by H.M.S. "Superb," of broadside type and larger tonnage. Captain Boyle courteously invited the members of the Town Council to inspect the "Superb," and on 8th September, 1891, the visit was made. Torpedoes were fired, submarine mines were exploded, the ship was minutely inspected, and refreshments were served to the party, who left highly delighted with the visit. I also give the ships of the channel fleet who have visited the Clyde in the past five years.

(2.) The movements of the military of all arms in the garrison at Maryhill at command of the Magistrates.

(3.) The splendid volunteer force of all arms maintained in Glasgow and immediate district, in such strength as proves that the military instinct which originated the movement in 1859 was not a spasmodic impulse. It continues unabated in Glasgow at least. Disraeli said, "the British army is the garrison of our empire, but the volunteer force is the garrison of our hearths and homes." Every encouragement therefore, imperial and local, is due to our volunteer corps for their patriotism.

(4.) The police force of the city, which appeals to us yet more closely, and does excellent service in a hundred ways little realized. The policeman picks up the wandered child, quiets its fears, and carries it in his arms or leads it tenderly to the office where inquiries are sure to be speedily made; and that this is not a far-fetched allusion, let me state that 19,874 little children were so picked up and

dealt with in the past six years. Runaway horses are laid hold of, drowning persons are rescued, and people are saved from fire by the policeman at the risk of his life; and one has only to think of what the desperate burglar, suddenly confronted in the act by a solitary guardian of the peace, is fit for, to realize how the policeman may fare in the discharge of duty.

GUARDSHIPS STATIONED AT THE TAIL OF THE BANK SINCE THE YEAR 1875.

Ship.	Description.	Tonnage.	Armament.	Date of		Captains.
				Arriving.	Leaving.	
"Aurora,"	Wood,	4,020	Guns. 28	9 May, 1874,	19 July, 1877,	H. D. Grant.
"Narcissus,"	Wood,	4,020	28	20 July, 1877,	8 May, 1878,	H. D. Grant.
"Hercules,"	Iron,	8,680	14	9 May, 1878,	30 Apr., 1881,	Ed. H. Howard to 28 Nov., 1879, then S. P. Townsend.
"Warrior,"	Iron,	9,210	32	1 May, 1881,	31 May, 1883,	S. P. Townsend to 27 Nov., 1882, then E. S. Adeane, C.M.G.
"Shannon,"	Iron,	5,390	9	1 June, 1883,	4 Aug., 1885,	E. S. Adeane, C.M.G.
"Ajax,"	Iron (Turret)	8,510	6	5 Aug., 1885,	13 Apr., 1891,	E. S. Adeane, C.M.G., to 27th Nov., 1885. Francis Durrant, C.M.G., to 27th Nov., 1888, then Robert H. Boyle, A.D.C.
"Superb,"	Iron (Broadside)	9,170	22	14 Apr., 1891,		Robert H. Boyle, A.D.C.

## VESSELS OF THE CHANNEL FLEET AT THE TAIL OF THE BANK.

I.—12-18 SEPTEMBER, 1887.

Ship.	Guns.	Tons.	Officer in Command.
Minotaur (flag), - -	26	10,690	Vice-Admiral Sir William Hewett, K.C.B., V.C.
Agincourt, - - -	28	10,690	Rear-Admiral Rowley, C.B.
Sultan, - - -	27	7,720	Captain Ernest Rice.
Iron Duke, - - -	14	6,010	Captain R. H. Boyle.
Monarch, - - -	24	8,320	Capt. Edmund J. Church.
Curlew (Torpedo boat),	4	950	Commander Anthony Kingscote.

II.—18-25 OCTOBER, 1888.

Northumberland (flag),	29	10,780	Vice-Admiral J. K. E. Baird.
Monarch, - - -	7	8,328	Captain N. C. Singleton.
Iron Duke, - - -	24	6,010	Capt. Rodney M. Lloyd.
Agincourt, - - -	20	10,690	Rear-Admiral St. George C. D'Arey Irvine, C.B.
Curlew, - - -	4	950	Commander Charles J. Norcock.

III.—2-7 OCTOBER, 1890.

Camperdown (flag), -	16	10,600	Vice-Admiral Sir Michael Culme-Seymour, Bart.
Howe, - - -	10	10,300	Captain Boys, R.N.
Rodney, - - -	10	10,300	Captain Warren, R.N.
Aurora, - - -	12	5,600	Captain Fanshawe, R.N.
Immortalité, - - -	12	5,600	Captain Sir W. Wiseman, Bart., R.N.
Curlew, - - -	4	950	Captain Barry, R.N.
Speedwell, - - -	2	735	Lieut.-Commander White, R.N.

## GARRISON OF GLASGOW.

## MOVEMENT OF TROOPS IN MARYHILL SINCE OCCUPATION OF BARRACKS.

CORPS.	Date of Arrival at Maryhill.	Date of Departure from Maryhill.	To what Station.
Detachment 6th Dragoons, -	21st July, 1877	29th April, 1880 30th April, 1880	} Norwich.
“O” Battery 2nd Brigade R.A.,	25th Oct., 1877	8th Mar., 1881	Woolwich.
79th Highlanders, - - -	15th Mar., 1878	3rd June, 1879	Gibraltar.
Detachment 61st Brigade Depot,	7th June, 1879	22nd Jan., 1880	Ayr.
,, 59th & 60th ,, -	25th Sept., 1879	21st Jan., 1880	Hamilton.
,, 62nd ,, -	”	”	Glencorse.
74th Highlanders, ,, -	23rd Jan., 1880	26th May, 1881	Aldershot.
Detachment 21st Hussars, -	30th April, 1880	3rd Sept., 1881	Kingstown.
“E” Battery 3rd Brigade R.A.,	10th Mar., 1881	12th May, 1883	Dublin.
71st Highlanders, - - -	26th May, 1881	16th Nov., 1882	Kingstown.
Detachment 3rd Dragoon Guards,	8th Sept., 1881	5th Nov., 1883	Manchester.
2nd Battalion A. and S. High- landers, - - - -	16th Nov., 1882	18th Aug., 1884	Portsmouth.
“I” Battery 4th Brigade R.A.,	11th May, 1883	19th June, 1889	Portion went to India; remainder formed new Batty. called S/4 R.A.
Detachment 2nd Dragoons, -	9th Nov., 1883	30th Sept., 1885	Aldershot.
1st Battalion Scottish Rifles (Cameronians), - - -	18th Aug., 1884	30th Jan., 1886	Dublin.
Detachment 4th Hussars, -	29th Sept., 1885	3rd May, 1887	Curragh.
1st Battalion Royal Scots, -	30th Jan., 1886	29th Mar., 1888	Aldershot.
15th Hussars, - - - -	30th May, 1887	28th June, 1889	Cahir.
13th Hussars, - - - -	28th June, 1889	16th June, 1891	Curragh.
1st Batt. Seaforth Highlanders,	29th Mar., 1888	13th Feb., 1889	Dublin.
1st Lancashire Fusiliers, -	13th Feb., 1889	25th April, 1891	Belfast.
12th Field Battery R.A., - -	19th June, 1889	28th July, 1891	Sheffield.
Detachment 6th Dragoon Guards,	16th June, 1891	} At present stationed at Maryhill.	
1st Batt. Royal Scots Fusiliers,	25th April, 1891		
7th Field Battery R.A., - -	22nd Sept., 1891		

## VOLUNTEER FORCE.

Arm.	County No. or Order of Precedence.	Regiment of Regular Army with which associated.	Authorized Establishment.	Efficients.	Total Enrolled.	Proficients who have qualified for the Special Grant of 50/.		Officers who have passed in Tactics.	Who have passed in Signalling.	
						Officers.	Sergeants.		Officers.	Non-Com. Officers.
Naval Artillery	—	6 Battery, -	480	281	313	—	—	—	—	—
Artillery	1	Southern Div. R.A., - -	1,370	1,105	1,133	38	72	16	1	—
Engineer	1	Royal Engineers, - -	906	895	907	23	49	9	—	2
Engineer (Submarine Miners),	Clyde Division	Coast Battalion R.E., -	196	196	215	—	—	—	—	—
Rifle, -	1	The Cameronians (Scottish Rifles),	1,606	1,316	1,328	50	84	37	1	2
	2	" "	1,010	838	873	25	52	1	—	—
	3	" "	1,205	1,068	1,079	41	64	14	1	2
	4	" "	904	660	662	26	47	8	—	1
	5	The Highland Light Infantry, - -	1,205	1,020	1,072	22	64	6	—	2
	6	" "	1,005	1,007	1,007	19	54	8	1	1
	7	The Cameronians (Scottish Rifles), Militia, -	808	782	802	22	44	1	—	—
	8	The Highland Light Infantry, - -	1,205	810	841	29	64	11	—	—
	9	" "	607	544	585	17	27	2	—	—
	10	" "	1,205	1,100	1,117	31	64	11	1	2
Totals, - - -			13,712	11,622	11,934	343	685	124	5	12



## VOLUNTEERS.

The total efficient strength of the Volunteer force of Great Britain was on 1st November, 1890, 212,293, of which 39,515 is Artillery, 10,774 Engineers, and 159,203 Rifles. Glasgow and neighbourhood has therefore 5·47 per cent. of the entire Volunteer strength of the country.

## CITY POLICE FORCE.

Chief Constable, - - - - -	1
Chief Constable's Clerks, - - - - -	3
Physician to the Force, - - - - -	1
District Surgeons, - - - - -	7
Superintendents, - - - - -	7
Lieutenants, - - - - -	23
Inspectors, Detective Department, - - - - -	2
Sub-Inspectors, „ - - - - -	7
Detective Officers, „ - - - - -	31
Pay-Clerk, Custodier and Registrar, - - - - -	1
Orderly Officer, - - - - -	1
Court Officer, - - - - -	1
Bar Officers, - - - - -	2
Turnkeys, - - - - -	18
Female Turnkeys, - - - - -	7
Gate Officers, - - - - -	2
Inspectors, - - - - -	41
Sergeants, - - - - -	62
Constables, - - - - -	906
Powder Magazine Keepers, - - - - -	2
Storekeepers and Tailors, - - - - -	3
Lamp Trimmers, - - - - -	5
Waiters, - - - - -	12
Cleaners and Searchers, - - - - -	28

## EMIGRATION.

I INTRODUCE a few words on this vitally important subject with a table showing the advance and declension of population in the three kingdoms.

YEAR.	ENGLAND. Including Soldiers and Sailors abroad.*	IRELAND.	SCOTLAND.	TOTALS.
1821	12,379,000	6,802,000	2,091,000	21,272,000
1831	14,262,000	7,767,000	2,364,000	24,393,000
1841	16,241,000	8,197,000	2,620,000	27,058,000
1851	18,283,000	6,574,000	2,889,000	27,746,000
1861	20,460,000	5,799,000	3,062,000	29,321,000
1871	23,073,000	5,412,000	3,360,000	31,845,000
1881	26,359,000	5,175,000	3,736,000	35,270,000
1891	29,251,000	4,706,000	4,033,000	37,990,000

England—Area, 58,613 square miles. Ireland—Area, 32,524 square miles.  
Scotland—29,819 square miles.

This is a most instructive table, and has local interest for Scotland and for Glasgow.

The population of Scotland now numbers 4,033,103, having *increased* by 297,530 in the last ten years; and the population of Ireland numbers 4,706,162, having *decreased*, by 468,674 in the same period. These ratios of increase and decrease continued till the close of the century will bring the population of Scotland abreast of Ireland.

The table exhibits for England a growth in population equal to 80·01 per cent. in the half century; for Scotland a growth equal to 53·92 per cent. in the same period; and for Ireland it shows a diminution of population equal to 74·17 per cent. in the same period.

It is not a subject to grieve over that the terribly congested condition which Ireland had reached in 1845 has been gradually relieved. The sufferings of Ireland have not

\* Soldiers and sailors abroad average 250,000.

been the offspring of Saxon tyranny, but of racial fertility beyond the capabilities of the soil, and oftentimes the specific for them, as in India and China, took the dread form of famine with its attendants, fever and dysentery. Happier methods of depletion are now followed—no other than the commonsense one of removing from a condition of semi-starvation in the best of times to lands where the absence of bread is unknown. So designated repressive enactments sternly administered have not put a single well-ordered Irish family to flight, as with the Jews from Russian territory in the present day, and more strikingly of their progenitors from Egyptian territory. The real depleters of the sister isle are citizens of Glasgow, esteemed by the Irish race as much as by their fellow-citizens, the late Sir George Burns, whose honours from the Queen we all heartily appreciated, his energetic successor in the baronetcy, Sir John Burns, Mr. Alexander Allan, and Mr. Thomas Henderson. The methods of these gentlemen have been prosaic in the extreme, simply proclaiming in posters throughout Ireland, to an unemployed, underfed, and semi-naked people, that beyond the Atlantic were vast unoccupied lands the Irish race were well fitted to cultivate, and were at liberty to enter into; and further, that their splendid service of ships could transport them there on easy terms. Ireland believed the promise and it has been saved. And let it redound to Ireland's honour that it is the blood-loyalty of her people, in spite of internal faction, that has secured her salvation. Those Irish millions, now absent from the Census returns of Great Britain, are settled and prosperous in America and in other quarters of the globe, largely through the help of friends who had gone before, and were mindful of those left struggling behind.

For Scotland there is the same comforting outlook whenever at any time the non-sustaining point is reached, and Scotland indeed has long recognized the benefits of emigration and is well represented already in all parts of the world. In the past ten years, 1881-91,

213,324 assisted emigrants of Scotch birth left the Clyde alone, and others would find outlet by other ports; but in addition, there must have been a large amount of unassisted emigration going on. Only amongst the Hebrideans is congestion seriously felt at the present time; but thanks in a very special degree to Sir James King and Sir Michael Connal, true friends of the Celt, the condition of the Lews, also arising from excessive fertility, was brought to the knowledge of the Secretary for Scotland, and through him to Government and Parliament. In co-operation with the Glasgow Colonization Committee the Government have entered on a State-aided Emigration Scheme for the Hebrides which, although as yet on a small scale, promises to develop into proportions adequate to relieve the congestion, and ultimately to make emigration from Scotland as from Ireland flow by its own momentum, and co-ordinately with the conditions of the mother country.

The encouragement for Lewsmen to settle in Canada, which may be extended to other congested districts, is exceedingly tempting. The Canadian Government give free allotments of land, 160 acres in extent, and the Colonization Board advances £120 to each family for conveyance and stocking, on condition that the amount is repaid by instalments beginning five years after the farm is entered on.

Carlyle was strong for transferring surplus labour to other lands, and Dr. Livingstone was pathetic on the same subject. Writing from the Nyassa Highlands the great traveller exclaims: "How many of our home poor are fighting hard to keep body and soul together! My heart yearns over our own poor when I see so much of God's fair earth unoccupied. Emigration ought not to be looked upon as the last and worst shift that a family can come to, but the performance of an imperative duty to our blood, our country, our religion, and mankind." It is a monstrous thing that children should be felt to be an encumbrance instead of an addition of strength as would be the case in lands not over-

populated. "It is time," says Dr. Livingstone, "to do something for the honest poor. Colonization from a country such as ours ought to be one of hope and not of despair." And if this can be pled from Central Africa, and with African land in his immediate view, how much more can be said for emigration to our own Canadian, Australian, and New Zealand Colonies.

To justify, if such were needed, observations on so wide a question, I give a table of recent subscriptions raised in Glasgow for relief of the congested Highlands and Islands. Other appeals may be looked for should the harvest of land or sea fail the Hebrideans:—

1881—(Lord Provost Ure), for Shetland,	- £2,096	0	1
1882—(Do.,), for Western Islands,	5,143	9	0
1883—(Do.,), Western Highlands and Islands,	- *7,209	15	1
1888—(Lord Provost King), for Lewis,	-	2,140	5 7
1888—(Do.,), Colonization Scheme,	1,300	0	0

NUMBER, NATIONALITY, AND DESTINATION OF PASSENGERS  
WHO LEFT THE CLYDE FOR PLACES OUT OF EUROPE  
DURING EACH OF THE YEARS 1885-90.

	1885.	1886.	1887.	1888.	1889.	1890.
Males, Married, -	1,696	2,334	2,762	2,526	1,786	1,518
Females, Married, -	3,049	4,163	5,604	5,564	3,989	3,570
Males, Single, -	10,649	15,754	20,597	19,620	11,319	10,897
Females, Single, -	3,128	4,344	5,754	6,315	4,746	4,429
Male Children, -	2,617	3,454	4,822	5,202	3,219	2,533
Female Children, -	2,288	3,073	4,482	4,611	2,964	2,491
Total, - -	23,427	33,122	44,021	43,838	28,023	25,438

\* In addition to this amount, and stimulated by Lord Provost Ure and his Committee, London contributed a further sum of about £7,000.

## NATIONALITY OF PASSENGERS.

	1885.	1886.	1887.	1888.	1889.	1890.
English, - -	329	228	225	31	115	120
Scotch, - -	15,398	18,634	27,337	28,777	19,848	15,489
Irish, - -	349	565	153	10	196	17
Foreigners, - -	7,351	13,695	16,306	15,020	7,864	9,812
Total, - -	23,427	33,122	44,021	43,838	28,023	25,438

## DESTINATION OF PASSENGERS.

United States, -	19,264	28,404	37,844	37,237	23,264	22,330
British N. America,	2,054	2,935	5,364	6,080	4,127	2,632
British W. Indies, -	93	57	63	98	77	84
Australasia, - -	1,986	1,690	721	392	294	280
Cen. and S. America,	—	—	14	—	244	—
All other Places, -	30	36	15	31	17	112
Total, - -	23,427	33,122	44,021	43,838	28,023	25,438

## NUMBER OF CABIN AND STEERAGE PASSENGERS.

Cabin, - - -	2,650	3,207	3,650	3,920	4,211	4,178
Steerage, - -	20,777	29,915	40,371	39,918	23,812	21,260
Total, - -	23,427	33,122	44,021	43,838	28,023	25,438

This Table is of national interest, and it is not devoid of local interest. It shows that the emigration wind blows for the most part in a westerly direction, and with varying force according as employment is good or bad at home. In the first place, the Table tells us that 197,869 persons were assisted to emigrate from the Clyde in the past ten years; that  $63\frac{1}{2}$  per cent. of these were Scotch by birth,  $35\frac{1}{2}$  per cent. were foreigners, chiefly Scandinavian doubtless, and 1 per cent. were of English and Irish birth.

Of the total emigrants,  $59\frac{1}{2}$  per cent. were unmarried adults, 45 per cent. being single men and  $14\frac{1}{2}$  per cent. single women;  $19\frac{1}{2}$  per cent. were married persons, 13 per cent. being wives and  $6\frac{1}{2}$  per cent. husbands—the

preponderance of wives being explained probably by the husbands having gone before; and 21 per cent. were children.

Of the whole, 11 per cent. were able to take cabin passage, and 89 per cent. went steerage.

Of the whole again, 75 per cent. crossed the Atlantic, and 5 per cent. went further afield—for the most part to Australia or New Zealand.

Of the emigrants to America, 85 per cent. settled in the United States, and 10 per cent. in Canada.

It is seen from the Table that the volume of emigration is not steady, being regulated very much by the condition of home employment. For example, work was plentiful in Scotland in the past two years, and the Clyde emigrants fell from 28,777, at which they stood in 1888, to 19,848 in the year 1889, and to 15,489 in 1890.

In connection with this deeply important subject of emigration I give a larger view of its results, particularly in Ireland and Scotland.



## THE UNIVERSITY.

THE following table gives the matriculated students in Session 1826-7, when Thomas Campbell was Rector, again in 1869-70, the last year of occupancy of the time honoured Halls in High Street, and in each of the twenty-one Sessions during which the University has enjoyed an enlarged sphere of usefulness on Gilmorehill.

## MATRICULATED STUDENTS.

YEAR.	Arts.	Theology.	Medicine.	Law.	Arts and Medi- cine.	Arts and Law.	Arts and Theo- logy.	Total.
1826-27	638	160	392	30	—	—	—	1,220
1869-70	734	83	336	129	—	—	—	1,282
1870-71	772	71	320	116	—	—	—	1,279
1871-72	817	72	349	111	—	—	—	1,349
1872-73	742	52	346	118	—	—	—	1,258
1873-74	805	48	342	138	—	—	—	1,333
1874-75	904	60	367	153	—	—	—	1,484
1875-76	942	74	415	170	—	—	—	1,601
1876-77	1,113	66	435	159	—	—	—	1,773
1877-78	1,243	60	492	223	—	—	—	2,018
1878-79	1,327	55	501	213	—	—	—	2,096
1879-80	1,380	73	539	193	21	17	12	2,235
1880-81	1,406	85	563	189	29	18	14	2,304
1881-82	1,331	100	624	211	25	9	20	2,320
1882-83	1,307	98	627	197	20	16	10	2,275
1883-84	1,183	99	633	242	28	8	19	2,212
1884-85	1,196	89	681	234	36	13	12	2,261
1885-86	1,158	101	694	239	36	6	7	2,241
1886-87	1,002	101	748	351	25	4	7	2,238
1887-88	1,074	90	774	194	38	7	11	2,188
1888-89	968	92	784	194	53	8	5	2,104
1889-90	1,046	93	800	188	36	8	9	2,180
1890-91	1,085	85	753	192	33	8	10	2,166

The University continues to merit and receive the offering of well-to-do alumni and other votaries for more fully equipping its teaching power, improving the conditions of student life, and perfecting its physical features. In the latter respect it has been bountifully dealt with in the last few years. As stated in my

last report the Bute and Randolph Halls were opened in 1884 and have proved an imposing adjunct to the University, and since then three additional benefactions have been received, (1) The Principal Gateway in University Avenue, (2) The spire of the Great Tower, and (3) The "Students' Union," followed by the Bazaar of happy memory for its endowment.

The first of these gifts in point of time was that of the late Mr. William Pearce, M.P., Member for the Govan Division of Lanarkshire, created a Baronet in 1887. Sir William became head of the Fairfield Shipbuilding and Engineering Company in succession to Mr Charles Randolph and Mr. John Elder, both benefactors of the University of an earlier date. Desiring to follow the example of his predecessors in business, and appreciating the architectural merits and historic sentiment attaching to the High Street elevation of the Old College Buildings, then about to be pulled down by the North British Railway Company, Sir William in 1885 offered to purchase the southmost half of this old front with its archway, and to re-erect it in University Avenue to form the Principal Gateway to the magnificent pile at Gilmorehill. The offer was gladly accepted, the translation was skilfully accomplished, and this ancient fragment now stands a venerated object linking the new with the old.

Its preservation was a happy thought, being brimful of reminiscence of the olden time. Originally built and in process of erection in the time both of Cromwell and of Charles II., the Protector contributed liberally towards its cost. In its old location thousands have passed in and out this old Archway and taught and studied to some purpose in the Fore Hall overhead, leaving the world better than they found it. One gruesome passage in its early record still echoes through the corridors of Scottish history and may be usefully recalled. In 1662 this Fore Hall was chosen as the meeting place of the Council or Parliament, presided over by Lord Middleton, and here in October of that year the Act was passed annulling

the Acts of the famous General Assembly of 1638 which had abolished Episcopacy, deposed the bishops, and established Presbytery as the national form of church worship and church government in Scotland. That great historic Assembly of 1638 had taken place in the nave of the Cathedral, and from this circumstance Glasgow and its University were probably chosen as an appropriate standpoint to overturn the Assembly's work and reinstate Episcopacy. The University authorities were helpless to prevent the choice. Charles, ill-advised, could not know how deeply the love of Presbytery had got rooted in the national heart. Be that as it may, it was in this fortuitously perpetuated Fore Hall of the Old College that the Act of stern reprisals was formulated, and through this old archway that the Royal Proclamation proceeded that within four brief weeks drove 400 Presbyterian ministers from their parishes. Its consequences were far-reaching and form glowing chapters in our history. To the honour of the University, Principal Gillespie submitted to deprivation of office rather than conform to the obnoxious edict. Looking at this episode it may be regarded as not a little singular that the preservation of this fine old fragment should have been the gift of an Englishman and Episcopalian. Sir William Pearce died at his London residence, 119 Piccadilly, on 18th December, 1888.

The second gift is that of the late Mr. Andrew Cunninghame, Deputy Town Clerk of Glasgow, who left by his will a sum for the completion of the University Tower, a still more conspicuous and no less desiderated object. From the ground to apex the Tower, with its spire as completed, measures 278 feet, and standing on the heights of Gilmorehill it commands a very wide radius and prospect. Mr. Cunninghame was born in Irvine in 1807, and lived a bachelor. He entered the service of the Corporation in 1835, and retired on 4th June, 1885. During this long period he most worthily filled the office of keeper of the register of sasines, long held by Mr. John M'Ure, first historian of Glasgow. During an *interregnum*

in the office of Town Clerk Principal, Mr. Cunninghame filled that office for the first three months of the year 1873. Besides his legacy for the Tower Mr. Cunninghame bequeathed to the University the sum of £2,000 to found Bursaries in connection with the Scots Law and Conveyancing Classes, and a further sum for a gold medal to be given as a prize in the Mathematical classes. He also made generous bequests for behoof of his native town of Irvine. Mr. Cunninghame died at his residence, 24 Blythswood Square, on 24th September, 1886.

The third gift was that of Mr. John M'Intyre, M.D., Odiham, Hampshire, a former student of the University, to supply to Glasgow a want in our Scottish University system in these latter days.\* It has long been regarded as a defect that small opportunity existed for a common or corporate life among the students such as exists in the Colleges of the great English Universities where students live together and associate with each other outside the class-rooms. A desire for something analogous has been growing up amongst Scottish students, and for his *alma mater* Dr. M'Intyre has bodied forth the idea in substantial stone and line. This gift of what is designated a "Union Building" contains a common room, library, debating hall, committee rooms, refectory, etc., but it did not include equipment and endowment. To make it therefore an ideal "Union" the active and gentle offices of the ladies were invited and readily given for a Bazaar. This great carnival came off on the 18th-21st December, 1889, within the Bute and Randolph Halls, and realised, after deduction of all expenses, the munificent sum of £12,250, or £2,250 more than was estimated to be necessary. Let there be put to Dr. M'Intyre's credit, not alone what he gave but what he stimulated as well, the generous rivalry inspired in leisured circles, possessed of much refined skill and latent energy, towards a deserving object. The display at Gilmorehill

\* In the first half of the 18th century many students lodged within the College.

during those dark December days has scarcely been equalled in this Bazaar pampered city.

I do not touch upon the changes introduced into the administration of the University's internal affairs through the institution of a University Court largely elected from without the professorial ranks. This must give to the University immensely added strength in these days of advancing ideas on and appreciation of higher education on the part of the educated public, by placing the University in touch with the people without running any risk of degeneration. The desire for extra-mural teaching facilities, which shall qualify for University degrees, seems spreading. Its recognition in the Faculties of Divinity and Medicine has been conceded, and the desire is strongly manifested that the privilege shall apply to Arts and Law as well; but whether it will command the respect attaching to training in the University itself must largely depend on the teaching power there maintained.

#### ST. MUNGO'S COLLEGE.

This College is largely the offspring of the Royal Infirmary, having originated for the purpose of utilizing its invaluable store of clinical teaching and training in medical science. The Infirmary was founded by Royal Charter in 1791, and has undergone enlargement from time to time, and it has now undoubtedly become one of the largest hospitals in the kingdom. Down to 1870, when the University was removed from east to west of the city there had subsisted a close and most beneficial connection between the University and the Infirmary. The students who attended the classes of the College for their theoretical instruction attended the wards of the Infirmary for practical and clinical instruction and demonstrations, but in consequence of the removal of the College westwards, and the opening in close proximity to it of the Western Infirmary in 1874, the Royal's usefulness as a training school became seriously impaired. In this way the eighty years connection which had so benefi-



ally subsisted between the two Institutions came practically to an end. The Infirmary had ceased to be a Medical School.

To remedy this state of matters, the managers of the Royal Infirmary in 1875 obtained a Supplementary Charter, by which they were empowered "to afford facilities and accommodation to individual teachers for instructing students in medicine, surgery, and the collateral sciences usually comprehended in a medical education, in addition to encouraging the clinical instruction of students." Acting on this, the managers appointed lecturers, and opened a medical school in 1876, under the name of the Royal Infirmary School of Medicine. Funds having been collected from private citizens for the purpose, a building suitable for the Medical School was erected near the Hospital, and was completed in 1882; and in it ample class room, anatomical, physiological, and chemical laboratories and appliances for these were provided for some hundreds of students. The school so founded and equipped did not, however, entirely realize the expectations of the managers, the want of success being mainly due (1) to the distance of the school from Gilmorehill, and (2) to the fact that only four classes of the course required for graduation in Glasgow University could be taken within its walls. The managers wished, therefore, the school to be united to the University, to become an integral part of it, so that the instruction received from its teachers should fully qualify for graduation in Glasgow University, and with this view they introduced into Parliament a Bill for constituting the Medical School of the Infirmary, under the changed name of "St. Mungo's College," a College of the University of Glasgow. Being, however, satisfied with the affiliation clause of the Scottish Universities Bill of 1889, and believing the object they had in view could be attained through it, the promoters of St. Mungo's College withdrew their own Bill, and incorporated themselves by special license of the Board of Trade, with the approval of Dover House, as St. Mungo's College. The objects for which the College is established are declared by the Deed of

Constitution to be "the institution and maintenance in Glasgow of classes for higher education; the absorption and continuance as a part of St. Mungo's College of the Glasgow Royal Infirmary Medical School; the teaching and instruction of students in Science, Literature, Art, Law, and Divinity, and learning of every description by lectures and otherwise; the establishment and maintenance of Laboratories, Museums, and Libraries; and the advancement and encouragement of these objects or some of them, by the giving of Prizes and the creation of Exhibitions, Scholarships, and Fellowships."

As the first instalment of this Scheme, the Governors, with the cordial co-operation of the Managers of the Royal Infirmary, have instituted a Faculty of Medicine calculated to meet the modern curriculum, and to utilize to the fullest the Infirmary's grand clinique of nearly 600 beds. They have also instituted a Faculty of Law. During the two winter and two summer sessions which the College has existed the Medical Classes have met with considerable success, the average number of students in attendance being over 90.

#### QUEEN MARGARET COLLEGE.

The progress made at this seat of learning for gentlewomen has fully satisfied the expectations of its promoters, and there need be no longer question that it is meeting a want in Glasgow and the West of Scotland generally in carrying on the education of young ladies who have reached the highest school standards to still higher studies in the Arts and Sciences. The last six years work may be generalized by the following figures:—

The attendances at all the classes in 1885-6 were 260; in 1886-7, 261; in 1887-8, 242; in 1888-9, 240; in 1889-90, 203; and in 1890-1, 194.

It must not be supposed that reduced numbers means diminishing practical results. On the contrary, it simply accentuates the fact that the teaching is thoroughly solid and earnest. Mere dilettante entrants, of which there were



many at the start, unprepared to do hard work have been dropping off, but this must be regarded as a strengthening process to the College.

Last session saw the important and significant addition to the College of a School of Medicine for Women. In August 1889, by request of some ladies of the city, the College Council resolved to organize such a school, with staff of lecturers, in which instruction on the same lines as in the University should be given. A curriculum similar to that of the University was arranged, a laboratory for anatomy was added, and complete equipment for the various classes was supplied; and here again Mrs. John Elder, to whom Queen Margaret College is so lastingly indebted, made all arrangements easy for the Council. Terms have also been made with the Royal Infirmary managers for providing clinical study and practice on an ample scale, and 110 beds have been reserved for the exclusive instruction of women students, and the Maternity Hospital and the Sick Children's Hospital are also open to them for bedside work. In last session, therefore, for the first time in Scotland, instruction in both Arts and Medicine has been made available for women in the same College.

The endowment fund of the College has now reached the gratifying sum of £18,000. If only the Muirhead Bequest could be worked along with Queen Margaret College the scientific teaching of women would be enormously strengthened.

#### QUEEN VICTORIA AT THE COLLEGE.

The most stirring event in the history of the College was the visit of Her Majesty Queen Victoria on 24th August, 1888. The dovescots of the College were charmingly fluttered by so gracious an interest taken in their work by the highest lady in the land. But the ladies must here be allowed to speak for themselves.

The royal carriage having been drawn up in front of the College, Lord Lothian, who had been seated in the second carriage, advanced, and presented Mrs. Campbell of Tullichewan, the vice-president of the committee. Mrs.

Campbell, making a deep obeisance, said—" May it please your Majesty to graciously accept this address from the Council and Students of Queen Margaret College. We beg to tender our grateful thanks for the great honour your Majesty has paid us to-day." Her Majesty graciously accepted the address which was in the following terms:—

"TO HER MOST GRACIOUS MAJESTY THE QUEEN.

" May it please your Majesty,

" We, the Council of Queen Margaret College, desire, on behalf of ourselves and the lecturers and students of the College, to offer to your Majesty the expression of our deep gratitude for the great honour you have done the College by visiting it. We feel that your Majesty has thereby not only conferred distinction on this College, but has stamped the work which is being done for the higher education of women throughout the kingdom with your gracious approval, and that this recognition of our aims and labours not only rewards our efforts, but stimulates us to further exertion in endeavouring to develop and perfect our undertaking.

" Queen Margaret College, the first, and as yet the only College for women which exists in Scotland, is intended to place within the reach of women a course of higher instruction similar to that offered to the students in the Universities, and to give training such as is found at Girton, Newnham, Holloway, and other women's Colleges in England. It originated in an Association for the Higher Education of Women, formed in Glasgow in 1877, and was incorporated in 1883 as a College, which was named after Queen Margaret of Scotland, the earliest patroness of learning and culture in this kingdom.

" Her Royal Highness the Princess Louise, Marchioness of Lorne, then graciously consented to continue to the College the honour she had conferred on the association by holding the office of president, and we desire gratefully to acknowledge the interest and kindness which Her Royal Highness has always shown us. In 1884 Mrs. John Elder presented to the College the handsome building and fine grounds it now occupies, thereby adding greatly to its prosperity and usefulness, and proving herself a true benefactress to woman's education.

" The lecturers in this College are the Professors in the University, their assistants, and other graduates; the average number of students attending the College classes is 250; and the department for the classes conducted by correspondence has an average of 450.

" To the hopes we would express for the future of Queen Margaret College we desire to add a thankful recognition of the great value of your Majesty's most welcome visit in giving an impetus to our work

and an incentive to perseverance in our steadfast purpose that the College shall always be worthy of your Majesty's most gracious favour, and of the continued interest of our Royal President, the Princess Louise.

"Signed on behalf of the Council, and sealed with the seal of the College, this twenty-fourth day of August, 1888 years.

"JESSIE CAMPBELL, *Vice-President*.

"JANET A. GALLOWAY, *Hon. Secretary*."

The address was enclosed in a case of blue velvet and old gold, the College colours, with the arms of the College on the top in silver gilt, the monogram of the Queen being placed above, and that of the College below. The clasp of the case was the College badge, designed by Sir Noel Paton, from the arms of Queen Margaret. Mrs. Campbell also presented a copy of the College Calendar to the Queen.

The Calendar was bound in terra-cotta velvet, with the College badge in silver embedded in the cover. Her Majesty graciously received the address, which was beautifully illuminated, and, after glancing with apparent interest at the emblematic ornamentation of the case, she handed to Mrs. Campbell the following reply :—

"I receive with much pleasure your loyal and dutiful address. It is a source of great gratification to me to hear of the success of Queen Margaret College in which my beloved daughter, the Princess Louise, takes so great interest. Every movement which tends to raise the position of women, and to extend their sphere of usefulness, has my warm approval. I trust that the College will long continue to be prosperous."

Her Majesty conversed for a few minutes with Mrs. Campbell. Her daughter, the Princess Louise, she said, greatly regretted that she was unable at this time to visit the College of which she is the patron. Lord Lothian then successively presented Mrs. Elder, the donor of the building; Miss Galloway, the honorary secretary of the College; and Miss M'Arthur, the honorary secretary of the Correspondence Classes Association. Mrs. Elder handed to the Queen a bouquet of choice orchids, which Her Majesty was pleased to accept. The interesting ceremony was thus brought to a close, and the Queen, bowing and smiling to

the assembled spectators, drove off amid cheering and waving of handkerchiefs.

One perhaps need not draw on the imagination in saying that the deft hand of Dr. A. B. M'Grigor, the sincere encourager of the higher education of women and of Queen Margaret College in particular, can be detected in every line of the above address. To the regret of the whole community Dr. M'Grigor was removed from our midst on 22nd March, 1891, while still in the prime of life, and when the citizens had been looking forward to his taking some leisure from his burden of business, and giving more of his time and great gifts to those more public objects which in his busy days he took interest in. Dr. M'Grigor's public spirit served the Corporation and the citizens well on many occasions, and his memory will be long cherished in the public circles of a grateful community.

"Queen Margaret College has applied to the Court for affiliation to the Glasgow University." So ran a recent press paragraph. Such an eventuality we have been looking forward to, for purposes ripen fast in Queen Margaret College. Nevertheless, there is bound to be sweet reasonableness in whatever advances the ladies make, and if a suggestion from without could possibly reach the University Court in their secluded cloisters we should say let them surrender graciously sooner rather than later. The ladies have set themselves the task of achieving great things, and elsewhere they have shown how easily it can be done. It may be they have no serious intent to push matters very far and will content themselves with one or two test triumphs; but, in any case, having been admitted to the precincts of the University and shown themselves so entirely worthy of the privilege, they ought now, perhaps, to have the doors thrown freely open.

## THE GLASGOW AND WEST OF SCOTLAND TECHNICAL COLLEGE.

This Educational Endowment Scheme was approved by Her Majesty on 26th November, 1886, and embraces Anderson's College, the Young Chair of Technical Chemistry, the College of Science and Arts, Allan Glen's Institution, and the Atkinson Institution. Administration is vested in 30 governors, 16 appointed for limited periods by the Town Council, University, School Board, City Endowments Board, Hutchesons' Trust, Merchants' House, Trades' House, Physicians and Surgeons, Procurators, Philosophical Society, and Engineers and Shipbuilders, and 14 hold office for life. Complete and systematic courses of instruction for day and evening students, qualifying for the chief industrial pursuits of the district, are given in the College, and distinctions to be gained in London are worked for. £300 of the Atkinson Funds is also devoted annually to bursaries, and £150 more is available from other sources for the same object.

The grant of £1,500 by the Town Council from the Customs and Excise duties gives much-needed relief to the governors, who have only been able to make ends meet through rigid economy, but it does no more than serve for immediate wants. The rapid increase of the evening classes brings them face to face with the problem of how to increase and improve the accommodation. But such difficulties have only to be made distinctly known to be removed out of the way.

## ALLAN GLEN'S SCHOOL.

This school is educationally a distinct part of the Technical College, and continues under the general scheme to discharge its former *rôle* of a day technical school for boys up to sixteen years of age. There are upwards of 700 pupils in the school this session, four-fifths in the technical department, receiving, in addition to a general education, elementary instruction in the more important branches of science and art, supplemented by laboratory teaching and workshop practice in the use of tools.

Under the scheme 100 boys receive free education, and 40 receive in addition a bursary of £5 yearly for the last three years. There are also three bursaries of £25 each for three years for boys leaving the school who desire to proceed to the Technical College or University.

Two years ago a wing costing £8,000 was built, but so great is the demand for technical education that the extended accommodation is already taxed.

In the day department instruction is given of a University standard in the subjects enumerated below, attendance upon which is recognized by the Universities of Glasgow and Edinburgh as qualifying *pro tanto* for their science degrees. The following Table shows the enrolments in the day classes since the inauguration of the College:—

DAY CLASSES.	1887-88.	1888-89.	1889-90.	1890-91.
Mathematics, - - -	58	51	57	67
Natural Philosophy, - -	30	52	50	84
„ „ Laboratory, -	2	3	4	10
Chemistry, - - -	61	43	45	53
„ „ Laboratory, -	53	51	49	49
Drawing, - - -	45	39	39	55
Applied Mechanics, - -	6	5	—	15
Mechanical Engineering, -	—	—	9	4
Engineering Workshop, -	14	13	23	30
Electrical Engineering, -	29	20	20	31
Civil Engineering, - -	23	9	8	8
Surveying, - - -	13	21	14	10
Technical Chemistry, - -	2	5	10	5
„ „ Laboratory, -	13	9	9	9
Metallurgy, - - -	8	—	10	9
„ „ Laboratory, -	7	9	6	12
Mineralogy, - - -	3	—	5	5
Agriculture, - - -	—	—	8	—
Total Enrolments, -	367	330	366	456
Number of Students, -	168	153	162	173

The classes in the evening department are intended



mainly for artizans and others engaged in daily work. The following are the enrolments:—

EVENING CLASSES.	1887-88.	1888-89	1889-90.	1890-91.
Mathematics, - - -	432	493	415	454
Theoretical Mechanics, -	124	126	138	142
Experimental Physics, -	—	82	85	71
Sound, Light, and Heat, -	28	22	17	39
Magnetism and Electricity,	177	129	204	268
Electric Lighting, - -	49	53	113	156
Telegraphy and Telephony,	10	12	22	16
Mechanics and Steam, -	345	335	378	421
Mechanical Engineering, -	40	42	30	35
Machine Construction and				
Drawing, - - -	238	247	405	443
Building Construction, -	48	51	71	85
Naval Architecture, - -	34	23	32	32
Mining and Mine Surveying,	43	31	34	43
Mineralogy, - - -	12	7	4	12
Metallurgy, - - -	35	43	34	48
„ Laboratory, -	26	30	23	32
Inorganic Chemistry, - -	203	231	254	218
„ „ Laboratory,	166	111	122	101
Organic Chemistry, - -	32	22	37	39
„ „ Laboratory,	19	8	19	11
Technical „ „	6	—	—	11
Bleaching, Dyeing, Printing,	43	13	—	—
Photography, - - -	—	—	25	15
Agriculture, - - -	86	103	76	52
Agricultural Chemistry, -	16	81	41	31
Agricultural Entomology, -	—	—	21	4
Agricultural Botany, - -	—	—	—	9
Botany, - - -	123	136	128	173
Geology, - - -	94	68	59	66
Biology, - - -	—	—	20	—
Physiology and Hygiene, -	13	84	54	43
Sanitation, - - -	—	—	—	27
Plumbing, - - -	—	126	129	127
Phonography (Pitman's), -	129	125	173	197
„ (Script), -	—	—	—	46
Theory of Music, - -	58	52	48	50
Art of Vocal Music, - -	74	54	54	41
Total Enrolments -	2,703	2,940	3,265	3,558
Number of Students, -	1,771	2,045	2,379	2,612



The evening students also are encouraged to follow systematic courses of study for the certificate of the College, and there can be no question that a great future is before the Glasgow and West of Scotland Technical College.

