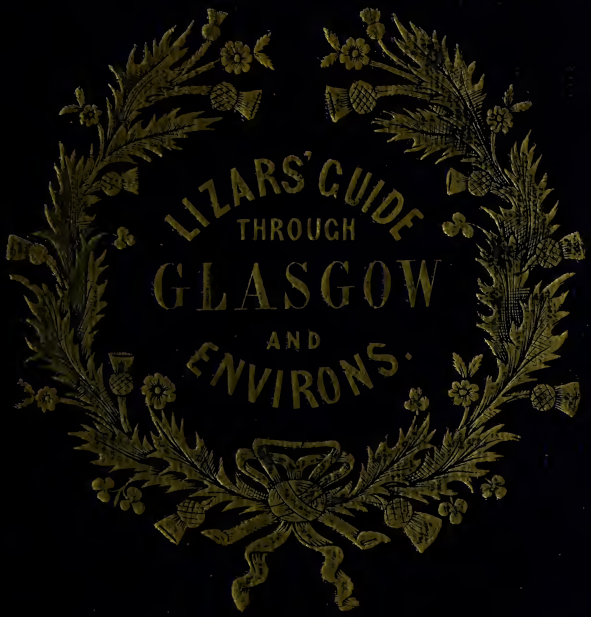
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BEING A COMPLETE

HANDBOOK TO THE HISTORY, MANUFACTURES, PUBLIC INSTITUTIONS, SCENERY OF GLASGOW, AND THE SURROUNDING DISTRICTS;

CONSISTING OF A

SERIES OF WALKS IN THE CITY, AND EXCURSIONS THROUGH THE ADJOINING COUNTRY.

BY

JOHN WILLOX,

Author of "The Edinburgh Tourist and Itinerary," "A Guide to the Edinburgh and Glasgow Railway," "Scotland Illustrated," &c., &c.

ILLUSTRATED WITH NUMEROUS VIEWS AND PLAN OF CITY.

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PREFACE.

In compiling the following pages, it has been more an object to present an outline of Glasgow, in the aspect which she naturally wears to the eye of a stranger, than to offer a picture of the City or its Manufacturing and Mercantile wonders, to those whose every day avocations lead them into familiar contemplation of its intellectual and physical resources. Even to these latter, however, it is humbly hoped, the "Guide to Glasgow and its Environs" will prove to some extent interesting, as a sketch in which a passing glance, however cursory and imperfect, is taken

at the leading features which indicate the commercial vitality and energy of the Scottish western metropolis.

It has been thought best, for the purpose of aiding the stranger in making his inspection of the various places and localities of leading interest in the city and its neighbourhood, to arrange the whole into a series of easily accomplished though imaginary rambles, and rather to assume the style of familiar description, than to attempt that more stately form of didactic explanation, which the nature and importance of the subjects treated of would not only have justified, but which, under other circumstances, they would have imperatively demanded.

In the necessarily very brief and consequently unsatisfactory notices which have been made of several of the great manufacturing and commercial establishments with which Glasgow abounds, as it was impossible, within the prescribed limits, to do justice even to one of them, any attempt at fully overtaking all, was an entirely hopeless task; in these circumstances, the only course open was, to essay a mere approximation, and in making a selection for this purpose, to adopt such a choice, as while it would afford a sort of scale whereby to measure the manufacturing achievements of the community, would also be within easiest reach of that class of the public for whose especial convenience the work has been undertaken. Where the chief difficulty arose, not from the scantiness, but from the

superabundance of material, a good intention is almost all that can be pleaded in extenuation of imperfect execution; and whatever indulgence is to be allowed under that head, the author feels himself fully and confidently entitled to claim; not without hope, it must be confessed, that that indulgence which an intelligent and high minded community feels pleasure and pride in freely conceding, will be generously accorded to his present labours.

The engravings for this volume have all been executed from original drawings, carefully made on the spot, expressly to illustrate the present work.

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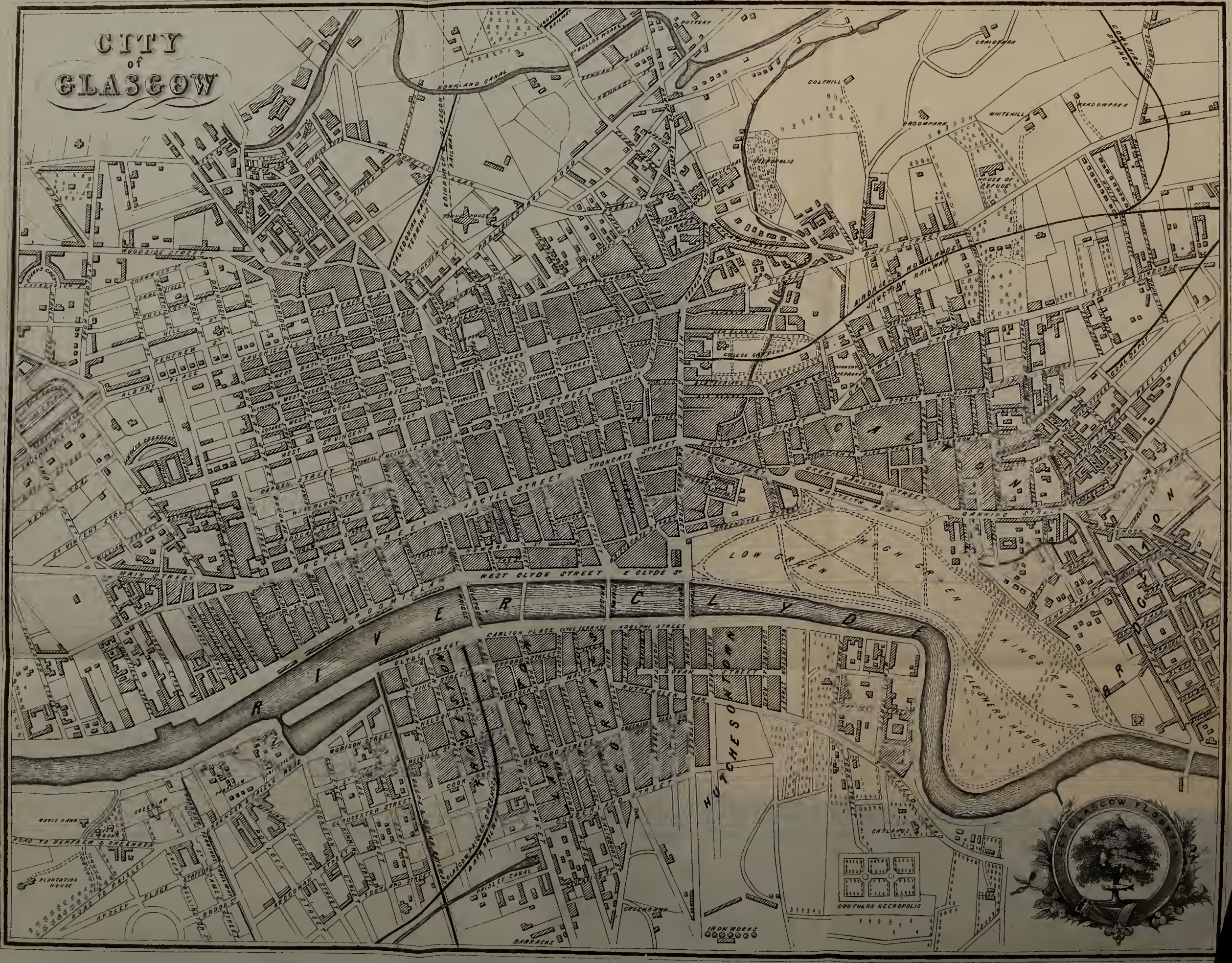
ENVIRONS OF GLASGOW.



CITY of GLASGOW
LET GLASGOW FLOURISH
RIVER CLYDE
LOW GREEN
KINGS PARK
FLESHERS HAUGH
HUTCHESONTOWN
CALTON
BRIDGETON
TRONGATE STREET
ARGYLL STREET
WEST CLYDE STREET
E CLYDE St
BROOMIELAW
CARLTON PLACE
ADELPHI STREET
INGRAM STREET
E GEORGE STREET
DUKE STREET
GALLOWGATE STREET
LONDON STREET
GREAT HAMILTON STREET
MONTEITH ROW
WOODSIDE STREET
MONKLAND CANAL
PAISLEY CANAL
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SOUTHERN NECROPOLIS
IRON WORKS
BARRACKS
GREENHEAD
CATLANDS
COLLEGE GARDENS
ROAD TO RENFREW & GREENOCK
ROAD TO PAISLEY
APSLEY PLACE
PLANTATION HOUSE
GREENLAW
GOLFHILL
CRAIGPARK
BROOMPARK
WHITEHILL
MEADOWPARK
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GORBALS
CALEDONIAN RAILWAY TERMINUS

GUIDE

TO

GLASGOW AND ENVIRONS.

HISTORICAL SKETCH.

Concerning the date of its origin, and the etymology of its name, the city of Glasgow may, in an equal degree with other important cities, claim whatever advantages are to be found in those conjectures so plentifully supplied by the teeming imaginations of traditionary authors, among whom the deficiency of historical record is substituted by legends more congenial to the taste of unenlightened barbarism than satisfactory to the understanding, or compatible with the belief of intelligent and cultivated minds. No authentic record of the origin of Glasgow is known to exist; but good grounds are afforded for believing, that during a lengthened period, while the Romans retained their acquisitions in Scotland, they maintained a station of considerable importance in the locality in which Glasgow is now built. Its importance, together with its position near the wall of Antoninus, which passed within two or three miles to the north of it, affords additional reason for the conjecture, that this station was long retained under the sway of that warlike people, as the province of Valentia, in which it was situated, was one of the last which the Romans vacated in this portion of the island. The name of Glasgow is admitted, on all hands, to be of Gaelic origin, but the interpretations of its meaning are both varied and discordant, although there is a general feeling

evinced by all the interpreters, that the name is descriptive of the locality or circumstances in which the infant city had its birth. By some the name is said to be significant of Grey Smith; and the upholders of this interpretation account for its connection with the city, by the creation of a swart son of Vulcan, possessed of marvellous skill in the handicraftsmanship of Tubal-cain, who, in very early times, settled himself upon the spot, and by the excellence of his manufactures, drew around him a gradually extending and settled population. According to others, the term is declared expressive of a dark glen, the existence of which they point out in the ravine, which, sweeping past the east end of the cathedral, divides that venerable and imposing edifice from the grounds now occupied as a place of sepulture, under the name of the Glasgow Necropolis, both banks of which ravine are said, in these ancient days, to have been thickly covered by a primeval forest, and thus to have justified the accuracy of an appellation now little suited to the margins of the Molendinar. Another, and at least equally credible authority, derives the name from the level green on the banks of the river, the word *Glassaughea* (the pronunciation given to Glasgow by a Highlander) signifying the green field or alluvial plain. Whichever, if any of these theories of nomenclature may turn out to be the true one, is now a matter of comparatively trivial importance; and the mystery may, with propriety, be left for solution, to those erudite dabblers in contaminated Latin and corrupt orthography, who are ever more zealous for the safety of the shell than anxious about the quality or preservation of the kernel.

How fanciful soever may be the means adopted to account for the naming of this now important and magnificent city, little if any room is left for doubt, that its existence, as a Scottish town, must be traced to the foundation of its Cathedral, or rather to the foundation of that religious establishment out of which the Cathedral itself took its rise. Shortly after the introduction of Christianity into Scotland, so early indeed as the year 560, or according to some accounts, even earlier, Kentigern, a Scottish Christian ecclesiastic of great sanctity, who was a disciple of

St. Sevirinus, Bishop of Orkney, established himself in a cell, which he erected on the site of a Druidical altar, near the spot now occupied by the Cathedral. Here Kentigern speedily acquired great celebrity by the fame of his piety, and his strict observance of religious rites and moral duties, qualities in no small degree enhanced by the suavity of his manners, and his general mildness of disposition. From the last named characteristics he is presumed to have been honoured with the appellation of Mungo, " a term" says Principal Macfarlan, " used in several languages " as an epithet of fondness and endearment." During a lengthened period he enjoyed the confidence and admiration of his contemporaries, many of whom, congregating from distant points around his cell, erected permanent residences for themselves, that they might enjoy the society, and benefit by the ministrations of the holy man; and thus the assemblage of those devotees formed the nucleus of the city. In the year 601, the pious Kentigern was removed (according to some of the monkish traditions by direct translation) from this sublunary sphere, ripe in years and in the full odour of sanctity. The extent of his reputation and the veneration in which he was held, may to some extent be gathered from the numerous religious houses, all over Scotland, devoted to his honour, the founders of which trusted in and claimed the benefit of his prayers.

From the death of Kentigern or St. Mungo, as he was by that time generally styled, for the space of five hundred years, the history of the Cathedral and of the town of Glasgow is almost utterly unknown, although, from what does transpire, there can be little reason to doubt, that even veneration for the shrine of the canonized Kentigern formed a very imperfect protection from those ruinous vicissitudes, which, during a considerable portion of that time, convulsed the kingdom of Strathclyde, of which Glasgow formed nearly the centre. Neither did the sanctity of its reputation secure the city from the cruel ravages of the Norwegian and Danish invaders, who, in those early periods of our history, constituted the most ruthless as well as the most frequent of our foreign enemies. Although the transactions of those dark centuries are

lost in the silence or contradictions of the chroniclers, there is no room for disputing that the Cathedral of St. Mungo enjoyed an exalted spiritual reputation, and exercised an extensive temporal jurisdiction, both of which are fully attested by the fact, that in 1115, when an inquisition was made into the lands and titles then and previously pertaining to the See of Glasgow, these were found to be large in extent and of great value, comprising numerous parishes in the best districts of Scotland, particularly in the west and the south. From the beginning of the twelfth to near the middle of the sixteenth century, Glasgow, though a city of considerable importance, was more remarkable for its ecclesiastical character and connection than for any other corporate peculiarity. So early as the year 1190, Glasgow received a royal charter from William the Lion, empowering the citizens to hold an annual fair, they having ten years previously obtained from the same sovereign, who seemingly entertained a marked partiality for the city, a charter conferring on the town the immunities of a royal burgh.

Glasgow was oftener than once the scene of conflict during the fierce and sanguinary wars, which arose out of the disputed succession to the Scottish crown between Bruce and Baliol, at the conclusion of the thirteenth and the commencement of the fourteenth centuries, one of which conflicts deserves especial notice. In 1300, Edward I. of England having unwarrantably appointed an English ecclesiastic, named Anthony Beik, to the bishoprick of Glasgow, Earl Percy, who at the time held military possession of the western division of Scotland, seized and strongly fortified the episcopal palace of Glasgow, an edifice situated nearly on the spot presently occupied by the Royal Infirmary. The patriotic Sir William Wallace, who was then at Ayr, after he had performed many gallant exploits for the deliverance of his country from English usurpation, concerted the plan of surprising Earl Percy in his palace at Glasgow, and of thus making another effort for the final extirpation of the invaders. For the achievement of this object, he marched to Glasgow at the head of a small but chosen band of followers, accompanied also by Wallace of

Riccarton, the Laird of Auchinleck, and other devoted adherents. He contrived to obtain access to the town, along with his band, without being observed, and separating his little army into three divisions, these proceeded, by different routes, to the vicinity of the bishop's castle. Wallace himself, at the head of the principal body, marching up the High Street, commenced a feigned assault upon the castle. Retreating, as if baffled in his attempt, he adroitly drew the forces of the garrison after him in pursuit, till they had reached nearly the middle of the descent, when Wallace, sounding his bugle, the preconcerted signal among the confederated patriots, the other two parties rushed upon the English, the one attacking them in flank, nearly from the line now occupied by George Street, the other pouring down upon them from the head of Drygate, while Wallace, suddenly checking his retreating troops, made a vigorous assault upon the enemy in front. The deluded pursuers, thus unexpectedly set upon on three sides, wavered; and perceiving their retreat cut off, as well as that they were placed beyond the reach of succours from the castle, became panic stricken, were dispersed, and entirely routed, with great slaughter, Earl Percy himself falling under the victorious sword of Wallace, who cleft his head at one blow. The bishop also, who is reported to have so far forgotten his peaceful avocations as to join in the conflict, was slain. This gallant action was fought between the present site of the University and the spot known as the "Bell in the Brae."

So early as 1546, although in point of population and trade, Glasgow was only the eleventh town in Scotland, she had nevertheless made such progress in mercantile pursuits, independently of her almost exclusive ecclesiastical character, as to possess some shipping, for in that year we find the Privy Council issuing an order, that ships belonging to Glasgow shall not molest those belonging to the Queen's uncle, Henry VIII. of England. As might have been expected from the religious nature of the contentions, in which originated the unhappy wars, ending in the fugitation and death of Queen Mary, and the ultimate triumph of the Presbyterian Reformation, Glasgow sustained a full share in

both the misery and the benefit of the conflict; the last battle fought between Mary and her opponents, that of Langside, which dispersed the adherents, and for ever dissipated the hopes of that unfortunate and ill-advised princess, being fought in its immediate neighbourhood. From the first establishment of the Reformed Church in Scotland, the community of Glasgow set themselves to maintain, with rigorous exactitude, the forms of conventional morality, and a strict observance of the external ordinances of religion, as appears abundantly from the numerous entries in the records of the town-council, as well as of the kirk-sessions, of laws enacted against, and penalties inflicted for breaches of regulations regarding those matters, some of which were indeed whimsical enough.

Glasgow, though in early days too frequently the scene of sanguinary contention, and although for centuries contributing her proportion of hardy and intrepid warriors to maintain in the field the cause of freedom and of social order, which has also found many able and devoted advocates, in more peaceful arenas, among the ranks of her intelligent sons; yet, from the very nature of her religious and commercial pursuits, she has been less a field for the display of martial exploits, than a nursing mother to the beneficent and more truly ennobling arts of peace. In her annals it is pleasing to trace the steady progress and practical application of scientific inquiry to the useful purposes of life—to watch the development and hail the triumph of those industrial arts by whose healing influence the barbarous usages of a people are improved, and their wants supplied—to witness a demonstration of the superiority of cultivated intellect, over the intractable and comparatively useless brute force of uneducated man.

For all the purposes of commercial enterprise and manufacturing advancement, Glasgow is placed in a peculiarly felicitous position. Built upon the banks of one of the largest and finest rivers in Scotland, and placed upon the borders of coal and other mineral fields, which, in point of productiveness and extent, yield to few if to any in the island, the progress of the city in wealth and influence could hardly be a subject of problematical opinion

when once its inhabitants had been awakened to a sense of the natural advantages they possess; yet it is matter of notoriety, that the development of those facilities is not of early date. So early indeed as 1420, we learn that in Glasgow the trade of curing salmon and herrings for the French market was prosecuted to some extent; and in 1664 this traffic appears to have been greatly increased. The commerce of Glasgow, however, may be said to date from the period of the Union of Scotland with England, which, opening up the trade of the British colonies to Scottish enterprise, gave an impetus previously unknown to the exertions of her merchants, who immediately, and with much spirit, embarked in the importation of tobacco from Virginia and Maryland, which they continued for a considerable time to supply for consumption in France and Holland. The importation and partial manufacture of colonial produce, subsequent to this event, became the principal source of revenue to the rapidly increasing numbers of Glasgow's industrious sons; but it was not till towards the conclusion of the eighteenth century, when the vast improvements then introduced into the manufacture of cotton gave so great a stimulus to this branch of industry, that Glasgow, completely changing the peculiarities of her previous social condition, may be said to have fairly started on that career of manufacturing and commercial enterprise, a judicious combination in the pursuit of which objects has contributed to raise her to a proud pre-eminence above all the other industrial communities of Scotland, and to place her on a parallel of commercial importance with most of the emporia of England, the comparison being instituted with each on its own peculiar staple. To the immense improvements effected on the navigation of the Clyde, under the superintendence of the River Trustees, one source of the remarkable increase in the prosperity of the city of Glasgow must also be greatly attributed. The operations of this body, by deepening the bed of the river, and erecting extensive and commodious quays on both its banks, have enabled ships of almost any burden to come up with full cargoes and unload, it may be said, in the heart of the city. As in most communities,

the turmoil of clashing interests and jarring opinion finds free vent in Glasgow, and the proceedings of that board, which is in a great degree elective, have been frequently criticised with a severity evincing feelings more akin to the querulousness of chagrined jealousy, than to an enlightened spirit of candid investigation. It may indeed be true, that the trustees have not given proof of infallibility in the management of their complicated and very difficult trust; but it should ever be borne in recollection, that the task imposed on them, besides being one of singular complexity, was also one of novelty; and above all, it should invariably be gratefully remembered, that under their direction of her vast energies, Glasgow has now succeeded in bringing the ocean to her streets, and, at the present moment, vessels from every clime, and of all sizes, crowd the wharves of the Broomielaw. Where the citizens of last century would have been startled at beholding any thing more imposing than a fishing boat, we now witness, without an emotion of surprise—

"The stately argosies of either Ind."

To aid in perfecting the commercial greatness of this fortunate city, the introduction of steam machinery may be said to have afforded the crowning impulse. The greatest improvement which has yet been effected in the principle and practical details of this, by far the most powerful assistant human labour has ever received, was perfected in Glasgow about the year 1796, by James Watt, who was born in Greenock on the 19th January, 1736; the full value of which improvements met with speedy appreciation and immediate employment in the growing manufactures of this community. Important, however, as were the improvements effected by Watt on the construction of steam engines, as applied to manufactures, there was yet another step in the process of advancement, to be effected through the agency of steam as a moving power, and that was its adaptation to the propelling of river and sea-going vessels. After numerous praiseworthy and ingenious efforts to obtain this highly desirable object had been made in various quarters and abandoned, it was successfully

achieved at Glasgow, in 1812, by Henry Bell, a native of Torphichen, in Linlithgowshire, where he was born on the 7th April, 1767. He died at Helensburgh, in Dumbartonshire, on the 14th November, 1830. This ingenious gentleman constructed a steam engine of three horse power, and employed Messrs. John Wood and Company, shipbuilders in Port Glasgow, to construct a boat for him which he named the "Comet;" and, on the 18th of January, 1812, this vessel, with its tiny engine, began to ply between Glasgow and Greenock, making five miles an hour against a head wind; subsequently the power was increased so much as to enable the Comet to make seven miles an hour under similarly adverse circumstances. This was the first vessel propelled by steam power which plied on any European water. It is only one more added to the previously numerous list of instances of the remissness of governments generally, and of our own in particular, in availing themselves of the advantages of scientific invention, to state, that Mr. Bell offered to the administration his new method of navigation three different times, viz., in 1800, in 1803, and in 1813, after his successful demonstration with the Comet; but it was looked on with the most freezing coldness, and rejected as utterly useless. Subsequently to 1803, Mr. Bell submitted his invention to all the crowned heads in Europe, with no better success; he also applied to the North American republics, and their government adopted it practically so early as 1806. For nearly thirty years no material change or improvement was effected on the principle of propulsion originated by Mr. Bell, all the improvements introduced being merely in matters of detail. In Glasgow, and from so humble an origin, not half a century since, arose the giant arm of steam navigation; it was at first received coolly and with marked suspicion; now there is scarcely a navigable river, sea, or lake in the world, that is not traversed by vessels, depending for their motive power upon the ingenious implement pushed into existence by the enterprise and genius of Henry Bell. Within these few years a propeller for vessels, constructed and worked upon the principle of the Archimedian screw, has been introduced with fair prospects of proving successful, and

is meeting with extensive patronage. Another important feature in the history of steam navigation originated on the Clyde. This was the construction of steam vessels, built entirely of iron. A material, at first sight seemingly so ill adapted by its ponderosity to the purpose, was at the outset looked on with such distrust as to lead some parties to call in question the sanity of the proposed builders. These gentlemen, Messrs. Tod and Macgregor, now of the Kelvin Docks, persevered however in their intention, which proved pre-eminently successful, and their iron-built steamers have acquired a wide-spread and well-founded celebrity, while other builders, following in the path originally indicated by them, the number of iron steamers built on the Clyde is now so great as nearly to supersede those of any other material. In connection with steam ship building it would be unpardonable, even in so slight a sketch as the present, to overlook the claims of the Clyde, and particularly of Glasgow, in respect to the manufacture of marine steam engines, a branch of scientific industry conducted in this quarter with more skill, and to a greater extent, than in any other locality in the world. Among the most famed of those ingenious works, stand conspicuously distinguished those of Mr. Robert Napier, of the Vulcan Foundry, Messrs. Caird and Sons, Greenock, and Messrs. Tod and Macgregor, already named. As the Clyde was the first European river which bore a steam vessel upon its bosom, it is gratifying to know, that it yet retains the prestige of its early celebrity in this department of scientific art, and, that in point of elegance of fitting, sailing qualities, and beauty as well as power of machinery, the steam ships produced in her dockyards still sustain their character of unrivalled excellence, and that the building and fitting of them constitutes an important item in the staple manufactures of the district; and farther, that they are highly esteemed all over the world.

