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**The Kilkenny Marble Works: A Family Business
Enterprise**

**PhD Thesis submitted to the
History of Art and Architecture Department
Trinity College Dublin**

Volume I

2011

Tony Hand

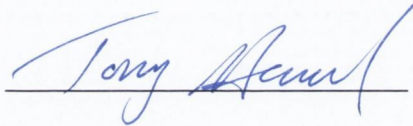


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A handwritten signature in blue ink, reading "Tony Hand", is written over a horizontal line.

Tony Hand.

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Summary

This thesis is the first comprehensive study of the Colles family of Kilkenny and their business enterprise, the Kilkenny Marble Works. It examines how this local industry influenced the marble trade on a national and international scale. The founder of this venture, Alderman William Colles (1702-1770), is considered to have been the first person in the British Isles to have used water powered machinery to cut and polish the famous black marble of Kilkenny. While examining the influence of the Kilkenny Marble Works on the decorative and architectural heritage of Ireland and further afield, this study also traces the role of this venture in the industrial and economic development of the country over a period of almost two centuries.

The first source examined for this study was archival material. Eighteenth-century manuscripts in Ireland, Britain and America reveal that Irish marble, particularly Kilkenny marble, was a much sought after commodity. Customs records give some indication as to the extent of Ireland's involvement in the marble trade during the eighteenth century. Within a short time of its inception, the Kilkenny Marble Works became a prime producer of decorative marble ornaments and was seen as a model of progress and improvement in many parts of the world.

The second source examined was published material. References to Kilkenny marble and the marble mills can be found in a myriad of published works, such as travel books, natural history and geology books, works dealing with architecture and building construction, parliamentary records and craftsmen's manuals. Material published on trade and economy, along with newspaper articles, indicate the widespread use of Kilkenny marble. This is the first time that such various sources have been brought together to form a comprehensive study of this family and their marble enterprise.

Visits to the site of the Kilkenny Marble Works, the Black Quarry and other areas associated with the Colles family were an integral part of this study. Anecdotal evidence from craftsmen involved in the marble trade in Kilkenny has been incorporated into this thesis to provide a greater understanding of this industry. In combining such diverse sources, this thesis provides new information on the contribution of the Colles family and the Kilkenny Marble Works to the industrial, economic and artistic heritage of this country.

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Finally, to my wife Carol and my children Edie, Joe and Susie, thank you for all your love, support, patience and companionship on this wonderful journey.

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Abbreviations:

- BL: British Library.
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- CARD: J.T. Gilbert (ed., vols. VIII–XV edited by R. M. Gilbert), *Calendar of the ancient records of Dublin*, 15 vols, Dublin, 1869–1911.
- Gunnis, *Dictionary*: Rupert Gunnis, *Dictionary of British Sculptors 1660-1851*, London, 1953.
- JH of C*: *The journals of the House of Commons of the kingdom of Ireland*, 19 vols, Dublin, 1796–1800; index, 2 vols, Dublin, 1802.
- Lewis, *Topographical Dictionary*: Samuel Lewis, *Topographical Dictionary of Ireland*, 3 vols., London, 1837.
- Nat. Arch. Dub: National Archives Dublin.
- Nat. Arch. Kew: National Archives Kew, London.
- Neely, *Kilkenny*: W.G. Neely, *Kilkenny: An Urban History 1391-1843*, Belfast, 1989.
- NLI: National Library of Ireland.
- Potterton, *Irish Church Monuments*: Homan Potterton, *Irish Church Monuments 1570-1880*, Ulster Architectural Heritage Society, 1975.
- Presentments*: *Bristol Port Presentments*, Bristol Reference Library and Bristol Record Office.
- PRIM: Prim Papers, National Archives, Dublin. NA ref. no. 2/469/10.
- PRONI: Public Record Office of Northern Ireland.
- RCJ: Richard Colles Johnson – Colles Family Papers, Midwest Manuscript Collection, The Newberry Library, Chicago.
- RD: Registry of Deeds, Dublin.
- Statutes*: *The Statutes passed at large, passed in the Parliaments held in Ireland*, 13 vols, Dublin, 1786-1801.

- TCD: Trinity College Dublin muniments.
- Tighe, *Statistical Observations*: William Tighe, *Statistical Observations Relative to the County of Kilkenny, made in the years 1800 & 1801*, 2 vols., Dublin, 1802, reprint Kilkenny, 1998.
- Watters, 'Kilkenny Canal': Patrick Watters, 'The History of the Kilkenny Canal', *The Journal of the Royal Historical and Archaeological Association of Ireland*, Fourth Series, vol. ii, 1874.
-

Introduction.

The carboniferous limestone beds that underlie the central plains of Ireland have been exploited for centuries. Marble quarries located in these beds proved to be a very profitable asset for many estate owners from the late sixteenth century through to the early eighteenth century. During this period Irish marble was being quarried in vast amounts and shipped abroad, mainly to England, where quality marble was in short supply. Statesmen, politicians, wealthy landowners and some prominent architects were involved, to various degrees, in the exploitation of Irish marble for use in major construction works in England during this period. Quarries of excellent marble and limestone played a vital, if seldom recognised, role in the concept of improvement in Ireland during the late seventeenth century and continued throughout the eighteenth century. This thesis will examine how, during the eighteenth century, a number of such quarries came under the control of one particular family, the Colles family of Co. Kilkenny. This family set about restructuring the marble industry in Ireland by taking it out of the control of the elite and with the introduction of modern technology, brought about changes that had far reaching effects on the marble trade on both sides of the Atlantic.

The methods used in quarrying progressed little since medieval times, as did the methods used for cutting the stone once it had been removed from the quarry face. As these quarries were controlled by a privileged group of people, there seemed to be little interest in modernising quarrying and stonecutting methods as labour was plentiful and cheap. However, by the early decades of the eighteenth century, the demand for high quality stone increased as the landlord class set about improving and modernising their estates on a grand scale. By the end of the seventeenth century and the beginning of the eighteenth century architectural taste had changed. Country seats were being renovated and others were being newly built as the need to fortify one's residence was no longer necessary, battlements were now giving way to pediments. As the eighteenth century progressed, towns and cities began to change as peace descended on the country. Trade and business began to prosper giving rise to the construction of new buildings and infrastructures to assist the economic growth of the country. New roads, bridges, and canals were needed for rapid transportation of goods to ports and markets, all requiring enormous volumes of stone. Rather than shipping this natural resource to Britain, most

of the stone remained in Ireland to, literally, rebuild the country. Many of the country's natural resources were now come under the control of a different type of individual emerging in Irish society, the entrepreneur.

Toby Barnard, writing in 2008, states that the 'cults and cultures of improvement' from the mid-seventeenth century to the late eighteenth century in Ireland involved many collective endeavours, while others were the 'effort of an individual.'¹ Adherents to this culture of improvement had, according to Barnard, 'a mission to spread their beliefs and practices.'² Louis Cullen states that the Industrial Revolution had a major impact on Ireland in the eighteenth century, both in economic and technological terms. The steam engine was the driving force behind the technological advancements, but, as Cullen elaborates, the revolution in technology was not solely linked with the steam engine, 'it also involved the application of water-power to new uses, or on a larger scale than in the past.'³ One individual involved in almost every aspect of the Industrial Revolution in Ireland, both in economic and technological terms, was William Colles of Kilkenny.

Alderman William Colles (1702-1770) of Abbeyvale, Co. Kilkenny became involved in the Kilkenny marble business in about 1730. Colles was not reticent about self promotion and was certainly not averse to publicly communicating information regarding his inventions and improvements. On 15 November 1743, he wrote a letter to Rev. John Perry in Dublin. In this correspondence Colles informs Perry that 'As to my Improvements...I am always on new Inventions for Doing Everything of Marble wch Can be Done with It.'⁴ It was not only the marble industry that benefitted from Colles's inventive spirit, the modernisation and expansion of the linen and flour industries were brought about by machinery and technology of his own design. William Colles was also endowed with an entrepreneurial spirit which was to the fore in his attempt to secure a canal for Kilkenny, thereby enabling the swift transportation of the region's produce to both the home and foreign markets, especially his own. This thesis will examine the efforts of this particular 'individual' and individuals of successive generations of the Colles family in the improvements carried out in the marble industry during the eighteenth, nineteenth and twentieth centuries. While the main focus of this thesis is on

¹ Toby Barnard, *Improving Ireland? Projectors, prophets, and profiteers, 1641-1786*, Dublin, 2008, p. 11.