The immense strides being taken in America and on the Continent of Europe in the higher departments of manufactures, and the wide-spread introduction of a technical training of youth, makes it absolutely necessary to do no less here, if our pre-eminence is to be maintained, or if we are ever to continue to compete on equal terms with other countries where wages may be lower than in our own.

#### CITY EDUCATIONAL ENDOWMENTS.

I give Table on page 285, which shows the application of the funds of this board. One-sixth of the income was formerly allocated for payment of fees and books to a large number of free scholars, but only books are now paid for, and the sum saved is spent provisionally on evening class bursaries. From the other five-sixths of the income a grant of £1,400 is given to the Technical College, and the remainder is expended on school bursaries, technical and higher education, and university bursaries.

#### GLASGOW GENERAL EDUCATIONAL ENDOWMENTS.

I also give Table on page 285 of the application of this board's funds. The net income is £2,550, one-third of which used to be allocated to free scholars, but the abolition of fees set the money free. The entire sum is now expended on the same objects as the City Endowments Funds.

Ideas have matured very fast of late years, and public legislation has upset many of the best laid schemes. The Endowment Boards have had special experience of this; but the money remains with them, and the intentions of the testators will not fail of accomplishment.

## GLASGOW SCHOOL BOARD.

THIS important administrative body proceeds with the educational superstructure in commendable manner. The foundations of the work were well laid by the first Board, and there has been small occasion to cavil at, still less to unsettle, any of the fundamental principles so wisely thought out at the beginning. The Board has been fortunate in its successive chairmen—Mr. Whitelaw, Sir Michael Connal, and Sir John Neilson Cuthbertson—all gentlemen accustomed to take a broad grasp of affairs. School Board functions are of national origin, but it is fitting that I exhibit the results of the work done within our own borders. The Board gives very full publicity to its proceedings in reports most ably prepared, which renders it the less necessary to dwell on any part of the work of this truly economic department. Economists have sometimes scented extravagance in the number of handsome and finely equipped school buildings erected. It certainly has required courage on the part of members to incur so heavy a bill of cost, but the primary function of the Board is educative, and in no branch of their work have they been more successful than in bringing about entire approval to the expenditure on school buildings. As a rule, these buildings will remain little impaired for a century. The earliest erected seventeen years ago are still new. By and bye it may be reasonable to ask the Government to extend the time within which the capital cost shall be redeemed. Fifty years will soon pass, and the buildings will remain.

I give a pretty full view of the Board's work in the past six years in the following series of Tables extracted from the accounts and reports, and have to acknowledge valued assistance courteously given by the Treasurer, Mr. Macwhannell.

## NUMBER OF CHILDREN ON SCHOOL ROLL.

CLASSIFICATION OF SCHOOLS.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	Increase in 10 years	Decrease in 10 years
Public(Board)Schools including High	37,263	42,140	48,785	53,402	55,162	59,403	61,593	62,722	64,306	65,986	28,723	—
Roman Catholic	—	—	—	—	—	—	—	—	—	—	—	—
Schools,	13,864	14,527	14,873	14,824	14,735	14,789	14,681	15,354	15,488	16,170	2,306	—
-	19,680	17,357	13,949	12,477	12,388	7,526	6,942	6,167	6,439	5,739	—	13,941
All other,	—	—	—	—	—	—	—	—	—	—	—	—
	70,807	74,024	77,607	80,703	82,285	81,718	83,216	84,243	86,233	87,895	31,029	13,941

Net Increase in ten years, 17,088.

## NUMBER OF CHILDREN IN ATTENDANCE.

Public(Board)Schools including High	31,821	36,334	42,204	46,097	48,068	50,197	52,890	54,360	55,728	57,572	25,751	—
Roman Catholic	—	—	—	—	—	—	—	—	—	—	—	—
Schools,	10,481	10,671	11,053	10,859	11,355	11,371	11,130	11,728	11,888	12,148	1,667	—
-	17,364	15,462	12,630	11,343	11,462	6,695	6,219	5,583	5,887	5,293	—	12,071
All others,	—	—	—	—	—	—	—	—	—	—	—	—
	59,666	62,467	65,887	68,299	70,885	68,263	70,239	71,671	73,503	75,013	27,418	12,071

Net Increase in ten years, 15,347.

## ABSTRACT OF BOARD'S DEALINGS WITH DEFAULTING PARENTS AND CHILDREN.

	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Warnings to Parents or Guardians,	7,227	5,036	6,425	7,280	7,046	7,184	6,953	6,633	6,393	4,648
Summoned before Board, -	2,133	2,016	1,941	2,205	2,102	1,995	2,351	2,177	2,620	2,803
Prosecuted before Sheriff, -	109	68	63	110	73	62	119	71	99	130

## ANNUAL COST PER SCHOLAR IN AVERAGE ATTENDANCE.

YEAR.	From Fees etc.	From Government Grants.	From School Fund.	Total Cost per Scholar.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1881	0 17 10	0 17 11	0 8 5	2 4 2
1882	0 16 9	0 18 2	0 7 0	2 1 11
1883	0 16 6	0 18 4	0 6 6	2 1 4
1884	0 16 5	0 18 4	0 7 4	2 2 1
1885	0 16 7	0 18 9	0 6 0	2 1 4
1886	0 16 11	0 19 3	0 6 9	2 2 11
1887	0 17 0	1 0 2	0 5 6	2 2 8
1888	0 16 0	1 0 5	0 6 11	2 3 4
1889	0 17 9	1 0 10	0 5 8	2 4 3
1890	0 17 3	0 19 8	0 6 5	2 3 4

## SUMMARY OF NUMBERS STUDYING AND PASSED IN SPECIFIC SUBJECTS DURING LAST SIX YEARS.

	1885.		1886.		1887.		1888.		1889.		1890.	
	Number Studying.	Number Passed.	Number Studying.	Number Passed.	Number Studying.	Number Passed.	Number Studying.	Number Passed.	Number Studying.	Number Passed.	Number Studying.	Number Passed.
Mathematics,	523	246	477	245	599	279	651	396	914	569	1,294	797
English Literature,	7,047	4,981	6,451	4,688	6,483	4,504						
Latin, -	1,071	459	814	459	751	345	754	306	676	301	776	405
Greek, -	44	22	31	16	51	22	38	26	78	42	56	32
French, -	1,254	503	1,108	567	1,246	554	1,762	920	1,875	1,120	2,451	1,481
German, -	98	58	175	97	184	113	262	176	294	167	303	184
Mechanics, -	—	—	—	—	—	—	13	—	19	—	—	—
Chemistry, -	346	205	271	249	218	201	259	198	283	243	305	266
Physiology, -	1,232	821	1,409	1,064	1,606	1,199	2,266	1,702	2,157	1,735	1,975	1,603
Light and Heat, -	72	56	87	59	—	—	60	27	39	29	9	8
Magnetism and Electricity, -	363	106	205	170	438	300	738	510	805	537	803	577
Physical Geography, -	3,171	2,122	2,850	1,942	3,439	2,431	4,375	2,862	4,283	2,980	3,506	2,606
Domestic Economy, -	3,957	2,794	3,446	2,634	3,043	2,284	2,521	1,999	2,041	1,360	1,260	1,011
Botany, -	2	2	4	3	—	—	30	24	37	28	8	8
Totals, -	19,180	12,375	17,328	12,193	18,058	12,232	13,729	9,146	13,501	9,111	12,746	8,978

## ANNUAL INCOME AND MONEY BORROWED FOR BUILDINGS.

YEAR	FEEs.	Government Grants.	Rates raised.	Money borrowed for Buildings.	Receipts from Books sold to children.	Other Receipts.	Total Income and borrowings for Year.
1881	£23,065	£26,954	£43,862	£15,000	£487	£1,058	£110,426
1882	24,902	25,541	44,393	31,000	562	637	127,035
1883	28,804	26,892	45,219	53,500	612	393	155,420
1884	34,046	37,528	51,470	82,613	603	* 10,329	216,589
1885	36,066	36,593	50,770	82,785	700	934	207,848
1886	37,838	48,572	61,402	78,735	808	1,195	228,550
1887	40,558	47,525	61,207	76,000	1,175	783	227,248
1888	41,932	49,615	65,571	29,100	1,375	453	188,046
1889	42,774	56,459	75,618	20,000	1,551	* 24,603	221,005
1890	27,037	† 69,961	77,207	34,550	1,426	982	211,163
	£337,022	£425,640	£576,719	£503,283	£9,299	£41,367	£1,893,330

\* In these two sums are included £34,000 received for prices of Property sold in 1884 and 1889.

† This figure includes for first time grant in relief of School Fees.

## ANNUAL EXPENDITURE SINCE 1881.

YEAR.	Election Expenses.	Salaries of Officers and other Administrative and Office Expenses.	Salaries of Teachers.	Books, Apparatus, Prizes, etc., for Schools.	Rents, Repairs, Rates, Insurance, Furniture, etc., for Schools.	Expenditure on account of High School.	Buildings and Sites.	Loans Repaid and Interest on Loans.	Total Expenditure for year.
1881	—	£8,020	£48,032	£1,353	£10,091	£977	£12,139	£22,161	£102,773
1882	£2,280	7,939	49,034	2,275	10,243	451	23,655	22,742	118,619
1883	—	9,174	54,826	2,329	12,677	694	57,716	24,646	162,062
1884	—	9,843	64,912	3,031	14,068	387	98,373	27,807	218,421
1885	2,216	9,704	71,830	3,294	15,408	601	67,158	32,588	202,799
1886	—	9,039	78,021	5,259	15,678	446	74,270	37,976	220,689
1887	—	*16,137	83,852	4,847	17,221	306	55,683	40,945	218,991
1888	394	10,352	89,945	4,549	17,299	363	39,555	45,008	207,465
1889	—	9,852	89,306	4,546	16,880	265	36,499	45,723	203,071
1890	—	9,308	90,414	4,573	17,808	334	36,016	46,471	204,924
	£4,890	£99,368	£720,172	£36,056	£147,373	£4824	£501,064	£346,067	£1,859,814

\* £6,273 of this sum is price of Board Offices.



**GLASGOW HIGH SCHOOL.**  
(UNDER PATRONAGE OF THE TOWN COUNCIL AND MANAGEMENT OF SCHOOL BOARD.)  
**PUPILS STUDYING IN EACH SUBJECT.**

SUBJECTS, &c.	1885-86.		1886-87.		1887-88.		1888-89.		1889-90.	
	Average Number on Roll.	Average Number in Attendance	Average Number on Roll.	Average Number in Attendance	Average Number on Roll.	Average Number in Attendance	Average Number on Roll.	Average Number in Attendance	Average Number on Roll.	Average Number in Attendance
Latin, -	465	430	482	447	457	419	441	406	417	383
Greek, -	143	133	136	127	134	124	131	122	108	99
French, -	298	278	332	311	627	576	628	572	632	576
German, -	118	110	142	133	256	251	251	237	291	266
Italian, -	—	—	—	—	1	1	—	—	2	2
Spanish, -	—	—	—	—	1	1	6	5	5	4
English, -	671	613	678	619	713	657	701	633	718	644
Mathematics, -	302	278	346	319	372	343	397	364	379	348
Arithmetic, -	588	527	585	535	633	575	634	570	661	596
Writing, -	539	500	504	470	526	486	498	459	538	496
Book-keeping, -	62	58	75	69	96	87	111	102	122	110
Drawing, -	353	331	364	341	506	482	517	498	553	524
Science, -	256	231	277	253	411	374	432	393	426	388
Fencing, Drill, and Gymnastics, -	172	162	181	175	186	176	170	163	188	182
Singing and Theory of Music, -	146	133	132	122	192	161	174	158	182	163
Phonography, -	43	39	45	42	123	112	120	110	142	126
Total No. of Scholars en- rolled during Session,	786	798	798	798	834	834	821	821	838	838
No. of Masters, -	22	22	22	22	26	26	28	28	28	28
No. of Mistresses, -	—	—	—	—	1	1	—	—	—	—

## INCOME AND EXPENDITURE.

YEAR.	INCOME.				EXPENDITURE.			
	From Corporation.	From School Fees, etc.	From Rates.	Total Income.	Salaries and Retiring Allowances of Teachers.	Books, Stationery, Printing, Prizes, Examination Expenses, etc.	Rent, Repairs, Taxes, Cleaning, Fuel, Light, Furnishings, etc.	Total Expenditure.
1881	£570	£6,027	£977	£7,574	£5,961	£378	£1,918	£7,257
1882	570	6,204	451	7,225	6,563	353	531	7,447
1883	570	6,234	694	7,498	6,085	430	843	7,358
1884	570	6,243	387	7,200	6,229	497	489	7,215
1885	570	6,396	602	7,568	6,506	503	679	7,688
1886	570	6,608	446	7,624	6,515	485	554	7,554
1887	570	6,752	306	7,628	6,773	347	534	7,654
1888*	570	7,572	2,625	10,767	7,198	440	1,647	8,285
1889	570	7,278	2,495	10,343	6,936	414	637	7,987
1890	570	7,690	2,532	10,792	7,303	567	664	8,534
	£5,700	£67,004	£11,515	£84,219	£66,069	£4,414	£6,496	£76,979

\* In this year a sum of £10,005 was borrowed for enlargement of School. + £336 19s. 7d. included in this sum was expended on alterations to School Buildings. + £10,005 2s. 5d. was spent on enlargement of School Buildings.

## GOVAN SCHOOL BOARD.

TABLE I.—SUMMARY OF CHILDREN OF SCHOOL AGE ON ROLL, AVERAGE ATTENDANCE, DEFAULTING CASES, AND COST OF EACH SCHOLAR DURING THE LAST SIX YEARS.

Year Ending July.	No. of children of School Age as per School Census.	Average Number of Scholars on Roll.	Number in Average Attendance.	Number of Defaulting Cases.		Fees per Scholar.	Grant per Scholar.	Cost per Scholar from Rates.	Total Cost per Scholar.
				Summoned before Board.	Prosecuted before Sheriff.				
1885	28,547	14,629	11,518	885	35	£0 15 10½	£0 18 7	£0 2 6¾	£1 17 7¾
1886	—	16,059	13,101	1,352	63	0 18 3¼	0 18 4	0 3 8¼	2 1 5
1887	—	17,488	14,346	971	103	0 18 5¼	0 18 10½	0 4 9½	2 2 8¾
1888	29,557	17,507	14,165	967	48	0 19 7¼	0 19 9¼	0 4 3	2 4 11½
1889	—	17,915	14,168	864	76	0 18 0½	1 0 3¼	0 4 9¼	2 4 9
1890	—	18,600	15,090	658	87	0 16 9	1 0 3½	0 6 9¼	2 3 8½

TABLE II.—SUMMARY OF NUMBER PASSED IN SPECIFIC SUBJECTS DURING THE LAST SIX YEARS.

SUBJECTS.	1885.						1887.			1888.			1889.			1890.		
Mathematics,	-	-	-	-	-	-	86	111	156	188	156	188	156	188	156	188	156	188
English Literature,	-	-	-	-	-	-	1,253	374	25	276	374	25	276	374	25	276	374	25
Latin, -	-	-	-	-	-	-	380	691	17	18	380	691	17	18	380	691	17	18
Greek, -	-	-	-	-	-	-	29	119	877	956	29	119	877	956	29	119	877	956
French,	-	-	-	-	-	-	695	127	176	230	695	127	176	230	695	127	176	230
German,	-	-	-	-	-	-	32	95	158	74	32	95	158	74	32	95	158	74
Animal Physiology,	-	-	-	-	-	-	—	—	2	466	—	—	2	466	—	—	2	466
Mechanics, -	-	-	-	-	-	-	—	172	190	69	—	172	190	69	—	172	190	69
Physical Geography,	-	-	-	-	-	-	—	49	—	—	—	49	—	—	—	49	—	—
Magnetism and Electricity,	-	-	-	-	-	-	—	—	5	—	—	—	5	—	—	—	—	—
Chemistry, -	-	-	-	-	-	-	1,203	1,383	1,312	1,504	1,203	1,383	1,312	1,504	1,203	1,383	1,312	1,504
Domestic Economy,	-	-	-	-	-	-	520	664	676	686	520	664	676	686	520	664	676	686
Cookery,	-	-	-	-	-	-	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL.	-	-	-	-	-	-	4,443	3,683	3,003	4,467	4,443	3,683	3,003	4,467	4,443	3,683	3,003	4,467

TABLE III.—ANNUAL INCOME AND MONEY BORROWED FOR BUILDINGS  
IN LAST SIX YEARS.

Year Ending 15th May.	Fees.	Government Grants.	Rates.	Money Borrowed.	Books Sold to Children.	Other Receipts.	Total for Year.
	£	£	£	£	£	£	£
1885	9,136	11,185	12,500	18,500	899	630	52,850
1886	12,269	12,757	14,000	35,100	1,016	1,496	76,638
1887	13,408	12,930	14,500	15,468	1,156	1,869	59,331
1888	13,804	13,712	14,500	3,300	940	2,053	48,309
1889	13,930	14,470	16,000	—	1,053	1,880	47,333
1890	9,590	20,156	16,000	17,300	703	2,282	66,031

TABLE IV.—ANNUAL EXPENDITURE IN LAST SIX YEARS.

Year Ending 15th May.	Election Ex- penses.	Salaries of Officers of Board and other adminis- trative and Office Expenses.	Salaries of Teachers.	Books, Appara- tus, Prizes etc., for Schools.	Rents, Repairs, Rates, In- surance, Furniture etc., for Schools.	Buildings and Sites.	Loans repaid and Interest on Loans.	Total for Year.
	£	£	£	£	£	£	£	£
1885	581	2,444	17,996	1,512	3,809	19,738	6,964	53,044
1886	—	3,260	21,516	1,913	5,526	31,855	8,444	72,514
1887	—	3,107	23,603	2,426	6,089	16,812	9,569	61,606
1888	530	3,436	24,082	2,466	6,933	5,100	9,898	52,445
1889	—	3,486	24,100	2,591	6,483	—	9,199	45,859
1890	—	3,260	24,762	2,433	8,346	4,136	9,193	52,130

I give these Tables of the Govan Parish School Board, because its work will from and after 1st November be in part conducted within City bounds. The Extension of Boundaries Act does not alter the School Board and Parliamentary divisions as at present existing.

## HUTCHESONS' HOSPITAL.

YEAR.	Gross Revenue.	EXPENDITURE.				Net Revenue.	ALLOCATION.	
		Interest on Loans.	Repairs, Taxes, etc.	Management, etc.	Total		For Pensions.	For Education.
	£	£	£	£	£	£	£	£
1885	16,401	3,406	398	1,144	4,948	11,453	6,872	4,581
1886	17,114	2,265	394	993	3,652	13,462	8,077	5,385
1887	16,629	2,214	514	1,081	3,809	12,820	7,692	5,128
1888	16,669	2,224	660	1,228	4,112	12,557	7,534	5,023
1889	16,929	2,315	563	1,151	4,029	12,900	7,740	5,160
1890	17,582	2,539	798	1,148	4,485	13,097	7,858	5,239

The net Revenue is allocated thus : 3/5ths for Pensions and 2/5ths for Education.

## APPLICATION OF SURPLUS REVENUE.

## I.—IN PENSIONS AND PRECEPTS.

YEAR.	Number of Men.	Disbursed.	Number of Women.	Disbursed.	Funeral Expenses.	Total Pensions.
1885	82	£695	779	£6,421	£89	£7,205
1886	81	796	736	6,754	86	7,636
1887	90	919	730	6,710	74	7,703
1888	95	905	727	6,417	118	7,440
1889	105	958	742	6,496	85	7,539
1890	109	1,021	750	6,523	107	7,651

## II.—ON EDUCATION.

## UNDER THE HUTCHESON EDUCATIONAL TRUST.

YEAR.	Educated in Hutchesons' Hospital Schools.		Expenses of Administration.	Expended on Schools beyond Fees.	Expended : Bursaries, Scholarships, Subsidies, etc., in terms of Scheme.	Surplus.	Deficiency	Total.
	Number of Boys.	Number of Girls.						
			£	£	£	£	£	£
1886	961	609	714	2,643	1,203	1,141	—	5,701
1887	806	567	661	3,278	1,611	—	70	5,480
1888	781	534	570	3,077	1,647	83	—	5,377
1889	763	577	571	3,069	2,014	—	110	5,644
1890	730	577	544	3,022	1,928	113	—	5,607

## THE GLASGOW CITY EDUCATIONAL ENDOWMENTS BOARD.

YEAR.	Capital.	Revenue.	EXPENDITURE.				Surplus to Capital including Cash in Bank.	TOTAL.
			Expenses of Administration.	Payments in respect of Vested Interests.	Expenses on Property.	Special Payments Scholarships, Bursaries, etc.		
	£	£	£	£	£	£	£	£
1886	135,874	4,830	637	58	397	1,319	2,419	4,830
1887	152,529	16,258	689	58	985	2,708	1,818	6,258
1888	155,321	17,000	536	58	600	3,831	1,975	7,000
1889	158,361	16,921	540	59	847	4,090	1,385	6,921
1890	159,681	16,909	566	59	709	4,196	1,379	6,909

## THE GLASGOW GENERAL EDUCATIONAL ENDOWMENTS BOARD.

YEAR.	Capital.	Revenue.	Expenses of Administration.	Expenses on Property.	Special Payments, Scholarships, Bursaries, etc.	Surplus to Capital including Cash in Bank.	TOTAL.
1886	£71,646	£2,596	£405	£383	£814	£994	£2,596
1887	72,346	12,847	432	415	1,127	873	2,847
1888	72,946	13,271	356	353	1,748	814	3,271
1889	74,046	13,277	328	283	1,802	864	3,277
1890	75,804	13,380	332	294	1,425	1,329	3,380

The Hutchesons' Educational Trust has a net income of about £5060. It maintains two grammar schools—one for boys and the other for girls. Two hundred scholars are entered on the foundation, the children of persons who have been in business in Glasgow, and are in reduced circumstances. The schools are equipped for secondary education, and are open to the public on payment of moderate fees. The balance of the funds is expended on school bursaries, higher education bursaries for girls, and university bursaries. Grants to the Technical College and Haldane's Academy for art teaching are also given.

See remarks on City and General Endowments, page 273.

# ABSTRACT OF THE REVENUE, EXPENDITURE, AND INCORPORATIONS

	1885.		1886.		1887.	
	Revenue.	Expenditure.	Revenue.	Expenditure.	Revenue.	Expenditure.
	£	£	£	£	£	£
The Trades' House, -	4,985	4,210	4,555	4,666	4,399	4,356
The Incorporation of						
Hammermen, -	1,152	1,014	1,423	1,061	1,230	1,086
Tailors, -	2,889	2,671	2,732	2,899	2,881	3,399
Cordiners, -	1,155	683	859	851	752	838
Maltmen, -	2,740	2,276	2,506	2,340	2,569	2,344
Weavers, -	1,074	830	1,759	810	1,023	872
Bakers, -	2,420	2,142	1,133	1,166	845	1,009
Skinners, -	1,459	889	1,231	826	1,246	1,046
Wrights, -	942	871	1,595	942	879	873
Coopers, -	938	712	797	701	778	717
Fleshers, -	1,961	1,145	1,326	1,159	1,206	1,208
Masons, -	599	397	477	419	484	459
Gardeners, -	213	178	239	191	228	219
Barbers, -	504	361	419	370	449	466
Dyers, -	442	102	99	96	101	96
	23,473	18,481	21,150	18,497	19,070	18,988

This house is to all intents and purposes a great charitable institution for relieving distress amongst members and the families of members deceased. With its fourteen incorporations, each possessed of its own funds, independently of the house and of one another, the Trades' House is a veritable "House of many Mansions," seeking to brighten stricken lives, especially when they happen to be also face to face with poverty. The zeal of the Trades' House and its incorporations in the discovery and relief of distress within its pale is a notable feature of its corporate life. Remarkable and generous rivalry is promoted by the existence side by side of so many separate funds, and altogether there is an inspiring influence in the air round about the Trades' Hall. Great store is placed on election to



## STOCK ACCOUNTS OF THE TRADES' HOUSE AND OF GLASGOW.

1888.		1889.		1890.		Stock as at 17th September, 1890.
Revenue.	Expendi- ture.	Revenue.	Expendi- ture.	Revenue.	Expendi- ture.	
£	£	£	£	£	£	£
4,636	4,497	5,140	4,640	5,756	4,569	124,049
10,66	1,191	1,231	1,140	1,332	1,078	22,507
2,571	2,905	2,815	2,712	2,646	2,592	66,216
856	893	778	694	739	672	19,747
2,377	2,378	2,476	2,502	2,473	2,167	65,353
1,006	1,118	1,027	1,022	954	864	21,708
795	1,247	963	1,109	1,193	1,005	63,032
1,280	1,625	1,349	877	1,295	850	38,926
877	967	927	925	1,022	980	28,151
815	852	777	739	764	724	19,330
1,291	1,316	1,246	1,156	1,149	1,167	31,920
559	542	498	509	482	429	15,799
263	223	241	206	261	219	6,775
460	392	452	341	469	344	10,146
100	106	105	110	123	105	3,540
18,952	20,252	20,025	18,682	20,658	17,765	537,199

the Master Court of an incorporation. Once within the cherished circle the Deacon Convenership is not unattainable, and no Lord Provost can value the chief municipal seat more highly than he who is called to the dignity of Deacon Convener of the ancient Trades' House of Glasgow.

The Trades' House is nothing unless conservative—it honours antiquity, is proud of its ancient lineage, and is studious in seeing that only citizens enshrined on the Burgess Roll of the city shall be admitted to its ranks. Yet, notwithstanding apparent exclusiveness, no institution in the city is more truly popular. Only one payment is required of members on entry, and it carries with it a title to relief should poverty befall. The collective revenues available for relief amount to fully £20,000 per annum.

## MERCHANTS' HOUSE.

## INCOME.

	1886.	1887.	1888.	1889.	1890.
	£	£	£	£	£
Rents, - - - -	2,080	2,121	1,994	1,933	1,907
Feu-Duties and Ground Annuals, - - -	633	646	633	633	633
Interest on Loans, etc., -	2,518	2,681	2,764	2,786	2,744
Dividends on Stock, -	1,517	1,517	1,517	1,558	1,536
Proportion of Burgess Fines and Gold Box Fund,	36	42	25	31	49
Necropolis, - - -	2,370	2,184	1,161	945	974
Other Receipts, - - -	867	3,755	652	210	348
	10,021	12,946	8,746	8,096	8,291

## EXPENDITURE.

	1886.	1887.	1888.	1889.	1890.
	£	£	£	£	£
Pensions, Bursaries, etc., -	6,300	6,260	6,350	6,066	6,215
Necropolis, - - -	1,192	1,091	1,089	1,112	1,118
Salaries and Wages, -	340	340	340	340	381
Repairs, Taxes, etc., etc., -	—	964	429	535	649
Painting and Decorating the Hall, - - -	1,212	—	—	—	—
Miscellaneous Expenses, -	167	156	120	329	263
	9,211	8,811	8,328	8,382	8,626

As with the Trades' House this house is for the most part engaged in works of active benevolence. Its net revenue, amounting to £6,000, is paid in pensions to decayed members and to the widows and children of members who die poor, an experience far from uncommon in this nervous and speculative age. Until about a score of years ago burgess-ship was a *sine qua non* of membership, but this qualification has been dropped. Neither is it needful to be a merchant. Citizens should understand that the only payment exacted is ten guineas at entry, and that it is a contribution to a most deserving fund.

## THE BOYS' BRIGADE.

THE Boys' Brigade movement was originated in October, 1883, in the Woodside District Mission attached to the Free College Church in this city.

In this, as in most other districts, the necessity for order in the Sunday school, and the need of retaining the older boys in the classes, had long been subjects of anxiety. Mr. Wm. A. Smith, a worker in the Mission and an officer in the 1st Lanark Rifle Volunteers, proposed to try the effect of military drill and discipline as a novel but likely way of effecting an improvement on existing conditions.

It was believed that, by taking advantage of the liking and aptitude for drill inherent in nearly all boys, this taste might be used as the best means for securing a hold on them, and of providing stimulating and continuous interest. It was hoped that a banding together for mutual support and encouragement in well-doing might be established by the close association and inter-dependence of company membership. It was felt that the officers in charge would stand in a more intimate relation towards their boys both on Sunday and week-day, in class and at play.

The 1st Glasgow Company of the Boys' Brigade, composed of 30 boys between the ages of 12 and 17, together with three officers, was thus formed. The working details were on military lines; the aim and object were the attainment of mental, moral, and religious growth.

The beneficial results were ere long apparent among the local surroundings of the pioneer company, and the subsequent extension of the movement over the kingdom has produced experiences which have only emphasized the value of the principles and methods of the Brigade where these have been wisely and effectively carried out.

The Headquarters of the whole movement are at 68 Bath Street, Glasgow. There all its affairs are managed by an official secretary and staff, acting under the control of the

executive. The entire strength on the roll at 31st May, 1891, was—

	Companies.	Officers.	Boys.
In Scotland, - - - -	246	757	10,229
„ England, - - - -	147	460	6,026
„ Ireland, - - - -	25	84	1,004
	413	1,301	17,259

All these companies are attached, in terms of the constitution, to some Christian organization, and during the past eight years most of our Protestant denominations have had a share in building up the Brigade.

The movement is making rapid progress in the States, in Canada, and in other countries; but the companies are entirely under their own organization, while at the same time adopting the basis and methods of the Home Brigade.

In our own city, as in several important centres, the companies are formed into a battalion, whose internal affairs are managed by a Council. The strength of the Glasgow Battalion and the denominational classification of the companies, as at 31st May, 1891, were as under:—

	Companies.	Officers.	Boys.
The Church of Scotland, - -	30	95	1,495
„ Free Church of Scotland, -	27	85	1,235
„ United Presbyterian Church,	24	76	905
„ Scottish Episcopal „	5	15	181
„ Evangelical Union „	3	11	157
Udenominational Missions, -	1	—	—
The Congregational Church, -	1	3	23
„ Baptist „ -	1	3	53
„ Wesleyan „ -	1	4	92
„ Original Secession „ -	1	2	19
	94	294	4,160

The Glasgow Battalion Council have shown very marked spirit in bringing out all that is valuable in the movement,

not only by guiding the work of the Brigade on its religious side, but in caring for the social welfare of the boys. They have instituted ambulance classes, whose training has resulted in examples of prompt and competent aid rendered by the boys in several cases of accident, and they foster all wholesome sports and pastimes.

The power of the controlling force which operates upon the boys, producing obedience and tractability, has been repeatedly shown in the public appearances of the Glasgow Battalion at inspections, church parades, etc. Perhaps the most conspicuous event in its history was on the occasion of the opening of the International Exhibition by the Prince and Princess of Wales, when, at the invitation of the Magistrates, no fewer than 3,649 officers and boys acted as one of the guards of honour at the reception of their Royal Highnesses. The battalion was marched to and from Kelvingrove with orderly precision, and were classed as a large and integral part of the Force, numbering 10,452, "under arms" on that memorable occasion.

The bands of some of the companies also give musical performances in the public Parks.

There is now sufficient evidence to show that the work of the Boys' Brigade is calculated to produce a good effect on the manners and habits of the boys. Its work and progress is therefore of the greatest interest to the citizens and to all who recognize the value of amelioration in the upbringing of the youth of the city who are to become our working men in the near future. Brigade-training is splendidly calculated for developing both physical and moral backbone, and I make no apology for introducing the Boys' Brigade on the stage of City Statistics.



## OF REFUGE.

FOR THE YEAR 1890.

EXPENDITURE.	Reformatory.	INDUSTRIAL SCHOOLS.		DAY INDUSTRIAL SCHOOLS.	Expenses of
	E. Chapelton for Girls.	Mossbank for Boys.	Maryhill for Girls.	Green Street, Rottenrow, and Rose Street.	General Management.
Dieting, - - -	£177	£1,682	£1,205	£1,511	
Clothing and Outfits, -	107	1,175	818	.....	
Washing, Light & Fuel,	81	715	422	225	
Repairs, Rates, and Furnishings, - -	87	1,002	840	890	
Medical Attendance, -	21	119	67	64	
Education, - - -	62	498	233	714	
Garden and Grounds, -	20	.....	61	.....	
Internal Management, -	115	1,036	692	466	
Expenses of Boys' Home, .....	.....	233	.....	.....	
Sundries, - - -	42	434	162	136	
Expenses of General Management, - -	.....	.....	.....	.....	£1,181
	£712	£6,894	£4,500	£4,006	£1,181
Average number of Inmates, - - -	25	385	225	419	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Gross average Cost per head, <i>exclusive</i> of Expenses of Management,	28 9 11½	17 18 1½	20 0 1	9 12 4½	
Gross average Cost per head, <i>inclusive</i> of Expenses of Management,	34 8 1	19 1 1¾	21 6 4	11 16 9½	
Net average Cost per head, deducting proceeds of Industrial Work, - - -	25 7 8	16 5 3¼	18 8 10¾	9 10 5	



## THE POST-OFFICE.

THIS Public Department, with which the humblest, no less than the affluent, have intimate relations, is not subject to great fluctuations. The messenger of all, it is ever plodding along, and its progress suffers no check from year to year. The increase of population, the spread of cheap literature—largely conveyed by post—the introduction of new kinds of postal business, and a growing desire for the extension of existing facilities have all combined to swell the volume of work done.

A great amount of information has been most kindly placed at my disposal by Mr. H. E. Spenceley, Chief Clerk and acting Postmaster, from which the appended statistical tables have been brought down to date, and the following interesting notes, illustrative of the growth of postal work, compiled. The statistics relative to the Parcel Post are given for the first time, the numbers for 1884 being added for purposes of comparison.

In 1800 the Glasgow Post-Office consisted of a small house in St. Andrew Street. Three years later it migrated westward to the back land of a court in Trongate. From 1810 to 1840 it was to be found in Nelson Street, in what was indignantly called by a town councillor who flourished towards the end of the period, “a dingy huckster’s shop.” The year 1840 was marked by the introduction of penny postage, and thenceforth the Post-Office was lifted out of its “dinginess” and obscurity, and rapidly attained the position of a first-class public department. The same year witnessed the removal of the office to Glassford Street, where now stands the warehouse of Messrs. Wilson & Mathieson. In 1857 the latest removal was to George Square, and for a time one half of the frontage to the square sufficed. Increasing business compelled the erection of the present structure, the foundation stone of which was laid in October, 1876, by H.R.H. the Prince of Wales in presence of the Princess of Wales and a large gathering of aristocratic and citizen notabilities. The institution of the Parcel Post has

now taxed the capacity of the new building to its utmost limit, and an addition, on the site of the old Athenæum, is presently in course of erection, and is expected to be ready for occupation towards the end of 1893.

The conveyance of letters is the oldest, as it is, perhaps, the most important part of postal work. It will be seen from the tables that the increase in the number of letters dealt with in 1890, as compared with 1884, is no less than 800,000 per week, or a gross total of more than 41 millions per annum.

The Glasgow and Carlisle Sorting Tender Branch is so interesting as to merit special notice. It was inaugurated in January, 1859, by the establishment of a Post Office carriage in connection with the Scotch limited mail, three men being employed in the work. The carriage was small and stuffy, was lit by oil lamps, the hot oil being frequently jolted out of the lamps on the persons of the sorting clerks. At the present time three large and well-ventilated carriages, illuminated by gas, stored in reservoirs, run daily to and from England, a total force of twenty men being employed. Letters are stamped and sorted, mails are received and despatched *en route*, the train, meanwhile, flying at the rate of from 45 to 60 miles an hour. The performance of work on the journey southwards gives to the public the latest possible hour of posting for the English mail; while the work done on the home journey in stamping and sorting the mails received from England and the Continent, provides for the delivery of correspondence in the morning at the earliest possible moment. Over half a million letters, books, and newspaper are dealt with in a week in the sorting tender; while nearly nine thousand parcels are disposed of in the same period.

The large and important branch of Telegraphy was taken over by the Government in 1870, and since the introduction of the sixpenny rate in October, 1885, at the instance of Dr. Cameron, the work has swelled to double the former volume.

Money Orders, as a part of the regular work of the depart-

ment, was organized in 1837, previous to which it had existed for some time in a semi-official way. The total business done in the above year amounted to £3,626, barely equal to the transactions of a single day at the present time. It will be noticed that there is a falling off in the *number* of transactions in this department as between 1884 and 1890 ; while there is an increase in the gross *amount* to the extent of nearly £300,000. This is accounted for by the extraordinary success of the postal order system, now the chief medium for the transmission of small sums, the larger amounts, as before, being forwarded by means of money orders.

Postal Orders were introduced on the 1st January, 1881, and have proved immensely popular, the small commission charged, and the ease with which they can be cashed and passed from hand to hand, making them a most convenient medium of remittance. In 1890 the transactions were fully five and a half times those of 1884.

The Parcel Post was instituted in August, 1883, and has proved of great public advantage, particularly in the conveyance of small parcels to remote or rural districts. The volume of work done has doubled in the six years from 1884 to 1890, no less than fifty-six thousand parcels passing through the head office of Glasgow in a week.

The Returned Letter or Dead Letter Branch was established in July, 1873, the work having previously been done in Edinburgh. Some idea of the business done in this veritable "clearing house" may be derived from the following compressed statement for the year ended the 31st March, 1891.

The total number of letters, books, parcels, etc., dealt with in Glasgow numbered nearly 400,000. More than 18,000 of these, although addressed to Glasgow, were evidently intended for other towns, and were forwarded direct, without being returned to the senders. Nearly fifteen hundred letters were posted without addresses, and these contained value to the extent of £706. No less a sum than £15,390 was found in letters which could not be delivered, but after careful investigation almost the whole of the money was successfully returned to the senders.

## THE POST OFFICE.

## I.—POSTAL BRANCH FOR ONE WEEK.

YEAR.	Letters dealt with during One Week.	Letters delivered in Glasgow in One Week, including Suburbs, now for the most part incorporated with Glasgow for Postal purposes.	Letters Registered in One Week.	OFFICERS EMPLOYED.		Total Postal Officers.
				Inside.	Outside.	
1875	1,312,936	520,974	5,410	116	186	302
1879	1,562,162	605,353	8,945	183	213	396
1884	2,300,000	852,000	12,480	212	370	582
1890	3,110,872	1,140,961	17,163	308	537	845

## II.—PARCEL POST BRANCH FOR ONE WEEK.

YEAR.	Number Posted.	Number Delivered.	Number Transmitted.	Total Number dealt with.
1884	12,290	7,958	8,560	28,808
1890	25,048	17,412	14,041	56,501

## III.—TELEGRAPH BRANCH FOR ONE YEAR.

III.—TELEGRAPH BRANCH FOR ONE YEAR.								
YEAR.	Number of Tele-grams handed in at Glasgow during Year.	Number of Telegrams delivered in Glasgow during Year.	Number of Telegrams transmitted during Year.	Total Telegrams dealt with.	Telegraphy Officers Employed.			Total Officers.
					Inside.		Outside.	
					Male.	Female.		
1875	695,221	881,083	723,490	2,299,794	168	48	170	386
1879	797,473	819,282	952,218	2,568,973	161	53	198	412
1884	948,303	1,066,278	1,312,987	3,327,568	249	162	221	632
1890	1,798,870	2,320,262	2,735,854	6,854,986	321	212	352	885

## IV.—MONEY ORDER BRANCH IN ONE YEAR.

YEAR	ORDERS ISSUED.		ORDERS PAID.		TOTAL MONEY ORDERS DEALT WITH.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.
1875	251,534	£420,024	265,227	£571,173	516,761	£991,197
1879	236,917	403,245	311,127	539,308	548,044	942,553
1884	217,172	397,100	261,866	556,489	479,038	953,589
1890	212,124	530,642	247,037	671,433	459,161	1,202,075

## V.—POSTAL ORDERS.

YEAR.	ORDERS ISSUED.		ORDERS PAID.		TOTAL TRANSACTIONS.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.
1884	104,145	£48,441	169,295	£32,894	273,440	£81,335
1890	462,966	199,928	635,064	259,710	1,098,030	459,638

The maximum amount transmissible by Postal Order is £1.

## VI.—SAVINGS BANK DEPARTMENT.

YEAR.	DEPOSITS.		WITHDRAWALS.		TOTAL TRANSACTIONS.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.
1875	7,967	£15,982	3,577	£18,873	11,544	£34,855
1879	6,362	15,103	3,440	17,818	9,802	32,921
1884	16,609	29,525	6,660	29,563	23,269	59,088
1890	32,408	57,108	10,306	45,597	42,714	102,705

## INLAND REVENUE—GLASGOW DISTRICT.

THE Inland Revenue is not co-extensive as regards its several departments. For example, the collection of "stamps" and "taxes" extends from the parish of Arrochar to Moffat, and comprises the whole of the counties of Lanark and Dumbarton, and portions of the counties of Renfrew and Stirling, but the "excise" collection is limited to the city and its suburban population.

Table I., or the *Stamp Department*, is always variable. The stamp duties are dependent largely on the turn over of heritage, of which there has been little of late years. Indications of a better property market are, however, given in the fact that £86,000 was collected last year, as against £71,400 in the preceding year. *Inventory and Legacy* duties in like manner are dependent on the mortality amongst the wealthier classes.

Table II. gives the result of the collection of taxes imposed. The leading item—*Income and Property Tax*—is illustrated by Table V. The house duties show a heavy decline from £37,952 in 1890 to £26,129 in 1891, as a consequence of relief given last year by Mr. Goschen to the middle and lower middle class of householders.

Table III. is remarkable in the advance it exhibits on the revenue from *British Spirits*, equal to *eight* per cent. upon the preceding year, and to *ten* per cent. upon 1888 and 1889, whereas the increased impost laid on it last year was only *five* per cent. Mr. Goschen may find, is indeed astute enough to know, that price does not materially affect the consumption of whisky. Wages have been good in the past year, and the Chancellor of Exchequer in this and in many other respects has benefited. But after all it may be the case that the wives and children of working men, who will have their drop of the "national beverage," be the price what it may, are the real sufferers from, and contributors to a very large extent to this most prolific of imposts. One might suppose half a guinea per gallon would prove a prohibitive duty to impose, but it is not so.