Allusion has already been made to the extensive improvement effected in the commercial condition of Glasgow by the spirited prosecution of the cotton manufacture; but the benefits conferred by it upon the community are far too numerous and important to be passed over without a word or two respecting its early growth

and present state. After the introduction of cotton as an article of manufacture, upon a scale of considerable magnitude, many efforts were made for simplifying and expediting the various and complicated processes through which the raw material had to pass in its progress towards the perfected manufacture. The first of these was the substitution of machine for hand-carding of the wool. This improvement, which is understood to have originated in the year 1760, was the invention of Mr. James Hargreaves, a Lancashire weaver. The next step was the invention of the spinning jenny, about 1767, also the fruit of Mr. Hargreave's ingenuity; but which was speedily superseded by the wonderful apparatus, named the spinning frame, invented about the same time by Mr. (afterwards Sir Richard) Arkwright, which, when put in motion, completes of itself the whole process of spinning, leaving to human labour only the task of supplying the material and of joining the threads which may break in the process. Several improvements have been made upon the spinning frame since its invention, but these are understood as affecting rather the details than the principle of the instrument and its operation. The introduction of the power loom, for the purpose of weaving the yarn into cloth, must be regarded as the next great and crowning step in the improved manufacture of cotton. The state of perfection at which this admirable piece of mechanism has now arrived, like that of most other important inventions, has been the result of a series of slow and persevering experiments; but the fulness of its success has been more than a reward for the painstaking and anxiety demanded in its improvement. Out of the extensive prosecution of the cotton manufacture in this city, have almost necessarily arisen numerous other ingenious and interesting as well as important branches of industry; of these the most remarkable are the arts of dying and calico printing, together with the extensive preparation of chemical substances used in the different departments of these and kindred arts. In the dying and calico printing branches there are numerous and extensive works in Glasgow and its vicinity. In the manufacture of chemicals the works of the Messrs. Tennent and Co. enjoy a celebrity which is European.

The advantages of railway transit, although somewhat late as regards the general history of Britain, have been eagerly made available by the citizens of Glasgow, so that between her noble river estuary for marine conveyance, and her canals and railways for inland communication, Glasgow may indeed be said to enjoy every means for bringing into full operation her natural and acquired resources; and, availing herself of these, she has nurtured in her bosom a race of men fitted to do honour to any time or to any community, and has greatly signalized herself by a successful prosecution of the arts of peace. If, on turning over the pages of her history, we are less dazzled by the showy brilliancy of heroic deeds, often tarnished, it must be admitted, by the unworthy if not actually reprehensible motives which prompted their execution—and are not led into regret for the disastrous feuds, nor betrayed into lamentation over the vindictive fury of broils occasioned by rapacious nobles bent upon self aggrandizement, and regardless of any consequences save those gratifying only to the dictates of narrow-minded ambition, or alone affording satisfaction to the feelings of petty jealousy—we are more than compensated for their absence, by a contemplation of actions and events which have gradually but surely contributed to a dissemination of the better feelings of human nature. The peaceful avocations and well regulated ambition of Glasgow have filled her countless mills of every description with admirable machinery—have poured, in never-ceasing streams, the exhaustless mineral wealth of the surrounding country into her innumerable works. Noble mansions court the eye in her busy streets, and all around gives unmistakeable evidence of the healthy presence and buoyant elasticity of properly-directed industry.

CATHEDRAL, GLASGOW

WALK FIRST.

St. Mungo's Cathedral—Burying Ground—Glasgow Necropolis—Royal Infirmary—Barony Parish Church—House of Refuge for Juveniles—North Prison—High Street—University Buildings—Hunterian Museum—Cross Steeple—Town Hall—Trongate—Statue of King William—Tontine Hotel—Tron Church—Candleriggs—Campbell's Warehouse—City Hall—Bazaar—Police Buildings—Municipal Buildings—Trades' Hall—General Post Office—Bank of Scotland—Hutcheson's Hospital—Union Bank—Assembly Rooms—George Square—Statue of Sir John Moore—Statue of James Watt—Monument to Sir Walter Scott.

THE intention of the present little volume is to furnish strangers to, and temporary residenters in Glasgow, with such a brief epitome, descriptive of the various localities and objects of interest, situated in the city and its immediate neighbourhood, as will enable them to economise their time in visiting them, and also to afford a succinct account of the leading particulars connected with their objects and appearances. For the purpose of effectually accomplishing this design, the most convenient form of procedure will be, to divide the city and its vicinity into a series of districts; and while taking imaginary rambles through these, discuss the leading features of interest as they successively occur. As already stated in the historical summary, the city owes its origin to the Cathedral; and such being the case, that venerable structure will serve as an admirable starting point in our cursory examination of the town. The Cathedral Church of Glasgow, named in honour of its founder, ST. MUNGO, occupies a prominent and imposing position, being situated on the summit of a rising ground, at nearly the north-eastern extremity of the city, occupying a conspicuous place on the western bank of the Molendinar Burn, a rivulet which, in the early days of the Cathedral, must have been a streamlet of much romantic beauty, how changed soever its aspect may now appear. The architecture of St. Mungo's, which is Gothic of a pure period, is in every respect worthy of the admirable situation in which the edifice is placed. Its length from

east to west is 319 feet, the height of the nave is 90 feet, and that of the choir is 85 feet, with a general width of 63 feet. In the edifice, including those of the crypts, there are 147 clustered columns, and 159 windows of various dimensions, many of them exceedingly beautiful. "The piers and groins," says Rickman, "are all of the most intricate character, the most beautiful design, and excellent execution." The exterior, although lofty and noble in proportion, and sweetly harmonized in details, is scarcely so impressive as at first might be surmised, from the large dimensions of the edifice, a defect no doubt in a great measure occasioned by the want of transepts, which reduces the contour to a somewhat bald and naked looking sweep, without being broken by sufficiently bold contrasting lines. In the interior, however, the true dignity and elegant beauty of the original design are conspicuously manifested in the spacious and lofty vault—the massive clustered pillars—the sweetly arranged windows, with their appropriate tracery, and the harmonious proportions of the side aisles. During many years the beauty of this stately fabric was greatly marred interiorly—and in part it is so still, by incongruous efforts to make the catholic unity of its design accommodate itself to the modified ideas suggested by mere temporary convenience; and exteriorly, by the erection of unseemly excrescences, reared up in contact with it; and by the accumulation of earth, which buried its western portion to the depth of several feet; while neglect on the part of those who ought to have been its conservators had nearly permitted the accomplishment of its entire destruction, the foundations having in several places given way, causing alarming rents in the superstructure. Some few years back, public attention was aroused to the unsightly and dangerous condition of the structure, and strenuous efforts were made for having the Cathedral restored as nearly to the pristine beauty and security of its original strength and proportions, as could be made to harmonize with the altered feeling which has sprung up in society since the days of its erection. After much contention on the subject, this desirable object has fortunately been so far accomplished. The nave has been completely cleared out, and the lofty groined arch

under the central tower has been again exposed to view. The aggressive earth which had accumulated on the outside has been levelled down, and the base-mouldings round the whole fabric, so far as these remain, have been brought once more into contact with light and air, and a very thorough repair has been bestowed upon the building, both exteriorly and interiorly, including the removal of an unseemly tower, which had been curiously appended to the north corner of its western front, to the all but total concealment of the principal doorway. The crypt under the chancel and chapter house of this Cathedral, is exceedingly beautiful, and has acquired a world-wide celebrity, as the alleged scene of meeting between Rob Roy and Francis Osbaldiston, as depicted by Sir Walter Scott. The existing edifice, although unquestionably of great age, is not by any means to be considered the original pile in which the orisons of the pious Kentigern were offered up. That structure having been destroyed by the invading Norsemen, was replaced by another, begun, and a large portion of it completed, by John Achaius, the first recorded bishop of the See, who was consecrated in Rome in 1115. The renovated building was consecrated in 1133, and Joceline, a succeeding bishop in 1176, completed the Cathedral, or at all events, finished nearly the whole of what has constituted that structure ever since. In even this imperfect sketch of the venerable pile, it would be unfair to omit noticing, that Bishop Blackadder, who did much for the embellishment of the edifice, besides building an aisle, which still bears his name, was one of the principal instruments in negotiating the marriage between James IV. and Margaret, daughter of Henry VII. of England, in right of succession to whom the house of Stuart became possessors of the English throne, and as one of whose descendants Queen Victoria is monarch of the British empire.

The Cathedral of Glasgow is the only ecclesiastical structure of any pretensions in Scotland which escaped nearly entire from the torrent of inconsiderate destruction which swept over the land, with so little regard to either beauty of design or excellence of execution, at the period of the Reformation. Like other religious

edifices in the kingdom, the church of St. Mungo was also assailed; but a rational admiration of their venerable church was too deeply rooted in the bosoms of the Glasgow burgesses of that period to permit its demolition; and, with an intrepidity and intelligence deserving of the highest praise, the stalwart craftsmen of the city turned out *en masse*, and in arms, to rescue the noble pile from that destruction to which it had been doomed by the overwrought zeal of those who took the lead in rooting out the obnoxious priesthood of a faith they had resolved no longer to tolerate. The resistance was all but completely successful, and the edifice was preserved, with the exception of a few of the ornamental carvings, which, under the denomination of idols, fell a sacrifice to the iconoclasts. The Cathedral of St. Mungo, like other ecclesiastical establishments of note, was surrounded by a burying ground, which, although of very circumscribed dimensions, was in all probability sufficiently large for the population of the infant city; the accommodation in this respect being gradually enlarged, as the population extended, by the annexation of consecrated ground to the churches belonging to the numerous religious bodies which rapidly clustered round the parent edifice. About the period of the Reformation, these fraternities were nearly all overthrown; and, in most of the cases, their temporalities being alienated to secular purposes, the burying grounds were devoted to other uses than as places of repose for the ashes of the departed, and, in course of time, the cemetery of St. Mungo's became nearly the only place of sepulture in which the vastly extended and rapidly increasing population of Glasgow could obtain the rites of Christian burial. The inconveniences, not to insist upon the revolting scenes, and the social dangers arising from this state of matters, roused the community to the necessity of making more adequate provision for the interment of its deceased members. Various other burying-grounds were from time to time added in different localities; but, in general, the provision was exceedingly limited and inconvenient. In 1830, the corporation of the Merchant's House formed an elevated park belonging to them on the eastern side of the Molendinar Burn, and in close contiguity with the

Cathedral, into an ornamental cemetery, on a plan similar to that of Pere la Chaise in Paris, under the name of The Glasgow Necropolis. The grounds of this burial place are approached by a narrow path, running along the south wall of St. Mungo's church yard, and which crosses the ravine of the Molendinar by a handsome bridge of one arch, denominated, with a considerable show of quaint appropriateness, the Bridge of Sighs. In front of the path is an alcove of Elizabethan architecture, on a double shield above the entrance to which are carved the arms of the Merchants' House and of the city. From this point ornamental walks lead through the ground, in two directions, with numerous diverging paths. Choosing that to the left hand, and following it for a few yards, take the first path leading to the right, and by it ascending over the back of the alcove already mentioned, by a graduated and winding ascent, the passenger reaches the summit of the grounds, passing, in succession, a series of monumental erections very diversified in taste and artistic value. The first striking one of these, which is passed in this review, is a fabric having a quadrangular base, ornamented in the Tudor style of architecture, and surmounted by a statue of the heroic size, executed in sandstone by Forrest. It is dedicated in memory of William M'Gavin, author of the Protestant, and bears a suitable inscription. It is of an imposing air, and is generally admired by the citizens. Near the extreme angle of this path is a large and elaborately ornamented circular mausoleum, designed by Mr. D. Cousins of Edinburgh. Passing onwards, the visitor winds through a labyrinth of monumental structures, executed in granite and in sandstone, embellished with ornament, and furnished with inscriptions indicative of every variety of taste and every style of feeling. Conspicuous, on a square base, is placed a short column of Doric architecture, surmounted by a capital, and crowned by a statue of freestone. This monument was erected in honour of John Knox, and although not by any means of great age, it is the oldest memorial in the Necropolis. The self-taught artist, Mr. Forrest, who executed the monument for M'Gavin, was sculptor. The square base is filled with inscriptions of great length on its four sides. Close by this

last mentioned tribute of admiration is a large structure, composed of simply worked blocks of granite, of considerable magnitude, supporting a colossal sitting statue of white marble, in remembrance of Mr. Charles Tennent of St. Rollox. The countenance of this statue is severe, grave, and thoughtful, and the general deportment pleasing and artistic. It was designed and executed by Mr. Patrick Park, a native of Glasgow, now resident in London, and is probably one of the most successful attempts, made of late years, to improve the character of our burying-ground sculpture. Nestling almost under the base of this imposing work is placed one of truly unobtrusive elegance, and classic purity of design, placed in memory of Mr. Alexander Fletcher, whose name simply it bears, as an inscription. It is an oblong cube, about ten feet in length, of exquisite proportions, chastely ornamented. The workmanship is most scrupulously beautiful, and the sandstone of which it is composed of a uniform texture, and a sweetly cool colour. This gem is from the refined studio of Mr. Alex. H. Ritchie, A.R.S.A., of Edinburgh, a distinguished pupil of the great Thorwaldsen, and is worthy of Mr. Ritchie's well-earned fame. From the point of the Necropolis in which these last mentioned monuments are congregated, at an early period of the day, when the atmosphere is clear of smoke, one of the most interesting views of Glasgow which is to be met with is obtained. The elevation being very considerable, the whole city is stretched out beneath the eye of the spectator, like a map, exhibiting a rich and picturesque variety of streets and squares, river, harbour, and manufactories, in endless combination and interminable extent, while at hand rises, in stateliness and pride, the lofty and imposing spire of the beautiful and suggestively elegant Cathedral. On the opposite side the eye wanders over a large expanse of fertile and well-cultivated country, richly wooded and every where giving evidence of immense mineral wealth. Leaving this elevated spot, and pursuing the onward winding path, descend, by sloping terraces, till near the bounding wall on the north side, and almost on a level with the bridge, we come upon a gothic monument of elegantly fanciful design, having numerous finials and ornamental figures cut in


ROYAL INFIRMARY


THE SOUTH PRISON


GLASGOW HOSPITAL INFIRMARY

very high relief. The general proportions and rich variety of outline in this structure are exceedingly pleasing, and the design is highly creditable to Mr. Wallace, its architect, whose efforts have been admirably seconded by Mr. Mossman of Glasgow, to whom the execution of it was intrusted — both the workmanship and material being nearly all that could be wished. At the north-west corner of the Necropolis a portion of the ground has been set apart for the interment of members of the Jewish faith. It is divided from the burying-ground of the Christians by an ornamented architectural screen, in a panel of which is inscribed the beautifully appropriate words of Byron's Hebrew melody, beginning, "Oh! weep for those that wept by Babel's stream." Like the rest of the grounds, the Jewish city of the dead is also tastefully laid out with walks and shrubbery.

Recrossing the Bridge of Sighs, directly opposite to the entrance to St. Mungo's Burying Ground, pass, on the left, the Barony Parish Church. It is an edifice of considerable extent, but of no great antiquity. On the other side of the open space in front of St. Mungo's stands the Royal Infirmary, a building of imposing external aspect, well aired, and happily situated for the purposes of its institution. It was erected after designs furnished by Robert and James Adam, architects, the foundation stone being laid with much ceremony on the 18th of May, 1792. The Royal Infirmary is built upon the lands originally forming the garden of the Bishop's Castle, the edifice itself occupying nearly the site of the archiepiscopal residence. Turning our backs upon the Infirmary, we proceed down the High Street, which, at its upper end, and indeed throughout the greater portion of its length, offers very few objects of interest or attraction. The upper end of the High Street bears evidence, in the style of its architecture, as well as in the squalid and dilapidated condition of its habitations, that it is the most ancient part of the city. It is steep, narrow, and winding, the houses being small, yet heavy looking and ill aired. Near its upper extremity, on the right, a narrow, and now ruinous looking as well as filthy alley runs off, named the Rottenrow, obviously a corruption of *Routine Row*, or the

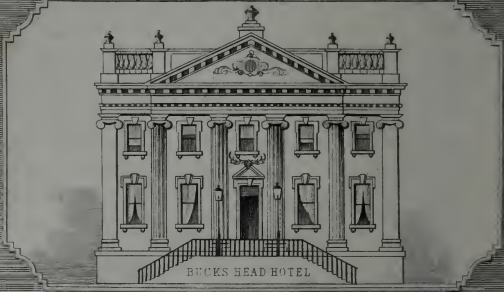
street of ordinary processions. It is of considerable length, and was at one time the locality in which several religious fraternities maintained their habitations, and along which, as a matter of necessity as well as of conveniency, they would form their line of march, in the numerous progresses to and from the cathedral, prescribed in the ritual of their religious observances. The Rotten Row now is and has long been abandoned as a place of abode for the humblest class of the community. A little below this, on the opposite side, DRYGATE STREET opens towards the east, another place in early times remarkable as the abode of ecclesiastics, and as stated in the historical observations, constituting one of the lines of attack in the victory which was obtained by Sir William Wallace over Earl Percy. The opening to the left next occurring is DUKE STREET, along which, a short distance on the left hand side, is the NORTH PRISON built originally for and long used as a Bridewell. It is now used as a criminal penitentiary. Beyond the North Prison is the HOUSE OF REFUGE for reclaiming discharged juvenile convicts. It is a well aired and handsome edifice, and it has been said, that its regulations and management have been productive of important benefit to the community. Directly opposite to Duke Street, running nearly due west, is GEORGE STREET, a street of great length, and towards its western extremity one of the fashionable places of residence in Glasgow.

Passing down the High Street two or three hundred yards farther, on the left hand side, and forming part of the line of street, is the front of the UNIVERSITY BUILDINGS, a striking and interesting, though quaint looking edifice. This building, or rather series of buildings, consists of four quadrangular courts of small dimensions, and exhibiting a marked diversity of architectural style, evincing various and even distant periods of erection. In the outer one, which is evidently the most ancient, the windows are all richly ornamented in the Flemish style, and it also contains a massive and well designed stair, leading to the second floor. The second court, to enter which the outer one must be passed through, is sensibly more modern in style and appearance, although still considerably antiquated; but on passing through this into the

GLASGOW UNIVERSITY

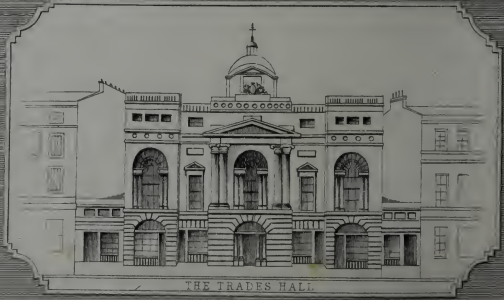
third or inner court, the aspect is entirely changed, and classic architecture, of a most gratifying character, meets the eye, in the chaste portico and elegant general effect of the HUNTERIAN MUSEUM. The fourth court is on the north side of the two first mentioned, and, like them, it is also quaint in its architectural embellishments. Altogether, the air of these buildings is that of quiet reserve, while a feeling of learned seclusion forms their general character, and creates an interest in their history. The University of Glasgow was founded in 1451, by James II., who, for the purpose of enabling it to grant degrees, and to confer on its licentiates and doctors the privilege of acting as teachers and regents in all the general seats of learning included within the bounds of the Catholic Church, obtained a bull from Pope Nicolas V., establishing it as a *Studium Generale* or University. At the Reformation, the chief members of the different faculties being Catholic ecclesiastics, and the principal revenues of the University being derived from the church, the institution experienced both difficulties in its finances and disorders in its course of discipline and curriculum of study. In 1577, James VI., to rectify this state of matters, granted a charter of new erection, in which were prescribed rules for the government and regulation of the College, and conveying a considerable addition to its funds. The affairs of the University are managed by three distinct bodies, named the Senate, the Comitia, and the Faculty—the first of which bodies consists of the Rector, the Dean, the members of Faculty, and the other Professors. The Rector is elected annually by the votes of the Comitia, which body is constituted of the Rector for the time being, the Dean, the Principal, the Professors, and the matriculated students of the University. Originally, the University received no endowments, had scarcely any property, and was destitute of any buildings for its accommodation, and its early meetings were held in the Chapter House of the Blackfriars, or in the Cathedral. The buildings now under review originated in a grant made by James, first Lord Hamilton, an ancestor of the noble house of Hamilton, who, in 1459, bestowed a house and four acres of land upon the University; and this small beginning was

subsequently augmented by donations and bequests from various members of the nobility and gentry. This University possesses a very extensive library, peculiarly rich in valuable editions of the classics, and has long been distinguished as a theological school of eminence, while the chairs of other branches of science have been filled by professors of wide-spread celebrity, including, among many others, the names of Black, Cullen, Adam Smith, Reid, and Chalmers. As already stated, the Hunterian Museum is situated within the walls of the University Buildings, and was founded by the celebrated William Hunter, M.D., who was born in the vicinity of Glasgow in 1710. It is one of the most elegant edifices in this opulent city, and although built for upwards of half a century, the improving taste and increasing wealth of the community have not as yet been able to surpass its simple beauty of design and unobtrusive elegance. It was erected after designs furnished by the famous William Stark. The Museum consists of a magnificent collection of medals and coins, books, some admirable pictures and anatomical preparations, together with natural and artificial curiosities, nearly all of them the donations of the munificent founder. Access to examine the collection, which has of late years been considerably increased, is obtained by the public on payment of one shilling. Before quitting the classic precincts of the University, it would be unpardonable to omit mentioning, that during the furious fever of railway speculation which prevailed in the summer of 1845, a proposition was gravely made, by some of the innumerable companies, which, like Jonah's gourd, expanded to such magnitude, and withered, it may almost be said, in a night, to purchase the University Buildings and grounds, for the purpose of converting them into a railway terminus. It is unquestionably true, that how suitable soever the locality in which they are placed may originally have been for the purposes of the University, time, that most potent of innovators, has completely changed the character and circumstances of the neighbourhood, which no longer holds out allurements to the votaries of science and refinement; and if suitable arrangements were made, a much more eligible site might easily be procured. Directly opposite to



BUCKS HEAD HOTEL

NEW CLUB



THE TRADES HALL

the University Buildings, a widish street, named College Street, opens to the westward, the corner tenements of which have some architectural symmetry, but the street itself, which is but a short one, is soon lost in a maze of squalid and irregular alleys. Pursuing the downward line of the High Street for a considerable distance, pass, on the right, The Cross Steeple, at the intersection of the High Street with Trongate Street. The Cross Steeple is a square tower of very considerable elevation, surmounted by a battlemented parapet, and the whole covered by an open arched crown of hewn stone, under which is placed a chime of bells. At this point five streets intersect, that directly in front being the Saltmarket, no longer the picturesque and almost hallowed residence of the Bailie Nicol Jarvies of bygone years — the old tenements being now, with all their romantic associations, deserted by the better class of citizens, and surrendered as the abodes, in many instances, of misery and wretchedness. To the left hand the Gallowgate winds its tortuous and uneven path towards the east; but, with the exception of the Infantry Barracks, which are situated in it a considerable distance to the east, this locale offers few objects of interest or attraction to the spectator. At no distant day, the Gallowgate being then the principal entrance to the city from the east, was one of the busiest thoroughfares of Glasgow. Since the introduction of railways, however, this has been entirely changed, and the traffic in Gallowgate is now almost exclusively local. Bisecting the angle formed by the Saltmarket and the Gallowgate is a line of street comparatively newly opened up; this is London Street, which joins with a finely situated terrace, named Monteith Row, fronting the Clyde, which it overlooks at some short distance. Immediately adjoining the Cross Steeple, on the west, is the Town Hall, a spacious apartment, with the usual accompaniment of committee and other rooms. It was built in connection with an Assembly Room and the Tontine Hotel, having been begun in 1736, and completed about four years after. The whole edifice, taken together, presents an imposing appearance—to the west, along the line of Trongate, exhibiting a well proportioned arcade, support-

ing a superstructure of good and massive architecture, enriched with embellishments well adapted to the general style of the building. In the Town Hall there is a marble statue of William Pitt, from the chissel of the accomplished and refined Flaxman. On the under floor of this building is an extensive and still well frequented news room, which, until comparatively of late years, formed the chief, indeed, it may be said, the only reading room of which the city could boast. In front of the Town Hall, or of the Tontine, as it is more frequently called, is erected an equestrian statue of KING WILLIAM THE THIRD.