² *Ibid.*, p. 13.

³ L.M. Cullen, *An Economic History of Ireland since 1660*, London, 1972, p. 91.

⁴ PRIM, William Colles to Rev. John Perry, 15 November, 1743.

the Kilkenny Marble Works, the improvements brought about in other trades and industries by members of the family will also be addressed.

One of the main sources examined for this thesis are the Prim Papers, miscellaneous papers relating to the history of Kilkenny in the 17th and 18th centuries compiled by John G. A. Prim located in the National Archives, Dublin. These papers contain transcripts of a number of letters written by William Colles of Abbeyvale. The transcripts provide a fascinating insight into the personal and business relationships of William Colles. The bulk of these transcripts span a period from the 1740s through to the late 1760s. These documents enlighten us as to the network of contacts built up by William Colles over this period. The contacts include MPs, peers, clergy, landed gentry and, more importantly from the point of view of this thesis, architects, fellow entrepreneurs, societies and boards whose main aims were the promotion of numerous improvement schemes throughout the country. This correspondence portrays William Colles as a proactive campaigner for a number of schemes that were not only beneficial at a local level, but also at a national and international level.

Another important source examined is the Colles Family Papers in the Midwest Manuscript Collection of the Newberry Library, Chicago, USA. This source was compiled by the late Richard Colles Johnson of Chicago, a bibliographer and librarian at the library. During his time there he succeeded in gathering thirteen boxes of correspondence and copies of documents on his ancestry, a large portion of which relate to the Colles family. The Colles family can trace its ancestry back to thirteenth-century Worcestershire in England and the first member of the family settled in Ireland at the end of the sixteenth century.

William Colles is regarded as the first person in Ireland and Britain to have used water power to cut and polish marble. On the successful conclusion of his experiments, Colles announced to the newly formed Dublin Society that he was producing a variety of marble items utilising the distinctive marble of the Black Quarry on the outskirts of Kilkenny city. Many contemporary sources provide detailed accounts of the quarry and the Kilkenny Marble Works during the eighteenth century, the most important being the papers of the Physico-Historical Society in the Public Library in Armagh. The Society was established in 1744 with the view to record the antiquities, natural history, geography, economy and society of the whole of Ireland. The account of Colles's business enterprise is one of the most complete of all the records in this collection.

Another important source, detailing the Kilkenny Marble Works at the beginning of the nineteenth century, is William Tighe's *Statistical Observations Relative to the County of Kilkenny, made in the years 1800 & 1801*, published in 1802.

William Colles was a prime mover in the various attempts to establish the Nore navigation during his lifetime. His correspondence displays how he canvassed local and national dignitaries and politicians in attempts to set up navigation projects in the Kilkenny area. The transcripts in the Prim Papers, along with parliamentary reports contained in the *Journals of the House of Commons of the Kingdom of Ireland* provide a valuable insight into the prolonged campaign by Colles to make the river Nore navigable to the tidewater at Inistioge, Co. Kilkenny. This project proved a dismal failure with much blame being apportioned to Colles after his death in 1770. This thesis will examine in detail the role of William Colles in the navigation of the River Nore.

As the largest inland city in the country, it was imperative that Kilkenny had a direct access to the port of Waterford for the exportation of its produce. William Colles understood how a canal would ensure that greater volumes of products from Kilkenny and the surrounding areas could be shipped more economically to ports all over Ireland and Britain. The disadvantage of having to transport the produce of the Kilkenny Marble Works by road did not deter the Colles family from exporting large amounts of Kilkenny marble, in finished and rough form, to Britain and further afield. The family also imported large quantities of Italian marble into Ireland via the then burgeoning port of Liverpool. Customs records, examined in the National Archives at Kew, London, provide much information on the export of Irish marble products to Britain during the eighteenth century. However, these accounts are extremely vague in revealing the source and destination of these products, therefore a speculative approach has been adopted to interpret the fact that the increase in marble exports to Britain coincided with the increase in production at the Kilkenny Marble Works. Further primary sources have been examined in Bristol which gives some indication of the quantity of Irish marble imported through that port during the late eighteenth and early nineteenth century. Contemporary newspaper articles and advertisements indicate that Kilkenny marble was a very desirable commodity all over Britain throughout the nineteenth century.

The largest project involving the Kilkenny Marble Works and public funding was the Nore navigation. However, William Colles was involved in practically all the public works carried out in Kilkenny in the latter half of the eighteenth century. Here again the

Prim Papers and parliamentary accounts prove invaluable in highlighting the extent of Colles's involvement in the construction and rebuilding of Kilkenny's infantry barracks and the horse barracks and also the rebuilding of John's Bridge and Green's Bridge in the city after the devastation wrought by the great flood of 1763. The Tholsel and Courthouse in the city were also buildings associated with the Colles family.

The use, or attempted use, of Kilkenny marble in public works was not limited to Kilkenny. The Prim Papers contain an account of an unsuccessful attempt to supply Dublin with water pipes made from Kilkenny marble. Further attempts to supply marble pipes to the cities of Cork and Waterford also proved fruitless. Kilkenny marble was also used in the construction of the Custom House in Limerick. William Colles's nephew Christopher Colles played a central role in the construction of this building and his letters in the Richard Colles Johnson collection reveal much about his formative years in Ireland and his relationship with his uncle. These letters have been closely examined and for the first time a more complete account of Christopher's association with navigation works carried out on the rivers Nore and Shannon will be presented in this thesis. These letters also give us a better understanding of Christopher's work with Davis Dukart⁵ on the construction of the Custom House in Limerick.

Ecclesiastical works were an important feature of the Kilkenny Marble Works during the eighteenth century. Commissions for restoration works at St. Canice's Cathedral and St. Mary's church in the city were carried out by William Colles, the work on the cathedral being executed on the instruction of Bishop Richard Pococke. Many church monuments and memorials contained elements of Kilkenny marble, some of which are examined as private commissions. Yet, many private commissions utilising stone products manufactured by the Colles family were on a far greater scale. A variety of sources have been examined to establish that many of the great houses of Kilkenny were constructed by the Colles family, or were supplied with materials from the Kilkenny Marble Works.

Throughout the nineteenth century and the early twentieth century, the Kilkenny Marble Works and later, its successor, the Irish Marble Co. Ltd., continued to export marble to Britain, the United States and as far away as Australia. With the Colles family still running the business, the firm was constantly adapting and modernising as it led the