## I.—STAMP DEPARTMENT.—GLASGOW DISTRICT.

Year Ending 31st March.	1886.		1887.		1888.		1889.		1890.		1891.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Stamp Duties, -	69,660	16 8	71,129	17 1	76,968	7 6	68,437	3 7	71,411	16 1	85,907	0 6½
Inventory Duties, -	139,349	5 0	114,291	5 0	142,278	3 0	107,855	3 0	166,825	15 0	125,931	15 0
Legacy Duties, -	56,739	17 11	78,558	4 10	82,359	11 4	67,544	6 2	81,575	8 1	80,960	0 5
	265,749	19 7	263,979	6 11	301,606	1 10	243,836	12 9	319,812	19 2	292,798	15 11½

## II.—TAX DEPARTMENT.—GLASGOW DISTRICT.

	1886.		1887.		1888.		1889.		1890.		1891.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Income Tax (variable rate), -	£465,915		£440,784		£376,075		£322,320		£349,537		£398,054	
House Duties (rates reduced 1891), -	36,685		36,813		36,954		37,619		37,952		26,129	
Land Tax (fixed rate), -	1,939		1,951		1,941		1,940		1,939		1,938	
Drainage Rent Charges, -	101		43		22		13		13		6	
	£504,640		£479,591		£414,992		£361,892		£389,441		£426,127	

## III.—EXCISE DEPARTMENT.—GLASGOW DISTRICT.

Year to 31st March.	1886.	1887.	1888.	1889.	1890.	1891.
Beer, - - -	£39,058	£38,027	£38,352	£37,909	£36,730	£34,612
Railways, - -	12,041	11,273	10,570	10,903	10,741	11,491
British Spirits, -	1,030,734	1,002,229	1,082,714	1,056,598	1,096,885	1,183,577
Foreign Spirits, -	40,868	48,892	51,387	54,452	55,665	58,774
Foreign Wines, -	11,476	10,480	10,348	10,808	12,092	12,398
Licenses, - -	64,759	64,420	64,829	64,063	64,095	63,391
Sundries, - -	2,869	327	361	324	481	636
Total, - -	£1,201,805	£1,175,648	£1,258,561	£1,235,057	£1,276,689	£1,373,879

## IV.—ABSTRACT OF THE ABOVE.

Stamps Department,	£265,749	£263,979	£301,606	£243,836	£319,812	£292,798
Taxes do.	504,640	479,591	414,992	361,892	389,441	426,127
Excise do.	1,201,805	1,175,648	1,258,561	1,235,057	1,276,689	1,373,879
Total Glas. Collection,	£1,972,194	£1,919,218	£1,975,159	£1,840,785	£1,985,942	£2,092,804

## V.—INCOME AND PROPERTY TAX COLLECTED IN GLASGOW.

YEAR.	Amount Collected.	Rate of Tax.	Produce of each Penny in the Pound.
1885-86	£408,241	8d. per £	£51,030
1886-87	387,599	8d. „	48,449
1887-88	329,610	7d. „	47,087
1888-89	283,904	6d. „	47,317
1889-90	298,915	6d. „	49,819
1890-91	342,707	6d. „	57,117

## CUSTOMS DUTIES COLLECTED ON THE CLYDE.

## I.—AT GLASGOW CUSTOM HOUSE.

YEAR.	Customs Duties.	British Spirits.	Miscellaneous Receipts.	Totals.
1885	£893,412	£188,735	£29,461	£1,111,608
1886	893,888	184,785	30,594	1,109,267
1887	833,992	178,059	32,504	1,044,555
1888	866,216	208,656	39,232	1,114,104
1889	922,431	237,683	43,655	1,203,769
1890	977,686	363,749	45,701	1,387,136

## II.—AT GREENOCK CUSTOM HOUSE.

1885	£24,895	£66,043	£3,777	£94,715
1886	18,170	62,025	3,374	83,569
1887	17,211	62,865	3,555	83,631
1888	15,635	66,886	4,887	87,408
1889	17,878	72,147	6,104	96,129
1890	18,107	76,875	4,595	99,577

## AT BOTH GLASGOW AND GREENOCK CUSTOM HOUSES.

1885	£918,307	£254,778	£33,238	£1,206,323
1886	912,058	246,810	33,968	1,192,836
1887	851,203	240,924	36,059	1,128,186
1888	881,851	275,542	44,119	1,201,512
1889	940,309	309,830	49,759	1,299,898
1890	995,793	440,624	50,296	1,486,713

## FACTORIES IN GLASGOW.

WITH the kind assistance of Mr. James Henderson, Chief Inspector of Factories for Scotland and the North of England, I am able to give a list of the Industries of Glasgow as carried on in "Factories," the term factory signifying an industrial work, where machinery driven by mechanic power is used.

## TEXTILE FACTORIES.

Cotton Spinning,	-	-	-	-	-	-	7
Cotton Weaving,	-	-	-	-	-	-	46
Worsted Spinning,	-	-	-	-	-	-	3
Weaving unions of Cotton and Wool,	-	-	-	-	-	-	4
Sewing Thread Factories,	-	-	-	-	-	-	4
Cotton Winding and Warping,	-	-	-	-	-	-	12
Cotton Doubling and Twisting,	-	-	-	-	-	-	6
Silk Winding and Throwing,	-	-	-	-	-	-	6
Silk Weaving,	-	-	-	-	-	-	4
Roperies,	-	-	-	-	-	-	3
Lace Factories,	-	-	-	-	-	-	2
Carpet „	-	-	-	-	-	-	8
Hair „	-	-	-	-	-	-	4
Jute „	-	-	-	-	-	-	3
Heddle Makers,	-	-	-	-	-	-	7
Waste (Wool and Cotton),	-	-	-	-	-	-	10

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## NON-TEXTILE FACTORIES IN GLASGOW AND GOVAN.

Calico Printing,	-	-	-	-	-	-	3
Bleaching and Dyeing,	-	-	-	-	-	-	26
Calendering and Finishing,	-	-	-	-	-	-	73
Boot and Shoe Making,	-	-	-	-	-	-	15
Underclothing and Mantles,	-	-	-	-	-	-	20
Handkerchief Hemming,	-	-	-	-	-	-	5
Shirt Making,	-	-	-	-	-	-	2

Tailors and Clothiers, - - - - -	14
Umbrella Makers, - - - - -	3
Waterproof Clothing Makers, - - - - -	3
Engine Packing (Asbestos), - - - - -	5
Blast Furnaces, - - - - -	2
Coppersmiths, - - - - -	10
Weighing Machine Makers, - - - - -	7
Steel Smelters, etc., - - - - -	4
Boiler Makers, - - - - -	19
Foundries, - - - - -	127
Makers of Machinery, - - - - -	129
Iron Ship Builders, - - - - -	12
Tin-plate Workers, - - - - -	3
Nail and Rivet Makers, - - - - -	9
Metal and Lead-pipe Manufacturers, - - - - -	11
Cutlers, - - - - -	5
Wire Workers, - - - - -	12
Electro-platers, - - - - -	8
File, Saw, and Tool Makers, - - - - -	13
Silversmiths and Jewellers, - - - - -	3
Gold Extractors, - - - - -	2
Brass Finishers, - - - - -	11
Button Makers (Bone), - - - - -	1
Smiths and Wrights, - - - - -	47
Tanners and Curriers, - - - - -	13
Leather Belt Makers, - - - - -	3
Soap Manufacturers, - - - - -	11
Lead (Red) „ - - - - -	1
Candle Makers, - - - - -	1
Paint, Colour, and Varnish Manufacturers, - - - - -	23
Oil and Oil Cake Manufacturers, - - - - -	22
Glass Manufacturers, - - - - -	11
Gas „ - - - - -	3
Chemical „ - - - - -	32
Bread and Biscuit Bakers, - - - - -	63
Breweries, - - - - -	9
Distilleries (Whisky), - - - - -	4

Margarine Makers, etc.,	-	-	-	-	-	3
Preserves (from fruit) Makers,	-	-	-	-	-	10
Aerated Water Manufacturers.	-	-	-	-	-	35
Pies, Sausages, etc.,	-	-	-	-	-	5
Flour and Grain Millers,	-	-	-	-	-	21
Stone and Marble Masons,	-	-	-	-	-	4
Picture Frame Makers,	-	-	-	-	-	51
Carpenters and Joiners,	-	-	-	-	-	29
Furniture Manufacturers,	-	-	-	-	-	37
Paper	„	-	-	-	-	2
Paper Stainers,	-	-	-	-	-	6
Cardboard Makers,	-	-	-	-	-	1
Paper Box	„	-	-	-	-	1
Stationery, -	-	-	-	-	-	3
Toy Makers (Children's),	-	-	-	-	-	2
Cork Manufacturers,	-	-	-	-	-	2
Sawmillers, -	-	-	-	-	-	59
Blackening Makers (Ironfounders),	-	-	-	-	-	7
Cement Makers, -	-	-	-	-	-	5
Potteries, -	-	-	-	-	-	20
Brick and Tile Makers,	-	-	-	-	-	26
Tobacco Pipe Makers (Clay),	-	-	-	-	-	13
Lime Burners, etc.,	-	-	-	-	-	4
Glass Cutters and Stainers,	-	-	-	-	-	10
Boat Builders,	-	-	-	-	-	5
Starch Manufacturers,	-	-	-	-	-	4
Letter Press Printers,	-	-	-	-	-	117
Lithographic	„	-	-	-	-	48
Engravers (Metal),	-	-	-	-	-	13
Bookbinders,	-	-	-	-	-	37
Box and Packing Case Makers,	-	-	-	-	-	21
Zinc Workers, etc.,	-	-	-	-	-	2
Coach and Van Builders,	-	-	-	-	-	9
Coopers,	-	-	-	-	-	9
Ivory and Bone Turners,	-	-	-	-	-	2
Musical Instrument Makers,	-	-	-	-	-	1
Washing Machine	„	-	-	-	-	4

Brush Makers,	-	-	-	-	-	-	4
Tobacco Manufacturers,	-	-	-	-	-	-	20
India Rubber and Gutta Percha Workers,	-	-	-	-	-	-	4
Wood-turners,	-	-	-	-	-	-	20
Electrical Engineers,	-	-	-	-	-	-	7
Grinders (Metal), Mineral and Spice,	-	-	-	-	-	-	17
Firewood Makers,	-	-	-	-	-	-	15
Iron Tube Makers,	-	-	-	-	-	-	3

There are numerous other trades, which do not permit of classification under the above headings.

No other city in the Kingdom presents such a variety of manufacturing industries. From the latest statistics it appears that the total number of establishments registered as factories in Glasgow is 1,877, of which 1,748 are non-textile and 129 textile factories. Textile factories are those in which yarn or cloth is manufactured either from cotton, wool, jute, silk, or such-like material. In 1884 the number of factories registered was 1278, and there has therefore been the extraordinary increase of 599 within a period of seven years. The introduction of gas engines largely explains the increase to the number of smaller factories, the use of mechanical power marking the distinction between a factory and workshop under the Factory and Workshops Act. There are no statistics available as to the number of workshops in Glasgow, but they are even more numerous than factories, and it is safe to say that they have been increasing within the last few years in quite as large a measure as the factories. The cotton manufacturers some years ago occupied a much more conspicuous place among our local industries than now, not that they have in themselves declined so much as that other industries—and especially our iron industries—have sprung into greater proportions by leaps and bounds.

The administration of the Factory Acts in Glasgow rests with a local staff consisting of one inspector and two junior inspectors. Glasgow is also the headquarters of the Superintending Inspector for Scotland and the North of England.



## COAL SUPPLY.

SCOTLAND and the North of England have become much dependent on their coal. Its extraction, carriage, and distribution generally give employment to a very large number of people, and every industry of the country and our gigantic commerce by sea is fostered, is indeed largely the creation of our coal supplies. The precious mineral is thus far obtainable in abundance at an easy price in comparison, for the present at least, with other countries of Europe. For domestic and local uses of heating and lighting we are wonderfully favoured by it, and so familiar an agent has it become to us that its true value does not strike us. As a prime mover to its giant child, the steam engine, coal stands quite unapproachable, and in this aspect of it, our industrial and commercial pre-eminence is probably bound up with our coal measures.

The following is the output of Coal in Great Britain since 1874, and in Scotland and Lanarkshire for the year 1890:—

## IN GREAT BRITAIN.

Annual average output in the ten					
years, 1874-1883, - - -				155,794,000 tons.	
Annual average output in the five					
years, 1884-1888, - - -				174,762,000	„
Year 1889, - - - - -				189,634,000	„
„ 1890, - - - - -				194,606,000	„

## IN SCOTLAND AND LANARKSHIRE.

YEAR.	Whole of Scotland.	Lanarkshire.		Total for Lanarkshire.
		Eastern District.	Western District.	
1890	Tons. 24,278,589	Tons. 7,669,956	Tons. 5,914,814	Tons. 13,584,770

COAL OUTPUT IN GREAT BRITAIN; ALSO IN SCOTLAND AND IN  
LANARKSHIRE.

This output becomes year by year strikingly large, and probably it is not a matter of which we, as a community dependent on coal for employment and comfort, can be boastful. It is an exhaustible substance of the earth, and that it can be worked out in districts we have much evidence in our immediate neighbourhood. Were coal a product responding to labour bestowed upon it, as with our food supplies, we might look on with complacency at our coal owners and great coal consumers using it freely. But we know it to be the product of pre-adamite epochs of time, and of processes within the earth's crust that we have no experimental knowledge of, and that, when consumed, it can be renewed only under conditions that must terminate the existence of the race. It seems reasonable to conjecture that this very precious substance belongs not to two or three generations only, nor to its few lucky possessors only, that it should be rushed out in hot haste. The gold it yields will prove a mockery when the coal is exhausted. Surely it ought to be adequately prized and used in moderation, that the generations following may have some share in it. Our progenitors made moderate use of it, and we are thankful; should not our gratitude take the practical form of example? Our industries and our commerce have undoubtedly been due to our enterprise, so called, in extracting our coal; but if its productiveness fail us within our own borders, and we and our children have to go far afield for supplies, what then? Shipbuilding deserted the Thames for the Clyde and the Tyne on account of these latter being in the midst of the coal and iron fields, and the same thing may happen to the Clyde when our fast diminishing supplies are worked out.

Economy seems possible in many directions, and on a great scale, without detriment—in our ocean-going steamers, and in our home manufactures—where much avoidable consumption of fuel goes on, from hasty and incomplete com-

bustion. The outer air has passed into it what ought to be consumed with advantage in the furnaces, and the atmosphere is clouded and seriously poisoned. Ought not foreigners to be left to develop their own mineral resources rather than have enormous supplies from us at a price below the cost of bringing their own to the surface? Ireland, too, has her own coal measures, and yet the shipment of coal to that country from Scotch ports continues on a huge scale. It does seem prudent that a look-out be kept ahead in this very important matter, if posterity of the near future is to be considered. Dean Stanley mentions that Dr. Arnold used to say not once, but often, "Woe be to that generation that is living in England when the coal-mines are exhausted, and the national debt not paid off."\*

The Water Commissioners, through their veteran con-vener, Bailie Wilson, have again been sounding a note of warning against wastefulness in the use of water, and have imposed checks to secure economy by legalizing certain fittings and disallowing others. If considered needful to moderate the use of water which the heavens renew to us unfailingly, it seems more needful still to consider if

\* (1) The very earliest Scotch coal charter known is given in Dr. Ebenezer Henderson's excellent "Annals of Dunfermline," and bears evidence that coal was valued six centuries ago. The Charter is dated in 1291, and runs :—

"To all who shall hear or see this Charter, William de Oberwill, owner of Pittencrieffe, wishes eternal salvation in the Lord. Be it known to you that I have granted, from my mere good pleasure and of my own free will, to the religious men, the Abbot and Convent of Dunfermline, a coal pit in the land of Pittencrieffe, wherever they may wish . . . in such a way that they may get from thence sufficiency of coal for their own use, *and may not presume to sell to others.* Given at Dunfermline on the Tuesday next before the Feast of St. Ambrose, Bishop and Confessor in the year of Grace 1291."

(2) In 1306, coal had no sooner come to be used in London by brewers and others than Edward I. was appealed to to put an end to the nuisance it caused, "the air being thereby infected with a noisome smell and a thick cloud, and endangering health."

some public check ought not to be put on any wasteful use of so extremely precious a substance as coal which, humanly speaking, is not being renewed.

The Corporation does right to conserve the coal in the Green, as it may soon have a value we wot not of at present. There is understood to be something like one and a half million tons in the various seams, but what is that amongst so many at present consumpt rate !

CAPITAL EMBARKED IN THE SCOTCH OIL WORKS AT  
APRIL, 1891.

COMPANY.	CAPITAL		Loans, Debentures, and Deposits.	Gross Cost of Mines, Works, and Plant.	Depreciation Written off.
	Authorised.	Paid Up.			
Broxburn, - -	£335,000	£299,750	—	£462,922	£234,803
Burntisland, -	170,000	144,950	£104,770	253,733	52,394
Clippens - -	368,000	257,235	140,000	431,583	89,456
Holmes, - -	100,000	40,000	—	54,503	6,468
Hermard, - -	350,000	265,750	23,810	276,904	—
Linlithgow, -	150,000	110,000	86,652	222,362	50,479
Oakbank, - -	90,000	67,500	17,686	85,430	17,454
Pumpherstoun, -	230,000	152,665	44,345	197,860	30,280
West Lothian,	75,000	74,898	22,200	103,646	7,755
Young's, - -	700,000	266,589	465,182	606,570	50,000
	£2,568,000	£1,679,337	£904,645	£2,695,513	£539,089

## OIL

## SUMMARY OF PRODUCTION OF OIL SHALE IN SCOTLAND

COUNTIES.	1885.		1886.	
	Tons.	Average price per Ton at the Mines.	Tons.	Average price per Ton at the Mines.
Edinburgh, - - - - -	564,332	5	570,523	5/
Linlithgow, - - - - -	898,724	5/	901,776	5/
Fife, - - - - -	156,880	5	141,703	5/
Renfrew, - - - - -	66,480	5/6	32,515	5/6
Renfrew, Ayr, and Lanark (West),	—	—	—	—
Lanark (East), - - - - -	38,122	5/	38,014	5/
Ayr, - - - - -	9,603	5/6	11,202	5/6
Ayr and Renfrew, - - - - -	—	—	—	—
Stirling, - - - - -	7,609	5/	3,411	5/
Total for Scotland, - - - - -	1,741,750		1,699,144	
England and Wales, - - - - -	28,663		29,359	
Total production of Oil Shale in the United Kingdom, - - -	1,770,413		1,728,503	

It is seen that the oil shale produced in this country is chiefly in the Lothians. The western districts are possessed of shales, but of too low commercial value to compete with the east. Attempts on a pretty large scale have been made in Renfrewshire at profitable production but without success, and it is probable that the west can have its opportunity only when the eastern shales and the

## SHALE.

AND THE UNITED KINGDOM FOR THE LAST SIX YEARS.

1887.		1888.		1889.		1890.	
Tons.	Average price per Ton at the Mines.	Tons.	Average price per Ton at the Mines.	Tons.	Average price per Ton at the Mines.	Tons.	Average price per Ton at the Mines.
582,947	5/	701,512		664,555		734,659	
690,817	5/	1,152,911		1,152,386		1,218,506	
72,309	5/	154,896		131,242		144,497	
—	—	—		—		—	
—	—	—		24,275		25,659	
17,394	5/	17,460		13,213		55,355	
—	—	—		—		—	
21,616	5/6	25,423		—		—	
5,237	5/	—		1,319		1,807	
1,390,320		2,052,202	5/	1,986,990	5/	2,180,483	5/6
21,058		24,302		27,870		31,767	
1,411,378		2,076,504		2,014,860		2,212,250	

petroleum wells of America and Russia show signs of exhaustion.

England and Wales make rather a poor show in the oil shales, and for the same reason, most probably, that the quality is poor in comparison with the rich shales of the East of Scotland. It is probable that posterity will be glad to utilize these poorer shales.

PRODUCTION, CONSUMPTION, EXPORTS AND STOCKS OF  
SCOTCH PIG-IRON FOR SIX YEARS.

	1885.	1886.	1887.	1888.	1889.	1890.
Production,      Tons,	1,003,562	935,801	932,240	1,027,774	998,928	798,833
Consumption—						
In Foundries,      „	152,597	123,186	128,912	137,805	185,896	346,782
In Malleable & Steel Works,      Tons,	243,022	299,509	346,822	450,844	576,389	419,613
Exports—						
Foreign,      -      „	*267,456	223,204	285,990	240,273	246,193	237,607
Coastwise,      -      „	*162,299	147,596	121,297	173,200	185,423	203,770
Railway to England,      -      „	14,859	9,950	4,218	9,259	13,620	12,956
Stocks—						
In Connal's Stores,      -      „	665,688	840,321	942,768	1,031,220	943,775	587,652
In Maker's Hands,      -      „	384,995	342,718	285,332	213,213	92,065	25,793
Number of Furnaces in Blast on 25th December,      -      -	91	75	85	77	88	6
Average number of Furnaces in Blast for the year,      -      -	83	80	84	84	66	—
Average price of mixed numbers, G.M.B. Warrants,	41/10	39/11	42/3	39/11	47/9	49/6
Highest Price of mixed numbers, G.M.B. Warrants,	42/10	43/3	46/4	42/	61/5	61/1
Lowest price of mixed numbers, G.M.B. Warrants,      -      -	41/1	38/4	39/5	38/5	41/3	44/7
*Shipped from Glas- gow, Foreign,      -	133,103	138,422	147,251	165,119	136,238	135,325
*Shipped from Glas- gow, Coastwise,      -	44,751	44,245	43,869	60,936	51,448	80,405



COMPARATIVE VALUE OF SCOTCH PIG IRON IN EACH OF  
THE LAST TEN YEARS.

MONTHS.	1881.	1882.	1883.	1884.	1885.
January, - - -	52/11	51/6	48/3	43/5	42/1
February, - - -	50/8	49/1	47/6	42/8	41/3
March, - - -	48/7	48/4	47/7	42/6	41/5
April, - - -	48/1	47/6	47/1	42/3	41/9
May, - - -	46/1	47/3	47/2	41/6	41/10
June, - - -	46/7	48/	47/	41/3	41/1
July, - - -	47/	50/4	47/6	41/4	41/1
August, - - -	46/3	50/5	47/1	41/6	41/4
September, - - -	49/1	50/4	46/4	41/7	42/10
October, - - -	51/4	51/	46/	41/11	42/1
November, - - -	50/9	49/7	44/5	43/5	42/5
December, - - -	52/2	49/1	44/2	42/6	42/5

MONTHS.	1886.	1887.	1888.	1889.	1890.
January, - - -	40/1	46/4	41/6	41/3	61/1
February, - - -	39/	44/1	39/5	42/	52/9
March, - - -	38/8	42/10	38/11	44/	50/9
April, - - -	38/8	41/4	38/10	44/6	46/5
May, - - -	38/4	41/4	37/10	43/7	44/8
June, - - -	38/10	42/2	37/10	42/9	44/7
July, - - -	38/11	42/1	38/5	44/5	45/8
August, - - -	39/4	42/6	39/11	46/3	48/8
September, - - -	39/9	41/10	42/	47/5	50/10
October, - - -	41/11	40/	41/1	54/8	51/4
November, - - -	42/	39/5	41/3	61/5	50/5
December, - - -	43/3	43/	41/9	60/4	46/9

Some results of the recent most obdurate strike of the furnacemen and consequent stoppage of the pig iron works during 1890 is illustrated in the foregoing tables. The production in that year fell from a million of tons made in 1889 to 798,000 tons, but consumers had abundant supplies to fall back upon in Connal's stores.

## THE SCOTCH STEEL TRADE.

THE following firms are engaged in the manufacture of Siemens' steel in the West of Scotland:—

Steel Company of Scotland.  
 David Colville and Sons.  
 William Beardmore & Coy.  
 Summerlee and Mossend Coy.  
 A. & J. Stewart and Clydesdale.  
 Clydebridge Steel Coy.  
 Lanarkshire Steel Coy.  
 Calderbank Steel Coy.

The last named firm is only just commencing operations.

The Lanarkshire Coy. make only angles and bars.

A. & J. Stewart and Clydesdale, the Clydebridge Coy., and the Calderbank Coy. make only plates or sheets.

The other firms make various products:—Angles, bars, plates, and other sectional steel.

Messrs. Beardmore and the Steel Coy. make forgings, and the latter Company steel castings.

The total make of Siemens' steel ingots and the number of furnaces in existence each year, are as follows—

SIEMENS' STEEL MADE IN SCOTLAND.

	1885.	1886.	1887.	1888.	1889.	1890.	1891. 6 months.
Number of Furnaces existing each year.	69	67	67	78	85	93	96
Total Weight of Ingots made, -	241,074	244,900	334,314	442,936	440,065	485,164	239,919

The ingots have been worked up into the finished form of plates and sectional steel, principally for structural purposes—ship and bridge building and boiler-making.

Besides the above firms, the Glengarnock Steel Coy. and the Glasgow Iron and Steel Coy. manufacture steel by what is known as the Basic Bessemer process. Their products have been largely exported in the form of blooms, billets, and slabs, which are ultimately made into wire, tinplate-bars, etc. In addition, large quantities of channels and angles have been produced by them for wagon-building and structural purposes. There are also now in this district several firms engaged in the production of steel forgings and castings, some from the Siemens' furnace, others using the crucible process, and some others using a modification of foundry cupola practice.

The production of steel castings has grown to be an important industry in this district since their use has been extended to shipbuilding and marine engineering. Castings subject to special tests have been largely used in the recent additions to the Royal Navy. Unfortunately in this case, as in so many others, keen competition for orders has succeeded in destroying the profitable character of the industry.

These remarks aptly describe the present condition of the large industry engaged in the production of plates, angles, etc., for shipbuilding and structural purposes. For many months past the demand for these products was very small, and the competition from the North of England was so close that prices fell away to an unremunerative level. A considerable improvement in demand has set in, and prices are somewhat better, although still much below the point at which a reasonable profit will accrue to the manufacturers.

WHEAT, FLOUR, AND OTHER FOOD SUPPLIES IMPORTED  
INTO GLASGOW IN THE LAST SIXTEEN YEARS.

By the esteemed kindness of Mr. John M'Dougall, Secretary of the Glasgow Corn Trade Association, I am able to give tables illustrative of the city's trade in bread stuffs for sixteen years past. It will be seen that the importations of wheat have, if anything, been declining, and that flour has been taking its place in a largely extended ratio. Local milling has, therefore, become a smaller industry than in former years, but that it is believed in still in some quarters may be judged of from the splendid "Regent Mills" recently erected by our much esteemed Ex-Lord Provost, Mr. John Ure and his sons, which are seen so conspicuous an object from the slopes of Gilmorehill.

The supplies of flour from America are enormous, having reached to nearly two millions of sacks of 280 lbs. in the year 1887. This is accounted for principally by Glasgow being an entrepot, as proved by the large shipments to Ireland and elsewhere, and to the contraction in home milling.

Prior to 1875 Germany, France, and Russia supplied Glasgow with large quantities of wheat and flour, but they have been gradually ousted or nearly so by the large volume of American breadstuffs received.

Indian, Californian, Chilian, Australian, and New Zealand wheats are seldom seen in our market. They go chiefly to England, Ireland, and Mediterranean ports—the quality being too ricy and not containing sufficient, or the proper, gluten to suit the Scotch taste or style of baking. But Glasgow is about the largest importer, if not the largest in the United Kingdom of the finest qualities of American patents and Hungarian flour, which contain a great deal of gluten and are the highest priced flour of any.

The consumption of flour in Glasgow and immediate neighbourhood was in 1890 equal to 23,262 sacks per week, 11,204 sacks being home grown and 12,058 sacks imported.

The average home growth of wheat in the United Kingdom is equal to 9 million quarters per annum, and the wheat imported averages 18 million quarters per annum.

## IMPORTS.

YEAR.	WHEAT.	FLOUR.	BARLEY.	OATS.	OATMEAL.	BEANS.	Muttar and Indian Pease.	PEASE.	MAIZE.
	Quarters.	Sacks.	Quarters.	Quarters.	Loads.	Quarters.	Quarters.	Quarters.	Quarters.
1875	785,494	641,434	184,602	100,806	61,583	114,827	—	44,816	365,546
1876	714,974	647,326	177,495	148,022	91,812	126,636	—	73,522	572,775
1877	503,398	833,028	180,210	139,979	74,997	175,510	—	47,764	524,843
1878	376,509	953,329	211,130	135,453	217,513	57,710	—	48,756	553,504
1879	565,501	1,494,665	179,655	84,437	184,167	86,746	—	92,214	410,086
1880	524,513	1,186,018	181,021	130,967	168,913	78,233	—	93,031	654,233
1881	483,891	1,392,021	206,124	98,554	93,382	75,789	—	81,276	681,116
1882	663,948	1,460,018	271,799	164,302	94,939	62,556	—	73,364	339,447
1883	475,939	1,706,006	316,891	200,936	113,158	136,137	—	53,394	709,377
1884	488,830	1,508,397	327,368	182,294	135,754	131,267	—	100,288	439,759
1885	609,407	1,768,429	295,633	177,010	134,146	131,926	5,570	69,530	531,676
1886	428,473	1,571,994	258,400	193,374	123,981	81,030	3,301	74,851	624,111
1887	526,890	1,843,229	272,439	169,974	81,606	60,732	11,351	103,018	492,993
1888	479,456	1,530,694	244,166	149,371	75,410	79,184	41,877	40,566	539,788
1889	501,297	1,668,100	267,977	167,888	83,312	115,298	9,022	35,637	847,736
1890	540,843	1,592,810	280,982	154,774	94,541	111,328	176	58,908	668,353

## EXPORTS.

YEAR.	WHEAT.	FLOUR.	BARLEY.	OATS.	OATMEAL.	BEANS.	Muttar and Indian Pease.	PEASE.	MAIZE.
	Quarters.	Sacks.	Quarters.	Quarters.	Loads.	Quarters.	Quarters.	Quarters.	Quarters.
1875	72,571	399,985	32,505	29,597	54,590	23,066	---	18,475	139,483
1876	56,513	374,366	30,991	24,472	65,786	31,807	---	19,016	122,516
1877	82,216	318,163	56,807	29,708	78,245	42,969	---	12,687	118,029
1878	67,991	357,013	50,278	32,069	91,589	30,414	---	18,066	158,363
1879	64,799	463,602	52,436	23,118	97,371	22,429	---	16,780	131,115
1880	84,158	538,254	41,136	41,449	117,258	26,494	---	30,534	209,642
1881	144,356	688,453	46,182	26,587	87,869	33,243	---	33,604	237,677
1882	176,452	789,660	80,459	32,433	87,039	26,996	---	35,639	160,812
1883	86,986	801,265	70,617	41,070	91,400	48,713	---	25,427	260,960
1884	91,853	880,226	73,708	34,497	106,534	36,895	---	30,753	137,669
1885	65,056	1,109,355	66,483	37,321	124,396	52,134	1,714	35,577	221,192
1886	105,851	1,092,158	68,502	41,018	114,501	33,816	7,369	34,990	285,972
1887	129,297	1,218,195	73,326	35,958	86,390	18,903	1,994	36,423	198,071
1888	107,512	1,012,266	79,209	46,083	78,569	27,589	6,076	18,766	250,571
1889	84,015	959,851	71,738	45,287	106,471	36,248	776	11,197	435,720
1890	69,880	945,546	62,209	35,093	105,157	35,013	116	19,474	265,734

The above Imports and Exports for the years named are made up to the 31st December of each year respectively. The Imports take in Ireland Coastwise Railways—Canada, America, Egypt, France, Mediterranean, Black Sea, and other Foreign Ports.

PRINCIPAL CONTRIBUTING COUNTRIES TO IMPORTS  
1875 TO 1890 INCLUSIVE.

WHEAT.

	Quarters.				
1875	- 785,000	-	America, about $5/8$ ths,	-	Russia, about $1/5$ th.
1876	- 714,000	-	" " $3/4$ ths,	-	" " $1/6$ th.
1877	- 503,000	-	" " $2/3$ rds,	-	" " $1/12$ th.
1878	- 376,000	-	" " $3/4$ ths,	-	" " $1/12$ th.
1879	- 565,000	-	" " $7/8$ ths,	-	" " <i>nil</i> .
1880	- 524,000	-	" nearly whole.	-	" " "
1881	- 483,000	-	" "	-	" —
1882	- 663,000	-	" about $5/6$ ths,	-	" " $1/10$ th.
1883	- 476,000	-	" " $9/12$ ths,	-	" " $1/12$ th.
1884	- 489,000	-	" nearly whole,	-	" —
1885	- 609,000	-	" " $4/5$ ths,	-	" " $1/10$ th.
1886	- 428,000	-	" " $4/5$ ths,	-	" " $1/15$ th.
1887	- 527,000	-	" nearly whole,	-	" —
1888	- 479,000	-	" half,	-	" " half.
1889	- 501,000	-	" "	-	" " $3/10$ ths.
1890	- 541,000	-	" about $4/5$ ths,	-	" " $1/5$ th.

FLOUR.

	Sacks 280 lbs.			Germany and Hungary	
1875	- 641,000	-	America, about half,		about $1/12$ th.
1876	- 647,000	-	" " "	"	" $1/7$ th.
1877	- 833,000	-	" " $1/4$ th,	"	" $1/3$ rd.
1878	- 953,000	-	" " half,	"	" $1/3$ rd.
1879	- 1,494,000	-	" " $5/7$ ths,	"	" $1/5$ th.
1880	- 1,186,000	-	" " $3/4$ ths,	"	" $1/7$ th.
1881	- 1,392,000	-	" " $4/5$ ths,	"	" $1/7$ th.
1882	- 1,460,000	-	" " $4/5$ ths,	"	" $1/6$ th.
1883	- 1,706,000	-	" " $5/6$ ths,	"	" $1/8$ th.
1884	- 1,508,000	-	" " $7/10$ ths,	"	" $1/8$ th.
1885	- 1,768,000	-	" " $4/5$ ths,	"	" $1/8$ th.
1886	- 1,572,000	-	" " $4/5$ ths,	"	" $1/9$ th.
1887	- 1,843,000	-	" " $9/10$ ths,	"	" $1/12$ th.
1888	- 1,539,000	-	" " $7/10$ ths,	"	" $1/6$ th.
1889	- 1,668,000	-	" " $3/4$ ths,	"	" $1/5$ th.
1890	- 1,593,000	-	" " $4/5$ ths,	"	" $1/8$ th.

France contributed of Flour, as follows :—in 1875,  $1/6$ th of whole importations ; in 1876,  $1/12$ th of whole ; and in 1877,  $1/6$ th of whole. Her contributions were insignificant in all the other years in the Table.



## THE SUGAR TRADE.

By the kindness of Messrs. William Connal & Co., I am enabled to preserve the continuity of the reports on the increasingly favourite article of sugar.

The refining industry in Greenock has been far from prosperous during the past seven years. The enormous expansion of the beetroot production on the Continent, under the stimulating influence of bounties, has had a generally unfavourable influence on the British refining trade. The bounty system enables *raw* beet to be sold at an artificially low value, and thereby to undersell cane sugar; it likewise enables the Continental refiner to undersell the British manufacturer, by giving a larger bounty on the *refined* article exported from the Continent than is given on the raw. The force of this statement is illustrated by the accompanying Tables, which show that the import of raw sugar to Greenock during 1890 was entirely beetroot, except 920 tons of Java sugar. Thus, raw beetroot has, for the present, driven cane sugar from our shores, while, on the other hand, the refining power of Greenock shows a gradual decrease, having diminished from 247,000 tons in 1888 to 221,000 tons in 1890, and the increasing consumption of the United Kingdom, which has not been less than 70,000 tons during the past two years, has been entirely met by the importation of foreign refined sugars.

With two brief exceptions, in 1885 and again in 1889, the value of sugar has remained at a very low level during the last six years. Previous to 1883 22s. was looked upon as a moderate price for good dry brown West India, while now 12s. 6d. to 13s. is its value; and beetroot sugar, which was then freely sold at 20s. to 22s., now brings 12s. to 13s. f.o.b. Hamburg basis 88 per cent. analysis.

The cheapness of sugar has helped to develop its consumption in many different ways. It has amongst others led to great expansion of the confectionery trade, and to an enormous development of jam boiling. Glasgow has enjoyed a fair share of the prosperity which has attended the cultivation of these branches of industry.

## RAW SUGAR IMPORTS, PRICES, ETC.

YEAR.	Stock, 1st January.	Imports of the Year.	Deliveries.	Prices of Good Dry Brown Sugar at 31st December.	No Duty.
1885	48,898	260,737	241,824	15/ c. 15/6	—
1886	66,334	206,412	235,764	11/	—
1887	35,657	246,148	238,570	16/ c. 16/3	—
1888	43,235	231,657	247,144	13/9 c. 14/	—
1889	23,498	262,034	235,432	11/6 c. 12/	—
1890	40,070	219,861	220,912	12/6 c. 13/	—
1891	36,193	—	—	—	—

## PRODUCTION OF BEETROOT SUGAR IN EUROPE.

	1885-86	1886-87	1887-88	1888-89	1889-90	1890-91
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
German Empire,	825,081	997,962	942,441	990,604	1,264,607	1,310,000
France, -	298,407	488,299	392,824	466,767	753,078	770,000
Austria-Hungary,	377,032	523,060	408,616	523,242	787,989	760,000
Russia & Poland,	537,860	480,000	441,342	537,000	465,000	530,000
Belgium, -	48,421	91,120	135,000	145,804	221,480	200,000
Holland and other Countries, -	37,500	50,000	95,330	101,040	135,813	125,000
	2,124,301	2,630,441	2,415,553	2,764,457	3,627,967	3,695,000

## BEETROOT SUGAR IMPORTED INTO CLYDE IN

1885, -	148,232 Tons.	1888, -	172,243 Tons.
1886, -	121,384 „	1889, -	218,205 „
1887, -	196,821 „	1890, -	218,941 „

## SUGAR IMPORTS INTO CLYDE DURING EACH OF THE LAST SIX YEARS.

YEAR.	B. P. West India.	Mauri- tius.	Brazil.	Cuba and Porto Rico.	Beetroot.	Java.	Sarinam and other Foreign.	Total.
1885	13,015	3,197	547	12,721	148,232	81,817	1,208	260,737
1886	2,786	4,967	—	—	121,384	77,003	272	206,412
1887	562	3,066	—	1,580	196,821	43,919	200	246,148
1888	753	3,067	6,107	6,394	172,243	41,757	1,336	231,657
1889	172	6,359	—	366	218,205	36,368	564	262,034
1890	—	—	—	—	218,941	920	—	219,861

## SMOKE POLLUTION.

REFERENCE has been made in the article on "Infantile Mortality" and "Diseases of the Respiratory Organs," pages 63 and 64, to the fatal consequences believed to be traceable to the prevalence of coal smoke in the air we breathe. That it lowers the vital properties in the atmosphere, and depresses the forces of the human body, needs no scientific expert to expound. The evidence from the mortality experience of other towns as much as in Glasgow seems most cogent that the ratios of smoke prevalence, and of mortality from the causes named, correspond. And most probably the effects are by no means confined to these particular causes of disease, nor may they be reckoned up from the mortality tables alone. A vastly greater number still are having their frames enfeebled for life, and even the most robust suffer from the deteriorating influences of a smoke-laden atmosphere. And in addition to the more vital question of health is the deterioration to property, to vegetable and animal life, to cleanliness and pleasurable living in the neighbourhood of dyspeptic steam boilers.

Did the alternative lie between harassment of our industries and staying the smoke plague, it would indeed be prudent to exercise caution in pressing for smoke abatement. But it was made exceedingly clear from the proceedings of the public meeting held in the City Chambers on 29th October, 1890, convened and presided over by Lord Provost Muir, and attended by a very large representative meeting of manufacturers and others interested in the subject, that no alternative arises. On the contrary, the meeting was unanimous in deploring the prevalence of smoke emission from the furnaces of industrial works, and in the opinion that it can and ought to be subdued, and not only without detriment, but with a practical saving to the users of steam power. The only question discussed was as to the *best* method or methods of effecting the proper combustion of fuel, and, as it was considered desirable to obtain and to

communicate to steam users reliable information on the point, an influential committee was appointed by the public meeting, consisting for the greater part of owners of public works, with powers to raise a voluntary fund, and to employ one or more experts to investigate the subject and make experiments with all due despatch. Ex-Lord Provost Ure, then Lord Dean of Guild, was appointed Chairman of this Committee, and Mr. Alexander Crum, of Thornliebank, Deputy-Chairman. A fortnight afterwards the Committee held a meeting, and appointed with large powers an Executive Committee, consisting of thoroughly practical gentlemen, to carry out the inquiry, which it was believed need not occupy more than one or, at the most, two years. The Executive is now grappling with the question on its merits: they have appointed a practical mechanical engineer, Mr. G. C. Thomson, who is testing one or more methods at public works belonging to members of the Committee, and in a few months' time valuable results may, I understand, be looked for. No more urgently vital subject can be conceived than the reduction in, and, if attainable, the suppression of, the discharge of coal smoke which hangs so dismally over us. The following are the names of the Executive Committee:—

The Hon. the Lord Provost.		A. K. M'Cosh, Gartsherrie.
Lord Dean of Guild Ure (Chairman).		James Neilson, Mossend.
Stephen Alley,	Glasgow.	Col. Carrick Buchanan, of Drumpellier, C.B.
Sir William Arrol,	"	Alex. Crum, Thornliebank (Deputy-Chairman).
Councillor Crawford,	"	Provost Rodger, Greenock.
Deacon-Convener Mason,	"	Walter Brock, Dumbarton.
David Richmond,	"	John Christie, Levenfield, Alexandria.
James Riley,	"	Alex. Wylie, of Cordale, Alexandria.
Robert Tatlock,	"	Robert Angus, Lugar.
J. S. Templeton,	"	Wm. J. A. Donald, Irvine.
Sir William Thomson,	"	Peter Sturrock, Kilmarnock.
W. Renny Watson,	"	
J. D. Young,	"	
W. J. Houldsworth, Coltness.		