Proceeding westward, along Trongate, a street which, taken in conjunction with its western continuation, ARGYLE STREET, presents a vista of street architecture not to be surpassed in Scotland. It is long, spacious, and level, having lofty ranges of elegant and well-built tenements on either side, the street floors of which are fitted up into splendid and busy shops; while the bustle and thoroughfare constantly maintained in it give life and animation to the scene. At a short distance west from the Tontine, on the opposite side of the street, into which it projects for a considerable distance, is the TRON or LAIGH KIRK STEEPLE, which was built in 1638, and bears in its construction indisputable evidence, that the spire of St. Mungo's was the model from which it was designed. It has been called the Tron Steeple, because the Tron, or public weights, for adjusting the weights used in the city, were kept under it. Having passed the Tron Steeple, the first street opening to the right hand is CANDLERIGGS STREET, on turning up which, the eye is caught by a Gothic edifice of ecclesiastical character—this is ST. DAVID'S or the RAM'S HORN CHURCH. It is a modern structure, and has been built on the site occupied by a previous church designated by the latter name. At a short distance up this narrow and not very prepossessing street, is the large and well-known warehouse of Messrs. J. & W. Campbell, extensive wholesale and retail drapers. This establishment, the entrance to which does not by any means predicate either the extent or style of the business carried on in it, is one of the lions regularly inspected by every visitor to Glasgow. The proprietors

of this place of business were the first in the city to open extensive premises, without the addendum of a shop, for carrying on a retail business: they also, from the first, set their face steadfastly against the annoying practice of cheapening goods from the prices originally fixed as their value. By adhering to this rule, and paying the strictest attention to prompt and polite service, in even the minutest dealings, as well as in more extensive purchases, they have been successful in securing a large and highly remunerative business. Their business premises contain an area of more than 30,000 square feet of flooring; and the arrangements are as remarkable for their systematic order and simplicity, as they are pre-eminently elegant and attractive. It is understood, that in this establishment, they turn over annually a sum little, if at all, short of half a million sterling, while the amount of their own manufacture is fully £100,000 sterling per annum. It is only proper to add, that every facility is offered for strangers viewing these elaborately convenient arrangements. Passing Campbell's Warehouse, and proceeding in the direction of St. David's Church, the first street on the right is Bell Street, a confined dirty alley, and chiefly remarkable as forming a principal line of access to one of the most costly and important buildings in the city—that is, the City Hall. Having penetrated the dingy gloom of Bell Street for a little distance, on turning up South Albion Street, the first opening on the left, and equally unpromising with that we have just deviated from, pass, on the left, the Police Buildings, containing the Court-house, Cells, &c., belonging to the Police establishment of the town. Immediately beyond the Police Buildings, on the same side of the street, is the principal front of the City Hall, a building of great magnitude. The principal hall is a large quadrangular apartment, with a gallery at each end. The ceiling is lofty and the area capacious. It is used as a place for holding public meetings, for which purpose its ample magnitude entitles it to some consideration, it being capable of holding between 3000 and 4000 people; and is also employed as a concert room, fully to fit it for which latter purpose it was intended to have been furnished with a powerful organ; but, like many other

good intentions, the organ has yet to be realized. Underneath the City Hall, which is supported upon arches, and on the areas adjoining it to the north and south, the ground is laid out as a BAZAAR, for the sale of vegetables, butter, cheese, eggs, poultry, and other similar merchandise; and in it a large traffic of those articles is carried on. Passing through the Bazaar into Candleriggs, proceed a few paces down in the direction of Trongate, till nearly opposite Bell Street, at which point turn to the right hand along WILSON STREET, in which is situated what is named the MUNICIPAL BUILDINGS, one of the finest, if not indeed the very finest modern edifice in Glasgow. It is of very chaste design, having an imposing hexastyle portico of the Ionic order, supported on a base or curtain wall, on which are sweetly sculptured, in *basso relievo*, several groups descriptive of the course of justice. Along each side of this handsome building, is a fine range of Corinthian columns, supporting a rich and well proportioned entablature and cornice. The interior arrangements, with the exception perhaps of the vestibule, are not in any degree inferior to the external grandeur of the edifice, and in both there is a delightful appropriateness of decoration, the ornament being full but not profuse. In this stately edifice, besides accommodation for other public departments, are, first, the COUNCIL HALL, for the meetings of the Magistrates and Municipal Council—this is a very splendid hall, and it is substantially and elegantly furnished; in it there is an original full length portrait of Her Majesty, Queen Victoria, painted for the corporation by Daniel Macnee, R.S.A.; second, the Council Record Office, Fiscal's Chambers, &c.; and third, the MERCHANTS' HALL, another splendid apartment, very elegantly and chastely decorated. On the landing place of the entrance to this Hall is placed a marble statue of the late Kirkman Finlay, Esq. of Castle Toward, long a distinguished member of the Merchants' House. This statue is in many points exceedingly fine, particularly the head, in which there is much calm dignity and quiet repose. It was modelled and executed in Rome by Gibson. As a whole, this building is one deserving and exacting admiration. It is pure in taste, grand in general effect, and pleasing in detail,

reflecting much credit on its gifted architects, Messrs. Clarke and Bell. Leaving the Merchant's Hall, which enters from Hutcheson Street, at the north end of which is situated an edifice of the quaint looking architecture characteristic of the prevailing style of the earlier part of the eighteenth century. It is adorned in front by two statues placed in niches, and arrayed in the formal costume of the period; and is surmounted by a spire of moderate altitude and rather pleasing contour. This is Hutcheson's Hospital, the annual income of which, derived chiefly from land heritages, is upwards of £2500 sterling. Directly in front of the entrance to Merchants' Hall, at the opposite end of a short street named Garthland Street, is the Trades' Hall. It is the property, as its name imports, of the incorporated trades of Glasgow, and is situated in Glassford Street. It has a symmetrical exterior, and is commodiously and elegantly laid out interiorly, the principal hall being decorated by several full length portraits, besides the armorial insignia of the respective trades. It is let out as a concert room and as a place for holding public meetings, when not occupied by the legitimate gatherings of the trades' corporations. The Trades' Hall was built according to designs furnished by Adams already referred to. On the east side of Glassford Street, a little nearer the Trongate than Wilson Street, is the General Post Office. At the north end of and immediately fronting Glassford Street, but built in Ingram Street, is the Office of the Bank of Scotland, a substantial although somewhat plain building. It is surmounted by an emblematical heraldic group of sculpture, which was lately executed for the embellishment of this fine building. This group, which is of the heroic size, is appropriately and conspicuously placed over the principal entrance, and consists of a shield bearing the armorial cognizance of the city of Glasgow, having for supporters, a figure of Justice and one of Plenty, with their respective insignia. They are remarkable for the grace and delicacy of their outline and general composition, and are marked by a bold yet suitable vigour of execution. The group was designed and executed by Alexander Handyside Ritchie, Esq., A. R. S. A., sculptor in Edinburgh,

already mentioned, whose peculiarly artistic talents and refined taste, have recommended him to the notice of the Royal Commissioners of the Fine Arts, who have appointed him one of the artists selected to design and sculpture statues for the interior of the new Palace at Westminster, intended for the accommodation of the House of Lords. Turning to the left, and proceeding a short distance along Ingram Street, on the left hand side, come in front of the UNION BANK OFFICE, an edifice of recent erection and elegant architecture, having a hexastyle portico of Roman Doric columns, raised upon a well proportioned curtain basement, and supporting a rich entablature, surmounting which are six colossal statues, representing Justice, Plenty, &c. These are well executed by Mossman, a native sculptor, by whom they were also designed. The whole of this building bears evidence of superior architectural taste, by no means the least interesting feature of which is to be found on its south front, which faces Argyle Street, occupying the north end of Virginia Street. This is a front which, though unpretending, is highly pleasing in effect, and affords admirable positions for two or three additional statues. The Union Bank was built from designs by Mr. David Hamilton, and is highly creditable to the taste and judgment of that talented gentleman. Almost opposite to the Union Bank is the ASSEMBLY ROOMS, a large and sombre building, erected between forty and fifty years since, as its name implies, for the purpose of holding balls and other gay festivities, for which it possessed ample accommodation. Towards the close of 1847, the Assembly Rooms were let on lease to the GLASGOW ATHENÆUM, an institution got up on principles somewhat similar to those of Leeds and Manchester, and devoted to objects kindred to those aimed at generally by such institutions. In connection with it, one thing is important to bear in mind, and that is, that from the extent of opposition it must encounter from the Mechanics' and similar institutions already long established in Glasgow, it will require unceasing toil and well-directed energy on the part of its managers, to enable it to hold the position it has started with. Like the institutions from which its constitution was copied, the Glasgow Athenæum was ushered into life by a

grand inaugural meeting. This opening display, at which the banquet consisted of the delectation to be derived from eulogia upon such meetings and institutions, and their legitimate consequences in the spread of human happiness, and the extension of universal philanthropy, was presided over by Mr. Charles Dickens; and besides many of the most influential native citizens of Glasgow, was attended by Sheriff Alison, the renowned historian of Europe, as affected by the French Revolution; the admired Delta (Moir) of Blackwood's Magazine; Alexander Handyside Ritchie, sculptor, and a host of other men, distinguished for their attainments in literature and in art. The meeting took place on the evening of the 28th December, 1847, in the City Hall, which was handsomely fitted up for the occasion and crowded to excess. Turning to the right hand, up South Hanover Street, at the west side of the Assembly Rooms, enter George Square, the largest square in Glasgow. At the point of entrance which we have selected, is placed an admirable bronze statue of Sir John Moore, commander-in-chief of the British army in Spain, and who fell commanding the troops at the battle of Corunna. This statue, which is simple and classical in design, was executed by Flaxman, and represents the general attired in his official costume, the details of which are hidden to a great extent by an ample cloak, to the loose flowing lines of which the artist has most successfully imparted a grace and simple beauty rarely to be met with in modern sculpture. The air and general demeanour of the figure are in the finest style of art, and the *ensemble* of this charming work is so refined and elegant, that although it may be equalled, little is ventured in saying, that it cannot be surpassed in the kingdom. Sir John Moore was born in Glasgow, and his memory is justly held in high estimation among the sons and daughters of his native city. Immediately to the north of this statue, occupying the centre of the square, is a tall column, resting upon a square pedestal, and supporting a statue of Sir Walter Scott. This is the Glasgow Monument to Sir Walter, the famous author of Waverley. It was designed by Mr. David Rhind of Edin-

burgh, and is chiefly remarkable as being the first public monument erected in Scotland in memory of the great novelist of the nineteenth century. At the south-west corner of this square is erected a bronze copy of the monument executed by Chantrey, in Westminster Abbey, in memory of James Watt. The figure is well-designed and cleverly modelled. At the north-west corner of George Square, is the terminus of the Edinburgh and Glasgow Railway, from which circumstance the square derives considerable importance as a place for the business of hotel keeping; and accordingly, there are several of the best houses of this description to be found in Glasgow situated in it. On the north side of this square, in the centre, a very steep street breaks off to the northward—this is North Hanover Street, at the upper end of which is the Mechanic's Institution, the front of which is embellished by a stone statue of James Watt. This institution was commenced in 1823, with the view of disseminating, at an easy rate, scientific knowledge among the operative classes, it has been attended with great benefit, and has met with very considerable success. In it lectures are given upon mechanical science, by highly competent lecturers, and it can boast of a very efficient scientific library for the use of its members. From the north eastern corner of this square, North Frederick Street strikes off also to the north with considerable steepness, near the higher extremity of which, on the left hand side, is the Night Asylum for the houseless poor. The house has only been recently built, but the charity itself has been in existence for a considerable time, and has been productive of much benefit to the poor and wretched objects of its protection. Running eastward from George Square, in a line with its northern side, is East George Street, already spoken of. A short distance east of the square, on the left hand side of the street, is the Andersonian University, an educational institution to which Glasgow owes much. It was founded and endowed in 1795, by John Anderson, Professor of Natural Philosophy in the University of Glasgow, who conferred on it a valuable assortment of philosophical apparatus, a museum, and a library. This University was incorporated by a seal of cause,

granted by the Lord Provost, Magistrates, and Town Council, in 1796. The funds of the institution continuing prosperous, the trustees in whom the management is vested, in 1828, purchased the buildings which it now occupies, and which were originally erected as the Grammar School of the city. In the Andersonian University classes are conducted, under the tuition of able professors, for natural philosophy, logic, and *belles lettres*, natural history, languages, drawing and painting, anatomy, surgery, medicine, and medical jurisprudence. These classes are in general well attended, and extensive benefits have been derived from them by the community.

WALK SECOND.

Queen Street—Wellington Testimonial—Exchange Square—Royal Exchange—Royal Bank—British Linen Company Bank—National Bank—Clydesdale Bank—Argyle Street—Miller Street—Western Bank—Theatre Royal—Stockwell Street—Clyde—Clyde Street—Catholic Chapel—Stockwell Bridge—Hutcheson Bridge—Jail and Court Houses—Green—Nelson's Monument—Upper Green—Rutherglen Bridge—Rutherglen Loan—Little Govan—Todd and Higginbotham's Factory—Hutcheson's School—Govan Iron Works—Cumberland Street—Eglinton Street—Cavalry Barracks—Glasgow and Johnstone Canal—South Western Railway Station—Jamaica Street Bridge—Custom House—St. Enoch Square—St. Enoch's Church.

In starting upon our Second Walk, for the sake of easy reference, it will be well to commence from the south-west corner of George Square, in a direct line south from which runs Queen Street, a narrowish but busy street, having well-built houses on each side, the lower floors of which are generally occupied by extensive and elegant shops, the upper floors being devoted to the accommodation of numerous wholesale warehouses. A short distance down Queen Street, on the left hand side, directly in front of Ingram Street, mentioned in the former Walk, is an equestrian statue of bronze. This is the Wellington Testimonial, and the first which has been erected to the honour of that distinguished warrior and statesman, the Duke of Wellington, north of the Tweed. It was designed and executed by the Baron Marochetti, the employment of whom, in preference to a British sculptor, gave rise to no small extent of acrimonious discussion, both among the subscribers and the public. The statue, which is colossal, is very cleverly modelled. It is elevated on a granite pedestal, about eight feet high, the four sides of which are filled by bronze panels, on which are sculptured, in *alto relievo*, groups descriptive of the battles of Assay and Waterloo; the early life of the soldier as an agricultural labourer, and his return after the fatigues and dangers of his military career. This work of art

ROYAL EXCHANGE GLASGOW

occupies an imposing situation in front of one of the finest and most public buildings in the city, viz., the Royal Exchange, placed in the centre of Royal Exchange Square. Taken as a whole, these constitute the finest group of buildings to be found in Glasgow, and it would indeed be difficult to point out many in Great Britain which would surpass this. The whole is from the design of Mr. David Hamilton, architect, already named, a native of Glasgow, to whose cultivated taste and naturally good judgment must be ascribed many of the finest architectural combinations of which the city can boast. The Royal Exchange has an admirably proportioned octostyle portico of the Corinthian order, the intercolumniations of which are exceedingly fine, and the whole exterior of the edifice might safely vie with any similar structure of modern Europe. The sides of this truly elegant building are adorned by handsome Corinthian colonnades supporting suitable cornices and entablatures. The interior richness and beauty, in all points, sustains the expectations raised by its external aspect. The principal apartment is the great saloon or reading room, which is indeed a spacious and princely hall, the finely arched and richly panelled ceiling of which is supported on rows of tall and elegant columns. It is amply lighted, and is lavishly supplied with newspapers and periodicals; and through the liberality of the subscribers, strangers are freely admitted at all times. Besides the reading room, the building contains side or committee rooms, extensively furnished with maps and charts, together with books of reference, sale-rooms, and the other usual and suitable accommodations to be met with in such an institution. Immediately behind the Royal Exchange is the building of the Royal Bank, another stately edifice, with a portico and pediment in front, of the Ionic order; at each side of this bank is a triumphal arch, of elegant proportions and admirable execution. Directly in front of the Royal Exchange, and occupying the north-west corner of Ingram Street, is the banking office of the British Linen Company, also designed by Mr. D. Hamilton. It is altogether different, in the character of its architecture, from those structures in its neighbourhood which we have been

discussing. It is of the ornate Venetian style. The interior of this building partakes of a similar character with its exterior, the telling room being exceedingly rich in its ornaments and decorations. Passing down Queen Street, on the same side with the Exchange, about two hundred yards, placed in the centre of a small square, is the office of the National Bank, a structure designed by Messrs. Gibson and Macdowal of London. This building, which is of the mixed Italian style, is very profusely ornamented, having a stone ballustrade running round it, and presenting in front the principal door of entrance and four windows, all of which have semicircular tops, the keystones of which are cleverly carved as heads, representative of the five principal British rivers, viz., the Thames, the Clyde, the Tweed, the Severn, and the Humber. Above the door is a boldly carved panel, containing the Glasgow arms; and surmounting the whole edifice is a group, carved in Portland stone, consisting of the Royal Arms in the centre, with two flanking female figures, representing Peace and Commerce. These, together with the arms above the door, are from the chisel of Mr. Thomas, a London sculptor of considerable reputation. The interior arrangements of this handsome edifice are commodious and elegant; the telling-room being elaborately ornamented, and its polychromatic decorations are tasteful and appropriate. These latter were executed by Messrs. H. Bogle & Co., Glasgow, house painters to the Queen, and reflect much credit on their establishment. Immediately behind the National Bank is the Stock Exchange Building, a plain but substantial and commodious edifice, the windows and door of which are adorned by plaster casts of the heads already noticed, as forming decorations for the keystones of those in the National Bank; these, which are fine, were modelled and executed by Mr. Thomas, already named. A short distance farther down the street,on the same side, is the Clydesdale Bank. After passing the Clydesdale Bank a few paces we reach Argyle Street, one of the noblest streets in Scotland, extending east and west, under the names of Trongate Street and Argyle Street, a distance of more than a mile and a half. Turning to the left, in this busy thoroughfare, the first opening on the

NATIONAL BANK OF SCOTLAND
(Glasgow)

left is Miller Street, joining with South Hanover Street, and opening into George Square. Near the foot of Miller Street, on its eastern side, is the head office of the Western Bank of Scotland. It is an extensive structure, but, unlike most of the other banking offices of which we have taken notice, it has no pretension to an isolated existence, its front forming only a part of the line of street. It is lofty, and is ornamented by a very elaborately carved frieze, the design of which is a massive scroll ornament, sheltered by a bold and well-defined cornice. The street is narrow, and from the altitude of the houses on each side, has altogether a confined appearance. Nearly opposite to Miller Street is the opening into Dunlop Street, a street of no great pretension nor attraction, farther than being that in which the Theatre Royal is situated. This structure, which externally exhibits a considerable number of architectural incongruities, is nevertheless most commodiously and elegantly fitted up internally. It is not by any means well attended, a fact not greatly to be wondered at, when it is considered, that the company is generally of a very mediocre character. On occasions of visits from metropolitan performers of established reputation, the admirers of histrionic representations turn out in sufficient numbers to justify the pretensions of the citizens to being both judges and patrons of dramatic excellence. Returning from the Theatre Royal, and keeping eastward by Argyle Street, after passing Virginia Street, in which is located the City of Glasgow Bank, proceed onwards till, taking the first turn to the right hand, enter Stockwell Street, a wide and somewhat antiquated looking, but still busy street, which at one time formed the chief means of communication between the city, and the country lying to the south of the river. Stockwell Street runs down towards the river, and at the foot of it we have gained the northern margin of the river Clyde. Extended towards the west and the east, fronting the stream, is the range of West and East Clyde Street. A short distance to the west of Stockwell Street is an old and somewhat worn-out looking building of a quadrangular form, and no great elevation. This was the Town's Hospital, a workhouse; but that institution has

been removed to the northern side of the city, and the building now spoken of, after being for a considerable time empty, was, during the alarming prevalence of fever in 1847, converted into a temporary Fever Hospital, in which capacity it was found to be of great service. Almost in immediate contact with the old Town's Hospital is the Catholic Chapel, a Gothic edifice, executed from the designs of Mr. James Gillespie Graham, of Edinburgh. It was opened with a solemn ceremonial on the Sunday before Christmas 1816, and possesses an organ of considerable power and sweetness. The view from the front of the Catholic Chapel, looking down the river, is interesting in a high degree as well as beautiful. The noble and symmetrical bridge, which spans the Clyde by seven graceful arches, forming a prominent feature of the vista, while beyond it the thickly clustering and tall masts of the shipping, lying in the harbour, complete a picture of rare beauty. At the foot of Stockwell Street is Stockwell Bridge, which was first built by Bishop Rae in 1345, but it has been several times extensively repaired and twice widened. Still, however, the growing traffic of the place has been found to outstrip the accommodation afforded by this mode of transit, and it has been resolved to take down the old structure, which, for 500 years, has endeavoured to keep pace with the increasing demands upon its capabilities, and replace it by another more suited to the wants of the day. In the end of summer 1847, a wooden service bridge was opened for the conveyance of the traffic, pending the erection of the new bridge. Passing the north end of Stockwell Bridge, and proceeding along East Clyde Street for some little distance, arrive at Hutcheson's Bridge, built on the site occupied by a former one. It was begun in 1829, from a design furnished by Mr. Robert Stevenson, civil engineer. It has five arches, is 406 feet in length, and is 36 feet wide within the parapets, and was built to connect the lands of Hutchesontown with the city. At the north end of Hutcheson's Bridge is an edifice of considerable magnitude, having a Grecian Doric portico in front; this is the Jail and Court Houses, which cost originally £34,000 sterling; but the accommodation not being suited for

GLASGOW FROM THE GREEN

present arrangements, much additional expense has been incurred in making the requisite alterations. The building contains the Sheriff and Justice of Peace Courts, in addition to which there is also a comfortably and judiciously fitted up Court Hall, in which are held the circuit sittings of the Supreme Courts. The nomination and return of members of Parliament for the city take place upon hustings erected in front of this building.

Directly in front of the Jail, which is built at the foot of Saltmarket Street, is the entrance to Glasgow Green, containing an area of not less than 136 imperial acres, very tastefully laid out as a park, to which all the inhabitants have a right of access. It is intersected by numerous walks, and adorned by clumps of trees, is furnished with numerous benches for the accommodation of pedestrians, has convenient and well laid out drains, and is delightfully situated on the bank of the magnificent Clyde, and is altogether such a possession as justifies the pride, and almost morbid jealousy, with which the inhabitants of Glasgow are accustomed to look upon every thing connected with the Green. Its grassy turf serves as a place of recreation for the youth of all classes, and it is also used for reviewing the troops stationed in the city, as well as for the bleaching and drying of clothes. At the lower end of the Green, only a short distance from its western entrance, is the Nelson Monument, a lofty obelisk of good proportions. To the left hand a tall spire rises up from behind a screen of lofty houses. This is the steeple of St. Andrew's Church, situated in the centre of St. Andrew Square, which enters from Saltmarket Street. Passing eastwards through the Green, there is an excellent view of Monteith Row previously alluded to. It is a pleasantly situated place of residence, with a fine southern exposure, and commanding a delightful prospect of the Green. The eastern extremity of this fine park, after having skirted the suburb of Calton, is bounded by Rutherglen Bridge, a structure of considerable antiquity, carrying the roadway from Glasgow, across the Clyde, to the ancient royal burgh of Rutherglen, a burgh whose importance has fallen greatly as contrasted with its leviathan though younger sister Glasgow.

Pursuing any of the paths which lead to the river bank, which is here very winding, will lead to one of the numerous ferries to be met with in this quarter; and, on entering one of the boats, we will, in a brief space of time, be rowed across the gently running stream, for the small charge of one halfpenny per individual. Preferring that between the Provost's Haugh and Little Govan, we will be landed immediately to the east of Messrs. Tod & Higginbotham's extensive factory at Little Govan. In this splendid work every process of cotton manufacture is carried on with the aid of the newest and most improved machinery. It is of great extent, giving employment to several hundreds of workers, and is usually visited by strangers of distinction, as by an inspection of that work alone the whole manufacture of cotton is witnessed at the same time. The commodity is taken into the premises in the shape of raw wool as imported: it is carded, spun, woven by numerous power looms, printed into handkerchiefs, packed in bales, and sent out of the work ready for sale. In the work there are numerous dyers, calico printers, and calico-printer's engravers, kept constantly at work, all the portions of the operations being conducted in the most systematic and admirable manner. After passing Little Govan Mill, we come to the very large and interesting iron foundry of Hayfield, carried on by Messrs. Goldie & Co., the extent and general excellence of whose castings may be guessed at, from the statement, that single castings, of fourteen and fifteen tons in weight, are of frequent occurrence in their premises, and that, in the Spring of 1848, they furnished one cast of the enormous weight of thirty tons, which was most successfully run without the slightest accident to either man or machinery; and with similar success and good management, the huge mass of metal was transferred from their manufactory to its destination. Leaving Hayfield Foundry, and pursuing the road leading towards the city along what is called Rutherglen Loan, the way, which is somewhat of the narrowest, and none of the cleanest, passes a dismal looking burying ground, and a little farther on enters a wide street, named Crown Street, running south from the line of Hutcheson's Bridge, turning up which street, towards the left hand, arrive at

a new building, somewhat eastern in the style of its architecture, but on the whole clean and rather attractive in its aspect. This is Hutcheson's School, an institution founded and supported out of the same funds from which the hospital, having a similar title, already spoken of, as existing on the other side of the water, has been built and endowed. In the school the usual branches of a plain but substantial education are taught to a limited number of pupils, who acquire the right of admission under certain qualifications derived from their parents. After passing Hutcheson's School, and proceeding onwards in a straight line for about half a mile, arrive at five huge circular towers, surrounded by projecting galleries, at about two-thirds of their height from the ground, and continually vomiting forth large masses of bright and lambent flame. These are the blast furnaces of the Govan Iron Works, the property of William Dixon, Esq. of Govanhill. As these works constitute a striking feature among the numerous and gigantic mechanical phenomena of Glasgow, a brief description of them may be pardoned in such a work as the present. Some little idea of their magnitude may be gathered from a statement put forth by a respectable and well-informed citizen of Glasgow, who, at the general election of 1847, in proposing Mr. Dixon as a gentleman qualified to represent the city of Glasgow in Parliament, stated, as one ground of qualification, that Mr. Dixon gave employment to about six thousand workmen, and annually paid upwards of £300,000 in wages.