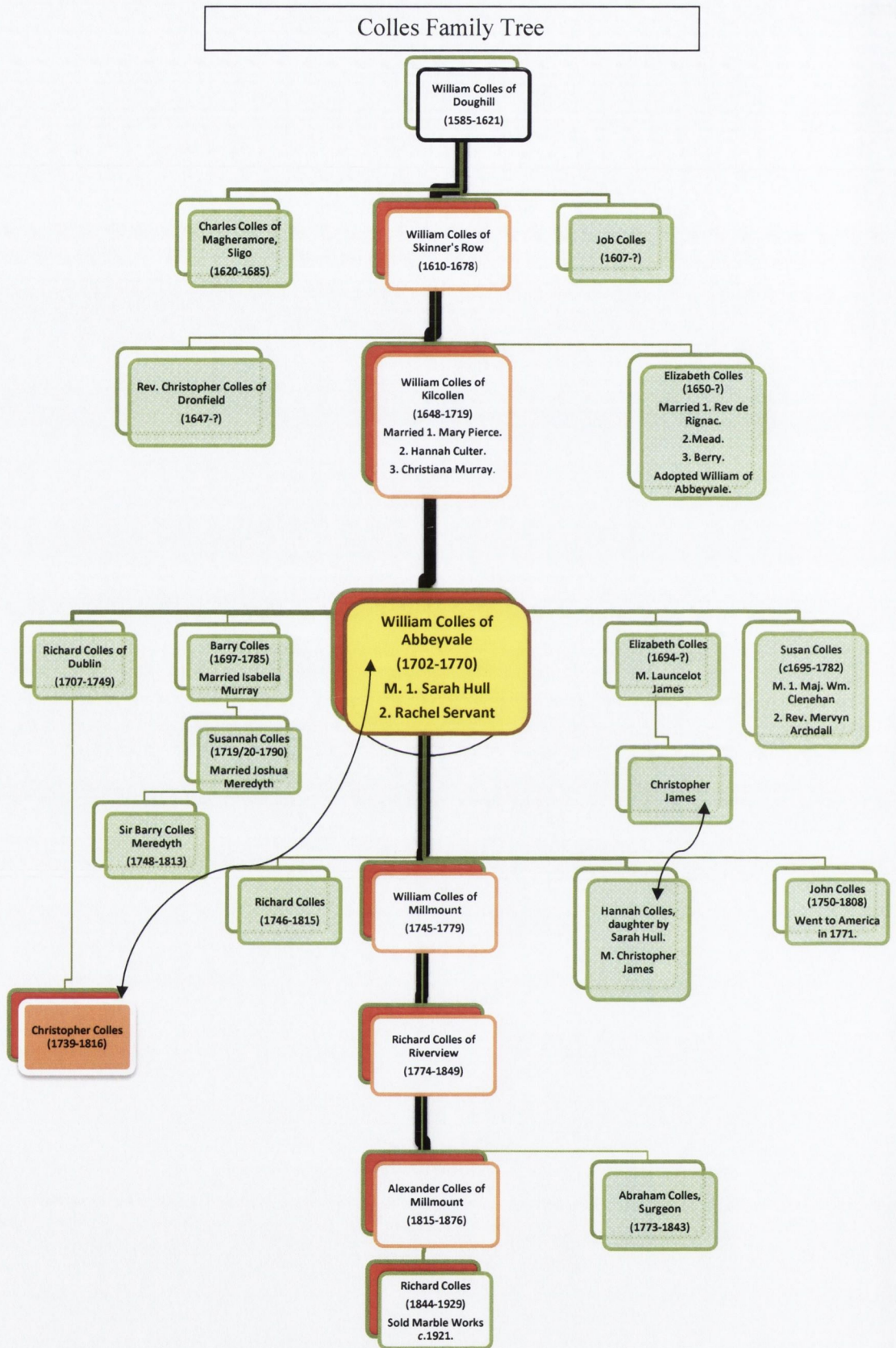
⁵ For the purpose of consistency the spelling of Davis Dukart's name with a 'k' will be used throughout this thesis, as this is the variation used by William Colles of Abbeyvale and John Ferrar in his book *An History of the City of Limerick*. Alternative spelling will only be used when citing published works.

market in marble production. The family expanded its occupation of quarries far beyond Kilkenny, eventually advertising itself as the largest marble concern in the British Isles. Even at this stage the transportation of the marble from Kilkenny to Dublin and Waterford proved problematic, as newspaper articles and parliamentary reports reveal. The costs imposed by the railway companies on the carriage of goods from Kilkenny to Dublin and Waterford appear to have been exorbitant according to the Colles family, who were vociferous in their campaign to have the charges reduced; this will be examined in detail.

As noted above, much material exists on the Colles family and the Kilkenny Marble Works during the eighteenth and early nineteenth centuries, but little has been gathered and published on the family and its business enterprise since then. The family papers in Chicago do not reveal a great deal of information on the Kilkenny branch of the family during this period. However, documentation does exist on the Kilkenny marble trade during the latter half of the nineteenth century, much of it dispersed over diverse disciplines and often concentrating on particular aspects of the trade. During the twentieth century a number of articles have appeared in various editions of the *Old Kilkenny Review*, the last one of any note being a concise piece published on the Kilkenny Marble Works in 1949. While this particular article provides a general history of the Marble Works, it does not reveal anything new on the endeavours of the Colles family in Kilkenny. This thesis will be the first time that these various sources have been gathered together to provide an in-depth study of the Kilkenny Marble Works.

The main theme of this study is the Colles family and the Kilkenny Marble Works, however, the underlying themes of improvement and modernisation are inextricably linked to the marble trade throughout the full period of the family's tenure of the marble business in Kilkenny. For almost two hundred years the Colles family ran a very successful business enterprise that brought a financial stability to Kilkenny and made its marble famous throughout the world. It took a little over a decade to almost obliterate this industry after the departure of the family from the area. The main thrust of this thesis is architectural history, but throughout this study many questions and problems are raised concerning other issues such as the transport and export of Kilkenny marble on a national and international scale. Some of these questions have been provided with satisfactory answers, but many have proven difficult to resolve. However, this

dissertation may be regarded as the starting point for future research in this particular field.



Colles family tree displaying the main characters mentioned in the text.

Chapter One.

The Colles Family.

The Newberry Library in Chicago, USA, has a large collection of material pertaining to the Colles family. This collection was compiled over many years by a member of the family and also a member of staff at the library, Richard Colles Johnson (1939-1998). Colles Johnson was a bibliographer and librarian and joined the Newberry in 1963. During his time there he corresponded with many members of the Colles and Johnson families spread throughout the world, to seek information and documentation on his family. His efforts resulted in amassing 13 boxes of correspondence and copies of documents, a large portion of which relate to the Colles family. Colles Johnson continued the great family tradition of preserving and recording as much of the family history as possible. It is this collection that will provide most of the information for this chapter, with supplementary material drawn from the Prim Papers in the National Archives, Dublin and other related sources, resulting for the first time in a comprehensive account of the family in Ireland.

The main protagonist of this thesis is William Colles of Abbeyvale (1702-1770) (Fig.1.1) and, although the central focus is placed upon William's marble business, this particular chapter will introduce and examine the improvements and innovations the Colles family brought to other trades and professions. It will also place the family in context of the concept of improvement in eighteenth-century Ireland. To avoid confusion regarding which member of the family is being examined at a particular time, a family tree has been prefixed to this chapter. William was a very popular choice of name in the Colles family and each William of relevance to this thesis will be addressed by their place of residence e.g. William of Abbeyvale. Whilst concentrating on the direct lineage of William there will be references to other family members who played a progressive role in society, both in Ireland and abroad. Never a family to rest on its laurels, the Colles sense of improvement and progression pervaded almost every generation of this remarkable family.

The Colles family can trace its ancestry back to thirteenth-century Worcestershire and, according to the Colles family records, the first member of the family to have settled in Ireland was William Colles of Doughill (1585-1621). William originally came to Ireland as secretary to Sir John Harrington. Harrington accompanied the Earl of Essex to

Ireland in 1599. This would suggest that William was only fourteen years of age on his first visit to Ireland and on returning to England he decided to engage his uncle, Sir Roger Purefoy, along with eight other gentlemen and twenty yeomen, to follow him back to Ireland sometime later. Colles eventually settled in the townland of Doughill in county Roscommon. It was here that his four children were born, one daughter and three sons.⁶

William's eldest son, Job, served under Lord Hamilton on the Continent. Upon being wounded at the Battle of Breitenfeld, fought during the Thirty Years War near Leipzig in September 1631, Job was presented with a silver handled sword by King Gustavus of Sweden. This was the same sword that was left to William Colles (1702-1770) of Abbeyvale, Job's grand-nephew, as part of his inheritance when his father passed away in 1719, as mentioned below.

The youngest son of William of Doughill, Charles (1616-1685), is said to have served in the Cromwellian army and received large grants of land in counties Sligo, Wexford and Kilkenny. His Kilkenny property was located in the barony of Crannagh in the north west of the county. It is not certain if his Kilkenny property was ever handed down to the Kilkenny branch of the family. Charles served as High Sherriff of county Sligo and also served as Provost Marshal of Connaught for 14 years. Although Charles chose to settle in Sligo, he died at Phibblestown in west county Dublin and was buried in the chancel of St. Michael's Church in the city.

The second son of William Colles of Doughill was born in 1610 and was also named William (of Skinner's Row). The younger William's first wife and their two sons perished in the rebellion of 1641. William escaped and made his way to Coventry where, in 1646, he remarried. With his second wife Elizabeth and some of the children of this marriage, William returned to Ireland in September 1658 and set himself up as a merchant in Skinner's Row in Dublin and was engaged in buying and shipping merchandise to London, though what this merchandise was is unrecorded.⁷ His eldest surviving son, Christopher (1647-1724), remained in England when the family returned to Ireland. Christopher became a clergyman and was appointed minister of the parish of Dronfield in Derbyshire. William's second surviving son, again named William (of Kilcollen), kept a journal, no longer in existence, and it is from his accounts that the early part of the family history has been recorded and handed down. At some stage during the

⁶ J.H. Glascott and Rev. W. Morris Colles, *The Pedigree of the Family of Colles in Ireland*, London, 1886, p. 3. This book was printed for private circulation and is not a very comprehensive account of the family.