## NATIONAL SECURITY SAVINGS BANK.

ONE of the best indexes to the moral and social condition of a town is its savings bank, and the Table, which I give below in few figures of the business done at our bank, is most gratifying testimony to the increasing store of frugal self-denial existing in our midst. The body politic of Glasgow it is clear possesses a strong back-bone to withstand a season of depression. In a susceptible community like ours, liable to wavering employment in one or other of its manifold industrial pursuits, it is an extremely satisfactory circumstance to find *five millions three hundred thousand pounds* at the credit of its working classes. This is a splendid insurance against hunger and pauperism, and it would be a most pleasant thing to contemplate were it more generally distributed. But it must still be said, looking on the fact that work and wages have been good and the necessities of life obtainable on easy terms, that the wonder is so few are saving and not that so many are depositors in the people's bank. It is only too true that a large proportion of our working people have not yet risen to the duty of providing against the evil day, but prefer to spend their earnings as fast as they can. The bank has had a powerful influence in putting people on the road to independence and hopefulness, and its benefits cannot fail to appeal to and leaven the mass of society.

Gratitude is due to many benevolent gentlemen, too numerous to mention, for devoting valuable time to the affairs of the bank, and it need hardly be stated that to Mr. William Meikle, who has so long been its official head, and to his staff, the directors, the depositors, and the entire city is indebted for excellent management and for creating an enthusiasm for thrifty habits inspiring to working people. As the bank welcomes deposits as low as one shilling, the inducement to bank savings, however small they may be, is most attractive.

The aggregate amount at the credit of depositors is £5,297,034 2s. 1d. It is secured to them by investments

with the Government and local Corporations, as follows:—  
Lodged with Government, £4,685,094 1s. od.; invested with  
Corporations and School Boards, £679,890 19s. 2d.; together,  
£5,364,985 os. 2d.

## VIEW OF PROGRESS SINCE COMMENCEMENT IN 1836.

YEAR.	Trans- actions.	Open Accounts.	Total Funds.	MEMORANDA.
1840	45,594	12,042	£154,690	1849. Bank commenced to open daily and to repay on demand.
1850	103,756	27,650	457,586	
1860	172,780	41,259	878,157	1866. Glassford Street Offices were built, costing £15,000.
1870	283,850	68,036	1,650,301	1871. City Branches were opened in thoroughfares N., S., E. and West.
1880	446,259	110,051	3,301,597	1883. Govan and Partick Branches opened in Suburbs.
1890	673,144	160,881	5,364,985	

This body of depositors, the average amount at their credit (£33 6s. 1d.), and the total sum at their credit is a long way ahead of any other bank in the kingdom.

This notice would not be complete without some reference to penny banks. Our esteemed citizens, Sir Michael Connal and Mr. James Stevenson, were the first to see in these institutions the germ of a great public good. As far back as 1850 they each instituted a bank themselves, and urged the directors of Glasgow Savings Bank to encourage the formation of penny banks throughout the city, and now there are 223 in active operation. The energies of 600 officials, chiefly Sabbath school teachers, are concentrated on the work. They have attracted 83,084 youthful depositors, who are receiving training in those habits of forethought and thrift which will serve them well in after life. Last year's aggregate amount of deposits was £74,062.



## THE CONSULAR CORPS.

THE consuls of foreign countries in Glasgow have formed themselves into a collective body with a president, two vice-presidents, and a secretary. This association serves only local and social purposes, but it is nevertheless a useful organization.

In these days of extraordinary development in travel and business the foreign consuls become more and more useful to Scotchmen going abroad and to foreigners coming to Scotland; and in mercantile matters their services are simply invaluable, being required to unravel difficulties of a great many kinds arising out of the differences in the laws, customs, and practices of this country from those obtaining in the States represented by them. The consuls of the United States, France, and Spain, have diplomatic powers of limited range, and they act exclusively in a consular capacity and are therefore salaried, whereas all the other consuls and vice-consuls are unsalaried, and either carry on business in the city or are at liberty to do so.

The Consular Corps has on two occasions paid a graceful compliment to the Municipality (first), by a magnificent banquet given on 21st March, 1888, and presided over by Dr. Francis H. Underwood, U.S. Consul, to Sir James King, Lord Provost, the Magistrates and others, within the Grand Hotel; and (second), by another banquet given on 28th January, 1891, and presided over by Levi W. Brown, Esq., United States Consul, to Lord Provost Muir, the Magistrates and others, within the Windsor Hotel.

The Corporation on their part have at all times recognized the dignity and importance of the consular office, and have had the greatest possible pleasure in their public and social relations with the Corps and the members of it individually.

The President of the Corps is Don Ventura de Collejon; the two Vice-Presidents are M. Jules Coste, Consul for France, and Mr. Levi W. Brown, Consul for the United States; the Secretary is Mr. Robert Hunter Dunn, Consul for Belgium.



COUNTRY.	CONSUL.	VICE-CONSUL.	ADDRESS.
Argentine Republic,	Thomas F. Agar, -	—	31 St. Vincent Place.
Austria-Hungary, -	—	William Burrell,	54 George Square.
Belgium, -	Robert Hunter Dunn, -	—	24 St. Vincent Place.
Brazil, -	—	James Mutter, -	98 West George Street.
Chili, -	W. R. Cruikshank, -	John C. Rogers,	Consul, 81 St. Vincent St.— Vice-Consul, 224 St. Vincent St.
Costa Rica, -	Richard Liepmann, -	—	124 St. Vincent Street.
Denmark, -	—	Henry Martin, -	104 Hope Street.
France, -	Jules Coste, -	—	131 West Regent Street.
Germany, -	J. O. Lietke, -	—	109 Hope Street.
Greece, -	G. A. Tombazis, -	—	5 Wellington Street.
Guatemala, -	Richard Liepmann, -	—	124 St. Vincent Street.
Hawaii, -	James Dunn, -	—	33 Virginia Street.
Italy, -	George Breen, -	—	204 St. Vincent Street.
Japan, -	A. R. Brown, -	—	109 Hope Street.
Liberia, -	—	Leonard Gow, -	19 Waterloo Street.
Mexico, -	W. J. Templeton, -	—	203 West George Street.
Netherlands, -	Jacques van Raalte, -	—	136 West Regent Street.
Nicaragua, -	Paul Liepmann, -	—	124 St. Vincent Street.
Norway, -	—	J. O. Lietke, -	109 Hope Street.
Paraguay, -	John Galloway, -	—	15 St. Vincent Place.
Peru, -	W. J. Templeton, -	—	203 West George Street.
Portugal, -	—	James Mutter, -	98 West George Street.
Russia, -	—	A. R. Meez, -	136 West Regent Street.
Spain, -	Ventura de Callejon, -	P. Diaz Y. Cossio,	131 West Regent Street.
Sweden, -	—	J. O. Lietke, -	109 Hope Street.
Ottoman, -	—	James Mutter, -	98 West George Street.
United States, -	Levi W. Brown, -	—	107 West Regent Street.
Uruguay, -	William Law, -	William Gibson,	123 Hope Street.
Venezuela, -	W. C. Macnaughtan, -	—	79 St. George's Place.

## BARONY PARISH.—ANNUAL INCOME DURING SEVEN YEARS, 1884-91.

YEAR.	Chairman of Board.	Assessment Collected.	Parliamentary Grants for Pauper Lunatics and Medical aid.	Receipts from other Parishes and Relatives.	Interest and Sundries.	Total Income.
1884-85	Mr. James Parnie,	£62,841	£6,426	£6,233	£591	£76,091
1885-86	Do.,	72,898	6,889	5,502	781	86,070
1886-87	Do.,	73,182	7,396	5,081	1,048	86,707
1887-88	Do.,	66,963	7,589	5,163	975	80,690
1888-89	Do.,	65,089	8,770*	4,656	882	79,397
1889-90	Mr. John Harrison,	58,709	10,920*	4,467	865	74,961
1890-91	Do.,	58,053	8,048	4,014	716	70,831

\* Inclusive of Probate Grants, 1888-89, £848; 1889-90, £2,720.

## ANNUAL EXPENDITURE DURING SEVEN YEARS, 1884-91.

YEAR.	On Poor-house.	On Boarded out Children.	On Insane Poor.	On Outdoor Poor.	On Medical Treatment.	On Education.	On Building, Repairs, Fuel Duties, Taxes, etc.	Interest on Loans, etc.	Administrative Expenses.	Advances for other Parishes.	Registration.	Total Expenditure.
1884-85	£11,517	£4,065	£8,803	£18,194	£2,591	£2,140	£8,905	£7,314	£12,921	£2,646	£96	£79,192
1885-86	12,730	4,286	9,106	18,874	2,829	2,500	13,742	7,508	13,196	2,601	102	87,474
1886-87	10,927	4,392	11,256	16,797	2,578	3,035	13,379	6,844	13,010	2,631	392	85,241
1887-88	10,170	4,173	10,390	16,125	2,660	3,037	7,553	7,233	12,779	2,528	272	76,920
1888-89	10,653	4,112	11,231	14,910	2,552	2,955	4,283	6,698	12,508	2,245	249	72,396
1889-90	10,257	4,226	10,892	13,141	2,660	1,992	3,999	6,441	12,355	2,238	265	68,166
1890-91	11,215	4,087	11,840	13,032	2,502	246	4,139	6,261	11,970	1,905	326	67,523

BARONY PARISH.—AVERAGE NUMBER OF PAUPERS CHARGEABLE TO PARISH  
DURING YEAR AND THEIR CONDITION.

YEAR.	Sane Paupers.				Insane and Imbecile Paupers.		Children Boarded out.	Children in Industrial School.	Blind, Deaf and Dumb, etc.	Total Chargeable to Parish.
	In Poorhouse (including Dependents).	In receipt of Outdoor Relief.			In Asylums.	Boarded out.				
		In receipt of Outdoor Relief.								
		Adults.	Dependents.	Total.						
1884-85	1,122	2,013	2,574	4,587	501	17	416	11	12	6,666
1885-86	1,168	2,116	2,447	4,563	539	45	419	10	9	6,753
1886-87	1,070	1,918	2,265	4,183	520	70	409	8	7	6,267
1887-88	1,006	1,746	2,259	4,005	565	100	402	11	7	6,096
1888-89	1,041	1,620	1,953	3,573	554	125	377	14	3	5,687
1889-90	931	1,615	2,023	3,638	550	138	369	15	2	5,643
1890-91	951	1,544	1,994	3,538	574	138	357	10	...	5,568

## CITY PARISH.—ANNUAL INCOME DURING SEVEN YEARS, 1884-91.

YEAR.	Chairman of Board.	Assessment Collected.	Parliamentary Grants for Pauper Lunatics and Medical aid.	Receipts from other Parishes and Relatives.	Interest and Sundries.	Total Income.
1884-85	Mr. George Gibson,	£45,452	£6,373	£4,195	£198	£56,218
1885-86	Mr. John Cramb,	46,252	6,466	4,173	133	57,024
1886-87	Do.,	45,534	6,529	4,022	160	56,245
1887-88	Do.,	45,240	6,714	4,127	2,722	58,803
1888-89	Mr. George Ogilvie,	43,835	8,740	3,975	159	56,709
1889-90	Do.,	37,434	8,372	3,255	606	49,667
1890-91	Bailie Hugh Breechin,	38,122	6,236	3,043	81	47,482

## ANNUAL EXPENDITURE DURING SEVEN YEARS, 1884-91.

YEAR.	On Poor-house.	On Boarded out Children.	On Insane Poor.	On Outdoor Poor.	On Medical Treatment.	On Education.	On Building, Repairs, Fuel Duties, Taxes, etc.	Interest.	Administrative Expenses.	Advances for other Parishes.	Total Expenditure.
1884-85	£7,658	£3,347	£13,087	£12,649	£3,664	£2,049	£3,433	£173	£6,892	£4,564	£57,516
1885-86	7,998	3,585	13,316	12,456	3,360	2,273	2,597	146	7,342	4,422	57,495
1886-87	7,191	3,686	13,477	11,985	3,284	2,659	2,143	201	6,912	4,225	55,763
1887-88	8,431	3,308	12,963	12,332	3,326	2,706	2,636	190	6,813	4,466	57,171
1888-89	7,956	2,998	13,542	11,634	3,022	2,619	2,268	158	6,662	4,013	54,872
1889-90	6,957	2,807	13,479	11,252	3,280	1,294	1,787	89	6,564	3,635	51,144
1890-91	8,128	2,679	13,028	11,015	3,062	505	1,947	174	6,905	3,425	50,868

CITY PARISH.—AVERAGE NUMBER OF PAUPERS CHARGEABLE TO PARISH  
DURING YEAR AND THEIR CONDITION.

YEAR.	Sane Paupers.		Insane and Imbecile Paupers.		Children Boarded out.	Children in Industrial Schools.	Blind, Deaf and Dumb, etc.	Total Chargeable to Parish.
	In Poorhouse (including Dependents).	In Receipt of Outdoor Relief.	In Asylums.	Boarded out.				
1884-85	1,500	3,150	458	70	345	75	11	5,609
1885-86	1,423	3,131	469	70	358	79	15	5,545
1886-87	1,399	3,068	475	77	366	82	13	5,480
1887-88	1,446	3,066	462	80	332	70	13	5,469
1888-89	1,330	2,912	475	87	300	65	9	5,178
1889-90	1,280	2,870	484	84	271	60	9	5,058
1890-91	1,290	2,784	465	86	269	59	8	4,961

## GOVAN COMBINATION.—ANNUAL INCOME DURING SEVEN YEARS.

YEAR.	Chairman of Board.	Assessment Collected.	Parliamentary Grants for Pauper Lunatics and Medical aid.	Receipts from other Parishes and Relatives.	Interest and Sundries.	Total Income.
1884-85	Councillor David Bowman,	£31,415	£3,392	£4,479	£668	£39,953
1885-86	Mr. Jas. McClelland,	31,702	3,073	4,481	538	40,395
1886-87	Do.,	34,840	3,947	4,670	513	43,970
1887-88	Do.,	35,706	3,997	4,595	574	44,872
1888-89	Mr. Thomas Dick,	41,089	5,374	4,718	778	51,959
1889-90	Do.,	38,295	4,588	4,576	*10,669	58,128
1890-91	Do.,	37,582	4,782	4,694	702	47,761

\* Includes £10,000 received as Balance of price of Crookston Hall.

## ANNUAL EXPENDITURE DURING SEVEN YEARS.

YEAR.	On Poorhouse.	On Boarded out Children.	On Insane Poor.	On Outdoor Poor.	On Medical Treatment.	On Education.	On Buildings, Repairs, etc.	Interest and Instalment of Loans.	Administrative Expenses.	Advances for other Parishes.	Registration of Births, Deaths, and Marriages.	Total Expenditure.
1884-85	£3,131	£2,734	£5,350	£12,671	£1,421	£2,393	£908	£2,969	£6,279	£3,011	£760	£41,627
1885-86	2,995	3,040	6,235	13,054	1,463	2,862	757	6,387	6,246	3,116	766	46,921
1886-87	2,924	3,565	6,421	13,525	1,395	2,801	753	2,433	6,133	3,041	750	43,651
1887-88	2,774	3,203	7,680	14,410	1,405	3,118	1,079	6,892	6,303	2,897	738	50,499
1888-89	3,211	3,446	8,618	13,625	1,310	2,815	759	5,271	6,558	2,848	731	49,192
1889-90	2,821	3,860	9,631	12,747	1,358	1,681	934	10,300	6,388	2,895	775	53,390
1890-91	3,240	3,284	10,331	13,675	1,448	317	1,976	5,691	6,478	2,828	846	50,114

\*Includes "Election Expenses," "Law Expenses," "Assessment Collection Expenses," "Salaries and Wages," "Auditor," "Removal of Paupers," and "Miscellaneous."

GOVAN COMBINATION.—AVERAGE NUMBER OF PAUPERS CHARGEABLE TO PARISH DURING YEAR  
AND THEIR CONDITION.

YEAR.	Sane Paupers.		Insane and Imbecile.		Children Boarded out.	Children in Industrial School.	Blind, Deaf and Dumb, etc.	Dependents of Outdoor Poor.	Total Chargeable to Combination.
	In Poorhouse (including Dependents).	In receipt of Outdoor Relief.	In Asylums.	Boarded out.					
1884-85	621	1,430	265	66	326	59	7	2,567	5,341
1885-86	604	1,421	282	74	381	66	8	2,577	5,413
1886-87	568	1,440	320	81	379	63	8	2,362	5,221
1887-88	594	1,472	325	87	314	48	11	2,438	5,289
1888-89	540	1,475	367	87	367	65	12	2,525	5,438
1889-90	554	1,465	386	90	339	67	14	2,247	5,162
1890-91	573	1,535	429	85	301	57	9	2,558	5,547



## PAUPERISM.

THIS large branch of city economics is very fully illustrated by the foregoing Tables prepared from the accounts of all the three parishes—three Tables being presented for each parish. As the printed accounts are not uniformly stated, all the Inspectors, individually and in concert, have, with much kindness and courtesy, relieved me of considerable trouble, to enable me to present a perspicuous view of the administration of each Board's work for comparison one with another.

A most gratifying abatement of pauperism is exhibited. Comparing the first year in the Tables with the last, that is 1884-85 with 1890-91, it is seen that the inmates of the three Poorhouses, notwithstanding an advance in population, have declined by  $13\frac{1}{4}$  per cent.; the out-door poor by  $14\frac{1}{3}$  per cent.; and boarded out children by  $14\frac{3}{4}$  per cent.; but on the other hand the number of insane poor has gone up remarkably in the same septennial period, not less than 29 per cent. of increase being shown.

The assessment raised in 1884-85 was £139,708, and in 1890-91, £133,757, a decrease of £5,951, equal to  $4\frac{1}{4}$  per cent. The great expense in maintaining the increased number of insane paupers has no doubt neutralized for the most part the saving that might be looked for from the diminution of sane paupers.

The City and Govan parishes are now lunacy districts, and each is busy building new asylums—the City Board at Gartloch, to accommodate 550 patients, and Govan Board at Hawkhead, to accommodate presently 500, and ultimately, if needed, 600 patients. The rest of the county is also busy building an asylum at Hartwood in Shotts parish to accommodate meanwhile 450, but to plans that will, when fully carried out, admit of 600 patients. These three District Boards have taken the place of the Glasgow District Board of Lunacy, which was dissolved in 1888.

## DAY INDUSTRIAL SCHOOLS.

The first of these schools, now three in number, situated in Green Street, Rottenrow, and Rose Street, was started twelve years ago very much at the instigation of Mr. William Mitchell, Vice-Chairman of the Glasgow School Board. They are specially suited for motherless children where the father has no home guardian for his young family in the daytime; or for fatherless children where the mother has to leave home to earn a living. They are also admirably suited for a certain class of neglected boys who have got beyond ordinary control. The female influence governing these schools has a marvellous effect on such boys, and what the School Board cannot accomplish can there be done. Any neglected child, from five to thirteen years of age, can be sent by the Court to these schools for a period not exceeding three years, the parents being ordered to contribute 2s. weekly towards their keep. The schools are open from early morning till about seven at night, when the children return to their homes. The children have education—industrial training to older ones—play, drill, and all meals provided. There is no question that these schools are reducing the candidates for the severer industrial schools maintained for incorrigibles.

Mr. Mitchell draws a picture: "How simply and artlessly they bear their hard lot. No word of complaint crosses their lips. Sadly and silently they carry their burden. In all the thousand cases which have come under my notice I cannot charge my memory with one where a poor child spoke complainingly or unkindly of father or mother. I may seem to speak of them in terms too glowing, but I firmly believe that when taken in time, ere yet the plastic elements of childhood and youth have become hardened and vitiated, there is about such children a receptivity for teaching and training, and an appreciation of sympathy and kindness which is full of encouragement. If left alone, neglect and vicious surroundings will all too soon canker and blight their prospects of future usefulness, and instead of fruit-bearing trees, they will be 'pricks in your eyes and thorns in your sides.'"

## BENEVOLENT INSTITUTIONS OF THE CITY.

PHILANTHROPY has received remarkable development in Glasgow in the last quarter of a century—not so much in the way of great institutions richly endowed by individuals, of which we are not devoid, as of organized personal and thoroughly practical effort for helping the indigent, for encouraging the fallen to rise again, for healing the sick, for restoring the feeble to health, and very specially towards the young, to prevent them drifting into vicious or vagrant courses. So numerous and active are such organized efforts in our midst that it is impossible in this place to do more than attempt to illustrate, in a very small way, only a few of these truly beneficent organizations. Many more are in my mind, but neither space nor time admits of fuller treatment of a phase of our city economics that inspires the cheering hope for the future of our city, that, populous as it has become, and squalid as are very many of its homes and denizens, they are really cared for by the very choicest of the citizens. One hopeful feature of these efforts is the implicit trust now placed in the humane instincts of the well to do ; and the tables I am privileged to give show with what certainty the requirements for deserving objects are being supplied.

The city was indeed rich in owning at one and the same time such workers as William Quarrier, Beatrice Clugston, Mary Orrell Higginbotham, William Mitchell, and others like-minded. The two ladies named have passed into the silent land, and their work not only follows them but it has really been stimulated and its borders enlarged since their removal, and so must it ever be with that description of labour. It engraves itself indelibly on the age.

## OUR INFIRMARIES.

Now that a third infirmary has been opened within the city it may be said truly that no community is ahead of us in benevolent provision for the poor when attacked by disease in its severer forms, and for the surgical treatment of casualty cases to which our working people are exposed. Happily the generosity of the city is manifested in adequate measure and according to the wants of the institutions, and no misgivings ought to trouble the managers that the "overflowing well of charity" will ever dry up, unless perhaps, as with the natural water springs in a drought, they intermit for a brief season to let us realize in them a value we might otherwise be forgetful of. Our infirmary managers have now so much experimental acquaintance with the vitally progressive quality of charity that they may trust implicitly to it for supporting institutions that appeal so powerfully to the benevolent instincts. There need be no fear of the infirmaries having to resort to "a rate in aid" so long as they minister so discriminately, as is being done, to those unable of themselves to pay for medical and surgical treatment.

The infirmaries are also all important schools for the practical training of medical students in clinical medicine and surgery, and great reciprocatory advantages ensue from the connection. St. Mungo's College and Queen Margaret College have attached themselves specially to the Royal, and the University and Anderson's Colleges to the Western Infirmary. Victoria Infirmary has doubtless its wards also thrown open to the young aspirants in medical science, although not in systematic fashion as yet. The handbook of these institutions, prepared in view of the International Exhibition and of the meeting in Glasgow of the British Medical Association, is a most useful work to everyone interested in our curative and ameliorative establishments.

I give tables showing the work done in some of these institutions in the last six years.



ABSTRACT OF IN-DOOR CASES TREATED.

YEAR.	IN MEDICAL WARDS.			
	Admitted.	Dismissed.	Died.	Average daily No. in Hospital.
1885	2,161	1,899	262	196
1886	2,056	1,816	253	180
1887	1,901	1,675	222	178
1888	2,051	1,821	223	192
1889	2,164	1,874	275	203
1890	2,186	1,937	246	228

YEAR.	IN SURGICAL WARDS.			
	Admitted.	Dismissed.	Died.	Average daily No. in Hospital.
1885	2,784	2,557	225	307
1886	2,761	2,581	184	306
1887	2,889	2,678	202	315
1888	2,992	2,785	203	323
1889	3,244	2,970	258	348
1890	3,132	2,922	228	344

OUT-DOOR PATIENTS TREATED AT THE DISPENSARY.

		1885	1886.	1887.
		No. of Visits.	No. of Visits.	No. of Visits.
Medical and Surgical Cases,	- -	1,247	26,555	26,124
Diseases of Women,	- - - -	23,732	680	849
„ the Ear,	- - - -	2,214	2,098	2,148
„ the Eye,	- - - -	—	32	571
„ the Teeth,	- - - -	1,120	1,160	1,131
„ the Throat,	- - - -	914	997	1,352
„ the Skin,	- - - -	1,079	1,436	1,885
Children Vaccinated,	- - - -	1,387	1,490	1,449
Out-Patients attending Surgical Wards,		1,247	1,346	1,479
Total Out-Door Cases,	- -	32,227	35,794	36,988

		1888.	1889.	1890.
		No. of Visits.	No. of Visits.	No. of Visits.
Medical and Surgical Cases,	- -	25,846	27,095	26,644
Diseases of Women,	- - - -	1,043	1,190	1,584
„ the Ear,	- - - -	1,350	1,729	1,704
„ the Eye,	- - - -	772	1,023	1,003
„ the Teeth,	- - - -	908	705	633
„ the Throat,	- - - -	1,734	1,603	1,476
„ the Skin,	- - - -	1,827	2,439	1,577
Children Vaccinated,	- - - -	1,268	1,209	952
Out-Patients attending Surgical Wards,		1,499	1,747	1,912
Total Out-Door Cases,	- -	36,247	38,740	37,485

WESTERN INFIRMARY.

## INCOME, EXPENDITURE AND CAPITAL FUNDS.

	1885.	1886.	1887.
	£ s. d.	£ s. d.	£ s. d.
Subscriptions and Donations,	10,837 11 1	11,138 2 11	10,787 8 10
Income from Investments, -	1,438 14 2	1,661 5 3	1,740 17 6
Miscellaneous Receipts, -	1,297 11 3	1,558 19 2	1,717 17 6
Legacies, etc., - - -	2,485 18 8	1,959 4 5	14,563 3 0
Total Income for year, -	16,059 15 2	16,317 11 9	28,809 6 10
Ordinary Expenditure, - -	18,732 13 7	17,787 7 4	17,841 13 10
Extraordinary „ - -	196 1 0	106 18 7	—
Total Expenditure for year,	18,928 14 7	17,894 5 11	17,841 13 10

	1888.	1889.	1890.
	£ s. d.	£ s. d.	£ s. d.
Subscriptions and Donations,	10,922 10 11	12,111 10 4	11,427 6 1
Income from Investments, -	1,780 2 8	2,028 17 5	1,984 7 10
Miscellaneous Receipts, -	1,675 11 11	1,734 2 5	1,678 10 4
Legacies, etc., - - -	4,906 1 5	12,681 5 1	14,321 14 5
Total Income for year, -	19,284 6 11	28,545 15 3	29,411 18 8
Ordinary Expenditure, - -	17,893 15 3	18,951 3 10	20,318 10 0
Extraordinary „ - -	433 13 7	655 8 7	1,314 8 4
Total Expenditure for year,	18,327 8 10	19,606 12 5	21,632 18 4

Capital Funds, £63,664 1s. 2d.



## ABSTRACT OF IN-DOOR CASES TREATED.

YEAR.	IN MEDICAL WARDS.			
	Admitted.	Dismissed.	Died.	Average daily No. in Hospital.
1885	1,514	1,349	165	194
1886	1,704	1,473	231	204
1887	1,679	1,487	192	195
1888	1,715	1,493	222	201
1889	1,719	1,542	177	196
1890	1,665	1,465	200	191
	IN SURGICAL WARDS.			
	Admitted.	Dismissed.	Died.	Average daily No. in Hospital.
1885	1,701	1,631	70	174
1886	1,813	1,736	77	169
1887	1,893	1,808	85	169
1888	1,889	1,807	82	173
1889	1,981	1,842	139	175
1890	1,939	1,820	119	175

## OUT-DOOR PATIENTS TREATED AT THE DISPENSARY.

	1885.	1886.	1887.
	No. of Visits.	No. of Visits.	No. of Visits.
Medical Cases, - - - - -	14,671	15,783	18,957
Surgical Cases, - - - - -	4,519	6,994	6,929
Diseases of Women, - - - - -	1,386	960	1,093
"    the Ear, - - - - -	1,086	1,164	1,251
"    the Teeth, - - - - -	600	626	645
"    the Throat, - - - - -	647	670	800
Children Vaccinated, - - - - -	727	1,428	1,436
Out-Patients attending Surgical Wards,	537	850	639
Out-Door Midwifery Patients, - -	61	46	68
Total Out-Door Cases, - - -	24,034	28,521	31,818
	1888.	1889.	1890.
	No. of Visits.	No. of Visits.	No. of Visits.
Medical Cases, - - - - -	16,218	13,413	13,624
Surgical Cases, - - - - -	6,369	6,281	5,459
Diseases of Women, - - - - -	888	1,168	1,132
"    the Ear, - - - - -	1,052	1,042	892
"    the Teeth, - - - - -	510	492	452
"    the Throat, - - - - -	689	935	1,116
Children Vaccinated, - - - - -	1,340	1,296	1,059
Out-Patients attending Surgical Wards,	7,996*	8,116	9,295
Out-Door Midwifery Patients, - -	—	—	—
Total Out-Door Cases, - - -	35,062	32,743	33,039

## VICTORIA INFIRMARY.

The subject of additional infirmary accommodation for Glasgow was frequently discussed in the last dozen years and has culminated in the erection of this excellent institution on an admirable site on the edge of Queen's Park. No situation more salubrious and cheerful could have been chosen, and thanks to the Corporation of Glasgow it has been secured to the infirmary in all time on most easy terms. - Only an instalment of the plan designed for a completed scheme has as yet been proceeded with. It comprises the administrative block for the institution when fully completed, and one pavilion containing three large and three small wards with the necessary adjuncts; also washing house, laundry, boiler and engine-house, mortuary and entrance lodge, and the whole of the grounds have been laid off and walled in. The pavilion erected gives accommodation for 80 patients, medical and surgical, and there is in addition a children's ward and wards for private patients.

This section of the infirmary was formally opened and dedicated on 14th Feby., 1890, by His Grace the Duke of Argyll, in an eloquent address, after a religious service conducted by the Rev. James Smith, D.D., of Cathcart Parish, and other clergymen. The ceremony was attended by the Lord Provost, Magistrates and Town Council in their official capacity, and by a large number of citizens. At the conclusion of the proceedings the Duke of Argyll and Managers of the infirmary drove to the City Chambers, where they were entertained to luncheon by Lord Provost Muir.

From a financial point of view the Victoria Infirmary has already received most encouraging support, and there is already evidence that the accommodation and professional skill it provides now and when enlarged will be taken full advantage of.

## INCOME, EXPENDITURE, AND CAPITAL FUNDS.

	1890.
Subscriptions and Donations, - - - -	£3,342 17 6
Income from Investments, - - - -	435 0 2
Miscellaneous Receipts to Building Fund, -	11,492 17 3
Legacies, etc., - - - - -	5,430 0 0
Total Income for Year, - - - -	£20,700 14 11
Ordinary Expenditure, - - - - -	£2,341 0 1
Extraordinary Expenditure on Building, - .	20,816 3 7
Total Expenditure for Year, - - - -	£23,157 3 8

## ABSTRACT OF IN-DOOR CASES TREATED.

YEAR.	IN MEDICAL WARDS.			
	Admitted.	Dismissed.	Died.	Average Daily Number in Hospital.
1890	222	167	14	21
	IN SURGICAL WARDS.			
1890	259	221	13	34

For 7 months only.

## OUT-DOOR PATIENTS TREATED AT THE DISPENSARY.

	1890
Medical Cases, - - - - -	881
Surgical Cases, - - - - -	1,233
Total Out-Door Cases, - - - -	2,114

For 7 months only.

## OUR CONVALESCENT HOMES.

The past twenty-five years has the credit of originating for Glasgow those most needful and humane institutions. The memory of Miss Beatrice Clugston may well be cherished by the poor for providing for them the means of restoration to vigour when enfeebled with disease. By indomitable energy and methods that only a woman with strong will and stout heart could confront, Miss Clugston raised large sums of money at various times, and aroused besides an interest in well-off circles on behalf of "feeble folk" that promises to be permanent. Her first home was two moderately-sized villas near Bothwell, opened in 1865—one for males and the other for female invalids. She next started the larger home at Lenzie in 1868; and thereafter the Seaside Home at Dunoon in 1869. In all these institutions enormous benefits have been received by poor convalescents—cured of their ailments, but as yet in no very fit condition for labour—generous diet and pure air bringing strength back to the frames and hopefulness to the spirits. Miss Clugston's example has been, and is being, abundantly recognized and followed by others like-minded. The Glasgow Abstainers' Union have had, during many years, an excellent Seaside Home for convalescents at Kilmun, opened in 1873; the Seaside Home at Saltcoats, begun in a small way by Mr. James Smith in 1866, has grown to considerable proportions; Sir William W. Hozier has generously gifted a convalescent home to the Western Infirmary, which is now being erected at Lanark; and a still larger convalescent home has now been gifted to the Royal Infirmary by Miss Marjory Schaw, to be planted at Bearsden within moderate distance of the city.

It should be added that Miss Clugston was also the promoter of the Broomhill Home for Incurables, opened in 1876.

I give some figures illustrative of the work done at Dunoon, Kilmun, and Lenzie, and of the financial support they have been receiving—requirements being met in all cases without superfluity.

## WEST OF SCOTLAND CONVALESCENT SEASIDE HOMES, DUNOON.

## INCOME, EXPENDITURE, AND CAPITAL FUNDS.

1885-1891.

YEAR.	INCOME.					EXPENDITURE.			
	From Subscriptions and Donations.	From Investments.	Miscellaneous Receipts.	Legacies.	Total Income.	Ordinary	Extraordinary	Transferred to Capital Account.	Total.
	£	£	£	£	£	£	£	£	£
1885	4,240	81	120	212	4,653	4,261	65	212	4,538
1886	4,184	53	73	255	4,565	4,185	126	255	4,566
1887	4,236	120	79	860	5,295	4,088	295	860	5,243
1888	4,375	139	88	447	5,049	4,212	129	447	4,788
1889	4,788	154	84	—	5,026	4,323	943	—	5,266
1890	4,913	158	91	350	5,512	4,533	993	—	5,526
1891	5,046	162	72	1,277	6,557	4,677	415	1,428	6,520

Capital Funds at 31st July, 1891, £6,671.

Property of the Homes *not valued*.

## SYNOPSIS OF THE PAST TWENTY-TWO YEARS, WHEN HOME OPENED BY THE LATE MISS BEATRICE CLUGSTON.

YEAR.	Weeks' Sojourn Granted.	Con- valescents Admitted.	Completely Restored.	Bene- fited.	Not Im- proved.	Died.	In Homes at end of Year.
1869-70	1,941	647	532	29	21	1	64
1870-71	2,893	964	847	57	38	3	83
1871-72	3,883	1,235	1,122	54	48	2	92
1872-73	3,928	1,179	1,056	70	49	1	95
1873-74	4,076	1,224	1,083	65	51	3	117
1874-75	4,997	1,547	1,365	92	79	2	126
1875-76	5,414	1,664	1,481	78	92	1	138
1876-77	5,829	1,849	1,646	89	107	3	142
1877-78	6,005	1,938	1,706	96	102	2	174
1878-79	7,552	2,337	2,059	140	128	1	183
1879-80	6,280	2,339	2,108	157	137	0	120
1880-81	5,050	2,367	2,054	154	146	9	124
1881-82	5,704	2,599	2,308	161	115	2	137
1882-83	7,249	2,679	2,478	66	118	6	148
1883-84	7,288	2,750	2,489	112	133	4	160
1884-85	7,279	2,779	2,469	172	134	1	163
1885-86	7,294	2,829	2,481	193	143	2	173
1886-87	7,768	3,207	2,895	205	104	3	167
1887-88	7,609	3,149	2,886	188	72	2	168
1888-89	7,920	3,322	2,947	272	94	4	173
1889-90	8,253	3,338	2,934	242	145	3	187
1890-91	8,404	3,366	3,027	200	143	4	189

## GLASGOW CONVALESCENT HOME, LENZIE.

## INCOME, EXPENDITURE, AND CAPITAL FUNDS.

YEAR.	INCOME.					EXPENDITURE.		
	From Subscriptions and Donations.	From Investments.	Miscellaneous Receipts.	Legacies.	Total Income.	Ordinary.	Extraordinary	Transf. to Capital Account.
1885	£1,243	£635	£96	£280	£2,254	£1,920	—	£280
1886	1,194	641	54	—	1,889	1,941	—	—
1887	1,208	646	53	438	2,345	1,762	£408	438
1888	1,204	645	94	50	1,993	1,755	243	50
1889	1,388	659	45	127	2,219	1,915	54	127
1890	1,368	664	50	—	2,082	1,862	54	—

Capital as at 31st December, 1890, including cost of Home and Furnishings, and cost of Farm, £25,162 9s. 1d.

## SYNOPSIS OF THE LAST SIX YEARS.

	1885	1886	1887	1888	1889	1890
In Home at beginning of year, - - - -	65	56	51	54	63	62
Admitted during year, -	1,563	1,515	1,441	1,490	1,637	1,474
Completely Restored, -	746	717	279	508	1,099	786
Much Improved, - -	805	781	1,095	919	492	592
Not Improved, - - -	18	13	52	50	41	24
Returned to Infirmary, -	1	4	4	3	2	3
Dismissed for Improper Conduct, - - - -	—	2	4	—	—	—
Died, - - - -	2	3	4	1	4	6
In Home at end of year, -	56	51	54	63	62	63

## GIFT OF CONVALESCENT HOME FOR ROYAL INFIRMARY.

The splendid gift of Miss Marjory Schaw of £40,000 to found, equip, and endow a Convalescent Home for patients discharged from the Royal Infirmary is something to be truly thankful for. It will serve a noble end, and greatly enrich and strengthen the infirmary. A site has been procured for the Home at Bearsden.

## KILMUN SEASIDE HOME FOR CONVALESCENT POOR.

## INCOME, EXPENDITURE, AND CAPITAL FUNDS.

1885-1891.

YEAR.	INCOME.				EXPENDITURE.
	From Subscriptions and Donations.	From Investments.	Legacies.	Total Income.	
1885	£969	£26	£17	£1,012	£1,148
1886	1,057	24	90	1,171	1,114
1887	1,054	27	34	1,115	1,178
1888	1,064	40	50	1,154	1,097
1889	1,077	43	—	1,120	1,129
1890	1,121	61	—	1,182	1,112
1891	1,157	63	—	1,220	1,194

Capital Funds, £2,273 5s. 8d.

## SYNOPSIS OF THE PAST SEVEN YEARS.

YEAR.	Convalescents Admitted.	Completely Restored.	Benefited.	Not Improved.	Died.
1885	990	709	201	78	2
1886	1,101	802	224	74	1
1887	1,185	863	236	85	1
1888	1,168	863	235	68	2
1889	1,202	905	210	87	—
1890	1,203	943	180	79	1
1891	1,226	995	164	66	1

## LANARK CONVALESCENT HOME FOR WESTERN INFIRMARY.

This Home is the gift of Sir William Wallace Hozier, Bart., Mauldslie Castle. The property at Lanark, built at the expense of the city and county for militia quarters, and now discontinued, has been acquired and a new building is about to be erected. No more bracing site than Lanark could have been chosen. Sir William's gift must be a valuable adjunct to the Western.



## BROOMHILL HOME, KIRKINTILLOCH, FOR RELIEF OF INCURABLES.

## INCOME, EXPENDITURE, AND CAPITAL FUNDS.

1885-1890.

YEAR.	INCOME.					EXPENDITURE.		
	Subscriptions and Donations.	Investments.	Miscellaneous Receipts.	Legacies.	Total.	Ordinary.	Extraordinary, including Capital.	Total.
1885	£3,752	£475	£138	£272	£4,637	£3,871	£2,966	£6,837
1886	3,838	442	154	17	4,451	4,423	860	5,283
1887	3,939	466	135	770	5,210	4,475	802	5,277
1888	4,293	475	122	280	5,170	4,935	167	5,102
1889	4,161	493	188	700	5,542	4,970	70	5,040
1890	4,191	539	163	305	5,198	4,925	26	4,951

Capital Funds at 31st December, 1890, £13,409.

## COLQUHOUN FUND FOR INCURABLES.

This fund, which amounts to £22,000, is in the hands of a body of Trustees who administer the income of it by way of annual payments and donations in the relief of poor persons residing in Glasgow or neighbourhood afflicted with incurable disease. The sums given range from £13 down to £3 5s.

## GLASGOW MEDICAL MISSIONARY SOCIETY.

YEAR.	INCOME.					ORDINARY EXPENDITURE.
	Subscriptions.	Investments	Miscellaneous Receipts	Legacies.	Total.	
1890	£1,151	£5	£20	£163	£1,339	£1,372

Capital Funds at 31st October, 1890, £436.

This humane and economically conducted institution has done excellent work amongst the sick poor during many years, and it aims at serving this class in a way that does no injury to their self-respect. About 40,000 visits were

made in last year to the dispensaries, or something like 130 visits daily. Of these 25,000 were made to the Moncur Street Dispensary, and 16,000 to the Dispensary in Oxford Street, and in addition, much work was done at the homes of the poor by the medical superintendents, nurses, and medical students.

## ST. ANDREW'S AMBULANCE ASSOCIATION.

## INCOME AND EXPENDITURE OF GLASGOW CENTRE.

1885-1891.

YEAR.	INCOME.				EXPENDITURE.
	Subscriptions and Donations.	Class and Removal Fees.	Miscellaneous Receipts.	Total.	
1885-86	£589	£68	£4	£661	£528
1886-87	487	144	—	631	633
1887-88	698	86	—	784	800
1888-89	642	127	—	769	794
1889-90	712	146	1	869	753
1890-91	722	110	1	833	977

## SERVICES RENDERED IN GLASGOW CENTRE BY THE AMBULANCE WAGGONS.

YEAR.	No. of Turns Out.	Cases attended to.	Removals to Infirmary.	Removals Home, etc.	Police Cases.	Removals other than accidents.	Cases that could not be attended to.
1885-86	531	495	414	81	163	186	1
1886-87	601	574	492	82	178	210	3
1887-88	1,067	1,031	879	152	257	311	—
1888-89	1,189	1,154	1,083	71	124	274	1
1889-90	1,438	1,479	1,328	151	373	332	—
1890-91	1,578	1,442	1,273	169	434	—	—

In the Glasgow Centre in 1885-86 there were 13 Ambulance Classes with 270 Pupils.

In the Glasgow Centre in 1890-91 there were 29 Ambulance Classes with 804 Pupils.