On entering the premises, permission to do which is not difficult to be obtained, if respectfully applied for in the proper quarter, namely, to Mr. Dixon himself, or his manager, although it must be obvious to every reflecting individual, that an indiscriminate admission of all who may be desirous of seeing these interesting works it would be unreasonable to expect, while in many cases it would be dangerous, if not indeed fatal to the visitors, the ear is assailed by a monotonous and surging noise, not unlike the deep toned roar of a tempestuous ocean. This impressive and still growing sound is produced by the rush of air, poured by the blast apparatus, with ceaseless assiduity, into the smelting furnaces, and

distributed through the incandescent mass of materials they contain. Immediately behind the blast furnaces already mentioned, is the building containing the blowing engine, a stupendous instrument of more than three hundred horse power. This engine, which is worked on the high-pressure principle, has its steam supplied by seven boilers, each about thirty feet in length, and eight feet in diameter, erected exterior but contiguous to the building in which the engine is placed. The heating of these boilers alone, in the course of twenty-four hours, consumes thirty-two tons of coals, or nearly 12,000 tons in the year. The steam cylinder of the engine is four feet in diameter, and has a stroke of ten feet; and although the full force of its tremendous power is seldom put on, it has been worked at the rate of sixteen strokes per minute, but it is usually going at, or rather under two hundred horse power. The blast is produced by the motion of two pistons worked in two air cylinders, supplied with air through valves, as in the case of common bellows. One of these cylinders measures nine feet in diameter, and has a perpendicular stroke of five feet; the other has a perpendicular stroke of ten feet, and a diameter of eight. A volume of atmospheric air equal to the cubic contents of these two enormous cylinders is forced into the blast pipes at each downward and at each upward stroke of the steam piston, the tumultuary plunge and rush of which produces an extent of sound to which nothing can be so aptly compared as the roaring of thunder; the quantity of air being sufficient to keep continually full one conducting tube of three feet in diameter, and another of twenty-one inches diameter—these two streams being distributed in opposite directions, and applied to different purposes. At the base of each smelting furnace is erected a massive cube of building, containing horizontal chambers of large dimensions, which are employed as furnaces. In each of these furnaces is placed a large cast iron tube, with countless convolutions, and presenting an appearance similar to the retorts in a gas manufactory, which are completely surrounded by fire, and so exposed to a very high temperature. Through this convoluted tube the air supplied by the blowing engine is driven in a continuous stream, and with tre-

mendous force. In its long passage through the fiery tube, the air necessarily becomes much heated, and, by a continuation of the tube, which, on quitting the heating furnace, is divided into branches, is forced, in a state of red heat, into the blast furnace, through what are called tweer pipes, entering by apertures on three sides of this latter furnace, near its base, the air being introduced just high enough to be above the space provided for containing the fused metal, and so is distributed throughout the burning mass contained within the upper portion of the cavity. The monotonous noise first alluded to is caused by the impetuous rush of this volume of air through the incandescent mass. The above narrated process constitutes the famous Hot Blast invention of J. B. Neilson, Esq., through the application of his patent for which he has realized a very large fortune. In strict justice, however, it is necessary to say, that while the principle of the operation belongs to Mr. Neilson, the reducing it to practical utility in the form above detailed, is due to the suggestive ingenuity of Mr. John Condie, a gentleman in the employment of Mr. Dixon as engineer, who invented the heating tubes, and also a most ingenious contrivance for preserving the nozzles of the tweer pipes from being fused at the point of their introduction to the tremendous heat of the blast furnace. This contrivance consists in coiling an iron tube round the tweer pipe nozzle, through which coiled tube a constant stream of cold water is kept running, operating on the same principle as the worm in distillery operations.

The ironstone, before being introduced to the smelting, or blast furnace, after being dug out of the mine in which it is found, is roasted in an ordinary kiln, and is then called calcined ironstone. This calcined stone, mixed with about one fourth of its own weight of limestone to act as a flux, and with double the combined weight of both of coal, is introduced at the top of the furnace, and by the aid of the hot blast the coal is rapidly consumed, and the other matters reduced to a state of fusion, the metal, by its superior weight, falling to the bottom, while the refuse floats on its surface, forming a kind of semi-opaque glass, which is run off from time to time, and is denominated *slag* by the iron smelters. The process

of separating the metal from the roasted ore, in a blast furnace, is of course continuously progressive, but what is technically denominated a making occupies twelve hours, the contents being run off at six in the morning and at six in the evening. The metal is run off, and allowed to cool in sand moulds, forming short thick bars denominated *pigs;* and the metal in this condition is called pig-iron, a name not indicative of quality, but significant of its being in the state of first removal from the ore, the different qualities being indicated numerically, as Pig Iron, No. 1, No. 2, and so on. In the pig-iron state it is fit for the purposes of the iron founder, who again melts it, and in a fused condition forms it into various shapes and utensils, all of which are denominated by the generic term of cast iron. In the Govan Iron Works the metal is put through various complicated and interesting processes, and is ultimately converted into malleable iron in the shape of rods and bars. To enter into even a slight outline of these operations in such a work as the present, is not to be desired, as it would occupy more space than can with any propriety be accorded to it; but before closing this short notice, it may not be out of place to say, that a clear yet brief and popular description of the whole of these processes, will be found in Hogg's Weekly Instructor for the month of December, 1847, from which the foregoing remarks have been chiefly taken.

On leaving the Govan Iron Works, retrace the line of road towards Crown Street, till, reaching the first wide street opening to the left, which is Cumberland Street. This, which is a street of no very great pretension, crosses several streets, leading nearly at right angles to the river. The chief of these is Hospital Street, so called from being built in such a manner as to intersect the ground on which, in the olden time, there was an hospital built and endowed by the Lady Campbell of Lucknowe, for the reception of patients afflicted with the leprosy. Farther to the westward of this is Main Street of Gorbals. This is a narrow, somewhat tortuous, and squalid street, built according to the model of streets which prevailed about two centuries ago. The street next to the west of Main Street is Portugal Street, chiefly remark-

able as being furnished with a handsome Roman Catholic chapel, school-house, and library room, of modern erection and design. Immediately to the west of the last named is Salisbury Street, striking off to the right hand or southwards, while to the north the same line of street is continued under the name of Apsley Place, losing itself in Warwick Street, which in its turn is again lost in Nicholson Street, under which name it emerges upon the south bank of the river, on the west side of the Gorbals Church. Pursuing the route westwards along the line of Cumberland Street, cross Portland Street, a long, straight, clean, and well-built street, of good architectural pretensions. This, under the names of Abbotsford Place and Portland Street, is by far the finest street on the south side of the river, and presents to the eye an elegance of appearance which will bear a favourable comparison with any street in Glasgow. Continuing to move towards the west, along the line of Cumberland Street, which, on the right hand side, has now assumed the name of Roseland Terrace, a very pretty, although short row of new and well-built houses, at the western extremity of which we enter upon the great north and south thoroughfare, named Eglinton Street, closely adjoining which, on the west side, a little to the south of Cumberland Street, is Port Eglinton, the Glasgow terminus of the Glasgow, Paisley, and Johnstone Canal, a means of inland communication at one time considered of great value and importance, although now all but totally superseded, by the superior facilities of transit afforded by the various railways with which the country is already intersected in that direction. In almost immediate contiguity with the south side of the canal basin is the extensive carpet factory of the Port Eglinton Company. It is a very large and handsome building, and is abundantly supplied with admirable machinery, the working of which gives employment to a very large number of the working classes of both sexes. At the distance of two or three hundred yards to the south of this factory, and on the same side of the street, are the Cavalry Barracks, beyond which the road rapidly merges into branching country roads. These barracks contain accommodation for all the cavalry and artillery which are gene-

rally stationed in Glasgow, amounting, on ordinary occasions, to one troop of dragoons, and the complement of men requisite for working two or three horse artillery guns.

Nothing of a very prepossessing nature presenting itself in connection with the city beyond the cavalry barracks, we shall proceed in a northerly direction along Eglinton Street, which is a wide and spacious street; and forming, as it does, the principal line of communication between Glasgow proper and the south, it is traversed, as might naturally be supposed, by a large and heavy traffic. After leaving Port Eglinton, and indeed almost adjoining to it, is the entrance to the present goods station of the Glasgow, Paisley, Kilmarnock, and Ayr Railway. The quantity of space contained in this station is considerably less than the convenience of the extensive and still rapidly increasing traffic of those thriving lines of railway would require, and the companies are consequently desirous of enlarging its extent; but as they have it in contemplation to continue their line to the north side of the river, they are judiciously availing themselves to the utmost of all the accommodations to be found in their present limited bounds. In passing to the north, along Eglinton Street, little presents itself which can interest a stranger. It is true, that secondary streets branch off to both the right and the left, but they exhibit scarcely any feature calling for description, till, at the distance of fully a mile from the cavalry barracks, and on the same side of the road, after having passed King Street, the opening parallel with and next to the river, and along which line of street runs the road to Paisley, we arrive in front of the booking offices of the Glasgow, Paisley, and Greenock, Kilmarnock, and Ayr Railway, at which point the street has now assumed the name of Bridge Street. The façade of these offices is elegant and imposing, presenting in the centre a pediment supported on columns of the Grecian Doric order, elevated on a flight of massive steps, the central compartment being flanked by well-proportioned rectangular corner pieces. As this is the only railway station on the south side of the river, and as, in a very short time, it will form the directly connected point with London by means of the Glasgow, Dumfries, and Carlisle Railway,

it is necessarily a locality of some considerable importance to travellers, especially to those who have either come from or are going to the south by railway conveyance. It is situated in immediate proximity to the south end of Glasgow or Broomielaw Bridge, and is in fact in one of the most central positions in the city. Another point of no small importance to travellers by such conveyances, and indeed to strangers generally, is the accommodation afforded in The Rainbow Hotel, situated so nearly in contact with the Railway Booking Offices, that a traveller can walk in a leisurely manner from the hotel, secure his ticket and his place in the train, after the first signal bell for starting has been rung, which bell is easily and distinctly heard throughout the whole of the Rainbow establishment, thus enabling parties to proceed leisurely and with certainty, when about to travel by railway to any of the numerous points communicated with by the above named lines, which are now about to assume the more comprehensive title of the Scottish South-western Railway, communicating directly with all the great English lines. In addition to the advantages to be found in its proximity to this extensive railway, the Rainbow presents the further attractions of a moderate scale of charges, prompt and attentive service, and most comfortable and family-like accommodation. The Broomielaw Bridge, already mentioned, which here spans the Clyde, is a structure of surpassing beauty and elegance, which, for the graceful sweep of its general curvature, the harmonized elegance of its elevation, and the imposing width and easy accommodation of its roadway, will bear a favourable comparison with any bridge in the kingdom. It is 560 feet in length over the newals, has seven arches, and measuring fully sixty feet in width over the parapets, has a greater breadth of roadway than any river bridge in Great Britain. It was erected according to the design of Mr. Thomas Telford, the celebrated bridge engineer, by Messrs. John Gibb and Son, and is faced with Aberdeen granite, the parapets being formed of an elegant open ballustrade of the same durable material. The foundation stone of this splendid structure was laid, with great pomp and much ceremony, on the 3d of September, 1833, and by the

untiring exertions and skilfully directed operations of the spirited contractors, the bridge was opened with the usual formalities on the 1st day of January, 1836. Its cost was £34,428.

At the north end of the Broomielaw Bridge, a very little to the eastward, is the Custom House. It will be readily observed, being surmounted by a squat and curiously designed carving of the royal arms. After passing the Custom House, the adjoining edifice, Dixon's Building, which is of respectable architecture, contains the mercantile offices connected with the extensive iron works at Govan hill, already briefly described. Turning up the eastern side of this handsome range of building along Dixon Street, we are introduced to St. Enoch's Church, one of the most exteriorly imposing modern ecclesiastical edifices of Glasgow. In front, it is ornamented by a very handsome hexastyle Ionic portico, the pediment of which is surmounted by an elegant and lofty spire. The congregation of this parish church has long been and still continues to be looked on, as one of the elite of the city, and has, as might have been expected from such a congregation, paid much attention to cultivating a pure style of music in their psalmody. This branch of the divine service, as conducted in St. Enoch's under the able direction of Mr. W. H. Lithgow, has obtained a just celebrity among the Presbyterian community of Glasgow. St. Enoch's Church occupies the south side of and forms a conspicuous object in St. Enoch's Square. The whole of the houses, which were at no distant date comfortable and rather elegant dwelling-houses, are now transformed into writing offices and counting-houses, the back grounds having been converted into warehouses and stores. The northern exit from this rather snug and comfortable looking square, opens upon the busy and stunning commotion which ceaselessly agitates Argyle Street: and here we shall conclude our Second Walk through Glasgow.

WALK THIRD.

Argyle Arcade — Western Academy of the Fine Arts — Buchanan Street — Princes' Square — Gordon Street — St. Vincent Street — Western Club — St. George's Church — George Street (West) — Blythswood Square — Princes' Theatre-Royal — Clelland Testimonial — Sauchiehall Street — Wellington Arcade — Queen's Arcade—Town's Hospital — St. Rollox — Railway Terminus — Port Dundas — Cowcaddens — Normal Seminary (Free Church) — Normal Seminary (Established Church) — City Road — Rose Hall Gardens — Botanic Gardens — Partick — Kelvin Dock — Govan — Lancefield Forge — Lancefield Foundry — Lancefield Dock — Broomielaw — Washington Street — Vulcan Foundry — Robertson Street — River Trustees' Office — Jamaica Street.

For the commencement of our third and concluding promenade, in review of the Glasgow *notabilia*, as fitting a starting point as any we can meet with will be found in the Argyle Arcade, a commodious and elegantly constructed double range of small shops situated near the heart of the city, leading off Argyle Street, a short distance to the west of Queen Street already traversed. From their construction and locality, the shops of this arcade are more peculiarly adapted for traffic in the superfluities than in the necessaries of life. The Argyle Arcade is covered over by a handsome trussed roof, through glazed apertures, between the couples of which an ample supply of light is admitted during the day, and at night the whole is brilliantly illuminated by gas-lamps, the light from which, in addition to that afforded by the numerous burners in the shop-windows, renders the arcade a scene of considerable attraction. The shops are in general very tastefully fitted up, and the display of bijoutery, millinery, stationery, fancy cutlery, and perfumery, is agreeably diversified by the continuous stream of gay visitors of both sexes, and the gastronomic allurements of a well supplied *restaurant* and fruit establishment. This enticing alley, forming a place of considerable attraction for the very limited number of loungers to be found in Glasgow, where every one is in general kept busier than his fellow, is supplied

with one or two exhibition galleries, for the accommodation of such objects of popular curiosity or interest as visit the city; in one of these, THE WESTERN ACADEMY OF THE FINE ARTS holds its annual exhibition of works of art. This institution, which is a highly praiseworthy one, took its rise a few years since, originating in the exertions of one or two of the more zealous and enthusiastic professional and amateur artists resident in the city. Among its members it includes professional gentlemen of no mean celebrity as painters, comprehending, in the combined departments of portrait and conversation pictures, Daniel Macnee, Esq., R.S.A.; in landscape, Horatio Macculloch, Esq., R.S.A., and John Crawford Brown, Esq., A.R.S.A.; and in portrait, John Graham Gilbert, Esq., R.S.A., who is president of the academy. Besides the gentlemen above named, the academy numbers in its ranks numerous artists of considerable promise, and no small quantity of already well-developed talent in various walks of art. The annual exhibitions, opened under the auspices of this academy for several years past, have been such as to merit even a more kindly consideration from the public than they have met with, encouraging although that unquestionably has been; and when the difficulties the institution had, in the first instance, to encounter and surmount are held in view, when contemplating its present condition, its progress affords satisfactory ground for anticipating, that it will exercise an extended and more powerful influence in spreading and in gratifying an intelligent appreciation for the creations of artistic genius.

The western extremity of the Argyle Arcade opens into BUCHANAN STREET, a wide and handsome street, extending northward from Argyle Street in a line parallel with and next to Queen Street. Buchanan Street contains a large proportion of the principal retail establishments to be found in the city; at the south-western extremity of which, indeed, is situated the very extensive retail premises of Messrs. Stewart and Macdonald, a mercery and haberdashery establishment, conducted on principles similar to those already alluded to as regulating that of the Messrs. Campbell & Co. in Candleriggs Street, and which it nearly rivals in the

points of magnitude and the extent of business transacted. Pursuing the route northwards by the line of Buchanan Street, on the right hand side of the way, at a few paces above the western exit from the Argyle Arcade, we arrive at the entrance to a small court, surrounded by lofty buildings, having fronts of polished sandstone, and ornamented in the centre by an elegant *jet d'eau* of considerable power; this is PRINCE'S SQUARE, the structures around which are chiefly occupied as warerooms and counting-houses. A short distance to the northward of this last mentioned square, on the same side of Buchanan Street, are entrances to the Royal Exchange, directly opposite to the southernmost of which is the east end of GORDON STREET, of which street there is as yet but little built. It is a wide and well-formed street, running parallel to Argyle Street, and one which promises, at no distant day, to be a good locality for business. At the northern corner of the junction of this street with Buchanan Street, the Commercial Banking Company of Scotland has purchased an admirable site for a new banking office. About a hundred yards to the north of Gordon Street is the opening of ST. VINCENT STREET, a double row of elegant buildings extending far to the west. The eastern end of this fine street is chiefly appropriated to insurance and writing offices, and other places of business, while towards its middle and its west extremity, it is the abode of numerous families holding the first rank in the society of Glasgow. At the northern side of its intersection with Buchanan Street stands the WESTERN CLUB HOUSE, an edifice of great magnitude. This elegant and imposing structure was designed by Mr. David Hamilton, and executed under his superintendence. Externally, its decorations consist chiefly in an elaborate portico, supported by rectangular columns, having Corinthian capitals and bases: the general cornice and entablature of the building are very massy. In the interior the style of ornament, and the general disposition of the various apartments, are well adapted to the purposes for which they have been respectively designed, attention to domestic comfort being happily blended with gorgeousness of general effect. Little more than a hundred yards farther to the north of the club house just de-

scribed, stands St. George's Church, a structure of large dimensions and of good architectural effect. It occupies the centre of a small square, named George's Place, and fronts the east, the principal entrance being surmounted by a lofty spire, ornamented by turreted pinnacles, in which is made to incorporate a gothic feature of embellishment with as much of classic general effect as is consistent with a spire. This church possesses an imposing and pleasing aspect, which is not a little enhanced by its excellent position, particularly as viewed from the east. Looked at from this direction, West George Street is seen stretching away far along the eastern brow of Blythswood Hill, and terminating in Blythswood Square, which crowns and occupies the summit of the ridge. In these two last named localities are situated the town residences of the principal citizens of Glasgow. The houses in all parts of this district of the city are generally large, commodious, and elegant, the streets are well and cleanly kept, and throughout the whole of them, there reigns an air of quiet and retirement, which contrasts strikingly, yet favourably, with the noise and stir predominating in the busier quarters of the town.

Passing St. George's Church, and still pursuing a northerly direction for the distance of two or three hundred yards, along the line of Buchanan Street, which almost immediately begins to rise with considerable steepness, we arrive at the east end of Bath Street, after having passed on the left, about midway between the church and the last named street, a widish arched entry, at the further extremity of which an edifice of large dimensions has been erected. It was originally designed for the exhibition of works of art, constructed on the dioramic principle; but latterly, it has been converted into an elegant little theatre, under the name of the Prince's Theatre-Royal, for the performance of operatic and other entertainments. Its principal entrance is from West Nile Street, immediately to the west of Buchanan Street. The Prince's Theatre was opened early in 1849 with great *eclat*, and has been conducted with much spirit, and a degree of good taste, which deserve public encouragement, which, from its proximity to the fashionable district of Glasgow,

ROYAL CRESCENT GLASGOW

it is likely to command. Bath Street, like most of those running off towards the west from Buchanan Street, is a first class street, and is inhabited chiefly by the wealthier and more influential rank of citizens. It is of great length, and possessing many claims to urban edificial consideration. Still further to the north, and forming the corner tenement of a wide street which runs westward from Buchanan Street, is a large structure, bearing as an inscription above the principal door—"The Clelland Testimonial." The history of this remarkable structure is sufficiently important to warrant a brief notice here. The office of statistician to the city (the statistics of which, till a comparatively very recent period, when they were taken up by Dr. Clelland, had been very imperfectly recorded) having been vacated by the retirement of Dr. Clelland, who had satisfactorily and most creditably filled that important office for upwards of twenty years, a number of the citizens resolved on raising, by subscription, a sum, for the purpose of presenting him with a lasting memorial of their approbation of the manner in which he had discharged the laborious and interesting duties which had devolved upon him during that long incumbency of the office. The idea, once promulgated, was widely entertained, and promptly acted on. In a few weeks, the sum of £4600 sterling was subscribed, and after mature deliberation on the subject, the building now under remark was erected with the proceeds, and settled upon the Doctor and his family, under the designation above quoted. The fabric has been constructed for, and is used as dwelling-houses; and forming as it does a corner at the junction of Buchanan Street, with the important thoroughfare of Sauchiehall Street, the property is likely to increase rather than to decline in value. Sauchiehall Street is a very long line, consisting of a series of splended streets, which, under different appellations, occupy what was formerly known as the Sauchiehall Road. It runs in a direction parallel with the Clyde, through the valley which intervenes between Blythswood Hill and Garnet Hill, both of which, as well as the dividing valley, are now covered by a magnificent array of squares, crescents, and streets, the buildings composing which

are both stately and elegant, and form desirable residences much sought after by the *élite* of Glasgow society. Proceeding westward along Sauchiehall Street, cross West Nile Street, and at a short distance further to the west, arrive almost in front of Renfield Street Church, a Gothic edifice, the street front screen of which exhibits excellence in general design, combined with great beauty of details. The façade, which is of considerable extent, is pure and rich in style, and is adorned by massive and spiritedly executed decorations. The internal arrangements are in every way suitable to the grace and power manifested externally; they are convenient and elegant, while the ornaments are harmonious and appropriate. This place of worship, which was begun in the summer of 1847, was opened about midsummer of 1848. It was built for the congregation of the late Dr. Heugh, now under the pastoral care of Dr. Taylor, from designs made by Messrs. Brown & Carrick, architects in Glasgow. Passing westward along Sauchiehall Street for a short distance, in the course of which the ground has a gentle but decided rise in level, we arrive at an imposing arched entrance of classic architecture, on the right hand side of the street. This is the vestibule to the Wellington Arcade, a retail mart of small size, but of very considerable elegance, in which are sold butcher meat, fish, poultry, and game; together with culinary vegetables, and several other articles of domestic use or comfort. Immediately opposite to the northern extremity of the Wellington Arcade, situated in Renfrew Street, is an entrance similar to that just noticed, leading into another retail market of kindred character and aspect, called the Queen's Arcade. It is rather shorter, and less imposing in appearance than that which has just been briefly described above.

Retracing our steps towards Buchanan Street, from which we have diverged to a considerable distance; on the opposite side of that street, and forming a continuation of the line of Sauchiehall Street eastwards, is a wide and level line of street, or, more properly speaking, of road, little of it having as yet been built — this is the Parliamentary Road, leading from the upper end of Buchanan Street towards the Cathedral of St. Mungo, at the

Town Head. About half way between those extremities, on the left hand, is a collection of buildings of great magnitude and architectural elegance. The principal edifice, which is surrounded by numerous accessory erections of various styles and pretensions, consists of a cruciform structure, over the centre of which rises a very handsomely proportioned lantern or dome, conferring on the general fabric an air of majestic and simple grandeur, admirably befitting the fine situation occupied by the buildings. This extensive and elegant building was originally constructed for a lunatic asylum, from designs furnished by Mr. William Stark, already favourably mentioned as architect of the Hunterian Museum. The rapid extension of the city, and other altered circumstances, having contributed to interfere with that seclusion requisite for the sanitory purposes of such an institution, a new and admirable asylum was built at Gartnavel, a mile or two to the west of the city. On the completion of this last mentioned institution, the edifice now under consideration was purchased by the City of Glasgow, for the Town's Hospital or City Work House, and which was then removed from the old Town's Hospital Building, near Stockwell Bridge, already mentioned. To fit the present building for the purposes of its new destination, it has undergone many internal alterations, and has been augmented in its capacity of accommodation by the erection of numerous external additions. Notwithstanding the magnitude and expense of these, the accommodation afforded is not by any means adequate to the immense and still increasing accumulation of imported and native pauperism by which the Glasgow community is beset and almost overpowered. Following the line of the Parliamentary Road, the eye is attracted by a tall and elegantly symmetrical tower of great altitude, which rises gracefully from among a crowd of tall and not unseemly stalks by which it is surrounded. This is the celebrated chimney of the chemical works at St. Rollox, an erection unrivalled in Great Britain; and the construction of which constituted an era in the building of such structures. It is of the enormous height of 468 feet from its base to its upper edge; its horizontal section is a circle of 36 feet in diameter at

the ground, which is gradually diminished to one of 14 feet across at its summit. Its tall and graceful form presenting to the eye an outline derived from the stem of the oak, a contour so felicitously adopted by Smeaton, in constructing the celebrated tower of the Eddystone lighthouse. This remarkable chimney stalk is built entirely of bricks, and receives into its ample throat flues from nearly all the furnaces in use about the extensive work, of which, as well as of Glasgow, it forms one of the most striking features. The object sought to be attained by the erection of this gigantic stalk was, by carrying the deleterious fumes, so prolificly generated in manufacturing the various chemical compounds prepared in this extensive and extraordinary work, to such a height, that they might be so diluted by atmospheric influences, ere their specific gravity made them descend to the earth, as to become nearly, if not entirely, innocuous to animal and vegetable health — all efforts to effect which valuable object by previously attempted means having failed, to the great loss and serious annoyance of the Messrs. Tennant, the intelligent and enterprising proprietors of these important works.