⁷ RCJ, Box 1, file 16, p.12.

late 1670s this William Colles settled in Kilkenny and it is from this point on that we shall examine the Colles family in greater detail.

William of Kilcollen (1648-1719), of the city of Kilkenny (the father of our main protagonist, William of Abbeyvale), was born in England and was one of the children to accompany his father back to Dublin. He appears to have been involved in his father's business, as there are a number of references to his having bought and shipped to London 'merchandise for his father', in his journal, mentioned above.⁸ Colles Johnson records that the abstracts of invoices contained in this journal were unintelligible from the abbreviations that William used, rendering them useless in the recognition of the type of merchandise that the family was dealing in.

William's initial ambition, influenced by the adventures of his uncle Job, was to become a soldier. As he grew older his attention was drawn to the church, but on account of his 'imperfect speech' he 'left the Church of Christ to his brother Christopher'.⁹ William was permitted by his father to leave Dublin for Coventry on 14 July 1668 in order to study 'physic and Chirurgerie', a profession better suited to 'the head and hands rather than the tongue'. On 19 November 1668 William began his medical studies in Brandon, four miles east of Coventry, under the tuition of Mr. Norton. Over the next few years William travelled over and back to Ireland a number of times, returning to the Coventry area after each visit home and, on occasion, would pay a visit to his brother Christopher in Dronfield. On 1 July 1671 William arrived back in Dublin, where he remained until early the following year. It would appear that by this time William had either completed, or terminated, his education with Norton, as, on 19 February 1671/2, he left Dublin for London to study medicine under the 'celebrated Lodge of Greenwich'. In October 1672, William boarded a ship bound for Lisbon as its surgeon and did not return to London until 1 June 1673. He continued his studies under Lodge until April 1674. There appears to have been some sort of falling out between William and Lodge at this point. Lodge lost most of his practice and William requested that his fee be returned to him. It is unlikely that William had his fee returned, as he complained bitterly of the injustice perpetrated by the arbitrator in this issue, one Alderman Hayes, Lodge's uncle.

William Colles returned to Dronfield where he remained during the summer of 1674 and on 4 August he left for Sheffield where he settled for the next four years. On 22 April 1678, after a visit to Chester, he returned to Sheffield where he discovered that his

⁸ Ibid.

⁹ Ibid.

plans to marry ‘the young Lady Sarah Stretton’ were dashed on account ‘of some trouble or scandal which he was in, but happily and creditably got through’. It must have been soon after this disappointment (albeit a short-lived one, as he was subsequently married on three occasions) that William returned to Ireland and ultimately settled at Kilkenny.

Once in Kilkenny, William (of Kilcollen) set about acquiring large tracts of land. He purchased the townlands of Kilcollen, Madleen and Lisnafunchin in the Barony of Kells from Kilkenny Corporation. This acquisition of land would indicate that William was earning quite a substantial sum from his medical practice. In his own typed notes on the family, Richard Colles Johnson states that William also acquired land from ‘James, 2nd Duke of Ormond’, but he does not indicate a source for this information and does not elaborate any more on this. Another source states that William bought land from the corporation ‘owing to his friendship with the second Duke of Ormond’.¹⁰ There is evidence to suggest that William Colles was known to Ormond as he is believed to have been the author of *A Diary of Events in Ireland 1685-90*, printed in the *Calendar of the Manuscripts of the Marquess of Ormonde*.¹¹

William experienced problems with the boundaries of some of his properties. Visiting the office of the Surveyor General in Dublin, William, writing to Josias Haydock in Kilkenny, indicated that the physical boundaries and those on the maps were not in agreement.¹² He mentions how ‘hardly [sic] I have been dealt with all along’ and would be ‘glad to be advis’d by your good father and yourself.’ William’s eldest son Barry inherited the above named townlands, but on his death the land passed from the Colles family to the Meredyth family through the marriage of Barry’s only daughter, Susannah. Susannah married Joshua Meredyth and their eldest son, Sir Barry Colles Meredyth, 7th Baronet of Shrowland, County Kildare, inherited all his grandfather’s lands.

William was the owner of property in Dublin also. The *Georgian Society Records* state that, No. 100 (later 113) St. Stephen’s Green, along with ‘other houses on Lots 13 and 14’ were built in 1716 by William Colles.¹³ Colles had a penchant for having his portrait painted every seven years to remind himself of the passing of time. One of his portraits now hangs in Rothe House in Kilkenny (Fig.1.2). The artist is unknown, but the

¹⁰ RCJ, Box 1, file 16.

¹¹ Royal Commission on Historical Manuscripts, *Calendar of the Manuscripts of the Marquess of Ormonde, K. P.: Preserved At Kilkenny Castle*, vol. viii, London, 1920, pp. liv-lv.

¹² NLI, Ormond Family Papers, XII. iv, Correspondence to Ormond family concerning Corporation of Kilkenny, Ms. 11,058/3/I, William Colles to Josias Haydock, 18 December 1692.

¹³ *The Georgian Society Records of Eighteenth Century Domestic Architecture and Decoration in Dublin*. Facsimile edition of 1909-1913 edition, 5 vols., Dublin, 1970, vol. ii, p. 106.

painting was completed in 1712, depicting William at 64 years of age, seven years prior to his death.

William of Kilcollen had one sister named Elizabeth, born 4 March 1649/50. Elizabeth married Rev. Elias de Vassall de Rignac in 1664. Her husband was a minister in the diocese of Londonderry. French by birth, but of Spanish extraction, Rev. de Rignac died in France in 1669 and by April 1670, Elizabeth had remarried. Her second husband, Robert Mead of Dublin, was a captain in the militia and was killed in Castle St. in 1693. Three years later she married John Berry, but he passed away in 1705. Her three marriages appear to have left her a wealthy woman, but she was also left childless. She had one child from her first marriage, but this child died at a young age in the 1660s. In her later years Elizabeth adopted her nephew, our hero, William of Abbeyvale. When William was adopted by his aunt is unknown and we know very little of his formative years.

William of Abbeyvale's father (William of Kilcollen) passed away in 1719 and declared in his will that his son was so amply provided for by his aunt Elizabeth that all he was to receive was £100 and the family heirloom of Job Colles's silver hilted sword, mentioned above. It soon became apparent that the young William was not amply provided for by his aunt as she became embroiled in a dispute over property in Spain associated with her first husband and arising from this all that she left to William was 'the satisfaction of burying her at his own charge'. Colles Johnson states that Elizabeth had left some landed property at Phibblestown county Dublin to William and a house in Dublin. According to the *Georgian Society Records*, Elizabeth owned a house on the west side of St. Stephen's Green in the 1680s¹⁴, but it is not clear whether it was this house that William inherited. The property at Phibblestown is likely that where Charles Colles (Elizabeth's uncle) passed away in 1685. Nothing is known of William's education and not being inclined to follow in his late father's medical footsteps he 'depended on his own exertions, becoming 'a man of universal talent, pre-eminent as a mathematician and mechanic.'¹⁵ Colles Johnson records that William had made some attempts at poetry and had also written several tragedies, but no records exist of any such items in the Colles Johnson collection.

¹⁴ Ibid., p. 103

¹⁵ Mrs. J.C.J. Murphy, 'The Kilkenny Marble Works', *Old Kilkenny Review* 1948, No. 2, January 1949, p. 15.

It certainly appears to be the case that William experienced independence at an early age. It is also likely that he had never been placed under the same parental pressure that his brother Barry experienced and so was free to follow the curious and inventive spirit that dwelt within him. Barry, according to the family records, was wild and irresponsible in his younger days. His father threatened to disinherit him unless he adopted some respectable profession and so, he became an attorney. William's greatest achievement was setting up the Kilkenny marble works, but this was not the only industry that reaped the benefits of his ingenuity, as we shall now see.

William of Kilcollen's eldest son Barry (1697-1785) became involved in the political life of Kilkenny, becoming an alderman and served twice as mayor of Kilkenny. An inscription on the city's mace and sword testify that he had them repaired during his mayoralty in 1743. Throughout his life, Barry amassed a great deal of land, even more than his father. He acquired estates in counties Dublin, Meath, Carlow, Kilkenny, Queen's County and in the city of Dublin. Barry passed away on 20 April 1785 at his home in St. Stephen's Green, the house he inherited from his father. He was buried in St. Patrick's Cathedral on 30 April in the vault of Dr. Richard Meredyth, Bishop of Leighlin and Dean of St. Patrick's, a relative of his son-in-law. In 1743 Kilkenny Corporation presented Barry Colles (then mayor) with a silver cup in recognition of his efforts in the promotion of linen manufacture in the city and surrounding area. It would appear that the both he and his brother William were the main movers of setting up the trade in Kilkenny.