## THE GLASGOW SICK POOR AND PRIVATE NURSING ASSOCIATION.

	1885.	1886.	1887.	1888.	1889.	1890.
	£	£	£	£	£	£
Income—						
Subscriptions, - - -	833	840	811	806	823	872
Interest, - - -	8	10	10	13	23	46
Nursing Fees, - - -	2,470	2,522	2,668	2,258	2,200	1,948
	3,311	3,372	3,489	3,077	3,046	2,866
Expenditure—	3,785	4,040	4,153	4,065	3,438	3,455
Deficiency, -	474	668	664	988	392	589
Extraordinary Revenue—						
Donations, Legacies, etc.,	811	307	1,647	595	990	203
Surplus of Revenue to meet Expenditure, - - -	337	—	983	—	598	—
Deficiency in Revenue to meet Expenditure, - -	—	361	—	393	—	386
Number of Nurses, - -	76	81	72	65	66	69
District Nursing—						
Number of Cases Treated,	2,372	1,621	1,477	1,798	1,727	1,759
Number of Visits made, -	42,828	42,820	46,963	67,848	60,299	62,113
Midwifery—						
Number of Cases Treated,	1,163	1,433	973	939	503	
Number of Visits made, -	—	11,542	9,144	8,653	4,068	

This institution suffered a severe loss on 12th December, 1889, in the death of its devoted founder, Mrs. Mary Orrell Higginbotham. Happily, it had been for years thoroughly organized, and the removal of its founder has stimulated others to carry on the good work. A fund, which has reached to several thousands of pounds, has been raised to build suitable home-accommodation for the nurses, as a memorial of Mrs. Higginbotham's earnest labours; and that lady has left to the association, from her private means, the income derivable from £20,000, set aside for the purpose, so long as it supplies trained nurses for the poor. Failing in this cherished ideal, which there is little chance shall happen, the money is to go to the Royal and Western Infirmarys, equally.

## GLASGOW NIGHT ASYLUM FOR THE HOUSELESS.

NUMBER OF NIGHTS' LODGINGS GIVEN DURING THE LAST SIX YEARS:—

	1885.	1886.	1887.	1888.	1889.	1890.
Place of Birth—						
Glasgow, - - -	10,228	10,515	12,038	12,212	13,604	13,775
All other parts of Scotland, - - -	12,200	13,093	13,082	13,255	13,200	12,725
England, - - -	3,274	2,636	2,955	2,874	2,956	3,226
Ireland, - - -	7,930	8,573	8,661	7,774	7,350	8,146
Foreign parts, - - -	336	275	214	338	324	277
Total,	33,968	35,092	36,950	36,453	37,434	38,149
Average number of Nightly Inmates, - - -	93	96	101	99	102	104
Number of Meals—						
Porridge and Buttermilk, - - -	74,462	77,136	82,844	86,783	87,678	87,004
Bread and Soup, - - -	17,930	18,870	18,397	19,541	19,480	19,622
Number of Rations—						
Bread without Soup, - - -	28,022	29,270	27,382	29,158	32,106	30,844
Total,	120,414	125,276	128,623	135,482	139,264	137,470
Soup Kitchen—						
Number of Rations supplied gratuitously, - - -	2,164	5,553	5,420	—	—	—
Per Ticket, - - -	27,094	34,413	13,811	8,694	7,080	6,138
For Barony Parish, - - -	76	28	10	4	21	—
Total,	29,334	39,994	19,241	8,698	7,101	6,138

This excellent institution, situated at No. 71 North Frederick Street, provides for the pressing wants of penniless wayfarers and for townspeople thrown temporarily out of a home. It serves an extremely humane purpose; it is judiciously managed and vigilantly guarded to prevent anything like encouragement of chronic beggary. A body of influential citizens give attendance in turn every night. Minute inquiry is made, and painful experiences come frequently to the knowledge of the directors. City Treasurer Thomas Watson is treasurer.

## THE ORPHAN HOMES OF SCOTLAND.

MR. QUARRIER continues his self-imposed labours for the rescue of orphan and neglected children with unwavering trustfulness and zeal. His "City of Refuge" at Nittingshill, Bridge of Weir, situated in a charming landscape, widens out at accelerating pace, having already about doubled its proportions in the past six years, and five additional villa Homes have quite recently been gifted, and will soon be seen in process of erection. The "village," as Mr. Quarrier calls it, is already a signal monument of individual power exerted for benevolent ends, in command of no material resources within itself to gratify its aspirations, but singularly vigorous to draw to itself and ingraft upon itself the benevolent instincts in others. Upon such instincts Mr. Quarrier lives, moves, and has his being; his work goes forward by its own momentum fortified by buoyant big-heartedness that wots not of to-morrow. "Sufficient unto the day" is his motto. Problems of the future have solved themselves marvellously well throughout a score of years, and he is content to abide by the gospel of trust. Vouchsafed more than an ordinary share of robust health and moral courage, it is impossible for Mr. Quarrier to restrain his energies in his great enterprise. Steadily, therefore, its horizon widens and its possibilities enlarge before his mind's eye. He believes in his work being rooted in the Father's love for the little ones, and that this love will have unfailing manifestations in this Christian land. Endowment, therefore, against the proverbial rainy day he considers to be superfluous and a foreboding spirit positively sinful. Most assuredly it must be universally admitted, that Mr. Quarrier's work is engraven on the age and no misgiving for its future, when his guiding hand is removed, need be indulged. No nobler work has been seen, and he may trust that

the benevolence which has built up his Home colony will maintain it no matter to what dimensions it may reach. He incurs no debt, and, come what may, financial disaster is simply impossible.

Mr. Quarrier's morning post bag, with its letters and parcels, must be a sight completely beating the showman's "lucky bag" in surprises. Many of the gifts are, as it were, sent by stealth, others more or less openly—but all of them are prizes to Mr. Quarrier, be they great or small in worldly value. One can imagine Cowper, living as an acquaintance of Mr. Quarrier in the wooded valley of the Gryffe, and becoming familiar with the free-will offerings daily poured in upon his thoroughly prosaic and practical neighbour, exclaiming—

“How copious and how clear  
The overflowing well of Charity springs here !  
Hark ! 'tis the music of a thousand rills,  
Some through the groves, some down the sloping hills,  
Winding a secret or an open course,  
And all supplied from an eternal source.”

The following Table shows the growth and extent of Mr. Quarrier's labours and the resources placed at his disposal. It has been prepared from authentic information, and will surprise very many and interest and gratify a wide circle. It is eloquent testimony of the reclamatory work Mr. Quarrier has accomplished and is bringing to pass, and the magnitude and beneficence of which few have other than the vaguest idea. Mr. Quarrier began in 1864 with his shoe-black brigade for the helping of street boys on their own happy hunting-ground ; in the following year he started the parcel and news brigades, and in 1871 the Orphan Homes of Scotland in James Morrison Street and at Cessnock—transferred in 1877 to their now beautiful location at Bridge of Weir.

ORPHAN HOMES

STATEMENT SHOWING NUMBER OF CHILDREN IN HOMES ;  
FROM NOVEMBER, 1872,

Cottage Homes, Bridge of Weir.			City Home.		Total children dealt with during year.	Disposal of Children.	
YEAR.	Total in Homes.	New Cases.	Total in Home.	New Cases.		Sent to Canada and provided for there.	Settled at home or returned to friends.
1872	93	93	—	—	—	64	8
1873	136	86	—	—	—	71	8
1874	141	81	—	—	—	71	6
1875	138	68	—	—	—	65	8
1876	150	76	246	246	396	49	113
1877	138	53	371	310	509	56	169
1878	151	75	445	347	596	79	222
1879	297	150	585	405	792	130	206
1880	357	193	481	396	838	117	221
1881	445	247	562	485	1,007	156	249
1882	459	107	538	447	997	138	275
1883	592	292	636	554	1,228	189	297
1884	451	329	687	597	1,138	245	313
1885	592	401	732	646	1,324	340	311
1886	734	367	616	518	1,350	230	185
1887	798	324	526	440	1,324	232	130
1888	844	304	472	390	1,316	240	101
1889	924	374	553	476	1,477	252	129
1890	972	358	528	452	1,500	249	150
Totals,	8,412	—	7,978	—	15,792	2,973	3,101



## OF SCOTLAND.

THE DONATIONS RECEIVED ; AND THE BUILDINGS ERECTED  
TO NOVEMBER, 1890.

Cash Statement showing amount recd. for				BUILDINGS.		Number of Children in each Home.		
Maintenance of Homes and Emigration Expenses.			Expenditure on Buildings and Ground.				Buildings completed and fully paid for during year.	
£	s.	d.	£	s.	d.	No.		
1,660	9	0	—				Rented Workshop, Renfield Lane	10
2,221	18	8½	88	4	9		Cessnock House, Govan Road,	90
							Girl's Home, Renfield Street,	30
							<i>These now closed.</i>	
1,964	16	1¾	498	9	4			130
1,948	4	0	8,143	11	3			
2,312	6	1½	3,724	2	11	1	City Home, James Morrison St.,	120
3,544	13	9¼	3,917	7	2¾		Ground purchased, Nittingshill.	
3,434	9	3	5,184	17	4¼	2	Central Building:—used at first	
							as church and school with	
							Teacher's and Superintendent's	
							House in the wings. Now	
							wholly for school purposes.	
5,764	19	5½	3,177	17	2½	3	"Broadfield" Home, - -	30
						4	"Glasgow" Home, - -	30
						5	"Dalry" Home, - -	30
						6	Offices (as first erected), Laun-	
							dry, Washing House, Bake-	
							house, Joiners', Printers', Shoe-	
							makers' shops etc.	
6,529	3	5½	3,816	16	4	7	"Dumbartonshire" Home, -	30
						8	"Ebenezer" Home, - -	30
6,391	7	7½	8,408	18	6	9	"Washington" Home, - -	30
7,068	11	8¾	5,556	7	8½	10	"Greenock" Home, - -	30
						11	"Aberdeen" Home, - -	30
						12	"Anderston" Home, - -	30
						13	"Bethesda" Invalid's Home, -	40
7,600	0	8¾	5,145	9	10	14	"Paisley" Home, - -	30
						15	"Cessnock" Home, - -	40
10,170	6	8¼	5,037	2	4	16	"Mizpah" Home, - -	40
9,275	5	8¾	3,443	15	9¾	17	"Leven" Home, - -	40
						18	Gatehouse, Gateway, & Railings.	
7,948	12	9	15,252	19	8	19	"Overtoun" Home, - -	30
						20	"Montrose" Home, - -	30
						21	General Store.	
8,457	12	8	4,426	1	8¼	22	"Mitchell" Home, - -	30
						23	"Homelea" Supt.'s House.	
						24	"Fairknowe" Canadian Distri-	
							buted Home, - -	120
						25	Church and Halls.	
						26	Ship, The "James Arthur,"	30
8,823	6	0¼	10,142	13	5	27	"Allan Dick" Home, - -	30
						28	"Somerville" Home, - -	30
						29	"Ashgrove" Home, - -	30
10,514	0	3½	6,665	6	6¾	30	"Kintyre" Home, - -	30
						31	Marshall, Bridgeton and Dal-	
							marnock Home, - -	30
10,013	1	6¾	8,668	18	11½	32	"Lincoln and Garfield" Home,	40
						33	"Edinburgh" Home, - -	30
							Enlargement of Offices (No. 6).	
						44	Gardener's House, Hennyery etc.,	6
£115,643	5	*8	£101,299	0	10¼			1,046

£216,942 6s. 6d.

Since 1st January, 1891, the following gifts have been received, and the work to which the money is dedicated is in full progress :—

No. 35. School Buildings.

No. 36. "Elim" Invalid Home for Boys (nearly finished).

No. 37. "Jehovah Jireh" Home.

No. 38. "Saggitarium" Home.

No. 39. "Ayr" Home.

No. 40. "Wilson" Home.

The total cost per annum for each child is under £12, including education, clothing and maintenance.

Older citizens casting their eyes back a quarter of a century, discover that the young arab, male and female, then so common a feature of our streets, has almost disappeared; and the table shows that in those years Mr. Quarrier has been patiently busy. Thousands of children have been caught up by him, and very many are now passing useful lives on Canadian farms, etc., where want is unknown, and where debasing tendencies have little encouragement. In most cases, indeed, they are adopted into the families they enter. A still larger number have entered workshops, domestic service, etc., at home, and many more become apprenticed to the sea. Mr. Quarrier enjoins upon all to keep in touch with him in after life, and he thinks himself warranted in saying, that not more than three per cent. of his adopted flock develop vicious courses on leaving him.

Believing in the endurance of his work, he has created a village that, in the character of its "villas," will bear comparison with suburban districts. The new church seated for 800 is an example of beauty and brightness. The Invalid Home, with its forty cots distributed in several airy wards, and with a large convalescent apartment, is a model hospital, and it is not confined to those of his permanent flock who fall ill, but a poor sick child from the outside, although in a dying condition, is received into it, and gently tended. The new school

in course of erection promises to be a very fine well-appointed building, and the "Store" where the manifold wants of the village are supplied is a wonder in organization. The training ship "James Arthur" is a feature of the village, and in it thirty boys are lodged under a competent sea captain. Every boy in the ship has taken to seamanship of his own free will. He must abide by his choice, and during his adopted tutelage he is taught the technicalities and duties of a mariner.

The numerous "Homes," male and female, vie with one another in tidiness and specklessness. Some accommodate thirty and others forty children, and in each every age is represented from the baby in arms to the boy or girl of 15 years ready for going out into the world. In each "Home" is a competent married couple who acts *in loco parentis* within lines laid down by Mr. Quarrier, the "father" being also, as a rule, skilled in a trade that he puts to use in day time. When stated that these "couples" seek enlistment in the work without fee or reward, and solely for the love of it, it may be accepted that the domestic ideal is as closely carried out in each "Home" as is possible where actual parentage does not exist.

The village is indeed a model of picturesque arrangement and quiet order, and cheerfulness, intelligence, and good manners abound. It has altogether a sweet savour and leaves lasting impressions on the mind of the power of persistent, patient, Christ-like effort in a good cause. Mr. Quarrier is indeed a "personage," a unique figure of the age, and one cannot but envy him and his silent coadjutors, the blessing attaching to their rescue work in catching up and training so many destitute or neglected little ones and fitting them for positions to earn honourable livelihoods. Only by a visit to the village at Bridge of Weir can any adequate idea be got of the supreme importance of Mr. Quarrier's work to Scotland and very particularly to Glasgow.

## THE MARSHALL TRUST.

By their deeds of settlement William Marshall, Merchant in Glasgow, and his sister Janet Marshall, appointed trustees to erect a Hospital or Educational Institute for the benefit of children who are orphans or fatherless or otherwise necessitous—*i.e.*, where the parents' income does not exceed £70, and who are resident in the counties of Lanark or Stirling. The trustees were to clothe, educate, and maintain such children either in a hospital, or to lodge them in boarding-houses or with private families. The capital sum amounts to £266,000, and the net revenue to about £8,600. In 1888 the Governors were paying fees and books for about 2,500 children resident in Glasgow and in the various parishes of Lanark and Stirling.

The introduction of Free Education has relieved the Governors of school fees in elementary standards, and the scheme has been modified, and is now as follows:—

1. Books, etc., of 4,000 Scholars in Elementary Standards, - - - - -	£600
2. Fees and books of 1,850 Scholars, in Day Schools, beyond 5th Standard, - - -	2,400
3. 110 High School Scholarships of £10 for two years by competition, - - -	1,250
4. Fees in Evening Classes to 650 Scholars, -	250
5. Grants of £5 per annum to 300 Scholars in Elementary Standards who are Orphans, Fatherless, or otherwise necessitous, -	1,500
6. Industrial Training Grants, value £5 per annum for four years, to former Trust Scholars attending Evening Classes, - -	800
7. 40 Marshall Bursaries for Higher Education, value £20 per annum for four years, - -	800
8. 20 University Bursaries, value £30 per annum for five years, - - - - -	600
	<hr/>
	<u>£8,200</u>

The bursaries are as yet only partially operative. The provisions of the Trust have been distributed, as follows:—Glasgow, for 3,000 children; Lanarkshire, for 3,200; and Stirlingshire, for 800.

## POOR CHILDREN'S FRESH AIR FORTNIGHT.

This admirable scheme has become a permanent organization of the city as a branch of the manifold benevolent agencies of the Glasgow Evangelistic Association. But it has already a zealous coadjutor in Her Grace the Duchess of Montrose and other ladies and gentlemen in the country. A more humanizing and truly benevolent scheme could not be conceived. It is a valuable aid to health and morals this fresh air fortnight to our poor children little acquainted with the sunlight and sweet voices of nature. "When summer suns are glowing over land and sea," we of the better off class take flight to country and coast with our children to bring them under the joyous and inspiring influences so invigorating to soul and body. But to the poor children of our dingy streets and wynds, with no horizon to speak of, their playground the pavement or court always in shadow, and sleeping most of them in unwholesome houses, a *whole fortnight* in the pure air and wide expanse of sky and water is a revelation and a godsend! Only to needy and feeble children is the privilege extended, and they are admitted to it after most careful scrutiny that they and their parents have complied with the conditions necessary to impose, touching cleanliness, poverty and freedom from infectious disease.

The Home at Robertson, Upper Ward, is provided by a Glasgow lady, daughter of a late Ex-Lord Provost; the Home at Stewart Hall, Bute, lodging 64 children, by a Glasgow gentleman; Montrose Home at Balmaha, lodging 30, by the personal exertions of the Duchess of Montrose; and the Home at South Ailey, Cove, lodging 30, is largely supported by friends of the cause residing at Cove and Kilcreggan. The other boarding-out resorts are in farm houses and cottages scattered over the country at such places as Kilmalcolm, Houston, Inchinnan, Mearns, Eaglesham, Carmunnock, Lochwinnoch, Howwood, Chryston, etc., all names redolent of the scents and sounds of nature.

The following Table, furnished by Mr. Alexander MacKeith who, with Mr. John R. Miller, Mr. John Steel, and others, are the tried friends of the poor, gives an idea of the work and suggests a yet fuller development of it.

NUMBER OF CHILDREN SENT ON HOLIDAY, AND WAYS AND MEANS VOLUNTARILY PROVIDED.

YEAR.	Children sent out.	Income.	Expenditure.
1886	146	£75 0 0	£73 0 0
1887	1,404	687 8 9	681 9 0
1888	2,544	1,772 11 9	1,413 18 2
1889	3,531	2,177 16 11	2,041 11 2
1890	4,103	2,637 4 7	2,402 17 7
1891			
to 7th October,	5,446	3,748 2 2	3,138 11 6

In this connection I would venture a suggestion to all whom it may concern, be it the Lord Provost and Magistrates or philanthropists dealing with city exigencies, to take into consideration the feasibility of utilizing the sweetly situated and sheltered island of Shuna for some such summer resort as a sanatorium for say, our feeble folk, young or old, in need of a thorough change of air during a longer period than a fortnight. With its 1,200 undulating acres it would be no detriment to the island as a farm but rather helpful in giving it a market for its produce. Shuna air cannot be beat, its cows and flocks of goats and sheep yield the richest of milk and flesh, vegetables can be raised in plenty, its waters abound in fish, and its hazel copse counts by scores of acres. One need not draw on his imagination in conceiving that some such purpose, meeting one of the manifold exigencies of artificial city life, served by the island of Shuna, must reflect the generous instincts of Mr. Yates in bequeathing it to the city.



## POOR CHILDREN'S DINNER TABLE SOCIETY.

The following Table shows that the benevolent objects of this Society are carried on on a pretty considerable scale—no fewer than 2000 hungry children receiving a daily dinner of soup and bread. The tables are spread in 14 districts of the city. While feeding is the immediate and urgent want served by this Society, it aims at higher and more permanent things, and very particularly at securing by its means regularity of school attendance; and, as nakedness no less than hunger is an enemy of the School Board, the Society's efforts in late years have been extended and a large amount of new and cast-off clothing is annually collected and distributed. In this way the Society, composed of devoted ladies and gentlemen, has earned the gratitude and deserves the support of the benevolent citizens.

I believe the Society is most careful to see that the children fed at these tables are proper objects of charity, and this is very necessary. Mischief to both child and parents might be wrought were the latter relieved of a duty they may be able to fulfil.

YEAR.	INCOME.		Dinners Supplied.	Daily Average Number of Children Supplied.
	Private Donations.	Donation from Juvenile Delinquency Commissioners.		
1884-1885	£1,334	£100	253,787	} about 2000
1885-1886	1,525	—	317,199	
1886-1887	1,752	100	320,201	
1887-1888	1,354	100	258,741	
1888-1889	1,268	100	251,289	
1889-1890	1,135	100	188,571	
1890-1891	1,244	—	210,980	



## SOCIETY FOR PREVENTION OF CRUELTY TO CHILDREN.

This society originated in 1884 and has found a prolific field for carrying on its benevolent and much needed labours, It has been the means of ferreting out many deplorable cases of neglect, destitution and cruelty, and the knowledge of its existence, as Mr. William Mitchell says, has done much to "stay the plague." Our streets with the operation of this and other agencies may be said to be entirely cleared of children engaged in casual employment at untimely hours. I give Table illustrating the work done.

## INCOME AND EXPENDITURE.

	1885.	1886.	1887.	1888.	1889.	1890.
Subscriptions and Donations, £	626	584	602	707	948	1,036
Received from Parents for Children in Shelter, - -	2	—	—	—	—	—
Miscellaneous Receipts, - -	—	1	2	16	1	15
Proceeds of Drawing-room Sale,	—	206	—	—	—	—
„ Calico Ball, - -	—	—	—	592	—	—
„ Military Assault-at-Arms, - -	—	—	—	140	—	—
<b>Total Income for year, - £</b>	<b>628</b>	<b>791</b>	<b>604</b>	<b>1,455</b>	<b>949</b>	<b>1,051</b>
Ordinary Expenditure, - £	412	594	813	726	877	1,171
Extraordinary „ - -	231	72	260	170	199	—
<b>Total Expenditure for year, £</b>	<b>643</b>	<b>666</b>	<b>1,073</b>	<b>896</b>	<b>1,076</b>	<b>1,171</b>
Number of Cases dealt with, -	595	1,129	1,005	1,064	1,138	1,250
„ Children involved, -	1,173	1,753	1,440	1,436	1,561	1,827
„ Children sheltered, -	639	979	806	979	1,063	1,207
„ Children clothed, -	219	400	246	341	339	358
„ Meals given, -	4,180	7,283	7,355	6,789	6,505	8,595
„ Children sent to Industrial Schools and Day Schools, Training Ships, Homes and Service, and placed under supervision of School Board, - - -	885	1,484	1,186	1,161	1,249	1,404

## GLASGOW CHORAL UNION.

THE Glasgow Choral Union was instituted in 1843, by the formation of a "Society for performing the 'Messiah.'" In the following year it assumed the designation of the "Glasgow Musical Association for performing Oratorios," which, shortly afterwards, was modified to the "Glasgow Musical Association." Under the last-named title it continued to exist until 1855, when, on its amalgamation with the "Glasgow Harmonic Society," it became the "Glasgow Choral Union."

Previous to 1874 no regularly organized orchestra existed in Glasgow. The accompaniments to choral works and the miscellaneous orchestral pieces, performed previous to that year, were supplied either by a local "scratch" orchestra, or by orchestras engaged from other parts of the kingdom. But the success attending the Festival performances in the winter of 1873 suggested the desirability of organizing an orchestra which, in conjunction with the Society, would give a series of choral and orchestral concerts. Thereupon the Musical Festival Committee and the Glasgow Choral Union, supported by a guarantee fund, instituted the present choral and orchestral scheme, and for the following season (1874-75) a band of 50 performers was engaged for a period of sixteen weeks. Since then, with the continued generous co-operation of guarantors, the scheme has been annually carried on, the extent of the respective seasons having been from 1875-76 to 1881-82, eight weeks; from 1882-83 to 1886-87, ten weeks; and from 1887-88 till the present time, eight weeks. In 1877-78 the orchestra was increased to 60, in 1882-83 to 70, and in 1885-86 to 85 performers. In 1887-88 the number was reduced to 70, but has since been increased to 90 performers.

The choral concerts of the Union were conducted by Mr. Thomas Macfarlane (1844), Mr. Andrew Thomson, Sen.

(1844-47 and 1850-51), Mr. John Harkin (1849-50), Mr. Julius Seligmann (1852-57), Mr. Henry A. Lambeth (1858-80), and Mr. August Manns (1880-87). Mr. Allan Macbeth acted as choirmaster, and conducted several popular concerts during the last-named period; and since 1887 Mr. Joseph Bradley has fulfilled the duties of choirmaster and choral conductor.

The orchestral concerts were conducted in 1874-75 by Mr. H. A. Lambeth; in 1875-76 and the following season by Sir (then Mr.) Arthur Sullivan; in 1877-78 by Dr. Hans von Bülow; in 1878-79 by Herr Julius Tausch; and from 1879-80 to the present time by Mr. August Manns. Occasional concerts (choral or orchestral) have also been conducted by Sir Arthur Sullivan, Sir Michael Costa, Dr. Hans von Bülow, Signor A. Randegger, Mr. F. H. Cowen, Dr. C. Villiers Stanford, and Dr. A. C. Mackenzie. With the exception of those given in the Cathedral, the concerts of the Society took place in the City Hall until November, 1877, when the St. Andrew's Halls were opened. The popular concerts were originally given in the Wellington Palace. They were subsequently removed to the Kibble Palace, and, in November, 1877, to St. Andrew's Halls, where all the concerts have since been given except a few popular ones in the City Hall.

The choral and orchestral programmes of the concerts given by the Union have embraced the finest works of the greatest composers, ancient and modern.

Among the works first produced at these concerts may be mentioned, C. F. Horsley's Oratorio, "Gideon" (1860); H. A. Lambeth's Cantata, "By the Waters of Babylon," Psalm 137 (1861); Henry Smart's Cantata, "Jacob" (1873); H. A. Lambeth's 86th Psalm, "Bow down Thine Ear" (1873); G. A. Macfarren's Cantata, "The Lady of the Lake" (1877); Hamish MacCunn's Cantata, "The Lay of the Last Minstrel" (1889); W. Ed. Duncan's Ballade, "Ye Mariners of England" (1890); Mr. Fred. Lamond's Symphony in A. (1889).

The following Tables will be of interest to many citizens,

and as this society's work has not hitherto been noticed in Municipal Statistics I make good neglect by going back to 1874.

GUARANTEE FUNDS IN EACH YEAR FROM COMMENCEMENT OF SCHEME.

1874-75,	-	£ 3,840	0	0	1883-84,	-	£ 2,666	10	0
1875-76,	-	1,800	0	0	1884-85,	-	2,821	10	0
1876-77,	-	2,455	5	0	1885-86,	-	2,956	5	0
1877-78,	-	2,965	15	0	1886-87,	-	2,745	15	0
1878-79,	-	3,391	5	0	1887-88,	-	2,745	15	0
1879-80,	-	2,570	10	0	1888-89,	-	2,990	15	0
1880-81,	-	2,670	10	0	1889-90,	-	2,761	5	0
1881-82,	-	2,546	0	0	1890-91,	-	3,445	15	0
1882-83,	-	2,466	15	0	1891-92, Sept. 21	-	4,200	0	0

STATEMENT OF SUBSCRIPTIONS AND DRAWINGS FOR SINGLE TICKETS AT CONCERTS.

YEAR.	Duration of Season, Weeks	Subscriptions.		Drawings at Shops and Doors.				Total.		
		Classical.	Popular.	Classical.	Popular.					
		£	s.	d.	£.	s.	d.	£	s.	d.
1874-75	16	2,099	13	0	—			1,139	4	7
1875-76	8	1,348	8	0	—			789	10	11
1876-77	8	1,522	11	3	—			767	6	8
1877-78	8	3,626	7	10	—			597	14	3
1878-79	8	1,677	12	0	—			1,186	8	5
1879-80	8	1,901	6	0	—			855	3	1
1880-81	8	2,667	8	6	—			749	3	8
1881-82	8	2,778	15	3	—			1,081	1	7
1882-83	10	4,406	2	0	—			919	7	2
1883-84	10	4,375	7	0	—			1,038	1	10
1884-85	10	4,187	6	0	—			919	7	2
1885-86	10	3,462	12	0	435	8	0	932	12	10
1886-87	10	2,529	3	6	514	10	0	4,821	7	3
1887-88	8	1,391	14	0	236	5	0	1,725	3	2
1888-89	8 <sup>1</sup>	1,628	19	6	309	7	6	7,197	18	6
1889-90	8 <sup>2</sup>	2,412	16	6	352	12	6	7,181	12	8
1890-91	8 <sup>3</sup>	2,601	18	0	318	0	0	6,615	8	10
								6,130	10	5
								5,019	5	7
								1,022	2	0
								1,099	14	3
								1,059	17	4 <sup>1</sup>
								1,127	0	8
								782	9	0
								5,394	3	5
								5,363	14	8

<sup>1</sup> And one extra concert. <sup>2</sup> And two extra concerts. <sup>3</sup> And three extra concerts.

## AVERAGE ATTENDANCE AT CONCERTS.

YEAR.	Classical.	Popular.	YEAR.	Classical.	Popular.
1875-76, -	1,315	—	1883-84, -	1,908	2,437
1876-77, -	1,324	1,337	1884-85, -	1,813	2,196
1877-78, -	1,766	1,657	1885-86, -	1,581	2,103
1878-79, -	1,189	1,064	1886-87, -	1,359	1,676
1879-80, -	1,481	1,634	1887-88, -	1,366	2,018
1880-81, -	1,681	1,642	1888-89, -	1,434	1,774
1881-82, -	1,844	1,586	1889-90, -	1,645	1,577
1882-83, -	1,900	2,332	1890-91, -	1,788	1,165

The Guarantors at various times made up losses to the extent of £4,596, but were repaid from after surpluses.

The Jubilee of the Union is now close at hand. It is intended that the arrangements for season 1892-93 will include some special features for celebrating this interesting event in a manner worthy of the city and worthy of the organization which has done noble work in raising the musical taste and advancing musical education in Glasgow and the West of Scotland.

## A RESIDENT ORCHESTRA.

THE formation of the Scottish Orchestra Company, with a capital of £50,000, augurs an advance in musical culture. The company has been formed for the purpose of organizing and maintaining on a permanent basis an efficient orchestra which will be available for concerts throughout Scotland at all seasons of the year. There need be no fear on the part of other societies that the proposed organization will be injurious to them. It will be of their begetting, and its tendency ought and doubtless will be to encourage, assist, and strengthen every practical endeavour after higher and sustained culture and excellence.

FLUCTUATIONS IN THE INTEREST ALLOWED ON DEPOSITS SINCE  
SEPTEMBER, 1885.

	Interest per cent.		Interest per cent.
1881—Jan. 13, - -	3½	1886—21st October, -	2½
Feby. 17, - -	3	16th December, -	3½
April 28, - -	2½	1887—3rd February, -	2½
Aug. 18, - -	3	10th March, -	2
„ 25, - -	4	14th April, - -	1½
Oct. 6, - -	5	4th August, - -	2
1882—Feby. 2, - -	6	1st September, -	2½
„ 23, - -	5	1888—12th January, -	2
March 9, - -	4	16th February, -	1½
„ 23, - -	3	13th September, -	2½
Aug. 17, - -	4	4th October, -	3½
Sept. 14, - -	5	1889—10th January, -	2½
1883—Jan. 25, - -	4	24th „ - -	2
Feby. 15, - -	3½	31st „ - -	1½
March 1, - -	3	29th August, -	2½
May 10, - -	4	26th September, -	3½
Sept. 13, - -	3½	30th December, -	4
„ 27, - -	3	1890—20th February, -	3½
1884—Feby. 7, - -	3½	6th March, - -	3
March 13, - -	3	13th „ - -	2½
April 3, - -	2½	10th April, -	2
June 19, - -	2	17th „ - -	1½
Oct. 9, - -	3	26th June, - -	2½
„ 30, - -	4	31st July, - -	3½
Nov. 6, - -	5	21st August, -	2½
1885—Jan. 29, - -	4	25th September, -	3½
March 19, - -	3½	7th November, -	4
May 7, - -	3	4th December, -	3½
„ 14, - -	2½	1891—8th January, -	2½
„ 28, - -	2	22nd „ - -	2
1st September, -	1½	29th „ - -	1½
12th November, -	2	16th April, - -	2
17th December, -	2½	7th May, - -	2½
1886—21st January, -	2	14th „ - -	3½
18th February, -	1½	4th June, - -	2½
6th May, - -	2	18th „ - -	1½
24th June, - -	1½	October	
26th August, -	2	There was no change on this rate at 26th October.	



## FREEDOM OF THE CITY.

DURING the six years under review Honorary Burgess-ship was conferred upon the following four distinguished men with pomp and circumstance, and in presence of large assemblages of the citizens.

1. On 12th June, 1890, within the City Hall, on Henry Morton Stanley, Esq., "in recognition of the heroic spirit "and indomitable energy with which he has devoted his life "to the exploration of Central Africa, and the bringing of "that country within the range and influence of civilization." Mr. Stanley was afterwards entertained to luncheon in the banquetting hall of the new City Chambers.

On 10th October, 1890, within St. Andrew's Halls on, the Right Honourable Archibald Philip Primrose, P.C., L.L.D., Earl of Rosebery, Lord Lieutenant of the Counties of Edinburgh and Linlithgow, "in recognition of the distinguished "services he has rendered (1) to Education as a Royal Commissioner under the Endowed Schools and Hospitals " (Scotland) Act, 1873, and as Lord Rector of the Universities "of Aberdeen and Edinburgh; (2) to the State as Under-Secretary of State for the Home Department; as Lord "Privy Seal and First Commissioner of Works and Public "Buildings; and as Secretary of State for Foreign Affairs; "(3) to Local and Municipal Government as First Chairman "of the County Council of London; and (4) to the United "Kingdom and its Dependencies by his prolonged and "patriotic efforts to strengthen the ties which unite them." The right honourable gentlemen was afterwards entertained to luncheon in the Council Hall of the City Chambers.

On 20th May, 1891, within St. Andrew's Halls, on the Most Honourable Robert Arthur Talbot Gascoigne Cecil, Marquess of Salisbury, K.G., P.C., D.C.L., Chancellor of the



University of Oxford, "in recognition of his eminence as a  
"Statesman and Man of Letters; and of the distinguished  
"services he has rendered to his country as Secretary of  
"State for India in 1866-67, and again from 1874 to  
"1878; as Secretary of State for Foreign Affairs from  
"1878 to 1880; as Special Ambassador at the Conference  
"on Eastern Affairs, held in Constantinople in 1876-77;  
"as Second Plenipotentiary for Great Britain at the Congress  
"of Berlin in 1878; as Prime Minister and Secretary of  
"State for Foreign Affairs in 1885-86; as Prime Minister  
"and First Lord of the Treasury in 1886-87; as Prime  
"Minister and Secretary of State for Foreign Affairs since  
"1887; and of his services in arranging and securing the  
"consent of the Great Powers to the delimitation of Central  
"Africa under conditions eminently fitted to promote the  
"civilization of that country and the development of  
"commerce." The Prime Minister was afterwards entertained to luncheon in the banqueting hall of the City Chambers.

On 7th October, 1891, on the Most Honourable John Patrick Crichton Stuart, K.T., L.L.D., Marquess of Bute, "in recognition of the distinguished service he has rendered  
"to the higher education of Scotland by erecting and gifting  
"to the University of Glasgow its great hall, known as the  
"Bute Hall; by his personal contributions to literature;  
"and by the warm sympathy he has ever shown in what-  
"ever is fitted to promote the interests of Art and Science." The Marquess afterwards opened the Mitchell Library in its new home in Miller Street.

PORTRAITS COMMISSIONED BY THE CORPORATION  
AND HUNG IN THE CORPORATION GALLERIES.

JOHN URE, ESQ., Lord Provost of Glasgow, 1880-1883. Painted for the Corporation on his retiring from the civic chair, in recognition by his colleagues of a long term of beneficial service extending from 1856, during which he held office as Bailie of the River 1859-1861, Magistrate of the city, 1861-1862, and 1875-79, and Lord Provost of the city. Throughout the entire period of his municipal life, Mr. Ure took deep interest, in particular, in all measures for improving the sanitary conditions of the city, the suppression of infectious diseases now so well understood and efficiently combated, and the erection of proper hospital accommodation, and acted as chairman of the Committee on Health during twenty-three years. Mr Ure has also been *de facto* chairman of the Clyde Navigation Trust since 1886, and he held the office of Dean of Guild and chairman of the Merchants' House from October, 1889 till 7th October current. Mr. Ure was offered by Her Majesty the honour of knighthood, but for private reasons declined the honour. The portrait is by George Reid, R.S.A., President of the Royal Scottish Academy, and was unveiled in the Corporation Galleries, 29th October, 1885. Another portrait, half length, of Mr. Ure, also by Reid, was presented by the Corporation to Mrs. Ure, at Cairndhu on 6th April, 1886.

Sir William M'Onie, ex-Lord Provost of the city, 1883-1886. Painted for the Corporation on his retiring from the civic chair, in recognition by his colleagues of a long term of faithful public service extending from 1867 to 1873, and 1878 to 1886, during which he initiated or assisted in the initiation and promotion of a number of important schemes. In particular he promoted the extension of the works in connection with the American cattle trade, and presided over the initial steps taken for promoting the International Exhibi-

tion of 1888, and had a full share in the erection of the new City Chambers. The portrait is by George Reid, R.S.A., and was unveiled in the Corporation Galleries, 15th December, 1887. Another portrait of Sir William, also by Reid, was at the same time presented by the Corporation to Lady M'Onie.

Sir James King, Baronet, Lord Provost of the city, 1886-1889. Painted for the Corporation on his retiring from the civic chair, in recognition by his colleagues of a most successful public reign, during which the city was placed in circumstances of exceptional prominence requiring of the Lord Provost the highest qualities. In particular the Queen's Jubilee Celebration in Glasgow, the visits of the Queen, the Prince and Princess of Wales, and the Shah of Persia, the International Exhibition of 1888, and the opening of the new City Chambers, are all events with which Sir James' name and that of his estimable lady must ever be honourably associated. Sir James was invited by the unanimous voice of the Town Council of 1886 to enter the Council, and, having consented, he was elected on 15th July of that year a member for the Seventh Municipal Ward, and took his seat as a Councillor, and was elected Lord Provost in November following. The portrait is by Edward A. Walton, and was unveiled in the City Chambers, 25th September, 1891. Another half length portrait of Sir James, also by Walton, was at the same time presented by the Lord Provost in name of the Corporation to Lady King.

## VISITS FROM ROYAL AND DISTINGUISHED PERSONAGES OF OTHER COUNTRIES.

THE hospitalities of the Corporation have been extended to foreign guests on several occasions in the last six years, and it will be seen that they were extremely cosmopolitan in their range—embracing the entertainment of the greatest of oriental monarchs—the Shah of Persia; one of the most influential noblemen of Japan, Count Saigo; the most enlightened Minister of China, in modern times, the Marquis Tzêng; the American Ambassador, Mr. Phelps; two Indian princes, and distinguished representatives from almost every dependency of the Crown.

### VISIT OF HIS IMPERIAL MAJESTY THE SHAH OF PERSIA.

This enlightened Eastern Potentate visited the city on 18th July, 1889. Having expressed a desire to see Glasgow and the Clyde, His Majesty's wishes were officially communicated to Lord Provost Sir James King, and by him to the Magistrates, and a warm invitation was given to His Majesty by the Corporation. His Grace the Duke of Montrose, in the most handsome manner, offered to the Corporation to place Buchanan Castle at His Majesty's service. Situated, as Buchanan Castle is, close by the Queen of Scottish Lakes, no more charming residence could have been chosen, and no more graceful offer could have been made. It was, accordingly, most cordially accepted. The Duke and Duchess, need it be said, extended to the Imperial visitor the most princely hospitalities.

His Majesty reached Buchanan Castle on the evening of Tuesday, 17th July, and was met by the Duke of Montrose, the Lord Provost Sir James King, General Lyttelton Annesley, and others. On Wednesday, the 18th, His Majesty arrived in the city, at Queen Street Station, at one

o'clock, accompanied by his suite, consisting of His Excellency Mirza Ali Asgher Khan, Grand Vizier; Prince Malcom Khan, the Persian Ambassador; His Excellency Mehdi Kuli Khan, High Steward, and others; and was attended, on behalf of Her Majesty and the Government, by Sir John McNeill, V.C., Sir Henry Drummond Wolff, G.C.B., British Ambassador at the Persian Court, Major-General Lyttelton Annesley, commanding the forces in Scotland, and Colonel Boughey, assistant adjutant-general to the forces. The royal party also included the Duke and Duchess of Montrose, the Marquess and Marchioness of Breadalbane, Lady King, and Lady Alexander Kennedy, etc.

Awaiting the royal train were the Magistrates, Town Clerk, and City Chamberlain, in their robes of office, and a guard of honour from the 1st Lancashire Fusiliers, and a cavalry escort from the 13th Hussars. The platform was carpeted and profusely decorated by the Railway Company with palms, tree ferns, and other tropical plants.

On the train drawing up at the platform the Lord Provost, who had also travelled with it, alighted first, and going to the royal saloon received His Majesty as he stepped on to the Persian rugs spread on the carpet. Having introduced the magisterial party to the Shah, individually, a procession was formed, and the royal cortege proceeded to the new City Chambers, which, though not yet officially occupied, were completed and made ready for the suitable reception of His Majesty. Her Majesty the Queen formally opened the building on 22nd August preceding, but His Majesty the Shah was the first personage to be actually received within it. Here another guard of honour from the Lancashire Fusiliers was stationed at the grand entrance. His Majesty was conducted by the Lord Provost by the grand staircase to the principal salon amid a flourish of trumpets. After a brief rest the Lord Provost conducted the Shah to the Council Chamber, where were assembled the members of Town Council and officials only. His Majesty having taken his seat on the throne, with the Grand Vizier on the right and Prince Malcom Khan on the left, the Lord Provost standing in front of the throne, in the

centre of the members of the Council, asked that His Majesty might be pleased to receive an address from the Corporation. The address having been read by the Town Clerk, Sir James Marwick, it was presented to the king by the Lord Provost in a richly gilt casket, and His Majesty, speaking in Persian, made a reply, which was interpreted by Malcom Khan. The Shah was conducted by the Lord Provost along the principal corridors on the main floor, and repeatedly expressed admiration of the grand staircase and the richness of colouring of the marble and alabaster of which it is composed. Mr. Young, the architect of the building, being introduced to His Majesty, received hearty congratulations on the successful completion of his splendid work.