Once more reverting to the head of Buchanan Street, which, to the northward of its junction with the Parliamentary Road, passes into the more vulgar appellative of Cowcaddens Street, a tortuous and squalid line of street, traversing what at no distant date formed a detached suburb of the now leviathan city of Glasgow. At a short distance northward of Parliamentary Road, in Cowcaddens Street, is one of the stations of the Caledonian Railway, several of which, from the many branches with which it is connected, are to be met with in different localities in Glasgow. To the northward of the junction of Buchanan and Cowcaddens Street, on an elevated ridge, which will be readily indicated to the stranger by the masts of the assembled shipping, is Port Dundas, the western basin of the Forth and Clyde Canal. This canal has long formed the principal means of conveyance for heavy goods between Glasgow and the ports on the east coasts of Scotland and England; and also with those on the opposite shores of the European continent. It was originally constructed

at a vast expense, opening into the Clyde at Bowling Bay, near Dumbarton, on the one hand, and joining the Frith of Forth at Grangemouth, in Stirlingshire, on the other. It has proved of great utility in promoting commercial intercourse, by means of those noble estuaries of the east and west divisions of Scotland; and also, a lucrative investment of capital to the proprietors. In passing through the district of Cowcaddens, few objects of beauty or interest present themselves to the eye of the stranger, and but for its leading to an important public institution, and forming, moreover, the most direct road to an interesting suburban village, we might have been readily excused for omitting it altogether in our perambulations. As it is, however, while feeling constrained to pass through it, we will not be detained long, nor arrested frequently in our progress. On the left hand side of the street is a building of some magnitude, and possessing a degree of architectural beauty, composed of the gothic and Elizabethan styles. This is the NORMAL SEMINARY belonging to the Free Church Presbytery of Glasgow. As an educational institution, this seminary has obtained, and deservedly, a high place in public esteem. Passing this edifice, and pursuing the main line of street, at an angle where the road turns somewhat unexpectedly to the left, an imposing structure meets the eye; this is the NORMAL SEMINARY in connection with the Established Church, another educational institution of well-founded repute and much general utility. Immediately beyond this last mentioned normal seminary, a wide and spacious line of road extends in a continuous and level stretch for considerably better than a mile, in a westerly direction, till after crossing the classic stream of Kelvin, it loses all the characteristics of city arrangement, and merges into a country highway. This fine line of street is the NEW CITY ROAD. As yet, it is but very partially built, but even already, it presents alluring initiatory fragments of handsome streets and crescents, with interlacing cross lines of communication leading into the elegant Places of the Sauchiehall district, from which it is separated for some distance by the ridge of Garnet Hill. At a short way out from the Cowcaddens' end of the City Road, on the north side of the way,

is Rose Hall Gardens, a kind of tea garden, in which several attempts have been made, but without success, to establish an exceedingly provincial and miniature imitation of Vauxhall Gardens, in the vicinity of London. About a mile beyond these tea gardens (a style of rural enjoyment which has never become very popular in any part of Scotland), is the entrance gate to the Botanic Gardens, an admirably laid out and extensive portion of grounds, which the munificence of private liberality has contributed to form into a horticultural establishment of the highest order. The Botanic Garden occupies the identical spot of ground which Tannahill has rendered classic as "Kelvin Grove," an invitation to rove through whose mazes forms the leading theme of one of that gifted, though unfortunate son of genius's most popular love ditties. The public spirit of the Glasgow citizens has long found a fitting and commendable means of manifesting itself, by contributing to the erection and support of institutions calculated to disseminate useful education among the humbler classes of the community. Few institutions are better suited to accomplish this desirable object, by uniting pleasing and healthful recreation, with fascinating, intellectual, and humanizing study, than the botanic garden; and few have met with more extensive or more gratifying support. The numerous individuals whom the commercial enterprise of Glasgow has distributed over every quarter of the globe, have vied with each other in contributing specimens of vegetable produce from every clime, to enrich the collection of plants in the botanic garden of their native city; while the same spirit of generous emulation has been evinced by many of her sons, whose upward path towards wealth and influence has been confined to a less distant though not less important scene. These latter have contributed, in some instances at least, with an almost lavish prodigality, in bringing the advantages of such an institution within reach of even the humblest artizan. Conspicuous among those benefactors of his humbler fellow-citizens, in reference to this, as well as to numerous other institutions, stands William Campbell, Esq. of Tillichewan, one of the partners of the firm of J. & W. Campbell, in Candleriggs Street,

who, with a praiseworthy liberality, has bestowed an annual grant of £100 upon the Botanic Garden, subject to the condition, that the garden, conservatories, and grounds, shall be freely open to the working-classes, and their families, during five days of the Fair Week. Some idea of the value of this boon to the artizans of Glasgow, and of their appreciation of it, may be formed from the fact, that on an average of several years, the grounds have been visited, during the five days of these jubilee weeks, by not fewer than 170,000 individuals, who obtained gratuitous admission. Such facts are creditable to both the donor and the recipients of the bounty; and, to the credit of the latter, it must be recorded, that notwithstanding the pressure occasioned by the crowd of visitors on those occasions, every thing passed over with the most perfect decorum, and in no instance was injury of any kind sustained by even the most delicate or fragile elements which constitute the collection. The grounds, as already remarked, are admirably laid out into parterres, intersected by well kept walks. The green-houses are capacious and judiciously planned, as are also the extensive and well-stored hot-houses, chiefly devoted to the culture and preservation of plants indigenous to tropical climates.

Leaving the Botanic Gardens, and pursuing the route offered by a widish and rather invitingly sheltered road, which opens directly opposite to the garden gate, a brief but pleasant walk lands the traveller into the heart of the village of Partick, a rural suburb of Glasgow, which, within a few short years, was a secluded country village, at a distance of several miles from the city; but is now almost comprised within its municipal limits. Partick is built upon the banks of the River Kelvin, and nearly at the confluence of its waters with those of the Clyde. The site of the village formed part of the lands by which St. Mungo's Cathedral was endowed, and here the See of Glasgow had erected one of the numerous country mansions, by which, among many other matters, the bishopric was enriched and rendered desirable. Considerable water power being derivable at this point from the fall of the river, important grain mills have been long established at Partick and its immediate vicinity. There has also been erected here a pretty

extensive power-loom weaving factory, for the purposes of which water-power has been made available, as far as possible, and aided by the potent arm of steam as an auxiliary, the operations are carried on with much ingenuity and spirit. Almost immediately in contact with this weaving establishment is KELVIN DOCK, the extensive and admirably conducted iron steam-ship building yard of Messrs. Tod & Macgregor. These ingenious and enterprising gentlemen having, in the year 1835, conceived the bold idea of constructing a steam-vessel, every portion of which, excepting the boards of the deck, the cabin-linings, and the spars of the standing rigging, should be of iron, set about, and successfully carried on its construction. The novelty of the intention roused public curiosity to a high pitch, and speculations of all kinds, except favourable ones, were freely indulged in, and as freely circulated in relation to the singularity of the undertaking. At length, having completed the hull, and fitted it with all its equipments of machinery, rigging, and stores, in their engineering works at the lower end of the Broomielaw, they placed her, with steam up, and every way in sailing order, on a carriage, on which she was conveyed to the large crane in the neighbourhood, by which she was lifted from the carriage, and safely lowered into the water, amidst the loud cheers of assembled thousands. This handsome little vessel was named the PLATA, and with her boilers filled and a store of coal on board, she only weighed about eleven tons. She contained accommodation for twelve cabin and twenty-nine deck passengers; and immediately on being placed in the water, she proceeded on her trial trip, which proved so entirely successful, that orders for iron built steam-vessels flowed in on all sides, and their construction was promptly adopted by numerous other steam-ship builders; and further, it has been found an economical and advantageous style of ship building. Messrs. Tod & Macgregor, however, have still successfully maintained the prestige which their ingenuity and boldness so happily gained for them; so extensive, indeed, has been the encouragement they have met with in this branch of industry, that within little more than ten years from the time they completed the Plata, they launched from their new building

yard at Kelvin Dock, the fiftieth iron steam-vessel they had constructed, many of them being of large dimensions, and propelled by powerful and admirable machinery. In proof that these gentlemen have not forgot their cunning in the way of having their vessels nearly ready for sea at the time of launching, it may be sufficient to state, that near the close of the year 1847, they launched a large sea-going steamer, and had her machinery fitted into her, and herself delivered into the hands of her proprietors, in a condition fit for sea, within eight days after she was launched. Their building-yard, which is both large and convenient, is fitted up with all the requisite machinery, and is situated at the mouth of the Kelvin, at its junction with the Clyde.

Immediately opposite to the estuary of the Kelvin is the village of Govan, a sweetly situated village, nestling snugly on the south bank of the Clyde. Between Govan and the Partick side there is a ferry, the regular period for crossing which is every five minutes, and the fixed fare one halfpenny for each individual. The church tower of Govan, which forms a prominent as well as a pleasing feature of the landscape, rises with unobtrusive sweetness from amidst a fine group of well grown trees. It was built in 1826, and is said to be a fac simile of the one at Stratford-upon-Avon. This village, like all the others in the neighbourhood of Glasgow, is rapidly losing its rural character, and assuming that of an extended arm of the all-absorbing city. An extensive building yard, for the construction of iron steam vessels, has been opened here by Mr. Robert Napier, and here that gentleman has built some very large iron steamers, including, among others, the Government steam troop ship Simoom, the dimensions of which are on the following gigantic scale:—length upon deck, 243 feet; breadth amidships, 41 feet; depth, 27 feet. She was constructed to a measured tonnage of 2000 tons. Her keel is forged in lengths of 27 feet each, these are nine inches in depth by a thickness of five inches. She was designed for a paddle-driven frigate, and was to have been fitted with engines of 780 horse power; ultimately, however, that intention was changed, and she was fitted with an auxiliary screw propeller, worked by engines of much less power.

To an intelligent stranger visiting this quarter, it cannot be uninteresting to know, that not many years since, the Clyde at this point, as well as at numerous others both above and below it, was so very shallow, that it required considerable nicety of management to effect the transit of a vessel carrying forty tons. Indeed, from a survey made in 1770 by the celebrated James Watt, the depth of water in the Clyde, opposite the mouth of the Kelvin, was only three feet eight inches at high tide, and at ebb, it was no more than one foot six inches, while in dry seasons it was even less. Now, however, such has been the extensive and judicious nature of the improvements effected by the River Trustees, that vessels of 600 or 700 tons burden, and drawing sixteen or even seventeen feet of water, pass freely up and down the river, to and from the extensive wharfage on both its banks.

Leaving the scene of these Titanic labours by crossing the Kelvin, without however crossing the Clyde, proceed up the northern bank of the latter named river, and at the distance of about a quarter of a mile up, pass a shipbuilding yard, which, although in itself respectable from its size, and worthy of remark from the quantity and quality of the work executed by its proprietor, makes but little impression upon the spectator, whose eye has been filled, and whose other faculties have been nearly bewildered, by the contemplation of those vast operations, and the means afforded for their execution, to be seen in the works at which we have recently but barely glanced. Pursuing the eastward path along a yet comparatively untramelled river, the opposite bank of the Clyde presents many snatches of sweet landscape nooks, the sentiment of whose quiet retirement is frequently broken by the impetuous dash of some rapid and gigantic steam vessel speeding forth on breath of flame, with crushing power, sweeping onward to some distant port; or labouring with untiring strength, and uncomplaining toil, to facilitate the completion of the voyage of some home-bound barque, laden with wealth from far off climes. About a quarter of a mile farther up than the ship-building yard above alluded to, on an extensive piece of haugh land, to the left of the path recently acquired by the Clyde Trustees at an enormous expence,

it is intended to construct graving docks of capacity commensurate with the maritime requirements of the city of Glasgow, now the first shipping station in Scotland.

A short distance to the east of these intended docks, the want of which has been long felt and loudly complained of, the traveller up the north margin of the Clyde may be said to enter upon a town of engineering manufactures of exhaustless ingenuity, scarce comprehensible magnitude, and bewildering complexity; vast assemblages of low-roofed edifices, pierced by the flickering points of countless chimneys, of varied height and in every variety of form, continually pouring out dense clouds of rolling black smoke, or roaring torrents of bright lambent flame, strike the eye with startling frequency and force, while the ear is stunningly assailed by the clangours of a thousand ceaselessly plied hammers, sounding in every succession of tone, from the grave thunder of the monotonous tilt, to the sharp clang of the boilermaker's rivet driving; the diapason being filled up by the never-failing roar of steam engines, the groaning tumult of stupendous machinery, and the unslackening cadence of the thousand trucks and other conveyances which throng this region, teeming with labours of magnitude, power, and importance, compared to which the fabled workings of the antique Cyclops were but the pastime of a giddy youth, as measured by the subduing achievements of a Hercules. The first of the astounding works met with in this route is the Lancefield Forge, the stupendous iron forge belonging to Messrs. Fulton & Neilson, within whose premises are forged the powerful shafts, cranks, and cross-heads used in the machinery of our largest sea-going steam ships, such as those of the splendid Liverpool and New York steam packets America, Europa, Niagara, and Canada, all of which were forged in this work. Here also were welded and hammered the ponderous metallic masses already alluded to as forming the keel of the Simoom, the dimensions of which have been given before. In this same work are also manufactured, in numerous instances, those huge iron masses which form the stern-posts of the largest iron-built steam ships. To manipulate and render completely homogeneous

the numerous and comparatively trivial bars of malleable iron required in the construction of these ponderous fabrics, numberless ingenious processes and instruments are necessarily brought into operation, not by any means the least remarkable of which are, the heating furnace, by which the bundles of metal are rendered almost semifluid, and the potent hammer, by whose ponderous agency the ductile and pliant bars of iron are kneaded (if the expression be allowable) into one mass, and drawn into whatever form, or worked into whatever magnitude its intelligent director may determine. The temperature of the furnace, which is necessarily very high, is maintained by the application of a powerful blast apparatus, the fanners of which are driven by steam. In front of the furnace, which, as a matter of course, is erected in close contiguity to the hammer, is a huge and powerful crane, so constructed, that by its agency, the masses of iron intended to be welded are introduced to the furnace, or withdrawn from it, and are poised and moved in every direction with the greatest facility. The hammer is made by and is an invention of James Nasmyth, Esq., of the Paticroft Engine Works, near Manchester, a son of the celebrated Alexander Nasmyth, who may almost be denominated the father of landscape painting in Scotland, and whose sons bear a fame, as elevated in the annals of scientific invention, as that attained by their sire in the paths of artistic excellence. But from this divergence to return to the hammer, its percussion agent is an elongated rectangular cube of iron, weighing about twenty-two cwts., which is moved by the expansive power of steam, introduced into a cylinder, placed vertically, acting upon a piston, the iron cube being attached to the piston rod. The length of the stroke is three feet, and the full force of the descending blow is calculated at about five tons. In principle, this hammer, which is protected by a patent, is similar to that of the piling engine, and very superior, in many respects, to the ordinary tilt hammer commonly in use. To render the working power of this admirable instrument in every way complete, it is furnished with regulating machinery, both certain and easy of application, whereby one man renders its giant power as

pliant and gentle as that of the most docile of reasoning creatures, varying from the crushing blow of a destructive engine to the soothing pat of a fondled infant—while a mass of iron may be shattered to atoms by its resistless stroke, a walnut may be cracked by it without injuring the kernel. In these same premises is also a huge planing or sloting machine, for the purpose of fully adjusting the forms of those iron masses which have been rudely though tenaciously formed under the impulsive force of the hammer above alluded to. This instrument may be briefly and popularly described as consisting of a ponderous travelling table, composed of enormous ribs and other framework of iron, which moves slowly backwards and forwards in a horizontal plane, while, by the self-adjusting action of suitably appended screws, it also receives a lateral motion, at rectangles to that which may be called the direct movement, the latter of which is continuous, and may be considerable, while the former is very circumscribed in extent, taking place only at regulated intervals, and is alone used for bringing the mass to be planed again in contact with the cutting point, after the whole length of the material has been made to pass under the instrument, which is a strong piece of well-tempered steel, fashioned and ground in the form of a huge turning tool, and securely fixed in a gigantic shoulder of cast-iron. The article to be planed is firmly held upon the travelling table, by means of screws and other apparatus, and the cutting point is adjusted to the level at which the surface is to be left after every part of it has passed under the planing point. This operation has generally to be repeated two or three times, and frequently much oftener, according to the quantity of superfluous metal to be planed away. By the repeated application of this machinery, right lined surfaces of almost any form can be produced with a degree of accuracy unattainable by any other process, the capabilities of the instrument being only limited by its magnitude. Some faint idea of the size and power of the one now under consideration, may be formed by the reader, when he is told, that the single piece of cast-iron which forms its base, weighs between twenty-eight and thirty tons, and is that stupendous

casting, which in a former part of this volume is noticed as having been run in the Hayfield Foundry in the spring of 1848. The transit of this formidable piece of metal from the foundry in which it was cast, to the place of its ultimate destination, was of itself a work of no ordinary difficulty, and its execution constitutes no unimportant feature in the mechanical enterprise of the city. Fears had been entertained as to the capability of the bridge's arches being able to resist the concentrated and uncompensated weight of the enormous mass, and its necessarily ponderous carriage and motive power. Confident in their resources, however, Messrs. Goldie & Co. had it placed upon a powerful truck, and by the united strength of six horses and two hundred men, it was successfully dragged from their foundry across the Clyde, by Hutcheson Bridge, and without accident, safely lodged in the place of its destination, a distance of fully two and a half miles. The total weight of this stupendous yet beautifully constructed machine, which was manufactured by Messrs. Shanks & Co. of Johnstone, is estimated at sixty tons.

In almost immediate contact, on the south-east, with the work last examined, is another of equal interest to an intelligent examinator, this is Lancefield Foundry and Engine Work, one of the numerous large establishments belonging to Mr. Robert Napier, probably the most extensive and successful constructor of marine steam engines to be found in this or any other country. As, in the course of this walk, we will take occasion to visit another of the same gentleman's works of a similar kind, though on a larger scale, large even although this one undoubtedly is, we shall not linger here, but rest contented with merely peeping into the brass foundry, in which all the heavy castings in this department for both of Mr. Napier's engineering works are run, these being frequently of such magnitude as to startle the credulity of individuals conversant only with brass castings of the ordinary dimensions. Here it is not a matter of extraordinary occurrence to see brass castings, in the shape of pistons, weighing not less than eight tons of metal, and cylinders for the auxiliary or air pumps of marine steam engines of three and a half feet in length by thirty

inches in diameter. The boring, turning, and finishing of all these and numerous other much larger mechanical preparations, are carried on here with all the facilities afforded by the most improved apparatus, worked with an enterprise, and directed by a skill, which are as surprising and gratifying to behold as they are honourable to the individual displaying them, and profitable to the community blessed in the possession of such members. With these cursory remarks we will pass on to the next work of imposing magnitude in the vicinity, and which is separated from the one last named by a passage of only a few feet in width. This is LANCEFIELD QUAY, or as it is more commonly called, LANCEFIELD DOCK, also the property of Mr. Robert Napier, and the point at which he has fitted up apparatus for placing the machinery which he has manufactured on board the different steam vessels for which it has been executed. Here Mr. Napier has constructed shears, or lifting apparatus, capable of raising and transferring with ease and comparative celerity, loads of one hundred tons in weight. Here also he has erected accommodation, the most perfect and convenient, for house carpenters, cabinet-makers, carvers, decorative painters, and other artizans, whose taste and talents are required in fitting up the passenger accommodation afforded in the magnificent steam vessels built or equipped under his immediate care and responsibility. The tenement in which these various and elegant departments of constructive art are carried on, is a substantial range of wooden shedding, three storeys in height and 250 feet in length, the upper floor of which is set apart as a space for drawing out the plans of machinery, and the working lines of steam vessels, to the full size. From the great celebrity acquired by Napier's marine steam engines, his dock is constantly crowded with vessels receiving their machinery and interior fittings, many of them built by other and distant marine architects, besides those constructed in his own building yards. A mere enumeration of the first-class vessels which have received their engines at this dock would occupy a large space, and it would therefore be injudicious to attempt it, still it can hardly be deemed out of place to state, that here, at

one time, towards the close of 1847, were to be seen four first-class steam ships, all in the course of receiving their machinery at the same time, viz., the Dauntless Government steam frigate, built at Portsmouth; the America, the Niagara, and the Europa, three of the Liverpool and New York steam packets, identically the same in their form and structure, and generally admitted to be the finest moulds of vessels yet formed, the last named of these having been constructed in the building yard of Messrs. John Wood & Co., Port Glasgow, within whose premises, and by whom the first steam boat used in Europe was built; the two former were constructed by Messrs. Steele of Greenock. Of these large and fine vessels, the Dauntless is propelled by the Archimedian screw, worked by an engine of 580 horse power, the three others by paddle-wheels, thirty-two feet in diameter, driven each by engines of 650 horse power—all of these immense and complicated pieces of mechanism being constructed and furnished by Mr. Robert Napier. Commentary upon the capabilities of this engineering establishment, or argument to enforce its claim to be considered first class, need not be offered, further than to say, that all these, besides others of minor consideration, were carried on simultaneously, and completed with celerity and of unquestioned excellence.

A short distance farther up the river than the spot occupied by Lancefield Quay, but on the opposite bank, is the wharf belonging to the General Terminus and Glasgow Harbour Railway, by means of which communication of the best description is established between the river and all the important railways existing in the vicinity of Glasgow. At this point the apparatus for transferring goods from the railway to the shipping, and *vice versa*, is most complete and powerful, consisting of hydraulic and steam cranes, which are so constructed as to admit of their easy and regulated motion in every direction, without the apparent intervention of human labour, the whole of the operations being managed by the various machines on the self-acting principle.

It ought to have been stated previously, that the long stretch of well built wharfage, extending up the north bank of the Clyde,

of which Lancefield Quay forms a part, and indeed that of both sides of the river, although also known by varied designations, arising from different causes of nomenclature, such as Finniestown Quay, &c., is generally named the Broomielaw, a term applied to all that space below the lower bridge, on both sides, at which shipping can be accommodated — an extent of wharfage, several miles in length, admirably fitted with powerful cranes, and every convenience for the loading and unloading of cargoes of all descriptions; extensive storing sheds, and abundant supplies of fresh water. Proceeding up the river, at a short distance from Lancefield Quay, on the left hand, pass in succession the extensive engineering establishments of Messrs. Smith & Roger, and of Messrs. Tod & Macgregor, and at both of which superb marine steam engines are manufactured on an extensive scale, and of great excellence. From this point upwards the river is crowded with large sailing vessels, trading to and from every port in the world—immense steam ships fitted up in a style of interior splendour which may invite comparison with the saloons of the noblest in the land. Of these last, the steamers trading between Glasgow and Liverpool, and between Glasgow and Dublin or Belfast, claim precedence of consideration; but many of the river boats, in point of symmetrical construction, as well as comfortable elegance of upfitting, will stand a favourable comparison with any vessels of similar class in the kingdom.