In November 1743, writing to Rev. John Perry in Dublin, William Colles explains the reasons behind the setting up of the linen industry in Kilkenny. Attempts to introduce the industry in the county earlier in the century met with moderate success and had, over the intervening decades, gradually disappeared. While it may not have been the main reason for setting up the industry, Colles relates to Perry an innovative attempt to rid the city of beggars, but in a very fair and just way. The beggars, a 'Detestable Crowd...wch used to Throng ye Doors of ye Publick Houses and oblige Travellers to force thro' a Lane of Lice and nastiness to their coaches,' were given an ultimatum, work or leave the city.¹⁶ This task was done without having recourse to forced banishment or a tax on the public. A voluntary subscription of 13d a quarter was requested from persons willing to donate to a fund to set up a workhouse in the city. Forty spinning wheels were bought and the clothiers in the city provided 'as many more wheels and Reels as they Could supply us

¹⁶ PRIM, William Colles to Rev. John Perry, Dublin, 15 November 1743.

with.’ All the beggars were summoned to the quarterly sessions where those unable to work due to age or infirmity were granted licence to beg, twenty-six in all. Some of the others chose to leave the city and the rest remained to take up the offer of work. A clerk was employed to organise the work and a woman was appointed to teach spinning to those that did not know the craft. Small premiums ‘such as Brogues and Handkerchiefs,’ were given for the best work and this, in turn, encouraged other poor people to apply for work. Colles emphasises the fact that these people were paid on time and were given help in the form of heating and candles. Colles finishes his correspondence with the hope that, in a few months ‘we shall have Hundreds of Spinners both of Linen and Woolen’ and ‘that we have formed ourselves into a society called ye Kilkenny Society.’ It is evident from this letter that Colles, while saying it was a way of ridding the city of the scourge of begging, was intent on setting up an industry that would benefit the city by providing gainful employment to the poor of the area.

On 12 December 1743, William wrote to his brother Barry with an update on the progress at the workhouse. The Kilkenny Society had already been formed and had met at the Tholsel on the previous Monday and agreed that premiums for a variety of products be presented to workers between then and the first Monday in March. On 20 February 1743/4 he wrote again to Barry informing him of his latest invention, a machine for spooling cotton, or ‘an engine for filling ye Bobbins.’¹⁷ The machine filled the bobbins with greater ease and with less chance of the yarn breaking. The machine could fill twenty-four spools at the one time and the weaver could continue on with their work without the need to stop and refill the bobbins. We can see the ingenuity of William at work here. Just as at the marble works, he was aware of need to speed up production and improve quality control, while at the same time lightening the workload of the employee and still provide employment for as many as possible.

On 29 February 1743/4, William wrote a letter to Thomas Prior in Dublin giving an account of how and why the workhouse was set up in Kilkenny. Outlining the need to address the problem of begging and idleness, William states that, not until the present mayor took office, had anyone sought a solution to the problem. William does not mention Barry in this correspondence, but there is no doubting that William credits his brother with the nous to tackle the problem. Barry provided the political clout to carry out this project and William looked after the practicalities and logistics.

¹⁷ Ibid., William Colles to Barry Colles, 20 February 1743/4.

This particular letter in the Prim collection is an important one, as the recipient, Thomas Prior, was the principal founder of the Dublin Society. Prior would have been very aware of the Colles family as they were related through marriage. Barry's wife was Isabella Murray the older sister of Christiana Murray, Barry's father's (William of Kilcollen) third wife; these ladies were cousins of Prior.

On 19 May 1744 William informed Barry there were a hundred women and children fit to spin at Barry's property at Lisnafunchin and they were all 'much inspired at his forming a spinning school there.'¹⁸ The following July William informed the bishop of Waterford and Lismore on the background to setting up the workhouse. He wrote that the people were first employed in spinning at the courthouse in Kilkenny, but a house was soon taken at a cost of £5 per annum. A certain pride is evident in these letters and this is summed up in a letter to his brother-in-law Major William Clenahan in Gibraltar, written in August 1744. William states that Barry's approach to dealing with beggars 'has set an Example to ye Whole Kingdom' and has also laid 'a foundation in employing ye Poor wch meets wth great success and has gained him great applause.'¹⁹ But in reality, it would appear from William's correspondence that it was he who was running this trade singlehandedly.

In a letter to an unspecified recipient, possibly to the partners in the Kilkenny Linen Company, written in September 1745, William complained of the difficulties in getting these partners together. His attempts to call them to meet in order to raise more funding 'for carrying on the trade' were almost impossible. The partners were Anthony Blunt, John Blunden, Harvey Morres, William Evans Morres and Samuel Matthews, all prominent in local and national politics, but, as W. G. Neely, writing in 1989, states, 'With the exception of Colles they were not business men.'²⁰ The politicians represented family rather than business and, as Neely reiterates, Colles was 'almost alone in being an entrepreneur with a deep personal involvement in the commerce of the city.'²¹ Trying to persuade such people to get behind major projects of improvement and modernisation was to be a regular problem for William Colles, the Nore navigation being the prime example, which will be examined in detail later.

¹⁸ Ibid., William Colles to Barry Colles, 19 May 1744.

¹⁹ Ibid., William Colles to Major Wm. Clenahan, Gibraltar, 11 August 1744.

²⁰ Neely, *Kilkenny*, p. 182.

²¹ Ibid., p. 212.

There were also problems in trying to get Kilkenny merchants to sell the linen, as they were ‘not Disposed to give encouragement to our undertaking.’²² William, being proactive, contacted merchants in Dublin asking them to sell the linen for him. One such merchant, Richard Clarke, was informed of the great strides made in the industry in Kilkenny over the previous number of years, some of which were rewarded by premiums being presented by the Dublin Society. The quantity of linen bleached in the city had increased almost threefold over these years, from an average of 400 pieces per annum prior to 1744, to upwards of 1100 in 1745.²³

Writing in 1747 to the Rt. Hon. Thomas Carter, MP for Hillsborough, William informed him that ‘Our Linnen Manufacture goes on Reasonably well’ and that he was now concentrating on flax dressing, with fifty acres ‘watered, grassed and saved.’²⁴ Still striving to look at new ways of improvement in the industry, he had just completed a ‘mill for Breaking ye flax wch answers to satisfaction both as to ye Safety of ye flax and ye Dispatch, and have made some other mechanical Improvements in ye Linnen Trade.’ He stated that that he would announce these improvements both to Carter and the Linen Board in due course. Colles had no problem in self-promotion, especially to those of great influence.

At the time of writing this letter, Carter was a trustee of the Linen Board for Leinster and also Master of the Rolls. If Colles was having difficulties trying to get the local linen group together, then he had no qualms in contacting one of the major political figures of the period. Carter held many influential positions in parliament during his lifetime and he also voted against the Money Bill in 1753, a subject which will be examined later. Carter had a great interest in agrarian improvements and was also a founder member of the Dublin Society.²⁵

On 9 November 1747, William informed the Rt. Hon. Thomas Cartwright of the improvements he had made in the reels for reeling yarn, ‘calculated to be of much use in preventing frauds in false counting ye cutts.’ Waste due to the tangling of yarn would be prevented with the result that the finished linen would be produced ‘with equal regularity and expedition.’²⁶ It must have been this invention that Thomas Prior wrote about in 1749.

²² PRIM, William Colles to Mr. Richard Clar[k]e, 11 August 1745

²³ Ibid.

²⁴ Ibid., William Colles to Rt. Hon. Thomas Carter, Dublin, 14 October 1747.

²⁵ Edith Mary Johnston–Liik, *History of the Irish Parliament 1692–1800*, 6 Vols., Belfast, 2002, vol. iii, p.381.

²⁶ PRIM, William Colles to Rt. Hon. Thos. Cartwright in Dublin, 9 November 1747.

In examining the improvements made in linen trade, Prior wrote ‘One such improvement was made by ‘Mr. *William Colles* of *Kilkenny* to the common Reel, by which Yarn can be reeled, so as never to entangle.’ The result of this improvement was that much time and trouble would be saved and output increased. Prior suggested that the ‘Trustees of the Linen-Manufacture will...order all the Reels they shall give out to be made after the same Form, and with the same Improvement.’²⁷ As noted above, Prior’s relationship with the Colles family, more than likely, allowed William a certain access to the Dublin Society that others may have had difficulty in securing. But in reality his inventions were bringing about changes and improvements to the industry and, regardless of family connections, these inventions would have been judged on their own merits.