The royal procession was continued and proceeded by way of Frederick Street and Ingram Street to the Royal Exchange. His Majesty was received by an immense assemblage, and after a brief visit the progress was resumed by way of Queen Street, Argyle Street, Buchanan Street, and Sauchiehall Street to the Corporation Galleries, the Shah being warmly welcomed all along the route by crowds of citizens. At the Galleries a large representative party of invited citizens met the Shah at luncheon, including the entire Consular Corps. A *recherché* luncheon was served, at the conclusion of which the Lord Provost proposed as toasts—"Her Most Gracious Majesty the Queen" and "His Imperial Majesty the Shah." In speaking to the toast of the Shah, the Lord Provost said:—

"With a spirit of enterprise which, so far as I know, is unexampled amongst Eastern monarchs, His Imperial Majesty has made successive tours throughout Europe with a view to witnessing the progress of civilization and the extension of commerce and manufactures. In the course of these visits His Majesty has on each occasion traversed certain of the countries of the Continent, and he has paid two visits to England. But as Prince Malcom Khan has told us to-day he now sees Scotland for the first time. I trust that His Majesty will consider the cheers with which his progress has been greeted to-day as forming a cordial welcome to our country. We count it as no small honour that His Majesty has accorded to Glasgow the position of being the first resting



place in his progress through Scotland. In the Shah of Persia we recognize an able and enlightened ruler who has generously enlarged the liberties of his subjects, who has increased the securities to personal safety and to property, and who has opened his empire to the commerce of the world. We trust His Majesty may be blessed to see the fruits of this enlightened policy, and we trust he will also have an opportunity of watching the development of the commerce of his empire. We earnestly trust that Persia may continue to hold an important and powerful position among the nations of the East, and that in future times the progress of years may cement more and more closely those ties which bind Great Britain and Persia to each other."

The toast was honoured with much cheering, the band of the Fusiliers playing the Persian National Anthem. The Shah replied in Persian, and Prince Malcom Khan afterwards interpreted the speech. He said :—

"His Imperial Majesty cannot express sufficiently how happy he is to have been able to visit Scotland, and that his visit should have been begun by the kind reception you have given to His Majesty in Glasgow. The visit to Scotland has been a long-cherished ambition of His Majesty. The beauty of your scenery, the enterprising character of your people, your poetry and your history, have made the name of Scotland popular in every country. His Imperial Majesty thanks you again for the very cordial reception you have given to His Majesty, and he need hardly assure you that on his return to his empire it will be to him a pleasure and a constant object to increase the friendship and commercial relations of Persia with the British Empire. His Imperial Majesty is pleased to drink to the health of "The Lord Provost and to the prosperity of Glasgow."

The Lord Provost, Sir James King, in acknowledging the toast said :—

"It was not very often that crowned heads visited our city ; but the development of our commerce and the extension of our shipbuilding were becoming the means of making the name of Glasgow better known. He felt they should always receive with fitting honour and pay the highest respects to those monarchs who, like His Imperial Majesty, were the means of developing the natural resources of their country, and making their people more prosperous and happy. On behalf of himself and his colleagues he returned thanks.



At the conclusion of luncheon, and by special request of the Shah, the members of the Consular Corps were introduced individually to His Majesty, who graciously spoke a few appropriate words to each.

The drive was then resumed by way of the Kelvingrove Park and Kelvinhaugh Street, to an improvised platform erected in the latter street, where a special train was in waiting to convey His Majesty to Clydebank Shipbuilding and Engineering Works. A lengthened and interested inspection was made of portions of these works, and of the ships and machinery in various stages of progress, and also of the model room of the firm, where a light refreshment was served. Carriages were then entered, and the royal party was driven to Kilbowie Station, and re-entered the special train in waiting to convey the Shah and his distinguished suite to Buchanan Castle. The castle was reached at seven o'clock.

His Majesty took his departure from the castle next day, 19th July, at 11 o'clock for Glenmuick and Invercauld, on a visit to Mr. J. T. Mackenzie of Kintail. Thus ended this memorable visit from the monarch of an empire not more celebrated in history and in romance for the Orient splendours of its palaces than for the impenetrable seclusion in which its monarch was supposed to live and move—"far from the madding worlding's hoarse discord."

#### VISIT OF THE MARQUIS TZÊNG,

CHINESE MINISTER PLENIPOTENTIARY TO GREAT BRITAIN.

At the close of his ambassadorial residence in London and when about to return to his own country this highly distinguished and most accomplished and enlightened statesman, now deceased, desired to make acquaintance with some of the provincial towns of England, and in particular to visit Glasgow and its industries. His Excellency, accompanied by Fung Yee, the able permanent

secretary to the Chinese Legation in London, and by an official suite, arrived from London at the Central Station on the evening of Monday, 24th May, 1886, and was met by Lord Provost M'Onie, Senior Bailie Richmond, and other magistrates. Next day (Tuesday), accompanied by the Lord Provost and magistrates, the works of Lord Provost M'Onie were visited, after which the party embarked on one of the Cluthas, and viewed the harbour and river bank works as far down as Clydebank. Landing at Messrs. J. & G. Thomson's dock, a prolonged inspection was made of the ships and engines in progress of construction, and thereafter the party was entertained to luncheon by the Messrs. Thomson in the model room. Returning in carriages by Great Western Road, the Royal Exchange, City Glass Works, and Hyde Park Locomotive Works, were visited, and in the evening Lord Provost M'Onie entertained His Excellency to dinner in the Western Club. On Wednesday, 26th May, the party proceeded by special train, visiting Messrs. Dubs' Locomotive Works, Messrs. Morrison & Mason's Stone Sawing and Dressing Works, and the Steel Works of Scotland at Newton. At the latter works, Messrs. Arrol, Wilson, McClelland, and Lorimer, directors, with Mr. Riley, general manager, received the Marquis, and after a highly interested inspection of the great works with their ponderous machinery, His Excellency was entertained by them to luncheon. Thereafter the train conveyed the party to the Caledonian Railway Company's Works at St. Rollox, where His Excellency was received by the Marquis of Breadalbane, Mr. Hugh Brown, and Mr. Cowan, directors of the Company, and Mr. Drummond the Manager.

On Thursday, 27th May, His Excellency, desiring to pay his respects to the Lord Provost and senior Bailie Richmond, first of all made calls at their homes, after which the party drove in carriages to Paisley, and visited first the Anchor Thread Works, being conducted over them by Mr. Stewart Clarke; then the works of Messrs. J. & P. Coats, where the Marquis was received by members of the firm, and the party was afterwards entertained to luncheon at Woodside by Mr.

and Mrs. Archibald Coats. Returning by way of Govan the Fairfield Shipbuilding Works were visited, and here again refreshments were served.

In the evening the Marquis was entertained by the Corporation to a banquet in the Council Hall, when the Lord Provost presided, and the magistrates acted as stewards.

#### THE TOAST LIST.

"Her Majesty the Queen,"	Lord Provost.
"His Majesty the Emperor of China,"	Lord Provost.
"To the cordial relations existing between the Empires of China and Great Britain, and may they become more and more intimate,"	Sir James Watson.
"His Excellency the Marquis Tzêng,"	Sir William Collins.

The Marquis in response to the last toast rose and dictated his reply to the secretary.

Fung Yee stated that he was desired by His Excellency to say that, in the first place, His Excellency begged most respectfully to thank them for the warm manner in which they had received the toast which his Lordship had been pleased to propose—the health of the Sovereign, the Emperor of China. In the second place, he wished to say in regard to the sentiment to which Sir James Watson had just given utterance with respect to the relations between the two Empires, that they never had been on better terms. The friendly relations between the Emperor of China and Her Majesty the Queen and her subjects he hoped would be more and more increased. In consequence of these relations it must follow as a natural sequence that commerce between the two countries must be more and more prosperous, and for the mutual advantage of both. Since His Excellency had come to Glasgow his Lordship and the city Magistrates had been very kind, and he was desired to thank the managers of the leading manufactories they had visited for doing everything in their power to make them interested in their newest designs. His Excellency was very grateful for the informa-

tion given. They had seen England and Scotland, and he felt that notwithstanding all the resources of China they would require to come to the manufacturers of Glasgow for assistance. The great desire of the Marquis was embodied in the city motto, "Let Glasgow Flourish." (Applause.) Before resuming his seat Fung Yee proposed the health of the "Lord Provost, Magistrates, and Town Council of Glasgow."

At the close of the banquet the Marquis Tzêng and suite took their departure for London.

#### COLONIAL AND INDIAN VISITORS.

A distinguished representative party of ladies and gentlemen, numbering 150, delegated to the Colonial and Indian Exhibition of 1886, from all parts of Her Majesty's dominions abroad, visited Glasgow by invitation, and received the hospitality of the Corporation from 26th to 28th August, 1886. The party was largely of British extraction, but native Indian and African dignitaries with their ladies were numerous. The Grand Hotel and Maclean's Hotel were wholly requisitioned for the accommodation of the guests. The party were received by the Magistrates at noon of the 26th, at the North British Railway Station, and were driven to the Corporation Galleries, where they were formally received by Lord Provost M'Onie, the Magistrates, and their ladies. A light luncheon being partaken of, the party divided into groups, and, conducted by members of the Magistracy, some proceeded to the Cathedral, the University, and other places of interest, and others to view certain of our industrial works kindly thrown open for inspection.

In the evening a grand banquet was given in St. Andrew's Halls, which were decorated with trophies and flags of the various dependencies of the Crown, the Glasgow Arms being displayed behind the chair. A number of representative citizens were invited—the Lord Provost presided, and Bailies Dickson, Neil, Richmond, and Gray were croupiers.

The following is the toast list :—

“Her Majesty Queen Victoria,” - - Lord Provost.

“The Prince and Princess of Wales and the }  
other Members of the Royal Family,” { Lord Provost.

“The Navy, Army, and Reserve }  
Forces of the Empire,” - - { Sir William Thomson.

*Replies*—Captain Hixson, R.N.

Lieut.-General Sir George Willis.

Rev. Dr. Donald Macleod, 1st L.A.V.

“India, Canada, Australasia, and the other }  
dependencies of the British Empire,” { Lord Provost.

*Replies*—Sir Saul Samuel, G.C.B., *for Australasia.*

Mr. Lallee, *for India.*

Hon. Mr. Fabre, C.M.G., *for Canada.*

“Prosperity to the Commerce of the }  
Colonies and India with the Mother } Sir James Bain,  
Country and the rest of the World,” { *Chairman,*  
*Chamber of Commerce.*

*Reply*—Mr. Van der Byl, *of Cape Colony.*

“The Municipality of Glasgow,” - Mr. Malcolm Fraser,  
*of Western Australia.*

*Reply*—Lord Provost.

“The Clergy,” - - - - Sir James Watson.

*Reply*—Rev. Dr. Burns.

“The Ladies,” - - - - - Bailie Dickson.

*Reply*—Mr. Hawtayne, C.M.G., *British Guiana.*

“The Press,” - - - - - Mr. James King, LL.D.

*Reply*—Mr. Julian Thomas, *of “Melbourne Argus.”*

“The Lord Provost,” - - - Sir George Bowen, G.C.M.G.

*Reply*—Lord Provost.

On the following day, 27th August, the party enjoyed a cruise in Mr. MacBrayne’s steamer “Iona,” specially chartered for the day, and a large number of representative citizens, ladies and gentlemen, including the ex-Lord Provost of the city, were invited. The day was a perfect summer day throughout. The steamer left the Broomielaw at 9 A.M. with 600 guests on board. The tide, fortunately, was at flood. The route taken from Greenock was close past the turret ship “Ajax,” finely dressed for the occasion, the officers of which had been received on board the Iona at Princes Pier, then round the training ship “Cumberland,” at its anchorage at the mouth of the Gareloch, the esteemed commander of which, Captain Parry, R.N., and the band of the ship, being received on board, while the crew, numbering some

hundreds of youngsters, gallantly manned the yards of the old three-decker to their topmost altitude; next Loch Long was entered for a little way, and turning southwards, the Iona hugged the shores of Argyllshire, entered Rothesay Bay, passed close to the town, which was gaily decorated, proceeded onwards through the Kyles of Bute, gave the party a near view of Skipness and Loch Ranza, rounded the north of Arran, and passing Corrie, reached the entrance to Brodick Bay before four o'clock. Here the Iona's head was turned homewards, and passing close by the Cumbræes and along the Skelmorlie shore of the Firth, touched at Wemyss Bay, Dunoon, and Greenock—Glasgow was reached at eight o'clock, with the Broomielaw in twilight. Every provision was made for the comfort of the party, purveyed by Mr. MacBrayne's steward. On the return sail Sir Saul Samuel expressed the thanks of the distinguished strangers for the generous hospitality extended to them by the Corporation of Glasgow, and for that day's most enjoyable and memorable cruise over the Firth of Clyde. Lord Provost M'Onie acknowledged the compliment.

#### VISIT OF HIS EXCELLENCY COUNT SAIGO OF JAPAN.

This distinguished nobleman of Japan visited Glasgow on 23rd-28th September, 1886, and received the attention and hospitality of the Corporation. The Count, who was accompanied by a suite of official, military and naval officers, was received on arrival, and on the 24th they were taken to some of the public places and industries, including Messrs. Napier's engine works at Lancefield, and Messrs. Thomson's works at Clydebank, where the firm entertained the party to luncheon. In the evening the Count and suite were entertained by the Lord Provost and Magistrates to dinner in the George Hotel; and on Saturday, 25th September, the party was taken to Fairfield Works, the Steel Works of Scotland, where luncheon was served by the company, and to Gartsherrie Ironworks, where tea was served.



## VISIT OF THE RAJAH OF NARSINGHGARH (CENTRAL INDIA).

This Eastern Prince with suite visited Glasgow on 29th July, 1886, and was waited on at St. Enoch's Hotel by Lord Provost M'Onie. His Highness was shown some of the works and places of business of the city, and was otherwise entertained.

## VISIT OF THE MAHARAJAH GAEKWAR OF BARODA.

His Highness the Maharajah and suite visited the city on 22nd December, 1887, and was waited on at St. Enoch's Hotel by the Lord Provost Sir James King. Thereafter His Highness was driven to several places of interest, including Blochairn Steel Works and the Caledonian Railway Company's Works at St. Rollox, and saw much ponderous machinery in motion.

## VISIT OF HIS EXCELLENCY E. J. PHELPS, AMERICAN MINISTER.

His Excellency visited Glasgow in November, 1888, for the purpose of delivering an address to the Juridical Society, and was the guest of the President, Mr. Sheriff Berry. His Excellency was shown over the city and some of its places of interest, including the Fairfield Shipbuilding and Engineering Works and the Steel Works of Scotland, Newton, where luncheon was served, and on the evening of 14th November, he was entertained by the Corporation to a banquet within the Council Hall.

## VISIT OF U. S. FRIGATE "ENTERPRISE" TO THE CLYDE.

Captain M'Calla and officers of this ship on a cruise round the world, were, on 13th September, 1889, by invitation of the Lord Provost and Magistrates, taken over the city, and some of the industrial works, including the Steel Works of Scotland at Newton, where they were entertained to luncheon by the Company. The return compliment was paid the Magistrates of an invitation to a reception and dance on board the "Enterprise" at the Tail of the Bank.



## VISIT OF THE LORD MAYOR AND SHERIFFS OF LONDON.

The Lord Mayor of London, Sir Joseph Savory, Bart., having in early summer indicated a desire to visit and inspect the Glasgow Water Works, in view of the agitation in the Metropolis for a better supply of water, a cordial invitation was given by the Water Committee to the Lord Mayor and Sheriffs to accompany them to the annual inspection in June. The time was unsuitable, and a later date was suggested. The annual inspection proceeded as usual, and the Lord Mayor ultimately decided to come on 17th August. It was resolved to provide suitable accommodation for the distinguished party in the Central Station Hotel.

On 17th August the Lord Mayor and Lady Mayoress, Sheriff Sir William Farmer and Lady Farmer, and Sheriff Sir Augustus Harris and Lady Harris arrived at the Central Station from London, and were met and welcomed by the Lord Provost and Magistrates. On 18th August, accompanied by the Lord Provost and Mrs. Muir, Bailie Cumming, Bailie M'Lennan, and the City Chamberlain, the party visited first the Cathedral and were conducted over it by the Rev. Dr. Burns in his robes, next the Queen's Park, and were conducted through it by Mr. M'Lellan, and passing thence across the river by the "Finnieston" the University was visited, where the party was received by Principal Caird and Mrs. Caird, Sir G. H. B. Macleod, and Professors Dickson, Leishman, Ferguson, and M'Call Anderson, and conducted through the principal halls.

The drive was continued to Jordanhill Station, where a special train was taken to Clydebank on a visit to Messrs. J. & G. Thomson's works. Here a sumptuous luncheon was served in the model room on arrival, and the works and vessels in progress were afterwards inspected. A visit was next made to the works of the Singer Manufacturing Company at Kilbowie, where tea was served. Returning to the city the Lord Mayor and the Sheriffs, with their ladies, attended a banquet given by the Corporation in their honour, and met a large number of representative citizens.

On 19th August the Mayoral party proceeded by train to Aberfoyle, accompanied by the Lord Provost and members of the Water Committee. Both the old and the new works in progress in the Duchray Valley were visited, the final stone of the bridge over the Duchray Water was laid by Mrs. Muir\*, and luncheon was served in the reading room at this part of the aqueduct.

Returning to Aberfoyle the party, after a short rest, drove to Callander, where dinner was served and sleeping accommodation provided. On 20th August the works at the foot of Loch Vennacher were visited, and afterwards Loch Katrine itself. Luncheon was served at the Royal Cottage and dinner at Inversnaid, after which the party returned to Glasgow by way of Loch Lomond. During the next two days the Lord Mayor and Sheriffs with their ladies were guests of the Lord Provost and Mrs. Muir at Deanstoun. The weather throughout was most propitious, and everything was seen under the best weather circumstances.

#### BALL TO OFFICERS OF CHANNEL FLEET, 1887.

Being Jubilee Year, a brilliant and most successful ball was given by the Corporation to Vice-Admiral Sir William Hewett, K.C.B., Rear-Admiral Rowley, and the officers of the powerful squadron which visited the Clyde in September 1887. The event came off in St. Andrew's Halls on the 14th September, and was attended by a large representative gathering of ladies and gentlemen of the city invited to meet with the gallant officers. The officers were conveyed from Greenock to the ball-room by special train and carriages provided by the Corporation. The Magistrates acted as stewards.

Prior to the ball the Lord Provost, Sir James King, entertained the admirals and captains of ships to dinner in the Western Club.

An equally brilliant and unique return ball was given by

\* Vide page 118.

the admirals and officers of the fleet on board the “Agin-court,” on 15th September, to the Lord Provost, Magistrates, and Town Councillors and their ladies, and to almost all the other ladies and gentlemen who had attended the ball in St. Andrew’s Halls.

#### BRITISH MEDICAL ASSOCIATION.

A conversazione in honour of the British Medical Association, which was holding its Annual Congress in the University Class Rooms, was given on 10th August, 1888, by the Corporation within the Grand Hall and Art Galleries of the Exhibition, and closed to the public for the occasion. About 2,500 ladies and gentlemen were present by invitation, including many of the highest repute in medicine and surgery. The Exhibition authorities gave on the occasion an effective display of fireworks.

#### ARCHÆOLOGICAL AND LIBRARIES ASSOCIATIONS.

These associations held congresses in Glasgow in September, 1888, and were entertained by the Corporation on 4th September to a conversazione within the Corporation Galleries. The Marquess and Marchioness of Bute and other distinguished persons attended.

1887-1888.

## AN EPOCH-MAKING TERM IN GLASGOW.

It will readily be admitted that those years provide Events to justify the heading I give to this article.

QUEEN VICTORIA'S JUBILEE in 1887 had universal interest for the world, and it was observed in Glasgow in a manner memorable to every citizen.

The GLASGOW INTERNATIONAL EXHIBITION OF INDUSTRY, SCIENCE, AND ART in 1888 was an event of notable magnitude and importance to the City and West of Scotland, and its opening by their Royal Highnesses the Prince and Princess of Wales lent to it imposing lustre.

The visit of the Queen in August, 1888, when Her Majesty in State formally opened the new City Chambers and visited the Exhibition, gave crowning grace to this period, and elicited unbounded demonstrations of loyalty.

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Lord Provost Sir James King, Baronet, unanimously invited by the Town Council of 1886 to enter its ranks, filled the civic chair throughout this epoch in our history, and with extreme grace, dignity, and courtesy he discharged its manifold and onerous duties, earning the admiration and lasting gratitude of his fellow citizens, and receiving from Her Majesty the Queen the honour of Knighthood in 1887 and of a Baronetcy in 1888.

## QUEEN VICTORIA'S JUBILEE.

HER Majesty's Jubilee marked a period, when, in mercantile phraseology, stock was taken throughout the entire British Empire. The fifty years' reign which it signalized was unexampled for the expansion and development in material greatness of our Empire, and in the discovery and practical application of manifold means and appliances for drawing all parts of the Empire and the entire world more closely together. Most meet and fitting it was that so beneficent a reign, at so significant a period of it, should be worthily, loyally, and universally rejoiced in and celebrated.

“ Her Court was pure, her life serene,  
God gave her rest, her land repose ;  
A thousand claims to reverence close  
In her as mother, wife and Queen.”

In no part of Her Majesty's wide dominions were loyal congratulations more sincerely, more jubilantly manifested than in Glasgow, that our beloved Queen, in perfect health, had attained to the Jubilee of her remarkable and truly benignant reign. The Corporation with great heartiness voted the following address of congratulation, affection and gratitude to Her Majesty, and on 27th June it was presented to the Queen in person at Windsor Castle by the Lord Provost Sir James King, and Bailies Richmond and Gray, who were accompanied by Dr. Marwick, Town Clerk.

## TO THE QUEEN'S MOST EXCELLENT MAJESTY.

MAY IT PLEASE YOUR MAJESTY,

We, the Lord Provost, Magistrates, and Council of the City and Royal Burgh of Glasgow, desire to offer your Majesty our humble and heartfelt congratulations on the near approach to the completion of fifty years of your Majesty's beneficent reign.

That reign is memorable by reason of its exceptional duration.

Previous to the reign of King James VI. of Scotland and I. of England no one of the Scottish Sovereigns, and only two of the English Kings, occupied the throne for so long a time. As a Scottish Sovereign King James VI. reigned for fifty-eight years; and as Sovereign of Great Britain, King George III. reigned for sixty years. Only one Scottish Monarch and three English Sovereigns have thus each filled the throne for half a century. Your Majesty is the first Queen either of Scotland or of England, who has reigned so long.

Nor have reigns of similar duration been less exceptional in the other countries of Europe during the last ten centuries.

But the importance of your Majesty's reign is to be estimated not only by its duration, but by the momentous and beneficial changes which have taken place within it. During these fifty years the limits of the British Empire have been immensely extended in all parts of the world, and your Majesty's benign sway has been hailed by the different races which own the supremacy of the British Crown. Art and science, manufactures and commerce, have flourished as they never did before. Human rights have received wider and juster recognition. Better laws have been enacted, and have been righteously administered. The standard of human action in every department of life has been elevated. The blessings of diffused education have been widely extended, and there has been growing up between all ranks and classes of society a recognition of mutual rights and obligations, which cannot fail to give to the whole framework of society a coherence and solidity which is full of promise for the future.

In all this change and progress your Majesty has taken a deep and sympathetic interest. For the elevation of the people your illustrious Consort worked with a prescient devotion which has become better understood and more earnestly appreciated as his aims and life-work became more widely known. In that work, so inaugurated, and so devotedly carried on by your Majesty, we gratefully recognize the support which your Majesty has received from all the members of your family.

Thus it is, that after a reign of fifty years, in which your people have rejoiced in your joys and shared in your sorrows, and sympathized in every event which has affected your Majesty and your family, the feelings of love and loyalty and devotion which they entertain seem ever to broaden and deepen. In these feelings—nowhere more deeply cherished than in the city which we represent—we desire to offer the expression of our warmest and most loyal sympathy.



Our city's share in the progress of the Empire during the fifty years from 1837 when the Queen ascended the throne, might be illustrated in a thousand ways, and it is fitting that some comparison be made between our position in 1837 and that reached in 1887, but I confine the contrast to four items:—

	1837.	1887.
Population of City and Suburbs, - - - }	249,000	750,000
Annual revenues of the Corporation, - -	£15,000	£1,200,000
Tonnage of shipping registered, - - -	60,000 tons.	1,100,000 tons.
Revenue of Clyde Trust, -	£37,644	£287,934

In like measure, and in other aspects, religious, educational, commercial, and industrial, the city has extended, and been fortified by the wise, patriotic, and earnest labours and thoughtfulness of its rulers and philanthropists, and by the enterprise of its manufacturers and merchants.

It was natural and becoming, therefore, in a community so highly favoured under the Queen's rule, that Her Majesty's Jubilee should be celebrated with pomp and circumstance. Kept on Thursday, 16th June, in high holiday, and favoured with Queen's weather throughout, nothing was left undone by the Magistrates and Town Council and the entire body of citizens to display their loyalty and gratitude in a broad and unstinted spirit for unnumbered blessings bestowed on us as a community.

The day's celebration was appropriately begun with an impressive religious and choral service in the Cathedral, conducted by the Rev. George Stewart Burns, D.D., the incumbent, and first minister of Glasgow; the Rev. John Marshall Lang, D.D., of Barony Parish, second minister of Glasgow; the Rev. James Smith, D.D., of Cathcart Parish, ex-Moderator of the General Assembly of the Church of Scotland; the Rev. Alexander R. MacEwen, B.D., of



Anderston United Presbyterian Church; the Rev. Alexander B. Bruce, D.D., Professor, Free Church College; and the Rev. Donald M'Leod, D.D., of Park Parish, one of Her Majesty's Chaplains in Ordinary. Dr. A. L. Peace acted as choirmaster; Mr. Edwin J. Wareham was organ accompanist; and the Glasgow Choral Union, 300 strong, and led by Dr. Peace, rendered the vocal music with grand effect.

At a few minutes before eleven, The Lord Provost, Magistrates, and Town Council and principal officials in their robes of office in processional order entered the Cathedral, and were followed in the same order by the Principal and Professors of the University, the Consular Corps, the Presbytery of Glasgow, representatives of the Merchants' House, the Trades' House, the Chamber of Commerce, the Faculty of Physicians and Surgeons, the Faculty of Procurators, the School Board, the Parochial Boards and others. An immense body of citizens, admitted by ticket, filled both nave and choir of the Cathedral.

After readings of Scripture, a thanksgiving prayer was offered up by Dr. Macleod, and thereafter Dr. Burns delivered a brilliant discourse. The prayer contained these sentences:—

“Almighty God, who rulest over all the kingdoms of the world, and disposest of them according to Thy good pleasure, we yield Thee unfeigned thanks on this glad day that Thou wast pleased to place Thy servant, Victoria, upon the throne of this realm, and for all Thy mercies bestowed upon her, and upon us, Thy servants, during her long and prosperous reign. We thank Thee for all the grace Thou hast given to her to fulfil the duties of her high station, for Thy goodness to her in her great sorrows, and for all the wisdom by which she has governed her people for so many years. O Lord our God, who upholdest and governest all things in heaven and on earth, receive our humble and hearty thanks for Thy grace to us and to our Queen, in that Thou hast permitted her to see her children and her children's children. Let Thy blessing be upon Albert Edward, Prince of Wales, the Princess of Wales, and all the family and descendants of our Sovereign Lady.”

At the conclusion of the Cathedral service, the Corporation entertained 6,000 poor persons, judiciously selected, to a substantial dinner within five halls in different districts of

the city. Senior Bailie David Richmond presided in the City Hall, supported by Bailies Campbell and Mitchell, Councillors William Wilson, Brechin, Caldwell, M'Lennan, Morrin, Filshill, Neil, and others; Bailie James Gray presided in the Waterloo Rooms, and was supported by Sir William Collins, Archbishop Eyre, Sir J. N. Cuthbertson, and others; Bailie John Shearer presided in the Grand National Halls, supported by a number of prominent citizens; Bailie James M'Farlane presided in the United Evangelistic Association's Hall, supported by Lord Dean of Guild Blackie, Ex-Bailie Dron, Mr. John Steel, Mr. John R. Miller, and others; and Bailie Alexander M'Laren presided in the Bridgeton Public Hall, supported by Bailie Thomson, Treasurer Waddel, Councillors James Martin, James Henderson Martin, and others.

The Lord Provost, accompanied by Lady King, visited the several halls and at each of them addressed a few words appropriate to the august event of the day, and to the audiences. His Lordship also sent a telegram to Her Majesty while *en route* from Balmoral to Windsor in the following words:—

Six thousand of the Queen's loyal subjects assembled at dinner in Glasgow, under the presidency of the Lord Provost, request him to convey to Her Majesty their humble duty and cordial congratulations on the Jubilee of her reign, together with their heartfelt prayer for her health and happiness.

The following reply, dispatched from the Larbert telegraph office at 8.35 p.m., was duly received:—

To Lord Provost, Glasgow.—The Queen thanks, sincerely, the six thousand loyal subjects assembled under your presidency, as well as yourself, for your kind congratulations and good wishes.

Later on in the afternoon, a grand Review of the Volunteers of Glasgow and the West of Scotland of all arms—Naval, Artillery, Engineers, and Rifles—assisted by the troops of all arms in garrison in Glasgow and Hamilton, was held in the King's Park, Glasgow Green, where a grand

stand, to accommodate 3,000 persons, was erected and completely filled by invited citizens. A vast concourse witnessed the Review and March Past. Major-General Elliot, commanding the Forces in Scotland, was reviewing officer. The greatest enthusiasm and admiration was expressed at the steadiness and soldierly bearing of the citizen army.

A banquet was given in the Corporation Galleries to 200 representative citizens. The Lord Provost presided, and Bailies Richmond and Gray and City Treasurer Waddel were croupiers. The Lord Provost proposed the health of Her Majesty the Queen. His Lordship said:—

In reviewing the fifty years of Her Majesty the Queen's most beneficent reign, one cannot help noticing the changes of the most marked and marvellous kind which have taken place since 1837, in the extension of the empire, in the discoveries of science, in the education of the people, and in the increased comforts enjoyed by all classes. But in one respect the lapse of time brings no change, and that is in the widespread and deeply-rooted loyalty of the people in their admiration of the character of the Queen and their attachment to her person. During the last 50 years we have had times of overflowing prosperity and of severest adversity. We have rejoiced in the universal peace which heralded in the great Exhibition, and we have been involved in the anxieties of costly and bloody wars. We have seen the country again and again agitated by the most intense political excitement, and internal alterations have been peacefully carried into effect more sweeping than those which usually accompany the overthrow of a dynasty. During all these changes the Queen's character has never altered. She has remained steadfast and loyal to her great and solemn responsibilities. No difficulty or anxiety, however great, has ever shaken her trust in God, or diminished the confidence which she reposes in her subjects. But the changes which Her Majesty has witnessed in the history of the country are not more striking than those which have occurred in her domestic life. Her Majesty's joys have been the highest and her grief the deepest. But the Queen did not forget that the head of a great empire ought not to live for herself, and though life for her has been shorn of much of its brightness, she takes a deep concern in everything connected with the home and foreign affairs of the nation, and in binding together by closer ties the colonies and the mother country. She is interested in the progress of commerce and in the advancement of education and morality. She sympathises in every disaster, and she is a zealous promoter of the people's innocent pleasures. Remembering that the last jubilee celebration was connected with George III., it is

interesting to quote the words of a genial satirist in reference to that king and his illustrious granddaughter. "The heart of Britain," he says, "still beats kindly for King George, not because he was wise and just, but because he was pure in life and honest in intent." I think we acknowledge in the inheritrix of his sceptre a wiser ruler and a life as pure and honourable, and I am sure the future painter of our manners will pay a willing allegiance to that good life and be loyal to the memory of that unsullied virtue. In offering our tribute of respectful admiration and congratulation, we would express the hope that the future years of our good Queen's reign may be fraught with even greater glories and greater blessings to the nation. It is the earnest desire of our heart that, after seeing the fiftieth anniversary of the day which united her to her people by a sacred and lasting bond, Her Majesty may be enabled at the close of another decade again to receive the affectionate homage of all her subjects from every quarter of the globe, and comprising her subjects of every rank and of every race. With these imperfect remarks, I propose the toast of "The Queen."

In the evening, performances of instrumental and, in some instances, of vocal music were given in the various parks. In Kelvingrove Park, the band of the 1st Lanark Rifles, conducted by Mr. W. B. Howell, occupied the stand, while the rising ground to the north formed a convenient gallery for the South-Side Choral Society, numbering about 300 voices, conducted by Mr. James M'Kean. In Glasgow Green, the band of the 10th L. R. V., conducted by Mr. De Banzie, performed selections of national airs and dance music, and the Bridgeton Choral Society, under Mr. George Taggart, sang popular songs and glees from the Review stand. In Queen's Park, the band of the 3rd L. R. V., under the leadership of Mr. James Wilson, gave a performance; and in Alexandra Park, the band of the 5th L. R. V., under Mr. William Steel, played a well-selected programme. All the performances were largely attended by appreciative audiences, and so balmy was the weather on this June night that many remained in the parks till midnight.

But still another and, in the estimation of those privileged to be present, the crowning function of a day full of moving incident, was the Ball in St. Andrew's Halls, given by the Corporation to 1,500 ladies and gentlemen representative of the city's activities and influence in learn-

ing, commerce and philanthropy. It was in all respects a brilliant success.

The entire day's proceedings passed off most joyously and without accident, notwithstanding that some hundreds of thousands of the City and from the provinces were drawn together by enjoyments that all classes could enter into. The total expense of the various functions narrated were defrayed by the Corporation, and amounted to £2,828 5s. 11d.

Incidental to the Queen's Jubilee were three matters, two of them national and one local, that give to the august event more than a fleeting interest to Glasgow. (First) the raising of a fund to organize an Imperial Memorial of Her Majesty's beneficent reign; (second) the Women's Offering to Her Majesty; and (third) the Jubilee Memorial Sculpture on the pediment of the Municipal Buildings.

For the "Imperial Institute" Glasgow subscribed £7,404, being the highest town contribution in the United Kingdom. Dumbartonshire, with £2,989, ranks as the highest county subscriber in Scotland and the *third* highest in the United Kingdom, Sussex with £3,315 and Surrey with £3,000 being just ahead of it. Colonial and Asiatic subjects of the Queen contributed with enthusiastic cordiality, several individual donations being of princely value. The total amount subscribed was £409,000, a magnificent tribute to the Queen Empress. The edifice promises to be a worthy monument of the Victorian era, all the greater that it is intended to serve a thoroughly practical purpose in being a centre for the diffusion of knowledge on the affairs of the Colonies, India, and other dependencies of the Crown, and it is intended also to establish one or two branch museums. The members of the Institute number forty, of whom the Lord Provost, Sir James King, and Sir James Bain, are three. When a branch institute or museum for Scotland comes to be established, due consideration will doubtless be given to the special claims of Glasgow as the most populous centre, and as a Port in direct touch with every colony of the empire. If so constituted as to influence a more rapid transference from the mother country of her surplus children



to the Colonies beyond, the Imperial Institute will be helpful in lifting a dark shadow from off congested centres and tens of thousands of lives, and be indeed a glory to the Queen.

The Women's Jubilee offering was also liberally contributed to by Glasgow. It amounted to £90,000; and an interesting feature of its application by the Queen was that Her Majesty, in graciously accepting the gift, expressed the wish to apply, for personal use, only so much of it as would procure a replica of the equestrian statue of her illustrious Consort in our own George Square, for erection in Windsor Great Park—an act of wifely affection that was consummated last year. The rest of the offering was consecrated by the Queen for relief of suffering, by founding institutes for nurses in London, Dublin, and Edinburgh.

The Jubilee Sculpture on Pediment of the Municipal Buildings, triangular in form, has a total length of 50 feet, and its height is 11 feet at the widest point. The central figure is that of Queen Victoria seated on a raised dais, and supported on each side by female figures emblematic of England, Scotland, Ireland, and Wales, with two figures reclining at the foot of the steps which lead to the throne. The spaces at each side of the middle group are occupied with carvings illustrative of the various British possessions. On one side Canada is represented, an American Indian being introduced; Australia is shown by a gold digger; New Zealand by a female figure suggesting agriculture, with sheep and cattle about her; and there are numerous other carvings representing the other colonies of the empire, to the west of Great Britain. At the other side of the pediment are sculptures of East Indians, a native chief being one of the subjects, with the head and front of an elephant shown behind. After India comes Africa symbolized by a white man having his arm round the neck of a negro. Further on, and extending out to the end of the pediment, our Mongolian and other dependencies to the east of Europe are indicated. The figures are eight feet high, sufficient to show them at life-size when viewed from the street. They are slightly larger than those which adorned the pediment of the famous Greek temple.

Another incident worthy of mention is the kind act of Messrs. Turnbull & Sons in taking a large-sized photograph of the members of the Town Council individually in Jubilee year, the Lord Provost and Magistrates being taken wearing their robes and insignia of office. Messrs. Turnbull presented a complete set of the portraits to every member.

#### MEMBERSHIP OF THE TOWN COUNCIL ON JUBILEE DAY.

James King, LL.D., of Campsie, Lord Provost.	Councillor James Hunter Dick- son.
Bailie David Richmond.	Councillor Archibald Dunlop.
Bailie James Gray.	Councillor John Filshill.
Bailie John Shearer.	Councillor Robert Graham.
Bailie James M'Farlane.	Councillor John Laing.
Bailie Alexander M'Laren.	Councillor John M'Farlane.
Bailie James Shaw.	Councillor William M'Kellar.
Bailie Malcolm Campbell.	Councillor James M'Lennan.
Bailie Hugh Steel Thomson.	Councillor Duncan M'Pherson.
Bailie James Colquhoun.	Councillor Henry Shaw Mac- pherson.
Bailie Hugh Wallace.	Councillor James Martin.
Alexander Waddel.	Councillor Arthur Meehan.
Walter Graham Blackie, LL.D., Dean of Guild.	Councillor John Muir.
William M'Lean, jun., Deacon Convener.	Councillor David Morrin.
James Henderson Martin, Master of Works.	Councillor John Neil.
Robert M'Farlane Mitchell, River Bailie.	Councillor Alexander Osborne.
William Stevenson, Deputy Bailie.	Councillor Walter Paton.
Councillor Peter Bertram.	Councillor John Paterson.
Councillor William Bilsland.	Councillor William Pettigrew.
Councillor David Bowman.	Councillor John Ure Primrose.
Councillor Hugh Brechin.	Councillor Michael Simons.
Councillor Hugh Caldwell.	Councillor William Rae Wilson Smith.
Councillor Robert Crawford.	Councillor William Ure.
Councillor Thomas Cumming.	Councillor Thomas Watson.
	Councillor Henry Burt Wilson.
	Councillor William Wilson.



GLASGOW INTERNATIONAL EXHIBITION OF  
INDUSTRY, SCIENCE, AND ART, 1888.

THIS great undertaking was a notable event in the annals of the city for 1888. The project was mooted in 1884, when a meeting of influential citizens was convened by Lord Provost M'Onie, very much on the suggestion of the late Bailie George Jackson, who did not live to see his idea take shape. It was generally approved; but it happened that at the moment the shipbuilding industry was becoming depressed after a period of unexampled prosperity, and other branches of trade in sympathy with the shipbuilding had in like manner no very cheerful outlook. It was therefore agreed to postpone consideration of the subject, and meanwhile exhibition schemes for Edinburgh in 1886 and for Manchester in Jubilee Year, 1887, were launched.

But in 1886 the subject of an Exhibition for Glasgow was resumed, first in the Parks Committee on 22nd June, 1886, when the following minute was made:—

“On the suggestion of Bailie Dickson, it was resolved to recommend the Parks Trustees to remit to this Committee to consider and report on the advisability of holding a National Exhibition of Art, Science, and Industry in Glasgow in 1888.”

Soon thereafter a meeting, under Lord Provost M'Onie's presidency, was held, and the forecast being now cheerful and encouraging, it was resolved to test the feeling of the community by starting a Guarantee Fund, and Bailie James Hunter Dickson and Bailie John Shearer entered upon a canvas of the citizens. Immediate and assured success to an Exhibition scheme was the result—the marvellous sum of £250,000 being most readily and enthusiastically subscribed within a comparatively brief space.

The subscriptions were as follows :—

Corporation of Glasgow,	-	-	-	-	£5000
Corporation of Edinburgh,	-	-	-	-	2500
9 Individuals and Firms	£2000	each,	-	-	18,000
81	„	1000	„	-	81,000
1	„	-	-	-	525
117	„	500	each,	-	58,500
1	„	-	-	-	325
10	„	300	each,	-	3000
226	„	250	„	-	56,500
42	„	200	„	-	8400
3	„	150	„	-	250
6	„	105	„	-	630
156	„	100	„	-	15,600
41	„	under 100	„	-	1384
<hr/>					
695					<u>£251,814</u>

and ultimately the Guarantee Fund reached to about £300,000.

This was an extremely solid foundation to build upon, and active steps were unhesitatingly taken to organize an Exhibition for 1888, and on the proposal of Bailie Shearer it was made international in its scope. In a competition of architects the plans of Mr. James Sellars, I.M., architect, Glasgow, were selected. Oriental in character, they commended themselves to the citizens as singularly well adapted for a “World’s Fair,” and as the building proceeded and rose into the air and blossomed into domes and minarets, and received its bands of colour, it was greatly admired, and the admiration deepened with time. The entire area covered by the main building was 500,000 square feet, and the area covered by detached buildings was 25,000 square feet. The internal arrangement of the main building was as impressive and perfect for its purpose as its external elevation. The leading features were the Grand Hall, capable of holding 3,000 persons, and running westwards from this hall was the grand avenue or corridor, 1,500 feet in length and 60 feet wide, with transverse avenue across the entire width of the building, and at the point of intersection a great dome, 80 feet in diameter, and rising to a height of

110 feet. The citizens were justly proud of this beautiful palace, and of its charming situation. The cost of buildings and equipment was £83,800, including the bridge over the Kelvin,—a moderate cost for covering so great a space substantially and with so fine effect.