Still farther up the river than those points already mentioned, is the wharf made use of by the Glasgow and Liverpool steam vessels, at which there are daily departures and arrivals. Running northwards from the upper end of this wharf is Washington Street, remarkable as the locality in which several extensive foundry and engineering establishments are situated, the principal of these being the Vulcan Foundry, belonging to Robert Napier, Esq. of Shandon, proprietor also of the establishments at Govan and at Lancefield already mentioned. The Vulcan is one of the most extensive and important engineering establishments in the world, a visit to which, when the *entreé* can be obtained, will prove of the highest interest to an intelligent inquirer. It is

situated at a short distance up the street, on the right hand side, and contains, within itself, ample accommodation for carrying on engineering operations on the most extensive scale, and in all the variety of its complicated details. On entering the gate, the spectator will be led to feel rather disappointed at the seemingly commonplace character of the limited court-yard and its accompaniments, into which he finds himself ushered, and in which, generally speaking, he will meet with but few objects of striking importance to arrest his attention. This seeming want of interest, however, will be found to depend more upon the excited expectation of the visitor than upon any lack of interesting matter in the locality itself, at all events, such in an eminent degree, was the case on occasion of our first visits to this really wonderful manufactory. Towards the end of the summer of 1847, while all the complicated machinery intended for impelling the five magnificent steam vessels already mentioned were in full operation of manufacture, was the time at which we directed our frequent visits to the work. On entering, the first objects which presented themselves for observation, were five or six huge masses of cast-iron, of a magnitude little less than that constituting a small cot-house; these, upon inquiry, turned out to be what are technically called the *soles* of the engines for the America, Canada, &c., steam packets. Some more definite idea of these stupendous fabrics may be conveyed by the statement, that each of them weighed about forty-five tons, and had been run at a single casting. These, at the period referred to, were in various stages of preparatory dressing, to fit them for reception of their complicated adjuncts; in which operations numerous men were clustered round their huge dimensions, somewhat like ants at work upon an ant-hill, and conveying a forcible idea of the gigantic bulk of what had otherwise appeared as nothing extraordinary. For the purpose of obtaining a more systematic and satisfactory examination of this interesting work, the most advisable plan will be, to follow what may be called, without impropriety, the natural order of the various processes, omitting, however, the department of drawing, which differs but little, except in extent, from that of most other

engineering establishments. Commencing then at the carpenter or pattern-makers' shop, we will proceed leisurely through the various departments of the work. The pattern shop is situated on the upper floor of the south side of the central quadrangle. This is a spacious apartment, filled with ingenious handicraftsmen, busily engaged in the fabrication of wooden patterns, of the various complicated and ponderous parts of the machinery which are to be constructed of cast metal, of whatever denomination. In this department of the work, much intellectual and manual dexterity are constantly in operation, the wooden representatives of the ultimate metallic fabrics being constructed with an accuracy and neatness inconceivable except upon minute investigation. The wooden patterns, after being completed, are transferred to the casting shop or foundry, situated at the north-eastern angle of the court-yard first entered. Here the pattern is neatly impressed in moulds, constructed with much care, of a mixture of previously prepared earth and sand in certain determinate proportions; the moulds being finished up with great minuteness and precision. Into these moulds, which are situated on the floor, or rather in it, the molten metal is poured, which, on being consolidated by cooling, is withdrawn from the mould and conveyed to the dressing shop, where, by the aid of complex and powerful machinery, supplemented by the directing agency of human labour, the various fabrics are adjusted, in form and dimensions, to the exact configurations and proportions desired. Some faint idea of the complexity and magnitude of this department may be gleaned from the fact, that these castings embrace portions of machinery from a few pounds in weight up to the unwieldy *soles* already mentioned, of half a hundred tons, and include cylinders of between seven and eight feet in diameter, by nine or ten feet in length. Having cursorily examined the casting shop, in which the visitor will meet with much to interest and instruct him, not the least striking portion of which will be found in the admirable appliances for transferring the melted metal from the furnaces to the moulds, in which its plastic substance is formed into the various figures and magnitudes required. These appliances, it will readily

suggest itself, must vary much in power and in complication of arrangement, according to the objects to the accomplishment of which they are directed. The next points of interest will be found concentrated in the dressing and fitting shops, which occupy a large portion of the premises, including the lower floor of the southern and of the western, and part of the eastern sides of the quadrangle. On entering these, the uninitiated spectator is taken completely by surprise, at witnessing the numberless and varied operations carried on on all sides of him, resembling each other, as he will find upon a leisurely inspection, in orderliness of process, and precise accuracy of result. Here may be seen a vast cylinder in course of having its interior surface adjusted, with all but mathematical precision, by the steady and unswerving application of a boring apparatus, sufficiently extensive in its sweep to admit of a tall man walking upright with his hat on within the cylinder, to inspect the operation of the cutting point. There he will witness a huge and ponderous table of iron, traversing with unwearied repetition and unvarying regularity, beneath the cutting point of a planing machine, continuously scraping the indurated surface of the tabular mass till every portion of it has attained an exact and perfect level. At another point he will behold, with equal amazement and delight, a leviathan shaft of malleable iron, revolving with slow but resistless might, as its particular points are adjusted to a perfectly cylindrical form, upon a lathe whose magnitude and power of operation would, by comparison, have made the apparatus of Vulcan's smithy dwindle to the dimensions of a toy-shop's furniture. On either hand he will discover machinery, similar in principle and application, but working vertically, as the others have been horizontally, in adjusting the exterior and interior surfaces of working-cranks, piston-rods, *et id genus omne* of the inscrutable and endless paraphernalia of engineering on the most extensive scale. At the western extremity of this mechanical labyrinth, is a large and lofty compartment, devoted to the final adjustment of the various portions of the machinery, for whose preliminary formation the wonderful apparatus he has just been surveying has been invented and set in motion. In this part of

the establishment, his admiration will be no less excited than his surprise, at beholding the now perfectly perceptible and conclusive design which has pervaded every particular operation, and regulated the form and magnitude of every varied article which he has seen in the numerous stages of manufacture; by no means the least imposing portion of the effect upon him being produced by the huge dimensions of the complicated fabrics presented to his vision. Besides this large one, there is another fitting-up shop, as it is called, in which the numerous equally complicated, although less ponderous portions of the beautiful machinery are fitted to each other, and tested in their respective parts. Here the whole of the boring, turning, and planing operations are carried on by means similar to those employed in the various departments which we have already inspected, only every thing is on a more minute, and consequently on a more readily comprehensible although less astounding scale. The foregoing glance, brief and unsatisfactory though it necessarily is, must suffice, as the bounds prescribed by such a guide-book as the present inevitably precludes the possibility of dwelling upon it at greater length.

We shall next proceed to an equally cursory exploration of that part of the work devoted to the manufacture of boilers, and with a view to the chance of something like a comfortable inspection, shall take the liberty of making our visit while the numerous stalwart hammermen are at their respective homes, in the full enjoyment of their needful meals. The ordinary entrance to the boiler maker's shop is by a narrow passage, leading off to the left hand from the court-yard first entered. After passing along this limited and common-place looking if not forbidding passage, the spectator finds himself involved in a series of what at first sight appear to be narrow lanes, of grim aspect and frowning boundaries. A more minute examination will satisfy him, however, that he is only beset in a maze of narrow streets, the tenements on each side of which are the ends or sides of huge and intricately constructed boilers, the whole interior of which is composed of numerous iron tubes, with open orifices at each end lying parallel to each other, and running longitudinally through the vast fabric.

Through these numerous tubes the furnace draught causes the flame and heated air to pass in a never failing stream; the spaces intervening between the tubes not greatly more in extent of capacity than the tubes themselves, are filled with water, which is thus made to present a greatly increased surface to the action of the fire—a form of construction, which besides being greatly conducive to the economy of fuel, is also found to operate beneficially in counteracting the liability to explosion. This really ingenious and complex form of structure is of course invisible in the completed boiler, which to the eye presents only the appearance of a huge iron case, firmly bound together by a countless multitude of rivets, whose ridgy and rounded knobs suggest, in a forcible manner, a recollection of the formidable array of crustaceous protuberances which defend the alligator's back. Having leisurely surveyed the premises during the temporary absence of the workmen, in the course of which he will have satisfied himself of the complicated and ingenious nature of the fabrication of those unwieldy objects, which to his eye at first sight presented only the appearance of a shapeless and uninviting mass of patched plates of iron. Suppose now the introduction of the workmen, and instantly the ear is assailed by such a complication of percussive sounds as stuns and startles, as much as they bewilder and astonish him. At different points he will observe half a dozen or more workmen, with smoke-begrimmed features, dragging and pushing, with violent gesticulations, an unwieldy piece of plate iron, backwards and forwards, in close contact with a huge iron frame, of which a portion, like the head of an elephant, is bobbing up and down with slow but undeviating regularity. Farther examination will show him, that at each downward motion of this mighty instrument, a cylindrical point of steel, three quarters of an inch in diameter, has been forced clean through the iron plate beneath it, varying from three-eighths to half an inch in thickness, with as much apparent ease as if it had been a sheet of writing paper. This is a punching machine, for punching out the rivet holes in the boiler plates, and of these powerful instruments there are in regular operation here a goodly number. To prepare the plates for the application of

this instrument, is an operation of great nicety, which must be gone about with much care, as the holes punched in one plate must fit exactly, in point of distance and arrangement, to those pierced in the one to which it is to be joined; hence the adjustment of the two plates must be carefully regulated, and the points of perforation must be distinctly and accurately marked on each; but in addition to these precautions, much nicety is requisite in managing the punching process itself, as the punch once touching the plate in its downward progress, the resistless perforation is inevitable. For the purpose of cutting the plates to the various forms required, a clipping machine, as it is called, worked on similar principles to that for punching is used; and both these, as well as all the other machinery employed in this work, are driven by steam power.

In the survey of this extensive and really wonderful work, the intelligent visitor will be struck with the admirable regularity, decision, and vastness of all the operations; he will likewise perceive, with equal gratification and surprise, the manifest predominance of intellect over physical power — the inventive and directing intelligence which applies and regulates such gigantic means, and complicated operations, to effectuate predetermined results. More than all, he will be gratified to know, that all these have been created by or have risen up under the controul of one individual, who, commencing life in a very humble rank, in the earlier stages of his progress, confined his operations to simple and unpretending works, has gradually extended the sphere of his labours, and perfected the means within his reach, till he has at length established a combination of intellectual with mechanical power, which renders him and it at once an ornament and a boast to our common nature.

Although the Vulcan Foundry and Engine Work has been selected for description as the most extensive and probably the most perfect of its kind, it must be borne in mind, that there are various other establishments of a similar nature, and of almost equal magnitude and capability in the city and its neighbourhood, and that not a few of these are situated at no great distance from

that of Mr. Napier. Taking leave of Washington Street, and proceeding farther up the Broomielaw, pass, in succession, several streets leading from the river side towards Argyle Street, the leading thoroughfare in Glasgow, we arrive at Robertson Street, stretching between these two last-named lines, and presenting little to arrest attention, beyond the fact, that near the foot of it is built the Hall and Offices of the River Trustees, including an efficient police establishment for river, dock, and wharf purposes; but the street offers no incentive to the tourist for prolonging his stay in it or its vicinity. Pursuing his route towards the splendid bridge which spans the Clyde, and along which we have already travelled; at the northern extremity of this bridge we enter Jamaica Street, a *locale* of considerable importance, as the leading line of communication between the northern and southern portions of this busy and populous city, and also as being the principal avenue of intercourse between the city and its harbour. Jamaica Street presents few or rather no objects of public interest, beyond the mighty stream of living traffic which it continually pours into and abstracts from Argyle Street, at which point we shall now conclude our rapid though interesting peregrinations in Glasgow.

STANELEY CASTLE

ENVIRONS OF GLASGOW.

EXCURSION FIRST.

Railway to Paisley—Paisley—Paisley Abbey—Renfrew—Clyde—Erskine House—Erskine Ferry—Bowling Bay—Bowling—Dumbarton—Dumbarton Castle—Return to Glasgow by the River.

The district stretching to the west of Glasgow, independently of its great picturesque beauty and its stirring historical associations, on account of its commercial importance, is entitled to the first consideration, in a limited inspection of the localities adjoining that important city. To effect this object with the utmost economy of time, and at the smallest outlay of personal exertion, we will suppose the tourist to have fortified his inner man with a sufficient portion of the creature comforts, which are, at all times, to be had in the most substantial and best style at the different Hotels — after which a short walk will convey him, ticket in hand, to his seat in one of the trains, which start, with most accommodating frequency, for Paisley, along the line of the South-Western Railway, where the general accommodation, safety, and civility to be met with, is highly creditable to the board of directors, and is peculiarly expressive of the judgment and good feeling of the able manager of the company, and its not less indefatigable secretary. Having started with the train, a run of about fifteen minutes' duration, through a well cultivated country, a description of which we will not stop here to give, brings the traveller to the railway station at Paisley, emerging from which he will find himself in

the middle of a roomy area, having the Jail and Court-Houses on his left hand, and a row of well built and imposing houses, with good retail shops in their basement storeys in front of him. At this point, then, he will be in the heart of the busy town of Paisley, which though of comparatively recent existence as one of the principal seats of British textile manufacture, is nevertheless venerable in the annals of Scottish ecclesiastical history. Although little if any room exists for doubting that the Romans maintained for centuries an important settlement in the immediate neighbourhood of where the town now stands, there is equally little ground for disbelieving, that like Glasgow, the town of Paisley owes its existence to the establishment of an ecclesiastical fraternity, and the consequent erection of a magnificent monastic edifice upon the spot; as in 1163, at the time when its justly celebrated Abbey was founded, there does not appear to have been even a village or hamlet in the vicinity. At no distant date from the period of its foundation, Paisley Abbey appears to have acquired an extensive reputation, through the sanctity of character accorded to its patron, St. Mirinus, whose fame was sufficient to have attracted pilgrims, and to have made its neighbourhood a place of permanent residence for devotees assembled from all quarters of the kingdom. In a historical point of view, Paisley is of still further interest, as being one of the family possessions first bestowed upon Walter, the steward of Scotland, the original progenitor of the Stewart dynasty, which, for three centuries, bore regal sway in Scotland and the British kingdoms; and as a descendant of which family, the present sovereign of Great Britain holds possession of the throne. Concerning the origin of this family, many traditions, both written and oral, have obtained currency, and in accordance with the behests of that appetite for wondrous tales, which forms so plentiful an ingredient in the constitution of the lovers of popular legends, the early Scottish writers state, that a descendant of Banquo, Thane of Lochaber, who was murdered by Macbeth, and whose tragic history has been invested with so enduring a verdure by the spell-creating pen of Shakspeare, named Walter, the

son of Alan was, by David I., appointed steward of his household; his sovereign at the same time, in consideration of his valuable services, bestowed upon him the burgh and territory of Renfrew. This Walter, like his patron, being much under the influence of pious feelings, founded and munificently endowed the Abbey of Paisley. He died in 1177, and was succeeded by his son Alan, who inherited his father's office, and with it also his estate, both of which he held under the reign of William the Lion. This Alan was, in 1204, succeeded by his son Walter, in whose person the office of steward was rendered hereditary, and extended over the kingdom; the surname of Stewart being adopted by the family, as was by no means uncommon, from the office held by the chiefs of it. In addition to being stewards of the royal household, it would appear, that the Stewarts at an early period acquired renown as military leaders and important state functionaries, one of these, named Alexander, having been in 1255 appointed one of the regents; he was also, in 1263, commander of the Scottish army at the famous battle of Largs. This Alexander died somewhere about 1283, and was succeeded by his son James, who took a prominent part, on the Scottish side, in the troubles which beset the country at the conclusion of the thirteenth century. A subsequent Alexander died in 1309, leaving his office, emoluments, and estates, to his son Walter, a youth only sixteen years of age, who, at the age of twenty-one, appeared with his vassals at the muster of patriots at Torwood, before the battle of Bannockburn; and along with Sir James Douglas, he commanded a division of the Scottish army in that important and decisive conflict. After the battle Walter was knighted for his gallant conduct, and the following year was still farther rewarded, by receiving in marriage, Marjory, the king's only daughter, on whom and whose issue the reversion of the crown had already been settled. In 1316, just one year after her marriage, Marjory Bruce died, but left a son, who was named Robert. This son succeeded his father in 1326, and in 1371, after the death of his uncle, David II., he mounted the throne of Scotland, under the title of Robert II., thus securing the family of the Stewarts in

possession of the Scottish crown. The propinquity of Walter, the first of the Stewarts, to any of the progeny of Banquo, has been entirely disproved; and it has been satisfactorily shown by Chalmers, in his Caledonia, that the Walter who obtained such consideration and munificent rewards from David I., was one of the Fitzalans of Shropshire in England, a family of Norman Barons, who came over with William the Conqueror, and whose principal branch subsequently became Earls of Arundel. The early history and feudal connections of Paisley are thus, it would appear, of deep interest not to its immediate locality alone, but as having been vitally and inextricably interwoven with many of those events which have bestowed a colour upon the achievements, and supplied a form to the most highly prized institutions of the British nation.

In general aspect, the town of Paisley offers few attractions to the tourist curious in urban edificial arrangements, its streets being generally narrow, tortuous and irregular; but as a seat of elegant and extensive manufactures, it claims, and is deservedly awarded, a high position among the towns in Scotland. The trade of Paisley, like that of many other manufacturing communities, may be easily traced from small beginnings. In its earlier stages, these manufactures consisted chiefly of linen and muslin wares; these, after having reached a very considerable degree of celebrity, were in a great measure superseded by the production of sewing thread, made from flax, which in its turn gave way to the fabrication of sewing thread, made from cotton, a manufacture for which Paisley has acquired a wide-spread reputation. Silk and linen gauze also, for a long period, formed a staple production of the enterprise and industry of the town; but that which marks the most important era in the history of Paisley manufactures, was the introduction of shawl weaving. This ingenious and elegant branch of textile industry arrived at great perfection in the town, the shawls made there being chiefly remarkable for their varied excellence of pattern, brilliancy of colour, and cheapness. Of late years, the weaving of tartan shawls, and other fabrics of plaiden, known generally by the name of tweeds, from their hav-

ing been first manufactured in quantity, and of a superior quality, on the banks of the noble stream, Tweed, has been introduced into Paisley with much success; in the tartan shawl department, indeed, the beauty of pattern has been so felicitously combined with superiority of texture, as to command the approbation and patronage of even the Sovereign herself, who, on more occasions than one, has marked her sense of their excellence by wearing them in public. Paisley has likewise good reason to rejoice in the knowledge, that intellectual culture within her boundaries has not been limited to success in the mechanical arts, nor to pre-eminence in the manufacture of woven fabrics, how complicated and ingenious soever these may be. In the persons of Robert Tannahill and Alexander Wilson, she has given birth to men, whose poetical talents have been demonstrated to have been of a very high order; the descriptive lyrics of the former possessing a delicacy and truth of delineation, combined with a glowing energy of diction, justly entitling him to take rank among the foremost of the people's poets; while the graphic humour, pathos, and descriptive power of the latter, justify his claim to an equally high position—this, altogether independently of the honour to which he is so justly entitled as an investigator and delineator of ornithological science, in which department of natural history he was equally bold, sagacious, and successful. In musical genius also a claim to pre-eminence, on the part of her adopted sons, is well sustained in the delightful and expressive melodies composed by R. A. Smith, justly celebrated as one of the most elegant and prolific musical composers of whom Britain can boast. Among the living representatives of Paisley's mental growth, the first place will be freely accorded to the celebrated John Wilson, Professor of Moral Philosophy in the University of Edinburgh, author of the "Isle of Palms," the "City of the Plague," the "Trials of Margaret Lindsay," &c.; and, furthermore, the universally renowned "Christopher North" of Blackwood's Magazine. The learned professor, who is a native of Paisley, as is well known, is as remarkable for the unostentatious kindness of his disposition, as for the refined feeling and high poetical temperament which

predominate in and distinguish his numerous writings. In the kindred art of sculpture, too, the children of St. Mirin are adequately represented by two celebrated artists, viz., John Henning, to whose talent and cultivated taste was intrusted the important task of restoring the mutilations, effected by time and bad usage, upon the Phidian sculpture, brought from the ruined temple of Minerva at Athens to England, and known as the Elgin Marbles; and James Fillans, who, in addition to numerous public and private works, has achieved for himself lasting renown as the sculptor of a splendid bust, in marble, of Professor Wilson, which was executed by order of the Paisley public, and adorns the Hall of the Philosophical Institution. This really admirable bust is conceived and executed in a style of high artistic excellence. It is finely imbued with exalted sentiment; the expression is of a lofty moral elevation; and the general contour of features and demeanour, is of a grand and heroic character. It is only justice to state, in regard to Mr. Fillans, who now occupies a high standing in London, that he is a gentleman equally remarkable for eminent artistic talents, liberality of feeling, and unassuming modesty of demeanour. As may have been surmised from the preceding remarks, literary pursuits and their results occupy a considerable share of attention among the leading and general population of Paisley, no small portion of which is concentrated in the operations of the Philosophical Institution already named. It was instituted so early as the year 1808, and lectures have been ever since delivered in it, at sessional intervals, on the leading topics of philosophic investigation, not a few of the lecturers being gentlemen eminent for their scientific attainments — among these may be mentioned Mr. Hugo Reid, who has subsequently been appointed Principal of the People's College, Nottingham. Attached to this institution, besides an extensive library, is a valuable museum, containing an excellent collection of minerals, and a complete set of renovated casts of the Elgin Marbles, presented to the institution by Mr. Henning.

Among the antique features to be met with in this town, the Abbey Church, and the buildings connected with it — a consider-

PAISLEY ABBEY
From the West

able portion of which are in ruins — present the most attractive claim upon the passing stranger's regard. As previously stated, Paisley Abbey was founded and endowed with munificent liberality, by Walter, the steward of David I. From several of the founder's descendants, the establishment also received many valuable pecuniary and territorial acquisitions. Paisley Abbey was the burying-place of the Stewarts before their accession to the throne; and subsequent to that event, Elizabeth Mure, and Euphemia Ross, consorts of Robert II., were interred there; as was also Robert III. — the first mentioned during the latter half of the fourteenth century, the latter in 1406. This monastery was more richly endowed than any religious establishment in Scotland, founded by a private individual or family, vieing in magnificence with those of Dunfermline and St. Andrews, although the two latter were of regal foundation. The ecclesiastics belonging to this monastery were accommodated with a degree of splendour, in keeping with the superb style of its secular endowment. In 1307, the Abbots having all along continued hostile to the pretended claims of Edward I. of England upon the Scottish crown and kingdom, as a dependancy of England, the Abbey was pillaged and burned by the English army; but shortly afterwards, it was rebuilt on a larger and even more magnificent scale than previously. Subsequently to this rebuilding, the spacious buildings and extensive orchards and gardens, together with its deer park, considerably more than a mile in extent, were surrounded by a wall of hewn stone. The church of this monastery was of great magnitude, of lofty architecture, and very rich in decoration. In length, it extended, when measured over the walls, to 265 feet; the nave and transepts having been furnished with side aisles, while the choir remained destitute of those addenda. Interiorly, the effect of the church must have been extremely grand, more especially when viewed under the active administration of those imposing religious ceremonials, to aid in the effect of which such magnificent edifices were designed and erected. Long after the periods above referred to, Paisley Abbey and its affairs, both ecclesiastical and secular, maintained a condition of uninterrupted

prosperity, till the Reformation, in its onward progress, overtook it, in common with the other ecclesiastical institutions of the country, overthrowing and destroying its architectural splendours, in substituting a purer faith and a simpler form of church polity, for those which had become corrupted and debased by the accession of wealth and an intermixture of temporal power. At this period, besides the demolition of much of its edificial magnificence, the Abbey sustained additional privations, in having its revenues and endowments secularized, these being erected into a temporal lordship, in favour of Lord Claud Hamilton, who was created Baron Paisley in 1603, a title still retained in the family of the Marquis of Abercorn.

One of the aisles, to the south of the nave, is still known as St. Mirin's aisle, so called, as having at one period contained a chapel and altar dedicated to St. Mirin, the patron of the monastery and titular of the town. This is also denominated the sounding aisle, from a remarkable echo caused in it by the peculiarity of its architecture. In this aisle there is situated an altar tomb, commonly known, although from what cause is not very apparent, as "Queen Blearie's Tomb." This tomb, which is of very elaborate and beautiful design and execution, is popularly said to be the tomb of Marjory Bruce, daughter of Robert the Bruce, and wife of Walter the steward. Doubts as to the authenticity of this tradition, however, are freely stated by antiquaries, whose opinions are admittedly entitled to much weight.

Having thus inspected all that presents itself as strikingly conspicuous to the cursory glance of a stranger in Paisley, let us next avail ourselves of the accommodation offered by the Paisley and Renfrew Railway, a run of a few minutes' duration along which brings us to the south bank of the Clyde, within a short distance of the royal burgh of Renfrew. This burgh, which claims to be of high antiquity, and was once of considerable importance as a shipping port, and as the residence of a mercantile community, now offers little in either its appearance or circumstances to attract the attention of a passing traveller. The trade, upon which no small portion of its early importance mainly depended,

SEAL OF THE MONASTERY OF PAISLEY

has for many years past been altogether absorbed by, and concentrated in, the adjacent burghs of Glasgow and Paisley, leaving few claims to consideration, on the part of Renfrew, beyond the cherished though shadowy remembrance of those days in which it occupied a conspicuous place in the public transactions of the kingdom. One remnant of its ancient importance the burgh still retains, in conferring a hereditary title upon the heir-apparent to the British throne, who, in addition to his other titles of birthright, is Grand Steward of Scotland and Baron of Renfrew. Beyond this somewhat fanciful dignity — fanciful at least in so far as the community is concerned — little, if any thing at all, of its ancient grandeur pertains to the burgh. Its streets are deserted and lonely; the general aspect of the town is desolate and forlorn, every thing in and around it bearing unequivocal marks of dilapidation and decay. About half-a-mile to the westward of this ancient burgh, there has recently been erected an edifice of considerable importance. It is an educational institution, and is named the Blythswood Testimonial.