In September 1751, William wrote to Rev. John Perry, stating he had forty boys kept continually at work in the flax fields and during wet weather they were busy spinning flax. His mills had been fully set up for dressing the flax and he himself had now become ‘Engaged a Little in the Linnen Manufacture.’²⁸ The following November William Garnett let two houses to William Colles in Kilkenny. Colles used the houses for ‘his linnen factory and spinning school’ and he had another house known as the ‘Flax Shop’. These premises were located in Patrick’s St. in the city and cost £8-10-0 a year to rent.²⁹ Colles had a complete industry at work in these premises. The flax could be spun into yarn in the spinning school and then passed on to the factory where the yarn could be woven into linen cloth and then brought to the ‘Flax Shop’. Colles was awarded the prize of £100 by the Dublin Society ‘for raising and manufacturing most flax in 1751.’³⁰ In 1754 he won the premium from the Dublin Society for the most flax scutched, hackled and sold.³¹ From the mid 1750s onwards it appears that Colles decided to move away from flax and linen. With the large amounts of money being made available by parliament for public works at this time, he now concentrated on the more important projects such as barracks improvements and inland navigation, which will be examined in detail later. Flour production was another area where William Colles and his family

²⁷ Thomas Prior, *An Essay to Encourage and Extend the Linen-Manufacture in Ireland*, second edition, with a postscript, 1749, Dublin, p. 11. Eighteenth Century Collections Online. Gale Trinity College Dublin, (<http://find.galegroup.com/ecco/infomark.do?&contentSet=ECCOArticles&type=multipage&tabID=T001&prodId=ECCO&docId=CW106205359&source=gale&userGroupName=tcd&version=1.0&docLevel=FASCIMILE>), (accessed 30 November 2009).

²⁸ PRIM, William Colles to Rev. John Per[r]y in Trim, 28 September 1751.

²⁹ RD, Memorial of Indented Deed dated 28 November 1751 between Wm. Garnett and Wm. Colles, 155/18/103354.

³⁰ PRIM, no addressee 6 May 1753.

³¹ Neely, *Kilkenny*, p. 183.

brought about major improvements and while engaged in these activities he still ran his quarrying and marble business.

In his letter to Thomas Carter, mentioned above, Colles also discusses the transportation of wheat from Kilkenny to Waterford and Dublin. He also mentions the newly built flourmills in Waterford, the property of Mr. Wyse. He finishes off the letter by stating that ‘If I can be of any service in this or any other affair, I shall esteem it an honour.’ Colles was informing Carter that he was willing and able to take on any task. His comment on the Waterford flourmills is interesting, as it reveals that Colles was keeping abreast of improvements being implemented by his contemporaries in other industries. Many parallels can be drawn between the Colles family and others involved in major schemes of improvement and it is worth examining some of these figures to see how they were placed at the forefront of innovation and design during the mid-eighteenth century.

In a letter written in 1743 to the bishop of Ossory, Michael Cox, William Colles mentions that there was ‘for many years laid out in the Northern part of the Kingdom’ funding by parliament for the encouragement of tillage and inland navigation.³² One person who benefited from government funding for public works in the northern part of the country was Hugh Boyd. Parliament granted Boyd the huge sum of £10,000 in 1737 for the construction of a harbour for shipping coal from Ballycastle in County Antrim.³³ His vigorous undertaking of harbour and bridge construction brought about change and benefits to the wider area. Coal prices were reduced, just as William Colles would reduce the price of marble at his mills at Kilkenny. He sourced and supplied much of his own raw materials, such as stone and timber, much the same as William Colles would do twenty years later on the Nore navigation. He is regarded as the first person in the country to use a timbered rail system for transporting stone from his quarry down to the harbour improvement works.³⁴ He was also involved in glass making at Ballycastle, where in 1755 he constructed one of the largest brick built cones in these islands. The cone was a distinctive feature in a glassworks, as it was used to provide an up-draught for the glass furnace.³⁵

Boyd drew on the expertise available at the time and also sent his resident engineer, his own son and a carpenter to view similar works that were underway in Britain. He built

³² PRIM, William Colles to the Bishop of Ossory, 28 November 1743.

³³ Edward McParland, *Public Architecture in Ireland 1680-1760*, New Haven & London, 2001, p. 24.

³⁴ Colin Rynne, *Industrial Ireland 1750-1930: An Archaeology*, Cork, 2006, p. 359.

³⁵ *Ibid.*, p. 181-183.

his own flat-bottomed dredgers so that ships of 30 tons burden could dock in the harbour. Boyd used phrases such as ‘Work of such publick Use...the first of the kind that was ever attempted in this Island’ and ‘Improvements...of the utmost consequence to a trading Nation’³⁶ to emphasise, not only the importance of the work, but also the optimistic and forward-looking spirit that permeated the country. Of course, such vocabulary was also used as a selling pitch in order to secure funding and, as we shall see, would be used by many others in their petitions to parliament.

Thomas Wyse epitomised the same spirit of optimism and enterprise. In 1747 Wyse had built his flourmills in Waterford, as noted by Colles in his letter to Carter above, but by the following year he had erected a large smelting house and brass house for the manufacture of copper and brass. After only a few months Wyse had produced ‘several Tons of each Metal, equal in Quantity and Value to any imported, being the first Copper, and the only Brass, in the large Way, that was ever attempted to be made in Ireland.’³⁷ In 1757 Wyse petitioned parliament ‘for assistance towards carrying on an undertaking of...National Utility.’³⁸ Wyse had also erected a large rolling mill which was capable of doing the work formerly done by three different mills, ‘which was never performed before in this Kingdom’, echoing the language used by Hugh Boyd. This was similar to what Colles had been doing in the marble trade, but the similarities did not end there. Colles supplied his marble mills with marble from the Black Quarry in Kilkenny and, similarly, Wyse was supplying his lead smelting works with lead that he discovered himself and was actively mining. He was supplying Dublin with a ‘large Part of its annual Consumption of Pig, sheet, and Milled Lead’ and had also successfully carried out experiments by which a greater amount of silver was produced ‘than hath ever been obtained by any Method of Extraction hitherto in Practice.’ Wyse manufactured tinplates ‘the first that ever were made in this Kingdom.’ He produced all types of vessels and utensils that were usually made from copper. These he sold much cheaper than any copper smith or brazier could and he had ‘lately introduced other Branches of Metal-Work not attempted before in this Kingdom.’

Wyse was seeking a sum of £16,000 in order to construct a steel works and wire mill ‘with the introduction and establishment of a colony of artificers, of the various Kinds of Metal-Work.’ Wyse had provided his two sons with the ‘Knowledge and Insight’

³⁶ *Ibid.*, pp. 24-25.

³⁷ *JH of C*, vol. vi, p. 29.

³⁸ *Ibid.*

required to carry on the business should he die. Apparently Wyse had been refused £10,000 from the Dublin Society due to the amount being sought. A parliamentary committee agreed that ‘the Petitioner deserves Encouragement’ and granted him the sum of £4,000 on 11 November 1757.

Toby Barnard, writing in 2008, mentions another person who brought about improvements to an area of the midlands without assistance from the Dublin Society. William Smyth of Collinstown in County Westmeath utilised much of his own fortune to advance agricultural projects in the area and also became involved with a scheme for improving inland navigation in the Shannon region. Like Colles, he set up a linen business with the Linen Board awarding equipment to this venture. By the 1750s Smyth had twenty-four looms at work and was proactive in the establishment of a school for teaching girls to read and do needlework, similar to what Colles was doing in Kilkenny with the spinning school. He secured a grant to hold a market in his township of Collinstown and constructed a market house there.³⁹ Smyth also built himself a country house, which he called Barbavilla. William Colles and Smyth would have been known to each other as Colles was involved in supplying marble, or at least had agreed to supply it, during the construction of Barbavilla in the early 1730s.⁴⁰ There are no transcripts of letters in the Colles Johnston Collection, the Prim Papers, or the Smyth Papers in the National Library that record any correspondence between the two, but there must have been contact between both in order to draw up a contract or agreement to supply the stone for Barbavilla. Colles’s involvement in the construction of private dwellings will be examined later.