When its purpose was served regret was universal that it must vanish from sight. Many were the ideas which found public expression for its utilization in part at least for permanent social and art purposes. But its site had been dedicated for purely parks purposes, and the decree passed for its removal was therefore unalterable. It was besides constructed to serve a temporary object which it had satisfied pre-eminently.

The situation of the Exhibition too was picturesque to a degree, surpassing in natural beauty and attractiveness any exhibition hitherto held in other cities. The University pile on Gilmorehill, with its commanding tower,—the spire of which was hastened to completion in view of the Exhibition,—and its sloping grounds; Kelvingrove Park, with its imposing terraces and pleasure grounds; and the classic Kelvin, crossed by pretty bridges, winding through the midst of the scene; the Palace of Bishop Cameron of stately memory reproduced on the slopes of Gilmorehill, Eastern temples, Indian bungalows and jungles, Dutch houses, and pretty fountains, scattered unconventionally about, made the daylight view extremely effective; whilst at night, with the fairy fountain in play, and sweet music filling the air, the fascinations of the Exhibition grounds were such as the Shah of Persia would have been delighted to witness, had His Imperial Majesty's visit been made a few months earlier.

The ground actually covered by the Exhibition buildings extended to  $13\frac{1}{2}$  acres, and the pleasure grounds enclosed with it to 64 acres—in all, a space of  $77\frac{1}{2}$  acres was utilized for Exhibition purposes. But from outside this space the populace of the city were able, free of charge, to witness nightly the illuminations, fireworks, and play of the fairy fountain from the terraces of Kelvingrove, and oftentimes

in tens of thousands they were to be seen throughout the period of the Exhibition congregated delightedly for the purpose of sharing in the pleasures unselfishly displayed to their view.

For the interior of the Exhibition buildings it must suffice here to say that it was a vast storehouse of objects of beauty, utility, and constructive skill illustrative of the progress of the age in industry, science, and art. Raw materials used in our manufacturing industries were displayed in abundance, and machinery in motion and processes of manufacture were exhibited in profusion. Many of the home exhibits were possessed of great merit, in particular Glasgow and the Clyde centres were able to show to the world examples of extraordinary development and perfection in the departments of shipbuilding and marine engineering, in which the Clyde has shown notable enterprise and done excellent work for humanity by supplying the means of extending commerce throughout the globe, of bringing supplies to satisfy the national wants in food, luxuries, and raw industrial products, and of conveying passengers to the most distant places and transporting surplus populations in other lands.

Bands of music, brought from many quarters of Scotland, England, France, Belgium, Germany, Austria, etc., were maintained throughout, both within and without the buildings, in unstinted measure. Paintings and sculpture filled a suite of apartments specially designed for such treasures, and in the Bishop's Palace was judiciously arranged a large collection of historic objects, the value of which was deepened by their proximity to more modern exhibits. These were inspected with wonder, profit, and pleasure, during a space of six months, by many hundreds of thousands of different persons attracted to the Exhibition from all parts of Scotland, England, and more distant places in Europe, America, and the Colonies.

The opening of the Exhibition on 8th May was a day to be remembered and to be told to the generations to come. Their Royal Highnesses the Prince and Princess of Wales,

invited to honour the enterprise by performing the inaugural function, most graciously responded to the call. Their Royal Highness' acceptance was felt to be another presage of success, and it was prepared for by the Exhibition authorities and the entire populace with eager anticipations. It was the aim of the promoters that the Exhibition should be complete in all its parts on the opening day, and to further this end a press view was fixed for 21st April, seventeen days before the royal inauguration. Representatives of the leading journals of this country, the Continent, and America accepted the invitation of the Lord Provost and Executive Committee, and they were able to see the Exhibition in a state of surprising advancement towards completeness. What little was still necessary to be done was by this most judicious step made easily measurable, with the result that on the inaugural day the entire main building and machinery annexe, with their vast aggregations of treasures, were in a state of the most settled completeness.

The Prince and Princess of Wales made choice for their temporary residence of Dalzell House, situated on a beautiful reach of the Clyde, and of Lord Hamilton of Dalzell, universally beloved in Scotland by all classes of the people, as their honoured host.

This was the fourth visit to Glasgow of the Prince, and the third of the Princess. His Royal Highness' first visit was when, as a boy, he accompanied his royal parents in their visit to the city on 14th August, 1849; the next occasion was when their Royal Highnesses came to Glasgow and laid the foundation stone of the University, on 8th October, 1868; and the third occasion was when their Royal Highnesses laid the foundation stone of the Post Office in George Square on 17th October, 1876.

The Lord Provost and Magistrates entered upon the most elaborate arrangements for the comfort of the royal visitors and for the safety of the lieges. A general holiday was proclaimed; the streets were barricaded throughout; the services of the Volunteer battalions were loyally given, and an extensive display of street decoration was carried out by

the Magistrates, and effective decorations were carried out by citizens at their residences and places of business; innumerable platforms, gaily decorated, were also constructed, wherever possible, throughout the royal route. A beautiful triumphal arch was erected at the Park Gardens entrance to the Kelvingrove Park by the Exhibition authorities, and the decorations within the grounds, at the entrance of the main building, and within the vast building itself, were extremely effective and chaste, and were carried out by the late lamented Mr. Sellars. Space here does not permit of more than a mere reference to these preparations. The day, too, was most brilliant after a night's downpour which sweetened the atmosphere and streets.

The Prince and Princess of Wales arrived at Dalzell House on the evening of 7th May, and on the morning of 8th May the special train conveying the royal party from Motherwell drew up on the platform of the Central Station precisely at 11 A.M. Here the Lord Provost (Sir James King) and the Magistrates in their official robes received their Royal Highnesses, the Clyde Naval Brigade, commanded by the Marquis of Ailsa, did duty as Guard of Honour, and a large number of ladies and gentlemen, specially invited by the Caledonian Railway Company, occupied the platform. The Magistrates were individually introduced, and, this over, the Lord Provost conducted their Royal Highnesses to their carriage, receiving as they passed the respectful homage of the company assembled on the platform. A procession was formed, and proceeded by way of Gordon Street, Buchanan Street, George Square, and John Street, to the City Chambers in Ingram Street. Throughout the entire route the streets were crowded with gaily-dressed citizens, who were privileged to greet the Prince and Princess under most exhilarating circumstances as regards weather. The welcome which their Royal Highnesses received and constantly acknowledged was of the most enthusiastic description.

Within the City Chambers were assembled the members of the Town Council, the Lord Mayor of York, the Lord



Provost of Edinburgh, and the Lord Provost and Provosts of the principal cities and burghs in Scotland, the Mayors of Liverpool, Manchester, Leeds, Bradford, Belfast, Carlisle, Berwick, etc.; the Duke of Buccleuch, the Duke and Duchess of Abercorn, the Marquis and Marchioness of Lothian, the Marquis and Marchioness of Breadalbane, the Earl and Countess of Stair, the Earl of Home, the Earl and Countess of Rosebery, the Earl and Countess of Strathmore, Lord Hamilton of Dalzell and the Hon. Misses Hamilton, Lord and Lady Herschell, the Marquis of Hamilton, Sir James Fergusson, Bart.; Sir Archibald and Lady Campbell; Sir John Stirling Maxwell, Bart.; Hon. Sir Lyon Playfair, Hon. W. Cochrane Baillie, and others.

On the announcement that the Prince and Princess were about to enter the Council Hall the company rose to their feet, and their Royal Highnesses having taken their places on the dais, the Lord Provost, addressing the Prince and Princess, said the Corporation of Glasgow desired to present a humble address to their Royal Highnesses. The Prince of Wales having bowed acquiescence Dr. Marwick read the address of the Corporation, and the Prince of Wales read the following reply:—

My Lord Provost and gentlemen,—I have received your address with feelings of sincere satisfaction, and I thank you on behalf of the Princess of Wales and myself for your cordial words of welcome and your kind reference to our silver wedding. We have come here to-day to celebrate in one of the most prosperous cities of the United Kingdom the inauguration of a great national work of the highest and most varied interest, and one altogether worthy of your important town. I can assure you I thoroughly understand and appreciate the anxious desire which has prevailed among you that an industrial exhibition should be held this year in Glasgow, and I consider that, with the commercial, manufacturing, and mercantile eminence which she enjoys, such a desire is not only right and proper in the highest degree, but natural and commendable. I warmly sympathise with you in this feeling, and I would that my lamented father were now alive to witness the successful development of the general idea of which he was the originator. The relations of this city with all the markets of the



civilized world have long been well known, but they have been immensely extended during the present century by the energy and enterprise of those merchants and citizens who, by deepening the Clyde and providing the extensive harbour and dock accommodation which now exists, have overcome the natural disadvantages of its position, and given it a permanent place among the shipping ports and commercial centres of the kingdom. Let me, my Lord Provost and gentlemen, sincerely thank you for the loyal terms in which you have alluded to the Queen. I shall have much pleasure in communicating to Her Majesty the hope that you have expressed that she will visit your magnificent Exhibition, and I will not fail to acquaint her likewise with your words of devotion to her throne and person.

The Prince's reply called forth very hearty applause. Immediately on its conclusion, the Lord Provost with the Princess of Wales, and the Prince of Wales with Lady King, left the Council Hall, and after a brief space a procession was formed, consisting of the nobility who occupied the forward carriages, and their Royal Highnesses, with the Lord Provost in the rear. The royal procession passed through immense and enthusiastic crowds by way of Ingram Street, Queen Street, St. Vincent Street, Renfield Street, Sauchiehall Street, and the Crescents to the Lord Provost's residence in Claremont Terrace, where luncheon was served. The magistrates and the civic dignitaries of other municipalities were formed into another procession, and passed by the same route to the Bungalow within the Exhibition grounds, where a sumptuous luncheon was partaken of. Bailie Gray presided, with the Lord Mayor of York and the Lord Provost of Edinburgh to his right and left, and Bailie James McFarlane was croupier. Toasts were briefly proposed, and thereafter the Municipal party left the Bungalow in processional order, and took places in the Grand Hall in front of the dais.

At this time the entire hall was crowded by a brilliant assemblage, comprising the guarantors and their ladies and other representative ladies and gentlemen specially invited to witness the inaugural and august ceremony. While waiting the royal pageant, the assemblage was enlivened by the immense choir, consisting of the Glasgow Choral Union

in full strength, conducted by Mr. A. C. Mackenzie, and by Mr. Bradley on the grand organ.

At the conclusion of luncheon at the Lord Provost's residence the royal procession was re-formed and proceeded by way of the Park and Prince of Wales's Bridge to the Grand Entrance to the Exhibition buildings, where the Executive Council were assembled. When the royal carriage drew up at the steps, the guard of honour of the Seaforth Highlanders gave the royal salute, and the band played the National Anthem. Lord Hamilton having opened the door of the royal carriage, their Royal Highnesses ascended the steps and took their places immediately beneath the centre of the entrance arch. The following presentations were here made by Sir Archibald Campbell, the names of the gentlemen being handed to him by Sir Donald Matheson, K.C.B.:—

Councillor James Hunter Dickson and Bailie John Shearer, vice-chairmen ; Dr. A. B. M'Grigor and Professor Robertson, hon. secretaries ; Messrs. J. Wyllie Guild, Walter Mackenzie, and William Walls, hon. treasurers ; Mr. James L. Mitchell, Bailie Michael Simons, Mr. Alexander Stephen, Sir William Thomson, Mr. David Richmond, Sir William Collins, Messrs. Charles Howatson, James Murray, Sir John N. Cuthbertson, Messrs. John Morrison, Paul Rottenburg, John S. Templeton, John Cuninghame, Peter Denny, and William Clark, conveners of committees ; Mr. H. A. Hedley, general manager ; Mr. William M. Cunningham, secretary ; Mr. Alfred Brown, treasurer ; and Mr. James Sellars, architect.

Bailie Shearer then gave a handsome gold key to Sir Archibald Campbell, who presented it to the Prince of Wales. Simultaneously a royal salute was fired from the battery in the West End Park. His Royal Highness unlocked the eastmost door of the vestibule, and along with the Princess passed into the building. They were followed by Sir Archibald Campbell and Lord Hamilton of Dalzell, Lord Provost and Lady King, following whom came Councillor Dickson and Bailie Shearer, and the distinguished party already named in connection with the reception at the City Chambers.

As the royal procession entered and moved along the central passage of the Grand Hall, the organ and choir gave forth the National Anthem with powerful effect. The Prince and Princess having taken their places on the raised dais, Sir Archibald Campbell took up his position on the right at the foot of the throne, along with Sir James King, Lord Provost. The Rev. Dr. Donald Macleod, one of Her Majesty's chaplains, occupied a position at the left side, while the other members of the royal party filed off to the right and left to the seats reserved for them. The ceremony was at once commenced by prayer offered up by the Rev. Dr. Donald Macleod, and on its conclusion Sir Archibald Campbell, as president of the Exhibition, having obtained His Royal Highness's permission, read the following address :—

May it please your Royal Highnessess,

We, the President and Executive Council of "The International Exhibition Association of Industry, Science, and Art, Glasgow, 1888," beg most gratefully to express our sense of the great honour which your Royal Highnesses confer upon the City of Glasgow, and the promoters of this undertaking, by your presence on this occasion.

The Exhibition which your Royal Highnesses have thus distinguished will be found, we trust, worthy of taking rank among the most notable of those which have, in various parts of this Empire, been established on the lines laid down thirty-seven years ago, under the wise direction of the lamented Prince Consort.

It was honoured from the first by the patronage of Her Majesty, who has moreover graciously contributed to its contents the most precious and interesting of all its exhibits—the gifts made to Her Majesty on the memorable occasion of her Jubilee last year.

It has been distinguished also, almost since its conception, by the expressed sympathy of your Royal Highnesses and other members of the Royal Family, several of whom have taken a warm and active personal part in contributing to its success.

The deep and wide-spread interest occasioned by the undertaking was early testified in a remarkable manner by the subscriptions to the guarantee fund, now amounting to upwards of £250,000—a sum, we believe, largely in excess of anything approached before in similar cases, except in the metropolis itself. And from the outset we have received the most marked proofs that this feeling, so far from being

confined to our city and neighbourhood, is widely, we might almost say universally, diffused.

The Corporation of Glasgow has granted a site unique in the picturesqueness of its situation ; the various municipalities of England and Ireland, as well as of Scotland, have vied with each other in generous assistance ; and the labours of a committee which includes almost every name familiar in Glasgow and the West of Scotland as associated with science, industry, learning, and art, have been cheered and assisted by the cordial co-operation of persons high in rank, and distinguished in talent, from all parts of the Empire.

We shall not intrude upon your Royal Highnesses anything like a detailed enumeration of the various objects of interest embraced within the area of this building—the architectural beauty and careful adaptation of which to the object of its erection may, we trust, commend themselves to your Royal Highnesses. But we may be allowed briefly to allude to some of the leading features of the Exhibition.

To Her Majesty's Jubilee Presents we have already referred.

The industries of this city, which may be said to be the centre of a population of a million and a half, are freely represented in a multitude of exhibits of the greatest interest and variety. These include chemical, iron, and other mineral products ; engineering, shipbuilding, electrical and scientific appliances ; textile fabrics, both in course of manufacture and in the finished state ; and machinery in motion. Nor are these exhibits illustrative only of the trade and commerce of Glasgow, for from all parts of the United Kingdom and our colonial possessions, from America and from the Continent, contributions have poured in upon us, among which may be specially noted a large and varied collection of special exhibits of the arts and manufactures of India, and contributions in special courts, from Canada and Ceylon.

The artizan section includes a large number of exhibits, the results of the individual genius and skill of the working classes, which both from their diversified character and their marked excellence are deserving of especial notice.

The section devoted to the women's industries has entailed a grave responsibility upon us. It is not, perhaps, an exaggeration to say that had the available space been ten times what it is, it would still have been worthily occupied. The task of selection has therefore been arduous and embarrassing. Under the direction of Lady Campbell of Blythswood and Lady King committees were formed to deal with the women's industries of Scotland, India, the Colonies, and foreign countries, while under the superintendence of the Countess of Rosebery and the Duchess of Abercorn similar committees were grouped for England and Ireland respectively. Such was the zeal with which this branch of the undertaking was prosecuted that it was found neces-

sary in all parts of the United Kingdom to hold preliminary exhibitions of the work supplied, from which such selections should be made as it would be possible to accommodate here. This section will be found, we trust, to furnish an exposition of female industry of a truly remarkable character, including many striking specimens from abroad.

The marvellous display of works of art in the Exhibition at Manchester last year might well have inspired a doubt as to the wisdom of attempting to reorganise a similar collection here. But the hearty and zealous co-operation we have received, not in Scotland only but in England and abroad, has made the work rather one of selection than of solicitation, and enables us to submit to your Royal Highnesses a collection both in painting and sculpture of remarkable value and interest, many of the contents of which have never found their way to any previous Exhibition either in Scotland or in England. Akin to this department is the historical and archæological section of the Exhibition, where, in a building reproducing the striking features of the ancient residence of the Bishops and Archbishops of Glasgow, will be found an extensive collection of objects illustrative of Scottish history and archæology, including priceless relics of the Scottish War of Independence, of the life and reign of Queen Mary, of the times of the Covenanters, and of the history of Prince Charles Edward Stuart. In forming this collection we have been indebted to the hearty co-operation of most of the leading families of Scotland, of her universities, and of her municipal authorities, which has enabled us to exhibit a multitude of objects of the deepest national interest, rarely before accessible to the public. These, with the other objects of interest collected in this Exhibition, we now submit to the inspection of your Royal Highnesses, and in renewing the expression of our gratitude for your presence on this occasion, we desire to recognise with special gratification the fact that it has been accorded to us in a year memorable in the personal history of your Royal Highnesses as being the twenty-fifth of your married life. Commenced among the congratulations of a whole nation, we trust and pray that it may be continued for very many years to come, with ever-increasing happiness to yourselves, and with ever-growing sympathy and affection on the part of all classes of the people of this great Empire.

The Prince of Wales then read the following gracious reply :—

Sir Archibald Campbell, my Lords and gentlemen,—I thank you for your address, and I can assure you that it affords the Princess of Wales and myself very sincere pleasure to be present on this important occasion, and that gratification is increased by a sense of the connection which you



have recognized as existing between this International Exhibition and that in which my revered father took so deep an interest and so active a part. The various Exhibitions which have been held since 1851 have undoubtedly done much, not only to enlist the sympathies of the nations of the world, and to engage them in the friendly rivalries of industrial competition, but largely to extend our knowledge of every branch of manufacture, and to afford pleasure to all ranks and classes of society in every country in which these Exhibitions have been held. Recognizing the benefits which they have thus conferred, such Exhibitions can never fail to enlist the sympathy of the Queen, and to command the support of the Princess and myself. We are here to-day to give personal testimony of that feeling, and to express our satisfaction, not only with the public spirit with which the undertaking has been supported financially, but with the enthusiasm with which exhibitors from all parts of the world have enriched the collections of art, science, and industry now gathered within these buildings. Nor is it possible to overlook the special appropriateness of such an Exhibition in this city, in which the researches and discoveries of Black, of Watt, and, in our own day, of Thomson, have been productive of world-wide benefits to mankind. In the application of science, also, Glasgow can point with just pride to Bell, whose 'Comet' is still preserved as a memorial of the first attempt to apply the forces of steam to the propulsion of ships and to the multifarious industries which have here found a home. To the widely different character of these industries, which secures to the population of this district immunity from many of the risks which necessarily attend devotion to one special department of labour, it is only possible to allude in general terms. Here there exist and flourish side by side great establishments for ship-building, the production of marine machinery, locomotives, mill machinery, and other mechanical appliances for the working of iron and coal, for the production of mineral oil, the manufacture of thread, glass, and pottery, carpet weaving, dyeing, and printing. It must not likewise be overlooked that Glasgow was the cradle of the steam carrying trade with America and the great mercantile centres of the world. It is gratifying to me to learn that, in the comprehensive collection to be found here, due regard has been paid to the exhibition of works of art, and that the walls of your galleries are enriched by many and valuable paintings and works of sculpture. Here, as in the Exhibition at Manchester, are to be found evidences of the fact that the successful prosecution of trade, manufacture, and commerce afford not only the means of gratifying but of developing the taste for art. Not the least interesting of all is that section in which an honourable place has been given to the works of artisan exhibitors. In every industrial community, and nowhere more so

than in Glasgow, the development of the taste, skill, and handicraft of its operatives must always command respectful consideration and interest. To the Women's Industry Section we shall also look with special sympathy, recognizing the importance of encouraging every means by which women's work may be made productive. It is also a gratification to us to observe that the artistic building in which the Exhibition is contained occupies an appropriate position within, I may almost say, the shadow of the University of Glasgow, the second in antiquity of the old universities of Scotland. The site of the university is no doubt modern, but it is satisfactory to see the institution which was founded through the influence of King James II. in 1450 in a more flourishing state at present than at any previous period of its history. It only remains now for the Princess and myself to express our earnest hope that this great Exhibition may prove an immense success, and that the thousands whom, we trust, will visit it may derive such instruction from an examination of its various sections as will prove of material advantage to them in years to come. (Cheers.)

On the Prince concluding, the Lord Provost presented their Royal Highnesses with two albums of unique artistic importance, saying—"May it please your Royal Highnesses, I have been charged by the Executive Council of this Exhibition, humbly to request that your Royal Highnesses will condescend to accept these albums which have been prepared for your use. We trust that they will form no unsuitable memento of the proceedings of this day, containing as they do specimens of the original drawings of about thirty members of the Glasgow Art Club." The Prince graciously accepted the albums on behalf of himself and the Princess.

The inaugural ode "The New Covenant," written for the occasion by Robert Buchanan, was then sung by the choir with fine effect, Dr. A. C. Mackenzie, the composer, conducting. Thereupon the Prince of Wales formally declared the Exhibition open, and the Hallelujah Chorus was sung by the choir.

The royal party left the hall by the central passage and passed into the Picture Galleries. Here Mr. Francis Powell and Bailie Crawford, chairman of the Fine Art Committee, and Messrs. Joseph Henderson, F. H. Newbery, J. Carfrae Alston, John Honeyman, and William Lang, jr.,



were presented. Next the Women's Industries Section was visited, where an address was presented to the Princess of Wales by Lady Campbell of Blythswood, along with a quilt of silk embroidery worked by an Ayrshire Lass for the Hon. Mrs. Vernon. The Royal Reception Room was next entered and tea was served; and thereafter, accompanied by Sir Archibald Campbell, the Earl of Rosebery, and others, their Royal Highnesses first of all visited the Indian Section, and here the chairman of the Section—Mr John Muir, now Lord Provost—was presented. Next the Machinery Section was visited, and a hearty welcome accorded from the spectators crowding the galleries. Here Sir Henry Doulton was presented. Next the Canadian Court was visited, and Mr. Thomas Graham, Agent for Scotland of the Canadian Government, was presented. This concluded the tour of inspection and their Royal Highnesses were conducted to their carriage, which was entered also by Lord Hamilton, and as the equipage started from the main entrance a salvo of artillery was fired from the battery in the Park.

Returning to the Central Station by way of Kelvingrove Street, Dumbarton Road, Argyle Street, and Union Street, all of which were profusely decorated and crowded with spectators, their Royal Highnesses had a most unbounded ovation. Indeed from the time they stepped from the train in the morning until they re-entered it at six o'clock in the evening they were the objects of one of the most marked demonstrations possible to conceive. The Lord Provost and Lady King having shook hands and bade adieu to the royal party, the train moved away amidst renewed cheers raised by the large and select company who crowded both platforms of the Central Station, and the strains of the band of the 1st L.R.V. playing "God bless the Prince of Wales."

In the evening a dinner was given in the Central Station Hotel to the Lord Mayor of York, the Mayors of Liverpool, Manchester, Leeds, Belfast, the Lord Provost of Edinburgh, Perth Aberdeen, and Dundee, and the Provost of Stirling,

and other leading burghs, when the Lord Provost, Sir James King, presided, and Bailie Gray acted as croupier. Appropriate toasts were proposed, and a pleasant evening was spent.

With a view further of commemorating the opening of the Exhibition, Bailie Shearer, as convener of the Building and Grounds Committee, gave a banquet in the evening in the Royal Bungalow to a large company intimately connected with the undertaking, and appropriate toasts were again proposed. After dinner the company proceeded to the balcony of the Bungalow, from which they witnessed the first display of the Fairy Fountain, and of the scene in the Exhibition grounds.

In addition to the constabulary of the city, there were on the opening day on duty 649 men of the regular forces, 6,154 volunteers, and 3,649 members of the Boys' Brigade, in all 10,452 were under arms on this memorable day, and by their means perfect order was everywhere maintained and dignity lent to the occasion. Taking this number of guardians of the peace as a measuring line, one may form some idea of the vast multitude of spectators along the royal route.

On 22nd August the Exhibition had the great distinction conferred on it of a visit in State from the Queen, specially narrated in the next article, and again on 24th August Her Majesty honoured it with a more prolonged private visit. It was also visited by the Belgian Monarch; by Her Royal Highness Princess Louise and the Marquess of Lorne; by H.R.H. the Duke of Cambridge, and by many other distinguished personages.

After discharging all obligations, the handsome surplus of £47,000 remains to be devoted to the purposes designated in the articles of association, viz.:—"the promotion of Art and Science."

From this May dawn until its sunset close in November the Exhibition had an unclouded success. Beginning, as

we have seen in sunshine, and in presence of vast crowds of spectators, it closed no less brilliantly in presence of 117,901 persons admitted through the turnstiles, besides tens of thousands who witnessed its parting demonstrations from the terraces.

The total number of admissions through the gates was 5,748,179 ; the total number of season-tickets paid for was 45,519, yielding £43,976 12s. 6d. ; the total amount drawn at the gates was £117,072 1s., and by railway tickets and coupon books, etc., £7,884 11s. 9d. ; the total rents received for space was £15,955 9s. 9d. ; the total amount paid by caterers for the public in refreshments, amusements, etc., was £45,988 12s. 9d., and there was realized from furniture, etc., £1,051 7s. 5d.,—in all, the drawings from the Exhibition totalled £225,928 15s. 2d.

To no section of the Exhibition undertaking is more honour due than to that presided over with so much ability, tact, and geniality by Bailie Michael Simons. Never was it made more manifest in Glasgow that “music hath charms” than during the six months existence of our Exhibition. The recreations, too, under the same direction, were of the first order and attractiveness. Next to this, undoubtedly, was the art section, presided over by Bailie Crawford and Mr. Francis Powell. One would wish to dwell on many familiar friends amongst the pictures but space forbids.

The closing of the gates of the Exhibition was felt by not a few as if a November fog had suddenly settled down upon the city, so aimlessly did they move about for a while bereft of the “departed joys” that had become to them a second nature. The memory of the Exhibition remains fragrant to a degree. Happily, it shed some well-ripened seed before vanishing from sight, and in the form and to the extent of painting, sculpture, and no doubt music also, it will reappear before long on the same attractive site in even greater splendour. The long desiderated galleries of art, on a scale adequate and befitting a great city, are now assured, upwards of £110,000 being already secured.

## VISIT OF THE QUEEN, 22ND-24TH AUGUST, 1888.

THE visits of Her Majesty Queen Victoria and the Prince and Princess of Wales and other members of the Royal Family will mark the year 1888 with distinguishing features beyond any of its predecessors in the annals of the city. These royal visits were distinctions conferred on two local events, of themselves possessed of unique historic interest to the city, the International Exhibition of Industry, Science and Art, and the opening of the new Municipal Buildings. The Exhibition had its character and success enormously accentuated in being opened by the Heir-Apparent and Princess of Wales, and by the gracious State visit with which it was afterwards honoured by the Queen. The opening, also, by Her Majesty of the new Municipal Buildings reflects on this great undertaking of the Municipality a lustre and significance of lasting interest.

This visit of the Queen was the third occasion that Her Majesty in person has specially honoured the citizens, although only the second visit to the city itself, the intermediate event being the inauguration of the Water Works at Loch Katrine. On 14th August, 1849, Her Majesty first honoured the city with her gracious presence, accompanied by her illustrious consort, Prince Albert, and three eldest children, the Princess Royal, now Her Imperial Majesty the Dowager Empress Frederick of Germany, the Prince of Wales, and the late much-lamented Princess Alice, Grand Duchess of Hesse. The Queen arrived in the Clyde from paying her first visit to her subjects in Ireland, accompanied by a powerful naval squadron. Coming by river the royal progress was hailed throughout with enthusiastic demonstrations of loyalty, and on reaching the Broomielaw, at the foot of West Street, Her Majesty was welcomed on board the royal yacht by the Lord Provost and Magistrates. The honour of knighthood having been conferred on Lord

Provost James Anderson and presentations made, Her Majesty and the royal party landed in presence of a brilliant assemblage of citizens, and drove by way of Glasgow Bridge, Jamaica Street, Argyle Street, Trongate, and High Street, first to our venerable Cathedral, which was inspected with much interest, and thereafter to the University in its ancient seat in the High Street. These visits over, the Queen and royal party proceeded by way of George Street to the Queen Street Station of the Edinburgh and Glasgow Railway, by which Her Majesty took her departure for Balmoral on her second autumnal visit to her Highland home. The journey was broken at Perth, and here Prince Albert wrote privately to Baron Stockmar:—

“To-day, after a brilliant reception in Glasgow, and a veritable triumphal procession through five to six hundred thousand human beings, I find here your welcome letter.”

To perpetuate this cherished visit of the Queen a public subscription was immediately opened for the erection of some adequate memorial of it, the result of which was the beautiful equestrian statue of Her Majesty by Charles Baron Marochetti. The statue was first erected in St. Vincent Place, touching the line of Buchanan Street, where it was unveiled on 6th September, 1854, by Sir James Anderson and accepted by Lord Provost Stewart. In 1866 the statue was transferred to George Square on the erection there of a companion equestrian statue by same artist to her late lamented husband. This latter statue was unveiled by His Royal Highness Prince Alfred, Duke of Edinburgh, on 18th October, 1866, and was accepted by Lord Provost Blackie.

On 14th October, 1859, ten years later, Her Majesty, invited by the Corporation, did the city the honour of proceeding to Loch Katrine and, at the inlet of the aqueduct on the southern margin of the lake, turning on to the citizens their most bountiful supply of purest water. Her Majesty, returning southward from Balmoral, had remained overnight at the ancient Scottish Palace of Holy-

rood, and from thence travelled to Loch Katrine. On this occasion the Queen was again accompanied by the Prince Consort and Princess Alice, and also by Her Royal Highness the Princess Helena, now Princess Christian. The Duke of Newcastle was Minister in attendance. A splendid Celtic reception awaited Her Majesty on alighting at Callander, then newly connected with the outer world by rail, and the royal progress along the margins of Lochs Vennachar and Achray and through the Trossachs was worthy of the best traditions of the Highlands. On emerging from the defile of the Trossachs Her Majesty was received at the foot of the lake by Lord Provost Andrew Galbraith, ex-Lord Provost Robert Stewart, and ex-Lord Provost Sir Andrew Orr, the Magistrates of the city, and members of the Water Committee. Under their dutiful conduct the Queen, in the "Rob Roy," was conveyed "far up the lengthened lake" to the place of ceremony. Here were assembled some thousands of ladies and gentlemen, representative of the citizen population of Glasgow, as also the Duke and Duchess of Montrose, Duke and Duchess of Athole, Lady Willoughby D'Eresby, and others of the nobility, and Her Majesty was received with joyous acclamation. As guards of honour, besides a detachment of the 93rd Highlanders, were 400 of the newly-embodied volunteer riflemen of the city, in full equipment, who won on this picturesque spot the distinction of being, of Her Majesty's new army of volunteers, the very first to present themselves to their sovereign lady, and to do duty in the immediate presence. There, too, were the veteran Athole Highlanders, with their field guns and Lochaber axes, under His Grace's personal command.

" For strength and stature from the glen  
Each warrior was a chosen man."

Probably no public act of Her Majesty has had in it so much of the truly picturesque as this one. Only half a century had passed since Scott had electrified the world by



brightening this district with realistic pageants of his fancy, and only a quarter of a century had passed since his decease. Would that his imagination had penetrated the near future, and caught sight of and depicted this *real* royal progress and gathering within the fastnesses of the Macgregor. Possibly, however, the mission of the Queen on this to Glasgow truly historic day might not have been altogether to the poet's liking. With surroundings brilliantly poetic, its purpose was eminently prosaic, none other than the utilitarian one of tapping the poet's pretty lake, embosomed at the uppermost source of the Teith, within sight of his hero's homestead, and diverting thence to the Clyde a stream of cool, clear, mountain water, to satisfy a population whose avocations (if we may trust the poet) Rob Roy and his better half regarded with considerable disdain. Enough to say that the royal function was performed with queenly grace. At its conclusion the royal party lunched in the Commissioners' Cottage, since and while it lasts to be designated the "Royal Cottage," and thereafter re-embarked in the "Rob Roy," on their return to Holyrood, amid renewed demonstrations of affection and loyalty.

Whilst Her Majesty was thus doing the city honour at the fountain head of our beneficent water supply, on which the health and prosperity of the city so much depend, the citizen masses of all degrees, confined to the city, held high holiday as best they could, and in tens of thousands promenaded the streets, the chief object of attraction being the equestrian statue of Her Majesty, then standing in St. Vincent Place, and richly decorated for the occasion.

The visit of Her Majesty to the city in August, 1888, differs from previous ones in important respects; it was a State Visit of three days' duration, and it was Her Majesty's spontaneous act.

The Municipal authorities and the Executive of the Exhibition would indeed have been most happy to invoke the Queen's gracious presence and office for the



inaugural function of the International Exhibition in the beginning of May, knowing with how much sympathetic interest Her Majesty entered into the design and spirit of such an enterprise, that had its inception as regards this country in the highly-cultured, eminently practical and far-reaching mind of the Prince Consort. But as the time for the opening drew near domestic anxieties pressed upon Her Majesty, and it was felt, besides, that the date would have been unsuitable, unless at much personal inconvenience. From these considerations the Queen was not approached. The Prince and Princess of Wales were invited to discharge the inaugural function, and with most gracious readiness their Royal Highnesses accepted the invitation.

In early summer, however, it became bruited abroad that Her Majesty desired to renew her acquaintance with Glasgow, and to come while the Exhibition was open. Rumour became certainty when the following paragraph appeared in the morning papers of 14th June:—

“We are authorized to state that Her Majesty  
“will arrive in Glasgow on 22nd August, and  
“remain in seclusion on that day at the residence  
“of Sir Archibald Campbell at Blythswood, and on  
“the following day, the 23rd, she will visit the  
“International Exhibition.”

This announcement was received with the liveliest satisfaction by all classes of the community. Thirty-nine years had passed since the previous royal visit to the city, an interval in which an almost entirely new generation had grown up to enter into and celebrate the Event. The satisfaction of the citizens was, if possible, intensified by Her Majesty's choice of the honoured house of Blythswood for holding her court, its large-hearted possessor and his progenitors being closely allied in substance and in sentiment with the people of Glasgow in their aspirations, not less than in everything

noteworthy in the traditions and progress of the city from an early period in its history.

Although announced that the immediate occasion of Her Majesty's spontaneous visit was to see the International Exhibition the Lord Provost and Magistrates felt that they would not misinterpret the royal mind if they concluded that the idea underlying Her Majesty's gracious intention was once more to honour the citizens in a broader and general sense. The Municipal Buildings, of which Her Majesty in 1883 had been invited to lay the foundation stone, were well-nigh completed and ready for occupancy. From the first the Corporation felt laudable pride in their matured scheme for a creditable official residence, alike in the suitability of the site and in the beauty of the design, which, in the severe competition of architects, had won the distinction of being selected. Her Majesty was unable to accept the invitation in 1883, but now in 1888, after a lapse of five years, the edifice, which realized the utmost expectations of its authors and of the citizens, was ready to be formally opened. The occasion of the Queen's visit being opportune in the extreme, it naturally occurred to the Lord Provost and Magistrates to renew their invitation to Her Majesty to become identified with their official residence by performing the inaugural function.

Accordingly on 21st June, at a meeting specially convened, "The Town Council, on the motion of Sir James King, Lord Provost, resolved to invite Her Majesty the Queen to open the new Municipal Buildings on the occasion of her intended visit to Glasgow in August "next"; and it was remitted to the Magistrates to make the necessary arrangements should the invitation be accepted. In submitting the motion to the Town Council the Lord Provost said:—"I think you will observe with satisfaction that Her Majesty intends in the course of the month of August to honour her loyal subjects in Glasgow with a visit. That visit will be welcome, inasmuch as it

“is the express outcome of her spontaneous wish to see  
“again our city; and on such an occasion as that I feel  
“that we ought to take advantage of the presence of  
“Royalty to associate Her Majesty’s name if possible  
“with the new Municipal Buildings. It will be in the  
“memory of all of you that in the Jubilee year, in order  
“that these buildings, which we were then erecting,  
“might bear some link identifying them always in the  
“future with that happy period, a very elaborate and  
“appropriate bas-relief was executed on the tympanum  
“of the building. That of itself, I think, will furnish an  
“additional argument to induce Her Majesty to include  
“the inauguration of our Municipal Buildings as part of  
“the programme of her visit. Is it your pleasure that  
“that desire should be made known to Her Majesty, and  
“that I should be empowered to do so?” The proposal  
was enthusiastically agreed to, and on the suggestion of  
the Lord Provost it was further agreed to remit to the  
Lord Provost and Magistrates to make the necessary  
arrangements.

Since the announcement of her visit Her Majesty had  
been plunged into deep grief by the not unexpected death  
of her son-in-law, the Emperor Frederick of Germany, after  
an all too brief but pathetic and noble reign, throughout  
which he heroically suffered from his fatal malady. The  
arrangements were in consequence suspended. But on 5th  
July, at a meeting of the Magistrates, the following remit,  
on the motion of the Lord Provost, was made:—“In view  
“of the resolution by the Town Council on 21st ult. to  
“invite Her Majesty the Queen to open the new Municipal  
“Buildings on the occasion of her intended visit to Glasgow  
“on August next, and under the remit which was then  
“made to the Magistrates on the subject, it was remitted  
“to a special committee, consisting of the Lord Provost,  
“Bailies Gray, Shearer, M’Farlane, M’Laren, and Thomson,  
“with the City Treasurer and the sub-convenor of the com-  
“mittee on New Municipal Buildings, Preceptor Osborne,

“to make the necessary arrangements in the event of the invitation being accepted.”

Her Majesty having cordially accepted the invitation to open the buildings, the Magistrates proceeded with the befitting arrangements. They held frequent meetings, and, subject to royal approval, they adopted the following route through the city:—Leaving St. Enoch Station the procession to pass to the new Municipal Buildings by way of Buchanan Street, St. Vincent Place, and the south side of George Square, to the principal entrance, and passing through the loggia, to halt in the quadrangle, where the inaugural function should take place, and the royal opening of the building be consummated. It was also decided that platforms be erected within the quadrangle for representative citizens witnessing the ceremony. On the conclusion of the ceremony it was arranged that the Queen should leave the quadrangle by way of the north archway in George Street, and proceed westwards to the Exhibition, by way of the north side of George Square, George Street, Buchanan Street, St. Vincent Street, Renfield Street, Sauchiehall Street, Woodside Crescent, Woodside Terrace, Claremont Terrace, Park Gardens, and the Upper Carriage Drive of Kelvingrove Park, and enter the Exhibition grounds by the Prince of Wales Bridge. On the conclusion of the august ceremony within the Exhibition, it was arranged that the route to be taken by Her Majesty in returning to St. Enoch Station should be by way of Park Grove Terrace, Kelvingrove Street, Dumbarton Road, and Argyle Street, to St. Enoch Square.

It was further resolved to palisade both sides of the entire royal route, and to request the officer commanding the forces in Scotland, in addition to the military forces at his command, to invite the citizen volunteers to line the streets throughout the royal progress. It was also resolved to decorate the streets to be traversed by Her Majesty, and in addition to the arch which had been

erected in honour of the Prince and Princess of Wales at Park Gardens, to erect three additional massive triumphal arches at the following points on the route :— At the exit from St. Enoch Square to Argyle Street; at the entrance to George Square from St. Vincent Place; and the third at the summit of Sauchiehall Street, at the east end of the Corporation Galleries, the latter arch to be floral in design.

It was also resolved to give a banquet on the evening of Her Majesty's state visit to the city, within the Corporation Galleries, to which should be invited a number of noblemen, chief magistrates of the leading cities and burghs of England, Ireland, and Scotland, and representative citizens of Glasgow. All these arrangements were forthwith proceeded with. The palisading and decorations of the streets, and the designs for the triumphal arches, were entrusted to the veteran city architect, Mr. John Carrick, who had done similar duty in 1849, on Her Majesty's first visit to the city. The police arrangements were, of course, entrusted to Chief Constable John Boyd, and the military and volunteer arrangements were formulated by Major-General Lyttelton-Annesley, commanding the Forces in Scotland, Colonel Stevenson, C.B., of the Western District, and Colonel Sir Donald Mathieson, K.C.B., of the 1st Lanarkshire Engineer Volunteers, and senior officer of the Citizen Reserve Forces. In the preparations at the Municipal Buildings, Mr. Wm. Young, architect of the edifice, Dr. Marwick, town clerk, Mr. Carrick, city architect, and Mr. Nicol, city chamberlain, were associated with the Committee.

Simultaneously with these arrangements of the Corporation the Executive of the International Exhibition proceeded to make adequate preparations for the reception of their august visitor within the Exhibition buildings. They also resolved to extend invitations to the nobility of Scotland, lord mayors and mayors of the principal cities and towns of England and Ireland, and the lord



provosts and provosts of the principal cities and burghs of Scotland, to witness the ceremony of presenting an address to Her Majesty within the Exhibition buildings, and to entertain them to luncheon previous to the event.

The citizens, too, rose to the occasion and entered upon elaborate preparations for decorating their places of business and residences situated along the entire route of procession.

When the morning of 22nd August dawned upon the city every arrangement, public and private, was in a state of completeness, and most propitious weather was vouchsafed throughout the entire day.