The terminus of the railway by which we have journeyed from Paisley is in the immediate vicinity of the river Clyde, and at it there is a conveniently placed and well fitted up wharf, for the embarkation and debarkation of passengers to and from the numerous steam boats, plying on the river upwards and downwards every few minutes, especially during the summer months. At this point there is a ferry across the Clyde; and on the Renfrew shore there are several commodiously fitted up taverns, at which the traveller may readily procure substantial and comfortable refreshment; there are also two or three well kept bowling-greens in connection with these taverns, to which many of the Glasgow citizens, belonging to the middle classes, resort on occasion of summer holidays, and on the Saturday afternoons of that season, to enjoy the exhilarating recreation of bowling; for the full and frequent enjoyment of which, the ready conveyance and moderate rates of charge on board the river steamers offer peculiar facilities. Embarking at this point on board one of these admirable craft, we shall proceed down the river, the

scenery on both banks of which, in this neighbourhood, is rather tame and monotonous; but this uninteresting appearance rapidly changes, as we proceed through the sinuosities of the river, now quickly assuming the features of an interesting and noble estuary. At a distance of little more than two miles below Renfrew, the river begins to swell out into reaches; the banks, although more widely disparted, gradually attain a more elevated character, diversified by a range of hills, which, on the north, begins to exhibit an increasing abruptness of outline; the hills fringed with richly waving and variously coloured foliage. About the distance above indicated below the point of embarkation, pass on the left hand a small hamlet, sweetly embowered among the surrounding wood. This is Erskine Ferry, situated a short distance from which, and beautifully placed amidst thick sheltering wood, is Erskine House, the property and principal residence of Lord Blantyre. It is an elegant and extensive edifice, built in the Elizabethan style of architecture, from designs furnished by Sir Robert Smirke of London. The situation of this splendid residence is a most eligible one, being about half way up a charming though somewhat steep hillside, overhanging a bay of singular beauty, and commanding fine views of a very extensive range of picturesque and grand scenery; while the mansion itself, peering from its diversified sylvan screen, contributes an interesting feature to the numerous beauties of the landscape. Gliding gently yet rapidly along the picturesque waters of the Clyde, on entering Bowling Bay, the first view of Dumbarton Castle to be met with in this direction is obtained. The view from this point is singularly interesting and exceedingly beautiful. Directly in front, the conical and abrupt rock on which the ancient fortress of Dumbarton is built, projecting into the river, fills the eye, and almost seems to forbid farther progress; but as the steamer sweeps onward, its direction changing with the course of the stream, and gradually unfolding the estuary beyond this barrier, opens up to the delighted vision a panorama, revealing the widely expanded firth, and presenting to view the distant towns of Port-Glasgow and Greenock, with their numerous shipping.

Having passed Erskine House about a mile, the steamer touches at the quay of Bowling, a sweetly situated little village at which the Clyde Junction Dock of the Forth and Clyde Canal is erected. The village of Bowling is another favourite place of resort for the Glasgow citizens in quest of rural enjoyment. It is admirably suited for this purpose, being easy of access, and surrounded by beautiful scenery; and here, as at Renfrew, the facilities of transit afforded by the numerous steam ships plying on the river, render the means of visiting it easy, both in a pecuniary sense, and with a view to the economy of time. At the distance of little more than a mile below Bowling, perched upon a tiny isthmus of rock, is Dunglas Castle in ruins. This group of shattered walls, encased in their ivy curtain, forms in itself an object of much picturesque beauty, the interest in which is greatly enhanced by the tradition which associates it with the western limit of the wall built by the Romans under the Emperor Antoninus, to restrain the northern Scots from making predatory incursions into the territories secured under the Roman sway. Another and scarcely less interesting memorial feature of this locality, is a truncated pillar of white sandstone, erected close by these ruins, the base of which is washed by the smooth flowing waters of the Clyde, in memory of Henry Bell, the originator of steam navigation. This monumental fabric possesses few claims to admiration as an object of structural beauty, while the contemplation of it is likely to awaken sentiments in their character remote from complimentary to the nation, which, in return for the vast benefits conferred upon it by the genius of Bell, in practically working out the mighty problem of steam navigation, could afford him, while living, no tangible recognition of his successful enterprize; but which, after permitting him to drag out the evening of his laborious and beneficently valuable day in obscurity, darkened by the foreshadowing clouds of chilling penury, was contented to perpetuate a brief record of his personal existence, by this cold but durable memorial—thus adding to the already too numerous instances in which substantial national benefits have been sought to be compensated for by empty and

unavailing posthumous memorials. Passing this interesting point, an agreeable sail of little more than two miles farther brings us to the quay at DUMBARTON, overlooking the confluence of the river Leven with the Clyde, having previously passed under the battlemented rock on which is built DUMBARTON CASTLE.

The burgh of Dumbarton is a place of great antiquity, having been erected into a royal burgh in 1222, by Alexander II.; and at an early period of its history, it acquired considerable importance as a seaport. From a remote date, it was celebrated for the excellence of its ship builders, and is still famous for the symmetrical beauty, strength, and durability of the vessels constructed in its building yards. The town of Dumbarton occupied a conspicuous place in the public transactions of Scotland during the wars of succession under Wallace and Bruce; the latter of whom died in 1329, at his castle of Cardross, in the immediate vicinity of Dumbarton. In modern times, the pursuits of the inhabitants of this town, like those of the other towns situated in the basin of the Clyde, have been chiefly attentive to cultivating the peaceful arts of mercantile and mechanical enterprize; and manufactures of various kinds have sprung up within the burgh. These, although sufficiently interesting and valuable to the inhabitants, are not on a scale of extent adequate to excite great attention from the casual visitor, to whom, in all probability, the chief attractions will be found in the castle and its history, together with the beauty of the adjacent scenery. The castle, which stands about a mile south-east of the town, forms a remarkable feature in the landscape. It occupies a considerable portion of a nearly insulated basaltic rock, rather more than a mile in circumference, which rising abruptly from the alluvial plain, after having attained an altitude of nearly 400 feet, separates into two obtusely conical peaks, on the summit of the western, or highest of which, are still to be seen the remains of a Roman pharos or signal tower — this conspicuous and commanding elevation having been occupied as a place of strength by that warlike people, during the period they held sway in Scotland. In times more recent, though still long gone by, Dumbarton Castle, which was

made a royal fortress in 1238, was the scene of many and sanguinary contentions. Before the general use of artillery, it formed an almost impregnable fortress, and as such it was prized by the different parties endeavouring to establish themselves as masters of the realm; besides having been taken and retaken by the contending parties in the struggle for Scottish independence, under the heroic Wallace and the chivalrous Bruce. It was at a later period the residence in which, during a portion of her childhood, the celebrated but unfortunate Mary, Queen of Scots, lived, having been placed there for safety; and from Dumbarton she embarked on her voyage to France, in order to have her education completed at the French court. Subsequently it was the frequent scene of conflict in those wars which harassed the kingdom during her disastrous reign, and continued throughout the regency, which governed the realm during the nonage of her son. The importance of the fortress, as commanding the traffic of the Clyde, pointed it out to the military sagacity of Cromwell as an object of importance to the furtherance of his schemes; and he accordingly made himself master of it. In the castle there are still kept several relicks of historic interest and antiquarian worth, including the two-handed sword wielded by Wallace. The modern military appointments of the castle consist of a barrack building, capable of accommodating from 200 to 300 soldiers; an armoury, containing generally from 1500 to 2000 stands of arms; several batteries, mounted with ordnance of large calibre; and an arsenal of stores suitable for the military equipment of the fortress. The summit of this remarkable rocky eminence commands a view of great extent, and of nearly matchless variety and beauty. To the north and to the west, the huge and lofty Grampians shoot up their adamantine peaks in a flickering range of bold yet picturesque undulations, including in the panorama the giant symmetry of Ben Lomond, the abrupt and towering magnitude of Ben Arthur, the gracefully pointed pinnacle of Ben Ledi, and the ridgy crest of Ben Voirlich, together with the countless multitude of intervening hills of every form and altitude, which cover this portion of Argyle and Stirling shires.

To the west, the bosom of the Clyde displays its fascinations in all the tortuous sinuosities of outline, which relieve without destroying its bold simplicity of aspect—now sweeping onward to the ocean — now stretching northward into seemingly interminable inland seas—studded with numerous towns along its banks, and enlivened by the thousand sails which sparkle on its sun-lit waters. Among the most important of the events which have of late years lent vivacity to the usually routine existence of the ancient community of Dumbarton, was a visit paid to the castle by her Majesty, Queen Victoria, her husband, and several of their children, in the autumn of 1847. Preparations for the royal reception had been made on a scale sufficiently extensive to demonstrate the affectionate loyalty of the civic authorities of the burgh as well as of many others of the surrounding towns; and the well-known alacrity and *esprit de corps* of the military, combined with the neighbouring gentry, contributed in no small degree to enhance the attractions of the spectacle; the general effect of which, however, was mainly dependant on the splendid array of shipping, of every denomination, contributed by every harbour on the Clyde to swell the royal train. The day was serene — the sky bright and sunny — the cortége joyous and excited — and the whole scene and event such a demonstration of loyalty and affection, as alone would afford subject of gratifying reflection to even the sternest democrat; while coupled with the beauty of natural scenery by which it was surrounded, and enhanced by the enthusiasm of the assembled thousands who took share in it, it presented a spectacle of natural grandeur and moral beauty, such as might warm the imagination of a youthful poet, and stimulate him to a yet loftier flight of poetic aspiration than has as hitherto inspired the lays of laureate, or given zest to courtly minstrel's song. As might have been expected, that highly prized visit forms an epoch of grateful remembrance in the now peaceful annals of Dumbarton; and its anniversary has been celebrated with undiminished testimonies of gratifying and loyal zeal.

From Dumbarton to Loch Lomond, one of the finest as well as

one of the most extensive of the Scottish lakes, the distance is little more than five miles, the road winding through the vale of Leven, whose pellucid and gentle stream drains off the superfluous waters of the loch. A description of this beautiful loch we shall not stay here to give; but having contented ourselves with stating, that steam boat accommodation for viewing its numerous attractions is easy of access, and to be had at a moderate expense, we shall consider our mission to Dumbarton at an end; and having thus briefly glanced at the leading features of interest in the town and its vicinity, we shall re-embark, and with steam up, emerging from the estuary of the Leven, and skimming past the objects and locales noted in our hitherward progress, within a a brief space regain the busy wharves and streets of Glasgow.

EXCURSION SECOND.

Clyde Iron Works — Uddingstone — Bothwell Castle — Bothwell Bridge — Bothwell — Hamilton — Cadzow Forest — Hamilton Palace — Lanark — Falls of Clyde — Caledonian Railway — Motherwell — Dundyvan Iron Works — Garnkirk Pottery and Brick Work — Glasgow.

The route selected in this our second excursion, leads us from the city by the south-eastern extremity of its bounds, and immediately on emerging from the din and turmoil of the town, it brings us into a level and fertile country, giving evidence of being exceedingly well cultivated, and of also abounding in mineral riches. At about two miles distance from Glasgow, pass, on the right hand, the Clyde Iron Works, the property of James Dunlop, Esq. These works have long maintained a well-merited celebrity in the manufacture of iron. The machinery employed at them is all of the best and most ingenious construction; the works afford employment to a great many workmen, and the operations carried on there, are of such a nature as both to call for and repay a minute examination; but as a description of the manufacture of iron, although brief, has already been given, and as the processes are nearly the same in all instances, it is not desirable to enter into details concerning them here. We shall, pursuing a route at first nearly due eastward, but afterwards bending towards the south, pass, a little to the left, Mount Vernon, and still farther on, on the opposite side of the road, Daldowie House, near which latter the road divides. Let us keep that to the right hand, and after a journey of about two miles, arrive at the village of Uddingstone, which has acquired considerable celebrity as the village at which an ingenious artizan has produced and continues to manufacture the improved plough. A short distance south-east from this village, on the west side of the road, surrounded by fine wood, stands Bothwell Castle, the seat of Lord

Douglas. The mansion is comparatively new, of simple yet pleasing architecture. It consists of a handsome centre and two wings, built of a red sandstone, which is very durable, and is abundant in the neighbourhood. Its public rooms are spacious and elegant, and contain a valuable collection of portraits, several of which are by Vandyke. The old castle of Bothwell, now in ruins, is beautifully situated on a fine green bank, which slopes downwards to the Clyde, here a majestic stream, flowing full and calm, and of a clear amber tint, between massive hoary crags on the one side, and the rich verdure of the wooded banks below and surrounding the castle on the other. This ancient edifice, which belonged originally to the Morays, is by numerous well accredited authorities, believed to be one of the most magnificent ruins in Scotland, its front wall extending to fully 230 feet, and terminating in a lofty flanking tower at each end. The ruins of the court-yard may yet be distinctly traced, and at its eastern extremity, the remains of the private chapel are easily recognizable by the style and carving of the windows. Indications of the fosse or ditch are likewise still visible in several places. All the appearances and accessories of this fortress give unmistakeable evidence, that in its day it must have been a powerful stronghold indeed. In the front wall there is a circular cavern, about twenty feet deep and twelve in diameter, the entrance to which is by a small aperture in the wall. This, which is familiarly known as Wallace's beef barrel, has evidently constituted the donjon pit, or prison of the castle, and concerning its uses, and the fate of its involuntary inmates, there are numerous traditions still current among the neighbouring peasantry; although it is highly probable, that their wildest imaginings associated with this den, fall infinitely short of the sad realities witnessed by its adamantine walls. The ruins of this interesting remnant of the olden time, are preserved in a style of great propriety and tastefulness. In various places around the keep tower, among the buttresses, and on the curtain wall, the greatly mouldered shields, bearing the armorial cognizance of the Morays, the original lords of the domain, are still, although

with difficulty, to be traced. In other places, but more distinctly marked, and in better preservation, is the well known shield, bearing the bloody heart, the heraldic device of the gallant Douglas, recalling the memory of those stirring times, when, in all the Scottish armies, and on all occasions—

> ——— "The Bloody Heart blazed in the van,
> Announcing Douglas' dreaded name."

A short distance to the south of the castle is the village of Bothwell, the ancient though now deserted church of which is an object of considerable interest; it is a good specimen of gothic architecture, and as such is worthy of an inspection. Bothwell Bridge, which spans the Clyde in this vicinity, is remarkable and interesting as the scene of a sanguinary conflict, which took place on the 22d of June, 1679, between the troops of Charles II. and the Covenanters. The royal forces, under command of the Duke of Monmouth, having gained the Bothwell side of the river, resolved to pass, and give battle to or disperse the covenanting army, amounting to 4000 men, which lay on the opposite bank. The bridge, long and narrow, had at that time a portal or gate built across its centre, and this being in possession of the Covenanters, they determined to defend it, and intrusted the perilous enterprise to Hackston of Rathillet and Hall of Haughead, with a party of 300 men. The defence of the barrier was long and obstinate, Hackston, in particular, displaying great courage. Ammunition, however, at length failing, he was forced to withdraw his men, and the victorious army, with its cannon in front, marched across the bridge, and formed into regular order on reaching the opposite bank. Here the conflict was renewed, the Duke himself commanding the infantry, while the command of the cavalry was committed to Claverhouse. The Covenanters, disadvantageously posted, dispirited by repulse, overmatched in numbers, and little accustomed to military discipline, were soon thrown into disorder, and speedily fled, keeping the haugh land or meadow along the river banks, instead of taking to the hills, where they might more easily have baffled

pursuit. They were pursued by the victorious dragoons under General Dalzell, the second in command of the cavalry, who, eager to wipe out the stain of their defeat at Drumclog, made great slaughter among the fugitives. In the course of this rencounter and route, 400 of the adherents of the covenant were slain, and 1200 were made prisoners—the indiscriminate and wholesale butchery being perpetrated in defiance of the gentler Monmouth's positive instructions. After leaving Bothwell Bridge, but still continuing the same line of road, which is delightfully sheltered by well grown wood, a journey of about two miles brings us to the cavalry barracks at Amieda Hill, and almost immediately after, we enter the town of Hamilton, in which there is a considerable trade carried on in the finer species of cotton manufacture, particularly in imitation cambric. The town is built on both banks of the Cadzow Burn, and has been constructed within the barony of Cadzow, which was anciently a royal domain, and continued so till after the battle of Bannockburn; immediately after which victory, the barony was bestowed, by the valiant Bruce, upon Walter Fitz Gilbert de Hamilton, and it has remained in the possession of his descendants ever since that period. The ruins of Cadzow Castle, the ancient patrimonial residence of this domain, still stand in the forest, which derives its name from the castle, which latter is situated on the bank of the Evan or Avon, a tributary of the Clyde. The banks of the Avon are most delightfully picturesque, and the position of the castle and its accompaniments of rock, stream, and wood, are noble, almost to sublimity. The castle, towering in lofty supremacy, overlooks the rich and beautiful valley, stretching away in softening luxuriance from the rugged and impenetrable rocks of Cadzow. Little of the ancient castle now remains, and that consists chiefly of some mouldering vaults, and scanty traces of the moat and drawbridge by which the fortress was secured on the landward side. The vicinity of these ruins is rendered still farther interesting, by the existence of a considerable portion of the ancient Caledonian Forest. The portion now under consideration, being celebrated as the

Cadzow Forest, of which Lockhart, in "Peter's Letters to his Kinsfolk," gives the following interesting description. "In the neighbourhood of these ruins," Cadzow Castle "are still visible some of the finest remains I have ever seen of the old original forest with which the whole of our island was covered—the most venerable trees, without question, that can be imagined — hoary and crumbling, and shattered every where with the winds and storms of centuries — rifted and blasted in their main boughs — but still projecting here and there some little tufts of faint verdure — and still making a gallant show together where their grey brotherhood, crowns the whole summit of the hill — these are

——"the huge oaks of Evandale,
Whose limbs a thousand years have worn;"

and among them, I saw couched, most appropriately, the last relics of that breed of wild cattle, by which, in old times, the forests of Scotland were tenanted.

"Mightiest of all the beasts of chase
That roam in woody Caledon;
Crashing the forest in his race,
The mountain bull comes thund'ring on.

"Twice on the hunter's quiver'd band
He rolls his eyes of swarthy glow;
Spurns with black hoof and horn the sand,
And tosses high his main of snow."

"The description in these lines is a perfectly accurate one — they are white or cream coloured all over — but have their hoofs and horns and eyes of the most dazzling jet. The fierceness of the race, however, would seem to have entirely evaporated in the progress of so many ages, for the whole of the herd lay perfectly quiet, while our grave trio passed through the midst of them. I wonder some of our nobility do not endeavour to transplant a little of this fine stock into our parks. It is by far the most beautiful breed of cattle I ever saw — indeed, it bears all the marks of being the nervous original from which the other species have descended, taking different varieties of corruption into their

forms, from the different kinds of less congenial soil to which their habitation has been transferred." This vivid and beautiful description, although penned many years ago, is still strictly true. The "Old Oaks" in Cadzow Forest cover several hundreds of acres. Many of the trees have attained an enormous size, severals measuring thirty-six feet in circumference. One, growing near Wood House, called the "Boss Tree," is capable of containing eight ordinary sized individuals within a cavity in its trunk at once.

Another and a most important feature of this locality, is HAMILTON PALACE, which was originally a small quadrangular tower, about twenty feet long and sixteen feet wide, built about the year 1591. It was considerably augmented in size towards the commencement of the last century, and has, within the last twenty-five years, undergone an entire renovation and a great extension. The exterior aspect of the building, as it now exists, is very noble, consisting of a principal front upwards of 264 feet in length, adorned by a magnificent portico of corinthian architecture, the pediment of which is supported on a double range of columns, the shaft of each of which is a single stone, twenty-five feet in length, with a mean diameter of three feet three inches. Besides this principal portion, there is an additional wing to the westward, containing servants' and other apartments, this wing being 100 feet long, and the whole forming one of the most gorgeous edifices to be met with in Scotland. The interior accommodation and style of enrichment of Hamilton Palace, is in every respect worthy of its external grandeur. The saloons, halls, and other public rooms, are lofty, large, and elegantly decorated —marble, porphyry, and other valuable stones being profusely, yet tastefully employed in their construction and embellishment. The edifice, as it presently exists, has been erected from designs by the late David Hamilton, Esq. of Glasgow, upon whose architectural taste and judgment it reflects the highest honour. The collection of pictures, sculpture, and other articles of *vertu* contained in this superb residence, is of the most princely order, and will, it is to be hoped, form a lasting monument of the good

taste and munificence of its noble and illustrious owner. The picture gallery is a splendid saloon, 120 feet in length, twenty feet wide, and twenty feet high in the walls. The collection which fills this stately hall is amongst the first in Scotland. Among the portraits it contains, about a dozen of the very finest productions of Vandyke—one of the finest of these being a splendid full length equestrian picture of Charles I. on a white horse; besides this, there are magnificent portraits of the two brothers, Marquises of Hamilton, during the civil wars; by far the finest, however, is the portrait of Lord Danby going a-shooting, attended by a black boy, in which the peculiar grace and grandeur of conception, united to the charming delicacy, yet force of execution which form such conspicuous and delightful characteristics of Vandyke's pictures, are combined in all their glowing and glorious beauty. This splendid work of art will no doubt be known to some connoisseurs, by an admirable engraving of it, executed many years ago by the late Mr. Beugo of Edinburgh, but which was circulated to only a very limited extent. The chief ornament of the collection, however, is the famous picture by Rubens, of Daniel in the Lions' Den. This subject, which has been so frequently engraved as to be familiar to most readers, is a noble work, of large dimensions, and in excellent preservation. Among the other splendid productions contained in this princely collection, the most remarkable are a burying of Abraham, by Nicolas Poussin, and a dying Magdalen, by Ludovico Caracci, both gems of exquisite and characteristic excellence; and besides these, there are delightful specimens of Da Vinci, Corregio, Guido, Rembrandt, Titian, Salvator Rosa, Spagnoletti Guercino, Carlo Dolce, Reynolds, Hamilton, and many other famous masters. In several of the state rooms there are rare and magnificent vases of the best periods of ancient art, together with a countless multitude of charmingly adorned cabinets, superb tables, and other articles of refined luxury. To sum up briefly, it may safely be said, that whoever makes even a cursory inspection of the works of art contained in Hamilton Palace, cannot fail to treasure up remembrances which time alone can never obliterate,

and which will afford subject for gratifying reflection while memory itself exists. To render this noble residence complete in all its parts, it is surrounded for miles by velvet lawns, interspersed with groves of stately trees, increasing in grandeur and magnitude as they recede from the mansion; and what is of infinite value to the tourist, access is very readily procured, under certain trifling though necessary restrictions.

Leaving Hamilton, where we have been irresistibly tempted to linger long, and which, from the beauties of nature and of art concentrated there, would justify as well as gratify a much longer sojourn, we set out on the onward path, taking the first deviation in the road to the left, and proceed with little interruption, till we reach the county town of Lanark, where we will pause for a brief period.

Lanark, the county town of Lanarkshire, is supposed to occupy the site of an extinct Roman city. As a royal burgh it has existed since a very early period of Scottish history, and Kenneth II., in 978, held an Assembly of Estates at Lanark, which event is looked on by annalists as the first meeting of the Scottish Parliament. The burgh is also distinguished as the scene of the first martial achievement of Sir William Wallace, who, in 1297, in that place attacked and slew William de Hesliope or Heselrigg (for the name is given differently in various accounts), the English sheriff, and drove the English garrison out of the town. The following is the traditionary account of this interesting occurrence:— Wallace having married the heiress of Lamington, lived in privacy in the town of Lanark, a short distance from the patrimonial estate of his wife; here he, with a party of his friends, having had a fray with some English soldiers, and Wallace being overpowered, fled for concealment. The sheriff immediately seized his lady, and inflicted on her the punishment of death. To avenge this cruel outrage, Wallace collected his friends, and surprised the sheriff, whom he slew, along with 240 of the English; thus, from a petty quarrel, and out of a dastardly act of cruelty, sprung the uncompromising resistance of the Scottish hero to his country's

oppressors, whom he pursued with a zeal, courage, prudence, and constancy, which terminated only with his own life, and which ultimately resulted in establishing the independence of his country. In later times, Lanark has become more celebrated for useful achievements in the peaceful arts than ever it could have done in the arena of blood and strife, even although the contest had been, unfortunately, for national independence. About the close of last century, the far famed cotton-spinning mills of New Lanark were erected by Mr. David Dale, an enterprising and intelligent merchant of Glasgow; and by his philanthropy and sagacity, a thriving community were settled in that lovely village, and secured in comparative plenty, happiness, and virtue. On the death of Mr. Dale, the establishment fell into the hands of Mr. Robert Owen, by whose schemes for the complete regeneration of mankind, the felicity of this flourishing community was greatly imperilled and all but entirely destroyed. It is not less singular than remarkable, that the plans of this sanguine individual, for the social improvement of the human race, have been not less a subject of dispute to the world, than of general disappointment to himself. Fortunately however for the community, the establishment of New Lanark has long since passed out of his hands, and is now the property and under the management of the New Lanark Spinning Company.