The Prim Papers do provide evidence that William Colles was in contact with one of the most entrepreneurial families of the time, the Darley family. Colles wrote to Hugh Darley in 1751 to discuss the cost of transporting coal, culm, flags and marble from Kilkenny to Mullingar.⁴¹ Hugh Darley must have been involved in some building project in the vicinity of Mullingar as Colles was explaining how the cost of flags at the quarry were 1s per yard, but the added cost of carriage to Mullingar was 3s 6d per hundred.

The Darley family became very significant figures in the construction business in Dublin and the Leinster area during the eighteenth century. The Darleys appear to have

³⁹ Toby Barnard, *Improving Ireland? Projectors, Prophets and Profiteers 1641-1786*, Dublin, 2008, pp. 172-173.

⁴⁰ NLI, Smyth of Barbavilla Papers, MS 41,590/8, Patrick Doran, Dublin to William Smyth, Barbavilla, 30 April, 1734.

⁴¹ PRIM, William Colles to Hugh Darley, 25 September 1751.

arrived in Ireland during the late seventeenth century, from either Derbyshire or Yorkshire.⁴² Leases show that Henry was a stonecutter and that he and his sons were leaseholders of quarries in the Newtownards area. Two of Henry's sons, Moses and Hugh, moved to Dublin and became involved in building works at Trinity College and much of the speculative building activity in Dublin at the time. Moses died in 1754 but his sons, Henry and George, carried on the building tradition, operating in Dublin and further afield during the latter half of the eighteenth century, as they became involved in building and quarrying operations in Wicklow, Meath and Louth, again, very similar to what Colles was doing in Kilkenny. Whether the Darleys owned or leased quarries in these counties is uncertain, but it has been noted that, by the 1750s, George Darley had 100 men employed in the preparation of stone for the buildings of Trinity College.⁴³ It is also believed that George Darley had an interest in part of the Black Quarry in Kilkenny at the end of the eighteenth century, the main part of the quarry being worked by William Colles's grandson Richard.⁴⁴ This will be examined later.

In a letter written in 1765 to his wife in Dublin, William Colles informs her that he wishes to enter his second youngest son John into a trade that will set him up well in life. Colles wrote;

I would be glad to put Jack [John] to Harry [Henry] Darley if he will take him, and breed him up to the knowledge of the Building and Stonecutting trade, as that is a business I can easier set him up in than any other.⁴⁵

This letter reveals a certain familiarity between Colles and Darley. Colles trusts that Darley will look after his son and teach him well. Why Colles could not have placed his son within his own family business is strange, but it certainly appears that the relationship between Colles and Darley was one of familiarity and not purely based on business.

John Colles did not become apprenticed to Henry Darley, as we shall see below. What is noteworthy about most of the persons we have examined regarding major improvements and advances made in mid eighteenth century, is that, not only did they

⁴² Nat. Arch. Dub., 'Notes on the Darley Family', M473.

⁴³ Edward McParland, 'Trinity College, Dublin - I', *Country Life*, 159:4114 (6 May 1976), p. 6.

⁴⁴ Tighe, *Statistical Observations*, vol. i, p. 99.

⁴⁵ RCJ, Box 6, f. 202, William Colles to his wife, 10 November 1765.

invent, or invest in, new techniques and machinery, they invested in the futures of these industries by involving their sons in the family business. Hugh Boyd involved his son in the harbour construction at Ballycastle and Thomas Wyse ensured that his sons would carry on the business after his death. The Darleys continued their business well into the nineteenth century and the Colles family did not quit Kilkenny until the 1920s.

After his death in March 1770, William's second son took over the family business in Kilkenny. William's eldest son Barry had some form of accident at an early age that resulted in mental problems and his brother William succeeded his father instead. (Fig.1.3) About the year 1770 William (of Millmount) built a house for himself and his family just above the marble mills at Maddoxtown. (Fig.1.4) This house was called Millmount and to differentiate him from his father, William is referred to as William Colles of Millmount in the family papers and in this thesis. William (1745-1779) was educated at the Quaker school in Ballitore in County Kildare, entering there on 5 April 1757.⁴⁶ William became very attached to the Quaker way of life and 'little by little, had assumed the garb and manners of a Quaker'. On his early death in 1779, his remains were brought from Kilkenny and interred in the Quaker graveyard at Ballitore.⁴⁷

After leaving school William was not inclined to go into his father's business and left home to run away to sea. On being found and returned home, he gradually settled down and ably assisted his father in the management of the marble mills and flourmills. The family had operated the marble mills for many years, but the flourmills were a new business venture the family entered into on a very large scale in the early 1760s.

It was during the 1760s that, as Louis Cullen states, 'The industrial revolution in flourmilling'⁴⁸ took place and William Colles of Abbeyvale was at the forefront of this revolution. Prior to this flourmills were small, catering for local demands only, but these were about to be replaced by mills that were much larger and with a greater capacity to mill and store flour. These mills were also higher, often between three and six storeys tall with lifting gear driven by waterwheels to lift the grain to the top floors of the mill. The first such mill to be constructed was by Andrew Mervyn at Naul, Co. Dublin in 1761, followed by a larger construction at Abbeyvale in Kilkenny, where William Colles built his flourmill and set it in production in 1762. (Fig.1.5)

⁴⁶ Mary Leadbeater, *Leadbeater Papers*, London, 1862, appendix, p. viii.

⁴⁷ *Ibid.*, pp. 107-108.

⁴⁸ L.M. Cullen, *An Economic History of Ireland since 1660*, London, 1972, p. 92.

In a petition to parliament on 9 November 1763, this mill was described as being three storeys high where ‘Oats are shelled, winnowed from the Shellings, ground to Meal and sifted’ and wheat was ground in the same manner and ‘completely dressed into Flour’.⁴⁹ Some of the machinery in the flourmill was ‘invented by the Petitioner, on much and long Attention, after several expensive Trials, with Kilns and Granaries.’ Here we see the patience and perseverance of William Colles at work, his care and attention to detail encompassed everything he did throughout his working life, no task was insurmountable.

The cost of erecting this mill was in excess of £1,000. Since the mill’s start up date it had supplied the city of Kilkenny and the surrounding countryside with any amount of flour that was needed. During this period also, Colles had sent 2,450 cwt. of flour to Dublin ‘for the Use of the *Dublin* Bakers, and by them approved of.’ Colles foresaw the possibilities of sending flour and meal to New Ross and Waterford and then shipping this produce to ports around the country cheaply and efficiently. In times of great plenty it would also be possible to export it to ‘foreign Parts.’

Colles was seeking funding in order to add two more pair of millstones to the flourmill and also to add extra loft space and granaries. The knock on effect of this would be the prompt payment to farmers of ready money for their corn, ships could be loaded more rapidly at the ports due to the larger volumes being produced and the price of flour and meal could be maintained at affordable prices during times of scarcity. The final benefit of this would be that Dublin would be supplied with large quantities of flour, meal and corn, which could be stored and stockpiled to see the city through any scarcity that may occur. The value of stockpiled stores could be upwards of £3,000.⁵⁰ The petition states that Colles had exhausted his funds in the construction of his flourmill and without public money this enterprise would not be as beneficial to the country as it could be. A parliamentary committee set up to examine this petition agreed that Colles should receive ‘the Aid and Encouragement of Parliament.’⁵¹ What is remarkable about this petition is that William Colles was already expanding his flourmills at a time when David Jebb’s great mill at Slane in County Meath and Edward Uzold’s new mill in Limerick were only in the process of construction. As there was no precedent for such a fully operational tall building at this time in the country, Colles may be regarded as a pioneer of the construction of flourmills in Ireland.

⁴⁹ *JH of C*, vol. vi, p. 199.