The Queen had left Osborne for Blythswood on the evening of 21st August. Accompanying Her Majesty were Her Royal Highness the Princess Beatrice, the Grand Duke of Hesse, the Hereditary Grand Duke of Hesse, the Princess Alix of Hesse, Lady Southampton, the Honourable Harriet Phipps, Sir Henry Ponsonby, Sir John McNeill, and others. The train arrived at Renfrew at 8.30 A.M. on the 22nd August, and on alighting Her Majesty drove at once to Blythswood, and took up her Royal Court. The Queen's apartments at Blythswood commanded a charming view of the river Clyde at one of its prettiest and busiest reaches, and on this day it was seen under the finest of atmospheric conditions. In the near distance were the green ridges of the Dumbartonshire hills, and in the greater distance the blue ridges of the Argyleshire hills. Three days previously the royal yacht, "Victoria and Albert," came round to the Clyde, and was berthed, within view of Blythswood House, in Messrs. J. & G. Thomson's dock at Clydebank, which a few weeks previously had been occupied by the splendid Transatlantic ship, "City of New York," and was immediately thereafter to be occupied by its sister ship, "City of Paris."

About half-past three in the afternoon the Queen and Court left Blythswood House for the city, and travelling by rail alighted at St. Enoch Station at 4.15. Her Majesty

was quietly received by the Lord Provost, Sir James King, who was accompanied by Lady King, and other official gentlemen, the public being excluded from the station. But on emerging from the station into the square the Queen was heartily greeted by an immense concourse of people.

The route adopted by the Committee on arrangements was judiciously chosen for enabling the entire populace to see their sovereign lady and it was lined by the volunteer force of the city in close line. Three quarters of a million of loving subjects of the Queen were enabled to testify their loyalty under the most pleasurable weather conditions, and happily without accident. Her Majesty's drive through the city from beginning to end was truly, in the fitting words of the Prince Consort already quoted, "a veritable triumphal procession."

The Queen's reception at the Municipal Buildings was of the warmest description, and was graciously acknowledged by Her Majesty. On the royal carriage drawing up by the side of the magistrates' platform, Lord Lothian advanced to the Queen and bowed. His Lordship thereafter presented Lord Provost Sir James King, and the Town Clerk, Dr. Marwick, who advanced to the royal carriage, the Queen bowing graciously to both. Without further preface Dr. Marwick read the following address to Her Majesty:—

TO HER MOST GRACIOUS MAJESTY THE QUEEN,

May it please Your Majesty—

We, the Lord Provost, Magistrates, and Council of the City and Royal Burgh of Glasgow, desire, for ourselves and the community we represent, to offer your Majesty the renewed expression of our loyalty and devotion to your Majesty's person, throne, and family, and the assurance of our grateful appreciation of the distinguished honour you have done the city in consenting to inaugurate its Municipal Buildings, and to visit the Industrial Exhibition now being held here.

Since the consecration of the Cathedral and the foundation of the burgh in the twelfth century, Glasgow has received frequent visits



from the Scottish Sovereigns. The saintly King David I. attended the consecration of the Cathedral ; King James II. and King James III. often visited the city. Both the last named Sovereigns were Canons of the Cathedral, and conferred upon the see and the burgh signal marks of royal favour. Queen Mary resided in Glasgow for a few days, and it was twice visited by King James VI.

These royal recognitions have been frequently renewed during your Majesty's auspicious reign. The city was honoured and gratified by a visit from your Majesty and the Prince Consort in 1849, and ten years later your Majesty was graciously pleased to open the works by which the city received the water supply which it has since drawn from Loch Katrine. Since then Glasgow has been honoured by the presence of members of the Royal Family on several occasions—in the unveiling of the statue of the lamented Prince Consort ; in the laying of the foundation stones of the University buildings and the General Post Office ; and, three months since, in the opening of the Exhibition, which your Majesty is now about to visit.

Of these repeated evidences of the Royal favour the citizens are deeply sensible, and they have sought to connect the Municipal Buildings with your Majesty's Jubilee, so as to give permanent expression to the admiration and love with which your Majesty is regarded here. The structure will, we trust, long remain a memorial of a reign unexampled in the magnitude and far-reaching issues of the events comprised within it—in the public and private virtues of the Sovereign—and in the perfect sympathy which exists between the Crown and the People.

The Queen followed the address with deep attention, and was visibly affected by some of the references. The address being replaced in its beautiful gold casket, the Lord Provost handed it to Her Majesty, who graciously accepted it.

The Queen read the following reply :—

“I thank you most sincerely for your renewed assurance  
“of attachment to my throne and person. I am deeply  
“touched by your reference to my previous visit to Glasgow,  
“when I was accompanied by my beloved husband. I  
“gladly inaugurate these new Municipal Buildings, which  
“are worthy of the ancient renown and the modern pros-  
“perity of your great city.”

The Lord Provost then presented the following gentlemen to Her Majesty in the order named, viz. :—Bailies James

Gray, James M'Farlane, Alexander M'Laren, Hugh Steel Thomson, James Colquhoun, Hugh Wallace, Robert M'Farlane Mitchell, William Stevenson, and Michael Simons; Mr. William Walls, Dean of Guild; Mr. James Thomson Tullis, Deacon Convener; Mr. David Richmond, City Treasurer; River Bailie James M'Lennan; Depute River Bailie James Henderson Martin; Mr. Thomas Watson, Master of Works; Mr. James Nicol, City Chamberlain; Mr. John Carrick, City Architect; and Mr. William Young, Architect of the new Municipal Buildings. To each as he passed the royal carriage Her Majesty graciously bowed and smiled.

The Lord Provost afterwards said—May it please your Majesty, I am charged by the members of the Corporation to ask your Majesty graciously to accept the key of the main door of our new Municipal Buildings as a souvenir of the inauguration of the buildings by your visit to-day.

The Queen, having accepted the gold key, said, in reply—I thank you very much, and I desire the door to be opened.

The Lord Provost then gave the order—"Let the doors be opened."

The order was promptly obeyed, and Glasgow's new Municipal Buildings had been formally and right royally opened.

The ceremony here was at an end, and the royal pageant moved out of the quadrangle by the northern exit at 4.35.

Proceeding by way of George Street, Buchanan Street, St. Vincent Street, Sauchiehall Street, the Crescent, and Kelvin-grove Park, the royal cortege entered the Exhibition Grounds by the Prince of Wales Bridge, and reached the grand entrance at 5.21 o'clock. Throughout the entire route to the Exhibition immense crowds had an opportunity of seeing and greeting their sovereign lady.

Within the Exhibition elaborate and most perfect arrangements had been made in order to give to Her Majesty a befitting reception, the whole being carried out by Mr. James Sellars, to whose genius was due much of the dignity attaching both to the opening ceremony and to Her Majesty's visit.

The royal dais was erected at the west end of the hall instead of in front of the orchestra as on the opening function. It occupied a space 30 feet by 20 feet, and was arranged on four levels. On the highest level stood the throne, a richly-designed chair, flanked by lions, and having the Royal Arms on the back. Overhead was a canopy supported on turned pillars and surmounted by a gilded dome and royal crown. On either side were chairs for the royal personages accompanying the Queen, and behind were chairs for the suite. The canopy was richly draped in royal purple with gold fringes and vallances. Curtains extended on each side of the canopy the whole width of the dais, and on the top were shields bearing the insignia of India, Canada, Australia, and South Africa. Behind the throne was a floral shield bearing the letters V.R. The wood work of the canopy and chairs was in ivory colour, and the chairs were upholstered in ivory satin. Over the royal dais from the roof were hung festoons of evergreens and roses, with hanging baskets of evergreens and cut-flowers, and carried along the sides of the hall under the arches of the aisles were festoons of evergreens, baskets of flowers depending from the central shields.

Her Majesty's Scottish Body Guard of Royal Archers took up position on the right of the dais, and, numbering 170, they stretched for a considerable distance along the south avenue. The Duke of Buccleuch, Senior Gold Stick, was in chief command, and the second in command was the Earl of Stair, Senior Silver Stick. There were also present as officers, Lord Balfour of Burleigh, the Earl of Haddington, the Earl of Elgin, the Earl of Home, Sir Graham Montgomery, and Sir James Gardiner Baird, Junior Silver Stick, with

General Vessey Kirkland, Adjutant General. The standard-bearers, who occupied a position on each side of the throne, were Sir John Gillespie and Mr. Harry Cheyne. In their curious old-fashioned dress of Lincoln green, each with the eagle's feather in cap, the Royal Archers presented an appearance at once unique and savouring of the "olden time."

The 1st Battalion of the Seaforth Highlanders were also present in strength, posted in companies at the Grand Entrance, in front of the throne, and under the dome, and also lining the avenues along which the Queen was to pass. Besides these bodies, each volunteer regiment in the county sent twenty selected men to do duty within the building, by lining the various routes to be traversed by Her Majesty.

The musical part of the proceedings was rendered by the Glasgow Choral Union in full strength, conducted by Dr. Bradley; Dr. Peace presided at the organ, and the Exhibition Band performed the orchestral parts.

Long before the Queen's arrival the Grand Hall was filled to its utmost capacity by specially invited citizens and others, comprising largely the guarantors of the Exhibition and of members of the aristocracy; the Magistrates and Town Councillors of Glasgow, and the Chief Magistrates of many important cities and towns in England, Ireland and Scotland, the latter having been entertained by the Exhibition authorities to a *recherche* luncheon previous to the august ceremony.

When at 5.21 the signal guns in the Park announced that the Queen had reached the Main Entrance, the scene within the Grand Hall was brilliant, animated, and impressive.

The Queen was received at the main entrance by Sir Archibald Campbell and Lord Provost Sir James King. Accompanied by Sir Archibald, Her Majesty advanced into the building, bowing her acknowledgments as she passed to the greetings of a numerous party of gentlemen who had assembled. Her Majesty was followed by Princess Beatrice and Sir James King and Prince Henry of Batten-

berg. Lord Lothian, the Hereditary Grand Duke of Hesse, and Princess Alice of Hesse followed. As the Queen and suite entered the building a salvo was fired from the battery in the West-End Park.

Inside the entrance the conveners and sub-conveners of committees and officials were presented to Her Majesty in a body, the list being as follows :—

## HONORARY SECRETARIES.

A. Bennett M'Grigor, LL.D.      Anderson Kirkwood, LL.D.  
James Robertson, LL.D.\*

## HONORARY TREASURERS.

J. Wyllie Guild.      Walter Mackenzie.      William Walls.

## CONVENERS.

Stephen Alley,	James Murray,
Colonel Clark,	Ex-Lord Provost M'Onie,
Sir William Collins,	Francis Powell,
Robert Crawford,	Treasurer Richmond,
John Cuninghame,	Paul Rottenburg,
Sir John N. Cuthbertson,	Michael Simons,
Peter Denny,	Alex. Stephen,
Leonard Gow,	John S. Templeton,
Chas. Howatson,	Sir Wm. Thomson,
Donald Macleod, D.D.,	J. T. Tullis,
J. L. Mitchell,	W. Renny Watson,
John Morison,	Walter Wilson.
John Muir,	

Alfred Brown, Treasurer.

J. M. Macleod, Auditor.

Wm. A. Bryson, Engineer and Electrician.

James Barr, Architectural Engineer.

Her Majesty then retired to the reception-room, and meanwhile the marshals formed the royal procession. As soon as this was arranged a signal was given from the balcony of one of the towers in the Grand Hall, when the choir, with band and organ accompaniment, struck up the National Anthem, the audience the while rising to their feet.

\* It is singular that those three distinguished ornaments of the learned profession of the Law were taken away within a very short time. Dr. Kirkwood died on 16th February, 1889, aged 77 ; Sir James Robertson on 9th August, 1889, aged 68 ; and Dr. A. B. M'Grigor on 22nd March, 1891, aged 62. Happily all others on the list continue with us.

The procession marched up the north side of the main avenue in the following order :—

MARSHAL.		MARSHAL.	
Sir Donald Matheson, K.C.B.		Colonel Clark.	
GENERAL MANAGER.		SECRETARY.	
H. Anthony Hedley.		Lt.-Col. W. M. Cunningham.	
ARCHITECT.			
James Sellars.			
VICE-CHAIRMEN.			
J. Hunter Dickson.		John Shearer.	
VICE-PRESIDENTS.			
His Grace the Duke of Montrose, K.T.			
The Most Honourable the Marquis of Breadalbane.			
The Right Honourable the Earl of Stair, K.T.			
The Right Hon. the Lord Provost of the City of Edinburgh.			
EQUERRIES-IN-WAITING.			
General Gardiner.		Sir John M'Neill, K.C.B., V.C.	
PRESIDENT.		CHAIRMAN.	
Sir A. Campbell, Bart.		Sir J. King, LL.D.	
THE QUEEN.		The Grand Duke of Hesse, K.G.	
Prince Henry	Princess Henry	Princess Alice	Hereditary
of	of	of	Grand Duke
Battenberg.	Battenberg.	Hesse.	of Hesse.
MISTRESS OF ROBES.		LADY-IN-WAITING.	
Duchess of Buccleuch.		Lady Southampton.	
Marquis of Lothian.		Hon. Harriet Phipps.	
HER MAJESTY'S HOUSEHOLD.			
Lord Elphinstone.		Colonel Von Wernher.	
Sir Henry Ponsonby, G.C.B.		Sir F. Edwards, K.C.B.	
Baron Grancy.			
Dr. Reid.	Col. Clerk.	Capt. Fullerton, A.D.C.	
Major-General Annesley and Aide-de-Camp.			
THE CONVENERS OF THE WOMEN'S INDUSTRY SECTION.			
Lady King.		Honourable Lady Campbell.	
Her Grace the Duchess of Abercorn.			
THE HONORARY SECRETARIES.			
THE HONORARY TREASURERS.			
CONVENERS OF COMMITTEES.			
EXECUTIVE STAFF.			

As they reached the throne the members of the procession filed off to their respective seats, the space in front



of the royal dais being kept clear. The Grand Duke of Hesse handed the Queen up the steps to the throne. H.R.H. Princess Beatrice (Princess Henry of Battenberg) and H.R.H. Princess Alice of Hesse took up a position on the right of the throne, and H.R.H. the Grand Duke of Hesse, K.G., the Hereditary Grand Duke of Hesse, and Prince Henry of Battenberg, K.G., stood on the left. The Marquis of Lothian, the Duchess of Buccleuch, and other members of the suite occupied positions behind the royal party on each side of the throne. On ascending the dais the Queen bowed twice, and at the close of the National Anthem, in response to a loud outburst of cheering by the vast assemblage, she again bowed, smiling graciously in recognition to several of the noblemen and gentlemen gathered around the throne. As soon as the cheering which greeted the arrival of Her Majesty had ceased, His Grace the Duke of Buccleuch, in accordance with ancient custom, advanced to the foot of the throne, and, as the officer in command of the Royal Archers, with a triple obeisance, presented the Queen with the golden arrows resting on a velvet cushion trimmed with cloth of gold. Her Majesty accepted the tribute of homage, and immediately returned the arrows to the custody of the noble Duke. This interesting ceremonial, a survival of our ancient nationality, concluded,

Sir Archibald Campbell stepped forward to the foot of the steps of the throne and read the following address:—

“TO HER MOST GRACIOUS MAJESTY THE QUEEN.

“May it please your Majesty,

“We, the Executive Council of the International Exhibition of 1888, avail ourselves of your Majesty's gracious visit to Glasgow to offer to your Majesty the expression of our loyalty, and of the deep sense which we entertain of the numberless claims which your Majesty has established to the devotion of all classes of your Majesty's subjects, more especially of this the northern portion of your Majesty's dominions.

“In your Majesty we proudly recognize a Sovereign who, throughout a most eventful and happy reign of upwards of fifty years, has set before the country the noblest examples both of public and of private



life, and has ever manifested the warmest practical interest in everything that could conduce to the well-being and happiness of her subjects.

“It is impossible for us to think of the present Exhibition without remembering that, in common with all preceding Exhibitions that have been held within the realm under the beneficent sway of your Majesty, it owes its origin to the great Exhibition initiated, and so successfully carried out in 1851, by the lamented Prince Consort, whose ennobling idea and warmest aspiration it was, by bringing nations and communities into friendly competition with one another in arts and manufactures, to secure the blessings and the benefits inseparable from the promotion of peace and of goodwill among mankind.

“Will your Majesty permit us to advert for a moment to the signal success with which the present Exhibition has been honoured? It has now been open for nearly four months, and during that period has been visited by upwards of two millions and a half of people from your Majesty’s wide empire, both home and colonial, besides by great numbers from the Continent of Europe and the United States of America—all attracted by a display of some of the noblest productions in every department of science and art and of manufactures, and which, we believe, none have had an opportunity of seeing without expressions of the warmest admiration.

“We now respectfully submit for your Majesty’s inspection some of the principal features and contents of the Exhibition; and express our grateful sense of the distinguished honour which your Majesty is now conferring upon this city and the Exhibition. We earnestly pray that your Majesty may long be spared to reign over a happy and a united people.”

The Marquis of Lothian handed the reply to Her Majesty, who, in a beautifully clear and distinct voice, read as follows:—

“It is with the utmost gratification that I receive the loyal and dutiful address which you have just presented, and I am greatly pleased by the warm manner in which I have been welcomed by the vast community of this great city. I am deeply sensible of the advantages which the manufacturing and commercial interests of the whole civilized world have received from these Exhibitions, which were first organized by my beloved husband in 1851. I rejoice in the well-deserved success which has crowned your efforts, and I

heartily offer you my best wishes for the continued prosperity of this great undertaking."

The Lord Provost then advanced and said—May it please your Majesty, I have the honour to ask your acceptance of this badge in memory of your visit to the Exhibition.

Her Majesty graciously accepted the memento, and handed it to one of the suite, repeatedly bowing in acknowledgment.

Sir Archibald Campbell next presented to Her Majesty Bailie Dickson and Bailie Shearer, joint vice-chairmen of the Executive Council; Mr. H. A. Hedley, general manager; Colonel W. M. Cunningham, secretary; and Mr. James Sellars, the architect of the building.

By special request of Her Majesty, "Auld Langsyne" was sung, and while the familiar strains were filling the hall Her Majesty rose, and, again bowing to the assemblage, took the arm of the Grand Duke of Hesse and stepped down from the dais, followed by the members of the Royal Family. Her Majesty first of all entered the Women's Industries Section; next the Fine Art Galleries were visited, and lastly the Artizan Section, after which she proceeded to the Reception Room, where tea was served.

Precisely at half-past six Her Majesty took her departure, the gentlemen who were presented on arrival being again present in the vestibule. Her Majesty acknowledged their presence as she passed, and bowed to the Duke of Montrose. The royal salute was given, and amid the firing of cannon Her Majesty drove off on her return to St. Enoch Station.

Proceeding by way of Dumbarton Road and Argyle Street to St. Enoch's Square, the royal lady had again to receive a continuous and most demonstrative greeting from a vast concourse of her subjects.

The royal procession having reached the platform of St. Enoch Station at 7.15, the Queen was assisted from her carriage by the Duke of Hesse, while standing near were the Lord Provost and Lady King, Lord Hamilton, Sheriff Berry, and others. Her Majesty engaged in animated conversation with the Lord Provost, and also addressed a few words to Lady

King. The Lord Provost conducted the Queen to the saloon in which she was to travel to Renfrew, when she expressed gracious satisfaction with the extremely cordial reception she had everywhere met with in the city. The vast numbers of spectators and decorations she stated had greatly impressed her, and the arrangements had been most complete and well directed. Her Majesty was then assisted by one of her attendants into the royal saloon and all being in readiness the train moved off at 7.20.

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In honour of the visit of Her Majesty the Queen the Corporation gave a grand banquet in the Corporation Galleries, Sauchiehall Street. Invitations to the banquet had been given to a number of noblemen, to the Mayors of leading towns in England and Ireland, to the Provosts of the principal towns in Scotland, and also to a number of prominent citizens and members of Parliament.

The Hon. Sir James King, the Lord Provost, occupied the chair, supported on the right by the Earl of Stair, Earl of Dundonald, Lord Hamilton of Dalzell, the Lord-Advocate, Sir John Dalrymple Hay, Bart. ; the Lord Mayor of York, the Sheriff of York ; Sir Charles Dalrymple, Bart., M.P. ; Rev. Dr. Burns, Sheriff Berry, Dr. Underwood, U.S. Consul ; Archbishop Eyre, Mayor of Birmingham, Major-General Gildea, Sir Theodore C. Hope, K.C.S.I. ; Mr. James A. Campbell, M.P. ; Colonel Charles King, Mayor of Newcastle, Colonel Sir Donald Matheson, K.C.B. ; Mr. Alexander Crum, Mr. John Burns, Mr. Baird, M.P. ; ex-Lord Provost Ure, Lord Provost of Aberdeen, Mayor of Leeds, Bailie M'Farlane, Mr. James Dunlop, Lord Dean of Guild Walls, Mr. William Young, Mr. Stewart Clark, Mr. Caldwell, M.P. ; Mr. David Guthrie, Colonel Kelsey, Provost of Dundee, Mr. James Campbell, Professor Gairdner, Captain Darby Griffiths, Colonel Kidston, Mr. Provand, M.P. ; Colonel Robertson Reid, Mr. W. Lindsay Stewart, Sir Andrew Maclean, Bailie Colquhoun, the Spanish Consul, Dr. Blackie, Mr. John Anderson, jun. ; Mr. Hobson, postmaster ; Mayor of Carlisle, Colonel Merry. On the left by the Earl of Lindsay, Lord Forbes, Sir Thomas Clark, Bart., Lord Provost of Edinburgh ; the Solicitor-General for Scotland, General Lyttelton Annesley, Very Rev. Principal Caird, Hon. Mr. Vernon, M.P. ; Sir J. H. Haslett, Mayor of Belfast ; Sir William Thomson, D.C.L. ; Mr. Jacques Van

Raalte, president Consular Corps ; Sir Charles Tennant, Bart. ; Rev. Dr. Donald Macleod, the Hon. J. Macleod Stewart, Mayor of Ottawa ; Sir William Pearce, Bart., M.P. ; Colonel Black, C.B. ; Mayor of Bradford, Dr. Charles Cameron, M.P. ; Colonel Malcolm, C.B. ; Sir James Bain, Colonel Stevenson, C.B. ; Captain R. King Stewart, Sir William Collins, Mr. Alexander Allan, Principal Douglas, Bailie M'Laren, Sir J. N. Cuthbertson, Rev. Dr. Black, Mr. James C. Hozier, M.P. ; Mr. James R. Thomson, Mr. Donald Graham, Mr. Archibald Coats, Mr. Cameron Corbett, M.P. ; Hon. Major Alsopp, Sir George H. B. Macleod, Mr. Donald Crawford, M.P. ; Mr. Hugh Brown, Captain Sullivan, Mr. John W. King, Mr. Thomas Henderson, Mr. Alexander Stephen, Dr. A. C. Kirk, Bailie Wallace, the French Consul, Mr. Renny Watson, Mr. J. S. Templeton, Mr. James Scott, H.M. Customs ; Mayor of Berwick, Colonel Lysons, and Mr. Thomas Mason, collector, Trades' House.

Bailie Gray, *croupier*, supported on the right by the Lord Provost of Perth, Sir Michael Connal, Bailie Mitchell, Bailie M'Donald, Edinburgh ; ex-Bailie Laing, Colonel Smith, ex-Bailie Dickson, ex-Treasurer Waddel, Colonel W. M. Cunningham, secretary, Exhibition ; Councillor Crawford, Provost Marshall, ex-Bailie Neil, Councillor Paton, the City Chamberlain. On the left by the Provost of Leith, Preceptor Osborne, Mr. Carrick, Mr. Callander, Bailie Stevenson, Mr. John Lang, Mr. T. A. Mathieson, River Bailie M'Lennan, Provost Baird, Dr. Russel, ex-Bailie M'Pherson, Councillor Bilsland, ex-Bailie Campbell, and Councillor Pettigrew.

Bailie Shearer, *croupier*, was supported on the right by Provost Shankland, Greenock ; Dr. James Morton, Mr. G. W. Clark, Colonel Mein, Provost Brown, Stipendiary Gemmel, Bailie Walcot, Edinburgh ; Councillor Muir, Councillor Cumming, ex-Bailie Filshill, Councillor Martin, Provost Lindsay, Councillor Meehan, Councillor Caldwell, Mr. J. G. Monro ; and on the left by ex-Lord Provost Arthur, Mr. James Sellars, Bailie Turnbull, Edinburgh ; Mr. William Skinner, ex-Bailie Dunlop, Councillor H. S. Macpherson, Provost Hamilton, Councillor M'Lean, Councillor H. B. Wilson, Councillor Graham, Councillor Primrose, Councillor Guthrie, and Councillor M'Farlane.

Treasurer Richmond, *croupier*, was supported on the right by ex-Lord Provost M'Onie, Provost Yellowlees, Bailie Thomson, Provost Ferguson, Govan ; ex-Bailie Ure, Mr. John Morton, manager, Glasgow and South-Western Railway ; Colonel Hall, Master of Works Watson, Councillor Bertram, Provost Craig, River Bailie Martin, Chief-Constable Boyd, Councillor Bowman, Councillor Paterson ; and on the left by Professor Robertson, Provost Cochrane, Deacon-Convener Tullis, Bailie Simons, ex-Preceptor William Wilson, Treasurer Boyd, Edinburgh ; Mr. Hedley, Mr. James Reid, Colonel Clark, Mr. J. L. Mitchell,

Provost Hunter, Councillor Brechin, Councillor Morrin, and Councillor Walter Wilson.

Grace was said by the Rev. Dr. Burns.

The LORD PROVOST in proposing the first toast on the list said that never in the history of Glasgow had the toast of the Queen been proposed in circumstances more auspicious. The present was not the first visit of Her Majesty to Glasgow, but, so far as he knew, it was the first occasion on which the reigning Sovereign had paid a State visit to our ancient city. But whether that were the case or not he was sure it was true that never before in the history of the city had a more enthusiastic reception been accorded to either queen or king. Her Majesty came, not by the invitation of the citizens of Glasgow, but entirely of her own accord, and he thought that added doubly to the pleasure which we felt, and to the honour which had been conferred on the city. We could not but throw our memory back to the time 39 years ago when the Queen visited Glasgow. We were apt to cast our minds over the route of Her Majesty then, when landing at the Broomielaw she went to visit the Cathedral and the Old College, and, returning, left by the Edinburgh and Glasgow Railway. But that visit was comparatively short, and it could not in importance compare with that with which we had that day been honoured. In the annals of the city that day would stand pre-eminent as one in which every circumstance had combined to make the holiday perfect. The streets were gay with flags and triumphal arches, and we had endeavoured outwardly to manifest the joy which we felt at seeing the Queen again among us, but had her Majesty's visit happened in circumstances so depressing as those of the previous day he was sure half of the pleasure would have been lost. Might we take it that the auspicious visit of the Queen, without a jar, without an accident, bade promise for a prosperous future to the city, and was a good omen of prosperity in the time to come? Her Majesty had visited the Exhibition, in which long ago she had shown her interest by giving us the complete set of the costly presents which were connected with the Royal Jubilee. But there was one circumstance which, to those who were members of the Corporation especially, would afford in time to come matter of rejoicing, and that was that Her Majesty had condescended to inaugurate the new Municipal Buildings. He thought it would be a fitting thing if the term, the New Municipal Buildings, were changed, as in other places, to the Town Hall of Glasgow. That probably was not a fitting time to propose such a change; at any rate he was quite sure that in the future it would always be a circumstance which would add to the interest attaching to these graceful and beautiful buildings that Her Majesty's voice had been the first to be heard within their walls. He was sure that it would be one of the



most precious traditions of our successors that these buildings had been inaugurated by the Queen, the great and good Queen Victoria. Let us hope that, having been inaugurated in a manner so happy, by one so wise and so good, no unworthy expressions or paltry wranglings would ever happen within their walls, and that those who had to do the business of the city would remember the importance of the interests committed to their charge, and, in all cases, conduct their debates with becoming gravity and decorum. It was impossible to gild refined gold and paint the lily, and therefore he would not attempt to depict those personal qualities of Her Majesty which had not only endeared her to her subjects, but had raised her as a woman on a pinnacle as high as that which she occupies as a queen. He felt that any words of his would rather detract than add to the honour with which her name would be regarded, and therefore he proposed, with all the honours and without additional words, the toast of "Her Majesty the Queen."

Thus was brought to a close a day which must ever be memorable in local history. No accident befell any one, the weather was propitious, and the most perfect good humour and good order dominated the masses of spectators estimated to number six or seven hundred thousand persons.

## BARONETAGES AND KNIGHTHOODS.

I PRESENT a list of the Baronetages and Knighthoods bestowed by the Queen on citizens during her reign.

Sir James Campbell, Lord Provost,	- -	Knight,	1841
Sir James Anderson, Lord Provost,	- -	Knight,	1849
Sir Archibald Alison, LL.D., Sheriff of the County,		Baronet,	1852
Sir Andrew Orr, Lord Provost,	- - -	Knight,	1855
Sir William Thomson, LL.D., D.C.L.,	- -	Knight,	1866
Sir James Lumsden, Lord Provost,	- -	Knight,	1868
Sir James Watson, Lord Provost,	- -	Knight,	1874
Sir James Bain, Lord Provost,	- - -	Knight,	1877
Sir William Collins, Lord Provost,	- -	Knight,	1881
Sir Charles Tennant,	- - - - -	Baronet,	1885
Sir Michael Connal, Chairman, School Board,		Knight,	1885
Sir Archibald Orr Ewing, M.P.,	- -	Baronet,	1886
Sir James King, LL.D., Lord Provost,	- -	Knight,	1887
Sir William Pearce, M.P.,	- - - -	Baronet,	1887
Sir Donald Matheson, K.C.B.,	- - -	Knight,	1887
Sir John Neilson Cuthbertson,	- - -	Knight,	1887
Sir George H. B. Macleod,	- - - -	Knight,	1887
Sir Andrew Maclean,	- - - - -	Knight,	1887
Sir William M'Onie, Lord Provost,	- -	Knight,	1888
Sir James David Marwick, LL.D., Town Clerk,		Knight,	1888
Sir James King, Lord Provost, created a Baronet, 1888			
Sir George Burns,	- - - - -	Baronet,	1889
Sir William Arrol, LL.D.,	- - - -	Knight,	1889
Sir James Robertson, LL.D.,	- - -	Knight,	1889

In addition, the following gentlemen were offered Knight-hood, but for private reasons did not accept the honour:—

Mr. John Ure, Lord Provost,	- - -	1884
Professor W. T. Gairdner,	- - - -	1887

And, still further, Glasgow claims intimate relations with other two honoured names:—

Sir Archibald C. Campbell,	created a Baronet in 1880
Sir William Wallace Hozier,	created a Baronet in 1890



## EAST-END EXHIBITION.

I HAD prepared a short sketch of this popular and successful Exhibition and of its dignified opening by the Secretary for Scotland, the Marquess of Lothian, when, within the present month, the book bearing the title "George Square" came into my hands, and is no doubt in the possession of many by this time. The author is the Rev. Thomas Somerville, of Blackfriars Parish. The book was printed at the Exhibition Press of Messrs. Aird & Coghill, and it is stated to have been produced as a memento of the Exhibition. It contains in its final chapter a description of the scheme in its origin and development. I cannot do better than leave this genially written and excellently printed volume to tell the story of the GLASGOW EAST-END EXHIBITION.

I shall only add that the marvellous energy and zeal, born of success, which entered into the management, raised what was designed as a local Industrial and Art "Fair" into one of cosmopolitan attractiveness.

As with the greater Exhibition at Kelvingrove a substantial surplus was secured, amounting to something like £3000. The money has been lodged with the Corporation pending application of it for East-End purposes in conjunction with other available funds. In next publication I shall probably be privileged to describe the East-End "purpose" served by the East-End Exhibition, as well as the Art Scheme of the West-End.

## DINNER TO PRECEPTOR OSBORNE.

THIS veteran member of the Town Council was entertained by his colleagues, present and past, to a complimentary dinner within St. Enoch's Hotel, on 7th October, 1887, on the completion of 25 years' service as Councillor, River Bailie, Magistrate, City Treasurer, Master of Works, Preceptor of Hutchesons' Hospital, Clyde Trustee, and as Convener of several important Committees of the Corporation. The Honourable Sir James King, Lord Provost, occupied

the chair with much geniality, and there were also present ex-Lord Provosts Sir William Collins and Sir William M'Onie. Senior Bailie Richmond was croupier. Letters of apology for absence on account of infirmity were read from ex-Lord Provosts Clouston and Sir James Watson, and from ex-Lord Provosts Sir James Bain and John Ure for unavoidable absence from the city. The speeches were appropriate and redolent of the past.

#### STATUE OF MR. JAMES WHITE OF OVERTOWN.

THE statue of this public-spirited and large-hearted citizen, subscribed for by many friends, and erected in Cathedral Square near to the site of the old Barony Church, was unveiled on 21st August, 1891, by Sir James King, Bart., and accepted for the Merchants' House by the Lord Dean of Guild (ex-Lord Provost Ure). Mr. White was trained to the law, and for some years practised in Glasgow, but afterwards joined his father and brother in the business of chemical manufacturers in which he was most successful. He took a deep interest in, and was a liberal contributor to philanthropic movements, and was a sagacious adviser in matters of public interest. His memory will long be cherished amongst a wide circle in Glasgow. Mr. White, where more than one is entitled to initial credit, was in an especial degree suggester and promoter of, and one of the large contributors to, the City Bank Shareholders' Relief Fund. Initiated in October, 1878, this fund reached to £322,526, of which Glasgow contributed a little over one half the amount, and it was closed on 2nd November, 1888, at a meeting in the Merchants' Hall. This closing meeting was presided over by ex-Lord Provost Sir William Collins, who had, with Mr. White, Mr. William M'Ewen, Mr. James S. Napier, Mr. James Stevenson, the Lord Provost of Edinburgh, and others, successfully raised this princely offering to many hundreds of families suddenly and innocently brought face to face with broken fortunes.

## MR. ANDREW MACGEORGE.

THIS learned and estimable gentleman, native of the city and historian of its progress, passed away, at his residence, Glenarn, Row, on 14th September, 1891, aged 82 years. Mr. Macgeorge was until a few years ago a busy legal practitioner. An able general lawyer and shrewd and sound adviser, he was much more. In the laws of the Church he was deeply read, consulted, and trusted; in archæological lore he was profound, and in the mysteries of heraldry he occupied a foremost place as an exponent. Mr. Macgeorge wrote and published some few years ago the "History of Glasgow," a book at once fascinating and full of evidences of painstaking care and judgment; and in 1866, after years of study and research, he composed for the city the armorial bearings it carries, and had them matriculated in the Lyon Court; all this as a congenial pastime. And yet further, he wrote a charming book, which was published by Lord Provost Blackie, tracing the insignia of the city and its component emblems back into the mists of antiquity. Mr. Macgeorge was jealous for the dignity of the city and for its Corporation. Even apart from his gifted books, which will keep his name green in city annals, Mr. Macgeorge deserves to be kept long in remembrance for his work in connection with the Sick Children's Hospital, of which he was an ardent promoter.

Glasgow is much the poorer by recent deaths in the ranks of the legal profession of men who also stood prominently out as public-spirited citizens. Besides Mr. White and Mr. Macgeorge, we have lost Dr. Anderson Kirkwood, in February, 1889; Sir James Robertson, in August, 1889; Dr. A. B. McGrigor, in March, 1891; Mr. David Barr, in May, 1891; and others besides, whose places are difficult to fill.

How fast has brother followed brother  
From sunshine to the sunless land.

## MR. JOHN CARRICK.

THIS gentleman passed away on 2nd May, 1890, aged 70. He entered the Corporation service in 1844, and died in office. Mr. Carrick presented throughout those years the *beau idéal* of officialism. A native of the city, he was bound up in all its concerns, and incessant in watching, fostering and planning schemes for its good. He was also vigilant to prevent injury from the schemes of others. Shrewd to a degree, he was tactical above most men. His long and ripe experience in public affairs gave him minute knowledge and insight into the relations of things diverse in appearance. His opinions and advice were therefore much in request. Many a scheme of which we are proud he pressed for attention, never abruptly but by line upon line. His versatile mind is indeed traceable on most of the modern improvements of the city, on our streets, parks, squares, and open spaces, in our fine causeways and sewers, on and under ground, and in the buildings above ground. His purpose was fixed that his native city should be well equipped in all parts, whether done by public or private resources. Entering on office at a time when the city gave evidence of rapid expansion, and when the conditions of the old town were rapidly degenerating, consequent on the inflow from Ireland, and minds were busily at work scheming its regeneration by philanthropic effort, Mr. Carrick was one of those who persuaded the Corporation to face heavy duties and undertake monetary obligations, in order that health and rational and pleasurable living might be promoted. He lived to see many of his ideas in fruition.

As was most fitting, Mr. Carrick's remains received a public funeral, being carried from his house in the West to the Cathedral that he loved so well, and the environments of which he did much to embellish. After an impressive service the remains were borne on the shoulders of superior officials of his department to the Necropolis, and interred in a spot commanding, in a clear atmosphere, an outlook over the city he was so closely identified with.

## OBITUARY OF TOWN COUNCILLORS.

THIS list contains the names of thirty gentlemen who served in the Town Council for a longer or shorter period of their lives, and passed away in the last six years. The average of their ages was  $74\frac{1}{3}$  years. Eight lived to be octogenarians, averaging  $84\frac{1}{2}$  years; thirteen exceeded 70 years, averaging 75; seven exceeded 60 years, averaging 67; and two died at the age of 59. This is a record of longevity that challenges comparison with professional or other circles.

Three of the number—all octogenarians—had occupied the Chief Magistrate's chair—Mr. Andrew Galbraith, from 1857 to 1860; Mr. Peter Clouston, from 1860 to 1863; and Sir James Watson, from 1871 to 1874. Four had represented the Trades' House as Deacon-Convener—Mr. Andrew McOnie, 1879-1881; Mr. James Neilson, 1871-73; Mr. James Wilson, 1855-57; and Mr. R. A. Bogue, 1877-79. Nine had been in the Magistracy of the city, and thirteen were Councillors. Sir James Watson and ex-Bailie Hannan also represented the Merchants' House as Lord Dean of Guild—the former in 1876-78, after retiring from the Lord Provostship, and the latter in 1852-54, before entering the Council as a citizen representative.

Five on the list died in office—ex-Bailie John Young, Councillors Thomas Duncan, David Logan, and Joseph Gardiner, and Bailie of Provan Hannan. Of these five, the two first-named met their death when inspecting in discharge of official duty the quarry at Crarae, whence the Statute Labour Department obtains its supplies of granite, from the gaseous exhalations following upon a heavy blast of rock. From this circumstance the remains of the two gentlemen were honoured with a public funeral on 29th September, 1886.

The list is taken from the late Mr. James Brown's carefully kept obituary record. Mr. Brown has himself gone over to the great majority, in the fiftieth year of faithful Corporation service, having entered it as council officer on 19th August, 1841, and died on 23rd March, 1891, in the 79th year of his age.

## OBITUARY OF CITIZENS WHO SERVED IN THE TOWN

NAME.	Date of Death.	When Elected.
Walter M'Farlane, - -	1885. Oct. 18	1863
Thomas White, - - -	1885. Nov. 9	1855
Andrew Galbraith, - -	1885. Nov. 29	{ 1848
		{ 1854
Andrew M'Onie, - - -	1886. May 19	1879
David Logan, - - -	1886. May 19	1884
Joseph Gardiner, - -	1886. May 26	1883
Charles Thomas, - - -	1886. July 2	1850
Thomas Duncan, - - -	1886. Sept. 25	1883
John Young, - - -	1886. Sept. 26	1868
James Neilson, - - -	1886. Oct. 20	1871
John Craig, - - -	1887. April 21	1869
Andrew Fergus, - - -	1887. July 29	1870
James Wilson, - - -	1887. Aug. 25	1855
James Downie, - - -	1887. Sept. 28	1875
Matthew Fairley, - -	1887. Oct. 3	1879
James Brown, - - -	1888. Mar. 5	1856
Hugh Lamberton, - -	1888. May 25	{ 1868
		{ 1873
James Salmon, - - -	1888. June 5	1860
Matthew Pinkerton, -	1888. June 24	1871
James Hannan, - - -	1888. Aug. 10	{ 1852
		{ 1858
Peter Clouston, - - -	1888. Aug. 30	1854
Robert A. Bogue, - -	1888. Oct. 7	1877
Sir James Watson, - -	1889. Aug. 14	{ 1863
		{ 1876
James Adams, - - -	1889. Aug. 25	1873
Robert Lochore, - - -	1889. Sept. 27	1869
Walter B. Garvie, - -	1890. April 10	1871
George Wilson Clark, -	1890. June 2	1857
James Sharp, - - -	1891. Aug. 5	{ 1864
		{ 1870
John Burt, - - -	1891. Sept. 12	{ 1861
		{ 1873
John Hugh Watt, - - -	1891. Oct. 10	—



## COUNCIL AND DIED IN THE LAST SIX YEARS.

When Retired.	Offices Held.	Age at Death.
1866	_____	68
1857	_____	84
1850 } 1863 }	Dean of Guild, Magistrate, and Lord Provost.	87
1881	Deacon Convener.	68
1886	_____	59
1886	_____	69
1852	_____	85
1886	_____	64
1886	Depute River Bailie and Magistrate.	59
1873	Deacon Convener.	77
1875	Depute River Bailie and Magistrate.	76
1874	_____	65
1868 {	Deacon Convener, Magistrate, and Master of Works.	86
1878	_____	67
1882	_____	73
1881	Magistrate and City Treasurer.	78
1871 } 1882 }	Magistrate.	70
1878	Magistrate.	83
1879	Depute River Bailie and River Bailie.	75
1857 { 1861 }	Dean of Guild, Magistrate, and Bailie of Provan.	84
1863	Magistrate and Lord Provost.	81
1879	Deacon Convener.	67
1874 } 1878 }	Magistrate, Lord Provost, and Dean of Guild.	87
1880	Magistrate.	75
1873	_____	77
1879	_____	76
1862	_____	74
1867 } 1876 }	Bailie of the River and Magistrate.	77
1870 } 1879 }	Magistrate.	72
—	_____	72



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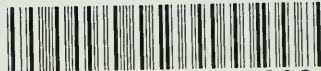
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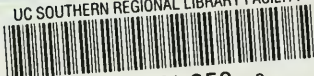
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