How interesting soever the civil history of Lanark may be, the locality falls more legitimately within the scope of a work like the present, on account of the romantic scenery to be met with in its immediate neighbourhood. The Falls of Clyde have been described with all the powers of prose, and have been celebrated in all the glowing imagery of verse; yet so far from having suffered by these encomiastic efforts, their natural beauties are rather enhanced than deteriorated, by comparing the reality with the best and most vivid descriptions. Leaving the town and pursuing the carriage road through the grounds of Bonniton, we arrive at a foot path branching off to the right, which leads us to the brink of a tremendous precipice, directly

opposite to the headlong torrent of Corra Linn, the middle fall, whose waters thundering into the dark abyss below, are ceaselessly driven up again in smoking vapour from the seething caldron which receives its flood; the vapour, illumined by the sun's rays, forming a tiny rainbow of intense brilliancy, though of limited span. The scream and balanced flight of the wild bird soaring high overhead, and mixing though not mingling with the roaring cataract's deep-toned but monotonous sound, complete the accessories to a scene of unsurpassed sublimity; while the gray time worn turrets of Corra Castle, flickering through the verdant woods, present a connecting link between the stupendous and enduring grandeur of nature, and the petty and ephemeral works of man. The river banks above Corra Linn are covered with wood, and the waters roll tortuously along a rocky bottom. About half a mile above the fall of Corra Linn, precipitous rocks approach within ten feet of each other; through which narrow channel the waters of the majestic river are forced with fearful sweep. After passing this confined rapid, a short walk brings us in front of Bonniton Linn, where the river is precipitated in one unbroken mass, over a fall of nearly thirty feet. This, the uppermost fall, although to some extent deficient in variety as compared with the other two falls, is nevertheless one of sublime interest and enchanting grandeur. The lower or Stonebyres Linn, is approached by the Glasgow road, which it is necessary to follow as far as the village of Linnvale, leaving which, we turn down a winding footpath leading towards the river, and at different points in our progress obtain glimpses of the foaming stream, till by our arrival in front of it, we secure a full view of the immense cascade, as it falls into the basin hollowed in the rock by the unceasing floods of ages. In many of its features, Stonebyres Fall bears a strong resemblance to Corra Linn; and in the opinion of many parties of taste, it is reckoned superior in beauty. The rocky precipices on either side are charmingly fringed with natural wood, through the openings in which, the rocks exhibit contrasting peeps of their hoary and rugged fronts, conferring

additional grandeur on the scene. To this enchanting locality, the following lines by Thomson are happily applicable:—

"Smooth to the shelving brink, a copious flood
Rolls fair and placid; where, collected all
In one impetuous torrent, down the steep
It thundering shoots, and shakes the country round.
At first an azure sheet it rushes broad;
Then whitening by degrees, as from its falls,
And from the loud resounding rocks below,
Dash'd in a cloud of foam—it sends aloft
A hoary mist, and forms a ceaseless shower.
Nor can the tortured wave here find repose;
But raging still amid the shaggy rocks,
Now flashes o'er the scattered fragments; now
Aslant the hollow'd channel rapid darts;
And falling fast from gradual slope to slope,
With wild infracted course, and lessen'd roar,
It gains a safer bed, and steals at last
Along the mazes of the quiet vale."

Another portion of scenery, and one scarcely less attractive than the Falls of Clyde, is to be found close by Lanark, on the river Mouse. This is at Cartland Crags. At every turn of the river a new and varying scene of rocky grandeur, heightened by the brawling of the rapid and noisy stream, breaks upon the eye, which is further delighted by luxuriant and varied foliage. The interest felt in contemplating these craggy precipices is not a little enhanced, by a knowledge, that in the caves which furrow their rugged brow, the brave and intrepid Wallace and his followers found shelter from their foes. The chasm formed in these rocks is spanned by an elegant bridge of three arches, the simple forms and regulated lines of which afford a happy contrast to the wildly irregular masses and abrupt forms predominating around.

Having now satisfied ourselves with the scenery in this interesting locality, we shall resume our journey by starting for the Carstairs Station of the Caledonian Railway, distant rather better than three miles from Lanark, where obtaining a place in

one of the trains going north-westward, we pass in rapid succession the station at Motherwell, and the extensive iron works at Carnbroe, Gartsherrie, and Dundyvan; and sweep past the extensive fire-brick and pottery work at Garnkirk, the fire clay of which is not inferior to that of Stourbridge. At this extensive work, the manufacture of ornamental vases, flower-pots, and chimney-pots, together with crucibles and other vessels intended to resist a great heat, is carried on most successfully, and these articles are manufactured in great quantity. From Garnkirk a short run brings us to the terminus at the Townhead of Glasgow, at which point our Second Excursion finds an appropriate termination.

EXCURSION THIRD.

Strathbungo — Cross-my-loof — Haggs Castle — Langside — Cathcart Castle — Pollockshaws — Nether Pollock — Haugh — Crookston Castle — Cardonald House — St. Ibrox.

In our third excursion, which shall be much more limited in its local range than either of the preceding ones, we will set out from the city, by crossing the Glasgow or Broomielaw Bridge, already described, and following the line of Bridge Street and Eglinton Street, pass Port Eglinton and the Cavalry Barracks, also already alluded to; and after having passed a very neatly constructed toll-house, we have gained the open country, although not by any means got beyond the din, dust, and smoke, continually emanating in vast dense clouds from the innumerable mills, manufactories, and steam engines, with which the whole of Glasgow so completely abounds. At the distance of about a mile and a half beyond the toll-house, having kept the road which lies to the right hand, we enter a village of no particularly attractive aspect, which rejoices in the unclassical, as well as euphony defying appellative of Strathbungo; and a short way farther on, arrive at another village, named Cross-my-loof; between which two villages, but at a short distance to the left of the traveller, is an eminence named Cross-hill, so called, it is presumed, from its having been the site of a cross, erected and maintained there in ancient times, indicative, it is said, of the co-terminous boundaries of the ecclesiastical authorities of Glasgow and Paisley. The somewhat singular, if not indeed whimsical name of the village, being derived, according to a yet current tradition, from a circumstance remotely connecting it with the battle fought

in the neighbourhood, in the year 1568, between the adherents of Queen Mary, and the troops of the Regent Murray. The story, which may be quite as authentic as several other tales of village gossip, runs somewhat in the following ancient traditionary strain: —

On the Queen's forces arriving within sight of their opponents, which, by some curious article of village faith, took place at this point, a deliberation was held here, by her Majesty's staff, when, as is not unprecedented in such cases, a diversity of opinion was entertained as to the proper steps to be taken on the momentous occasion, the more impetuous advising instant battle, the more prudent, at least, if not also the more wise among them, advocating the avoidance, if possible, of a hostile collision under existing circumstances — one of these peaceful advisers being, it is said, her Majesty's religious confessor, who, urging her with all the zeal and eloquence arising from his sincere attachment to her person and cause, succeeded only in confirming the unfortunate object of his solicitude the more resolutely in her determination to follow the councils of her probably equally zealous, though, as the event proved, less discreet advisers, and risk all to the hazard of a battle. The infatuatedly wayward sovereign, says the tradition referred to, to cut short his importunities, and get rid of arguments which could not well be answered, placing the cross which she wore in the palm of her hand, said pettishly, "I will fight him (the Regent) as sure as the cross is on my loof," (*anglice* palm) — a resolution which she carried into effect. To this incident it is said the village owes its name.

A short distance from the road, on the right hand side, not far from the village, is a very picturesque ruin, named Haggs Castle. It is a tall tower or keep, squarely built, of graceful proportions, and has evidently been constructed with an eye to tasteful embellishment. The windows still bear the traces of having once been richly ornamented with tracery of chaste and elegant design. This castle was built in 1585, by Sir John Maxwell of Pollock, as appears from a quaintly devised

inscription, carved upon a truncated triangular stone, placed over the principal door. This inscription is as follows:—

1585
NI DOMIN
ÆDES STRVXE
RIT FRVSTRA STRVIS
SIR JOHN MAXWELL OF POLLOCK KNYGHT
AND D. MARGARET CONYNGHAM
HIS WIFE BIGGET THIS HOUSE

From the peculiar construction and arbitrary contractions of its Latin portion, this inscription has given rise to curiously framed discussion among local antiquaries, although only a very little acquaintance with the architectural inscriptions, of the period referred to in that above quoted, will serve to show, that the puzzling part of it is merely a fanciful rendering of the Psalmist's eloquently pious ejaculation:—"Unless the Lord build the house they labour in vain that build it." As was common at the disturbed period of its construction, the edifice, while reared with considerable attention to architectural beauty, strength and durability have not been forgotten in its formation, any more than elegance or convenience; and besides being strongly built, it was surrounded by a wall of considerable strength and thickness. It was used for some time as a jointure house; and in all probability, was erected for that purpose by the family of Pollock. Though now deserted and dilapidated, it forms an object of great interest, in a richly wooded and otherwise finely diversified landscape. On the left hand, or east side of the road, is an eminence of no great elevation, but commanding a very extensive view. This is Camp-hill, which derives this name from having been the site of a Roman encampment, and not from having had any connection with either of the armies engaged at the battle of Langside, to which event the popular and often vulgar traditions of the neighbourhood ascribe every event, circumstance, or appellation, to which a military significance or association can be attached. In the instance now under review,

the circular camp is plainly traceable. It is but small, being only about one hundred yards in diameter, and the vallum is still entire. To the south-west of this eminence, and nearly on the ridge of the same hill, stands the village of LANGSIDE, in the immediate vicinity of which, on the 13th of May, 1568, the first and final encounter, after her escape from captivity in Lochleven Castle, took place between the adherents of the ill-starred Queen Mary and the army of the Regent Murray, in which her defeat for ever blasted the hopes of the unfortunate Princess, and was followed by exile — a more ignominious, though it might be less mortifying captivity — and a ruthless death.

The little but devoted army of Mary, on its march from Hamilton towards Dumbarton, the route to which lay in this direction, was observed by the Regent, whose forces had been previously encamped in the neighbourhood, at a place called Barrowfield; and he immediately moved into such a position as to intercept her progress. The determination, on the Queen's part, to give battle, has been already alluded to, and need not be here repeated. On reaching the road leading from Glasgow to Ayr, along which we have been travelling, the Queen's cavalry immediately formed into line on the north brow of Clincart Hill, a slight eminence adjoining, which was then entirely unenclosed and considerably overgrown with furze. The infantry, with the usual impetuosity of inexperienced voluntary levies, pushed on by a cross road; while the Queen and her staff, together with her personal attendants, pursuing the Ayr road, proceeded to occupy an elevated position, a short distance from, but commanding a complete view of the immediate scene of conflict. The principal part of Murray's infantry, and most of his artillery, were posted in or near the village of Langside, entirely commanding the road; while several squadrons of his dragoons occupied different positions of advantage in its vicinity. The conflict, at the entrance to the village, was keen and sanguinary, and was maintained with obstinate bravery, on both sides, for a considerable time; but at length the Regent's cavalry made a desperate and unexpected assault upon the flank of the royal forces, who for

some time bore up gallantly against the torrents of impetuous attack made upon them in front and flank; but raked by the artillery's sweep, which was advantageously poured upon them, and pressed by the power of superior numbers, aided by better discipline, and more skilfully concocted arrangements, they were borne down in all directions, and forced to fly. The unhappy Queen, from her post, having witnessed this final struggle and disastrous overthrow of her devoted followers, with feelings of mingled pity, mortification, and despair, concluded her luckless career as a seemingly free agent, by a hasty flight southwards, hardly slackening speed in her ill-omened journey, till she arrived at Carlisle, her only stop being a brief one at Dundrennan Abbey, in the county of Galloway. On arriving in Carlisle, as is well known, she wrote to Queen Elizabeth, representing her own distress, and imploring the assistance of her more politic than scrupulous royal kinswoman—a fatal step, which, in the eloquent language of Wordsworth, proved only the melancholy prelude

> ——— "to a long array
> Of woes and degradations hand in hand,
> Weeping captivity and shuddering fear,
> Stilled by the ensanguined block of Fotheringay."

About a mile and a half to the south-east of the village, and not far from the eminence whence Mary surveyed the field, and to her the fatal fight of Langside, is Cathcart Castle, an extensive and interesting ruin, which occupies an imposing position overhanging the rocky channel of the river White Cart. The ruins of this stronghold afford sufficient proof of its having been at one time a place of great consequence and strength. The period at which, and the individual by whom it was erected are alike unknown. On two sides it is defended by the river, from which there is an almost perpendicular precipitous rocky ascent of great height. It was in possession of Alan de Cathcart, from whom the present noble family, represented by the Earl of Cathcart is lineally descended, at the period of Bruce's struggle for the independence of Scotland, and who proved his fealty to his sovereign and his country, by rendering good service at the battle

of Bannockburn. About the middle of the sixteenth century, the then Baron Cathcart sold the barony, which after having passed through the hands of several families during two centuries and a half, was repurchased by the Earl of Cathcart in 1801. The castle was inhabited so lately as 1750, when it was given up to be demolished by the then proprietor. The materials were at that time sold to a tradesman in Glasgow, who proceeded with the work of destruction, by removing the roof; but after having essayed to take down the walls, he was forced to desist, by the strength and adhesive solidity of the building. A hawthorn bush, growing till the year 1790 near the castle, and known as "Queen Mary's Thorn," indicated the spot, whence, with anxious suspense, she witnessed the brief but decisive conflict at Langside; in that year, the hawthorn having decayed, and disappeared through extreme age, another was planted in its stead, and is still in vigorous growth. The rustic oral chroniclers of the district point out another eminence near the castle, known as the "Court Knowe," where, they aver, the Queen and her advisers held a council just before the battle, and from which event also they derive the title of the Knoll. The fact seems rather improbable, as though a consultation of the nature referred to may have actually taken place there, its duration must necessarily have been but brief; and there is only slender reason for believing, that it would be conducted with such state and formality, as to warrant its receiving the appellation of a Court. The derivation of the name of this eminence may, with much greater show of propriety, be traced to the fact of its having been the place at which, during the feudal power of the Castle's proprietor, he was wont to hold his courts of legal inquiry, and administer such justice, as was the custom of the day, in those "good old times," which at present it is so much the fashion with some parties to praise, and when the power of "pit and gallows," that is, death by hanging or drowning, was among the rights exercised over his retainers by every baron.

At the distance of little more than a mile to the westward of Langside, is the thriving little town of Pollockshaws, which has

a population of about 5000 individuals, chiefly engaged in cotton spinning, calico-printing, dyeing, and weaving — these departments of industry being prosecuted with much assiduity and success. A short distance to the west of Pollockshaws, is the mansion-house of Nether Pollock, the property and residence of Sir John Maxwell of Pollock, Bart. The house is a large and handsome edifice, four storeys in height, without any great pretensions to architectural decoration; it has, however, the commendable qualities of being substantial and commodious, and is beautifully situated on the right bank of the river White Cart. It is likewise surrounded by admirably laid out pleasure grounds, extensive plantations, and well kept lawns — a combination rendering it highly delightful as a residence, and also ornamental to the district.

Leaving Pollockshaws in a somewhat southerly direction, and passing the village of Auldhouse, the road diverges to the right, and at the distance of rather better than two miles, reaches the village of Haugh, near which are situated the ruins of Crookston Castle, celebrated in the pages of Scottish history, and alike endeared to the antiquary and the minstrel. These ruins, which are obviously very ancient, are the remains of a baronial residence, the first proprietors of which, so far as can now be traced, were gentlemen of Norman extraction, and bore the name of Croc, and who, at an early period of the twelfth century, were the principal vassals of Walter, the great steward. Considerable discussion has arisen among genealogists, as to the patronymic of this family; but the best authorities concur in that given above, and also in the fact, that the castle derived its distinctive appellation of Crocstown, as being the residence of the Crocs — in lowland Scotch, town being a name still applied to a mansion-house or farm steading, as well as to the more generally understood collocation of dwellings known as a town. From the original name of Croc's town, the orthography and the pronunciation have equally diverged into the present Crookston. In the thirteenth century, the barony of Crookston having devolved upon a female named Marion Croc, she by her marriage with a

CROOKSTON CASTLE
From the South East

younger son of the distinguished house of Stewart, conveyed her patrimony to that fortunate family; and her family name, as in most such cases, was lost in the surname of her husband. The united possessions, now converted into a regality, of the heiress of Croc, and the cadet of the royal Stewarts, were very extensive, comprehending the baronies of Darnley, Nielston, and Inchinnan, in the county of Renfrew; and that of Tarbolton in Ayrshire. In 1445, Sir John Stewart of Darnley was created a Scottish peer, by the style and title of Lord Darnley; and in or about 1481, the earldom of Lennox, which had been held and forfeited by his mother's father, was revived and bestowed upon him. In 1565, Henry, Lord Darnley, eldest son of Matthew, Earl of Lennox, baron of Crookston, was married to Mary, Queen of Scots. The fruit of this marriage, was James VI. of Scotland and First of England. It thus becomes readily apparent, that while our gracious sovereign, Queen Victoria, by indirect descent, represents the royal house of Stewart, through the unfortunate Mary, she also, through the lineage of Darnley, and the Darnley-Stewarts, is representative, still more indirectly, of the Scoto-Norman family of Croc, the early possessors of this domain, if not in point of fact the builders of Crookston Castle. After very numerous and varied mutations of ownership, the castle and lands of Crookston, and the barony of Darnley, passed, about the year 1757, by purchase, into the hands of Sir John Maxwell of Nether Pollock, in whose family, with small exceptions, they have ever since remained.

According to the account of Pennant, who visited the castle in 1772, and whose description in regard to situation and landscape accompaniments may still be received as correct:—"The situation is delicious, commanding a view of a well cultivated tract, divided into a multitude of fertile little hills." These ruins crown the summit of a conspicuous, though not very elevated wooded slope, overlooking a tract of country of the most richly varied aspect, including richly verdant uplands, fertile vales, and winding streams. Apart from the interest excited by the struggle these hoary ruins have maintained against the inroads of

time, and unconnected with the beauties of the adjacent scenery, Crookston Castle is invested with a somewhat romantic, although also melancholy interest, from their association with the name and fortunes of Mary, Queen of Scots; and concerning whose connection with it, there are in the neighbourhood, and elsewhere, several traditions current, the influence of which, from the pertinacity with which they are maintained, can scarcely be said to suffer sensible diminution from a knowledge of their utter fallaciousness. The first of these is, that within the walls of Crookston, the luckless princess first beheld the stalwart figure of her future ill chosen and unfortunate mate; the second, that immediately after the celebration of their marriage, at the palace of Holyrood, Darnley conducted his royal and lovely bride to his father's castle of Crookston; the third, that from the immediate vicinage of this venerable pile, Mary beheld the discomfiture and destruction of her gallant though little army, and her last and only chance of regaining her crown, also the enjoyment of her personal liberty. This last tradition, and a superstition kindred to, and arising out of it, which still retains a welcome place in the cherished traditionary reminiscences of the peasantry, is thus felicitously embodied in "Clyde," a poem, by John Wilson, a local poet of deserved celebrity:—

> But dark Langside, from Crookston viewed afar,
> Still seems to range in pomp the rebel war:
> Here, when the moon rides dimly through the sky,
> The peasant sees broad dancing standards fly;
> And one bright female form, with sword and crown,
> Still grieves to see her banners beaten down.

To all of these traditions, however pleasing to contemplation, and how much soever they may harmonize with the behests of poetic imaginings, the stern declarations of cotemporary history presents no unequivocal negative. As previously noticed, the hapless lady witnessed that disastrous field from an elevated spot near Cathcart Castle; but whether that had been the case or not, the nature of the country renders an inspection of the scene of battle at Langside a physical impossibility from Crookston

Castle. As to the second, we have very conclusive evidence, from cotemporary documents, that Darnley attended divine worship in Edinburgh on the two consecutive Sundays immediately succeeding the marriage; while on equally authentic testimony it is known, that the first time Mary saw Darnley was at Wemyss Castle, usually called Macduff's Castle, in the county of Fife. It is certain, however, that during the very brief period of domestic sunshine which followed the union of that illustrious pair, they passed some time together in Crookston Castle. On a small but commanding elevation near the castle, on its eastern side, there grew for many years a yew tree of elegant form and stately proportions, which was known as "The Crookston Tree," beneath the gloomy and portentous shade of which the royal couple were in the habit of passing their hours of relaxation during their sojourn at the castle. In his description of Renfrewshire, published in 1710, Crawfurd speaks of this tree, as being then a "noble monument, well spread in its branches," and describes it generally as of large dimensions; and such it continued to be for more than half a century after the date of Crawfurd's observation. About the year 1780, by way of experiment in verification of some arboricultural theory, the tree was pruned. What particular result was meant to be obtained from this unexplained and unfortunate experiment is not known; and more need not be said on the subject now, than that from the period of its being pruned, the tree gradually degenerated, withering branch by branch, and died. In the blighted and leafless condition to which it was thus unintentionally reduced, it remained for many years a dismally expressive memento of the misplaced loves and broken fortunes of the unhappy pair, with the tragic story of whose melancholy fate it was in the vigour of its growth romanticly connected. How long it might thus have remained a funereal remembrancer of the poisoned affections and blighted hopes expressed beneath its ominous shadow, is a question now impossible of solution, as the reprehensible and ruthless cupidity of relict collectors, induced the numerous body of that fraternity, who in countless numbers, and ceaselessly recurring

squadrons, annually visited the spot, to lop branch after branch from the withered trunk, till by far the greater portion of the seared and stricken memorial was shamefully, though it might be inconsiderately, purloined; and to save the yet remaining fragment to himself, the proprietor, Sir John Maxwell, in the year 1817, rooted up the stump, out of which he caused to be manufactured several articles of ornament or use — among other matters, a well executed model of Crookston Castle, which still stands in Pollock House, was made from it. In such veneration was this tree held by several gentlemen residing in the vicinity of its original growth, that one or two cuttings which had been obtained from it, and successfully reared, were made subjects of special reservation, in the sale of the properties on which they had been cultivated, and one of which growing slips was with much ceremonial planted in the Glasgow Botanic Garden, in 1817, having been bestowed as a valuable gift by its proprietors, upon that institution, at the formation of the present garden.

Bidding adieu to the venerable and enduring ruins of Crookston Castle, and the charming views by which the neighbourhood is surrounded, let us follow for some distance a northerly direction, along the murmuring mazes of the Leven Water. At no great distance from its junction with the White Cart, we arrive at an old mansion, castellated in its architecture, and of large dimensions, situated on the bank of the latter stream. This is Cardonald House. It is embowered among wood of large growth, and was once occupied as the favourite residence of Walter, Lord Blantyre, to whose family the property still belongs. This venerable and imposing edifice, now shorn of its aristocratic associations, and stripped of its lordly trappings, is let to various tenants — *Sic transit gloria mundi!* Leaving Cardonald and its faded glories, we at a short distance from the house regain the highway between Glasgow and Paisley, and turning to the right hand, about two miles onwards, pass on the right the gate of entrance to the mansion of St. Ibrox, at no great distance from which we enter the suburbs of Glasgow; pursuing the route through which, after passing a toll-house about

a mile, our line of progress now leads us under the arches which support the roadway of the South Western Railway across King Street, and enter Bridge Street, close to the booking offices of the above named railway company. Having once more regained a central position in Glasgow, we will there take leave of our kind and indulgent reader.

FINIS.

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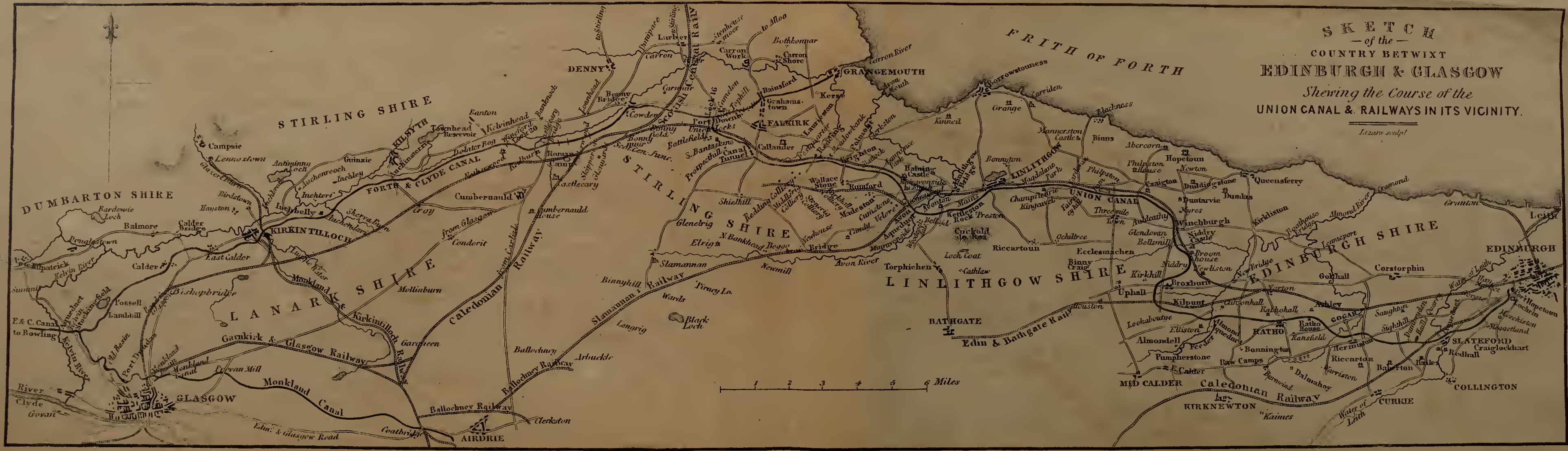
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