⁵⁰ *Ibid.*, p. 200

⁵¹ *Ibid.*

Less than ten days after the death of William Colles of Abbeyvale the following notice appeared in the newspaper;

The business formerly carried on at the Marble Mills, and the Flourmills near Kilkenny, by the late Alderman William Colles, is now carried on by his son William Colles [of Millmount].⁵²

By 1778 there were two flourmills in operation at Maddoxtown. In a memorial of an indented deed dated 16 October 1778, William Colles of Millmount is recorded as a flour manufacturer and stonecutter. On the lands mentioned in the deed, Highrath and Maddoxtown, were erected Colles's residence Millmount, two flourmills and one marble mill. Highrath and Maddoxtown are adjoining townlands lying on the east bank of the Nore together with Millmount, the marble mills and one of the flourmills in Highrath just a few hundred yards south; the second flourmill lay in the townland of Maddoxtown. (Fig.1.6)

Prior to this, in 1774, William of Millmount leased a former flax mill to his cousin Christopher James.⁵³ James was also William's brother-in-law, James being married to William's sister Hannah. The mill, formerly known as 'New Mills', was located at Archer's Grove, but of greater interest is the fact that there was a 'Horizontal Mill for Rubing [sic] Marble' located there also. Archer's Grove was also the location of the Black Quarry, the prime source of stone for the marble works. This would indicate that the marble from the quarry was going through some form of processing on, or near, the site at this time. The lease, dated 31 August 1774, was for a period of 25 years. James in turn demised the said mill to George Smith, 'Architect, Kilkenny', the next day for a period of 24 years from 1 November 1774.⁵⁴ The names of James and Smith will appear together again when we examine the Nore navigation, as James was pay clerk for a time on the navigation and Smith was appointed Director of the Navigation of the Nore in 1761, having previously been its Deputy Director. Both men worked with William Colles of Abbeyvale on this project and Smith worked with Colles on bridge construction in Kilkenny in the 1760s.

⁵² *Finn's Leinster Journal*, Weds Mar 14 to Sat Mar 17, 1770.

⁵³ RD, Colles to James, Memorial of Indented Deed, dated 31 August 1774, 300/651/201713

⁵⁴ RD, James to Smith, Memorial of Indented Deed, dated 1 September 1774, 300/652/201714.

There is a record of another, earlier lease associated with this property in which William Colles of Abbeyvale leased the mills to George Smith and Christopher James. This lease was dated 25 September 1764 and since its execution ‘the said Flax Mill and premises demised have been converted into a mill for manufacture of flour in partnership between Smith and James.’⁵⁵ Such deeds portray how a network was formed among families, professionals, partners and business acquaintances to run a variety of businesses and industries at this time.

William Colles of Millmount, like his father, kept himself well informed of other industrial improvements being carried out around the country. In a letter written by his cousin Christopher Colles, he is updated on new machinery imported from England employed in the great flourmill in Limerick. Christopher was working for the architect Davis Dukart in Limerick at this time, a subject that will be examined in greater detail later. The Limerick mill, built between 1762 and 1764 by Andrew Walsh and Edward Uzold, was, when completed, the largest industrial structure in the country and cost £6,000 to realize.⁵⁶ By the time Christopher Colles was writing from Limerick the mill had undergone some modernisation. The new machinery had been installed for bolting, or sifting, flour and worked six times faster than the previous machines. Christopher also informed William that the pipes supplying the bolting machines with flour are ‘at least 12 or 14 Inches square by which means the meal never arches as is common in the Kilkenny mills.’⁵⁷ This could be interpreted today as ‘industrial espionage’, but it is more likely that this is how many ideas were disseminated at the time, by observation of working machinery in one area of the country and implementing the improvements elsewhere.

William of Millmount married Mary Anne Bate of Co. Wexford in 1771 and they were blessed with three sons and one daughter. As none of these children were of age when their father passed away in 1779, it was left to William’s widow to carry on the marble and flour businesses. An advertisement in the newspaper for Kilkenny and Italian marble chimneypieces informed stonecutters, or anyone interested in the chimneypieces, to apply to ‘Mary Anne Colles near Kilkenny, who carries on the marble business on the most extensive manner.’⁵⁸ Further advertisements appeared regarding the flourmills. In

⁵⁵ RD, Colles to Smith and James, Memorial of Deed, dated 31 August 1774 of an indenture of lease dated 25 September 1764, 305/249/201711.

⁵⁶ Colin Rynne, *Industrial Ireland 1750-1930: An Archaeology*, p. 258.

⁵⁷ RCJ, Box 7, folder 26, Christopher Colles to William Colles, 3 May 1771.

⁵⁸ *Finn’s Leinster Journal*, 29 January 1785.

June 1786 she attempted to let a bolting mill at Maddoxtown⁵⁹ and in 1795 she advertised Millmount and ten acres for letting ‘with or without the bolting mills of Abbeyvale.’⁶⁰ It appears none of William’s brothers were willing to take on the running of these interests as they were set up in their own businesses or professions.

Richard Colles (1747-1816) of Prospect, Co. Dublin and St. Stephen’s Green, was the third son of William of Abbeyvale. He entered the office of his uncle Barry who was anxious that, as he had no son, his favourite nephew should succeed him in his business.⁶¹ Richard was not involved in the running of the marble business, but there is a distinct possibility that he would have been involved in any legal affairs pertaining to the Kilkenny Marble Works.

The second youngest son of William of Abbeyvale was John (1750-1807). As noted above, William’s attempt to send John to Henry Darley was unsuccessful. It appears John wished to become a merchant and in a letter to his wife, William was leaving it to her to look after this issue, for fear John would ‘get an habit of idleness.’⁶² There was much discussion between William and his wife on John’s future over the next year and it was eventually settled that John would be apprenticed to his cousin William, a book publisher in Dame Street in Dublin. John served his seven years apprenticeship and on completion in 1773, he set up his own printing and publishing business in Dame Street.

John appears to have had no head for business. His brother Richard, in a letter to William of Millmount stated that ‘I frequently call upon him and examine his books and find them most irregular’.⁶³ His brothers and his sister Hannah were constantly lending him money and on one occasion Richard had to post bail after John had problems with paying some bills and was arrested. Further financial problems forced John out of Dublin

⁵⁹ Ibid., 7 June 1786.

⁶⁰ Ibid., 18 February 1795.

⁶¹ The newspapers reported the following in 1770, ‘Richard Colles, Gent. an Attorney of the Court of Exchequer, is admitted and sworn an Attorney of the court of King’s-Bench.’ *Finn’s Leinster Journal*, 14 July 1770. He was not keen on the profession of attorney, so he entered the Middle Temple and in 1783 he was called to the Irish bar, where he developed a considerable reputation as a barrister. He published some works on legal issues and was noted for his work *Reports of cases, upon appeals and writs of error, in the High Court of Parliament; from the year 1697, to the year 1709*, published in Dublin in 1789. Richard’s first wife, Sarah George, died, no date given, and in 1796 he remarried. His second wife, Elizabeth Richards, was sister-in-law of Rev. Walter Blake Kirwan, the celebrated Dean of Killala. One of the sons of this marriage, Edward Richards Purefoy Colles (1798-1883), became a barrister and was appointed by the British Government to the position of Chief Justice of Sierra Leone. On his return to Ireland he became a member of the Royal Dublin Society and in 1855 he was appointed the Society’s Librarian.

⁶² RCJ, Box 6, folder 202, William Colles to his wife in Dublin, 14 December 1765.

⁶³ Ibid.

and, stopping at Kilkenny for a few days, he eventually made his way to Cork, where on 28 July 1778, he boarded the troopship *Valliant* bound for New York.

In October 1778, John, writing from New York, informed William of Millmount about his sea crossing. The British had taken New York at this stage and many of the city's inhabitants had fled, including his cousin Christopher who had emigrated to America in 1771. John went on to state that 'Everything here is in utmost confusion...Business is not thought of by anyone, nor can I get anything to do.'⁶⁴ Within a month of writing this letter, John was advertising his services as a miniature portrait painter. On 9 November 1778 the *New York Gazette* and the *Weekly Mercury* carried an advertisement informing the public that

J. Colles having had the honour of taking off the profiles of many of the Nobility of England and Ireland, begs leave to inform the Ladies and Gentlemen of New York that he takes the most Striking Likenesses in Miniature and Profile of any size at so low a price as 2 Dollars each framed and glazed.⁶⁵

The *Royal Gazette* in New York carried the same advertisement on 10 May 1780, with an additional piece proposing that for 2 guineas, Colles could supply the purchaser with a machine for reducing likenesses and 'instruct the purchaser in the use of them and the whole art of reducing figures to any size.'⁶⁶ On 29 April 1783, John Colles was advertising the same offer of miniature portraits to the citizens of Philadelphia. The advertisement, carried in the *Pennsylvania Packet*, informed the public that for 2 dollars they could buy a portrait framed and glazed, or a family group could be purchased, framed and glazed, costing ten shillings for each person portrayed. This particular advertisement also informed the public that Colles was now employed as a paperhanger and he 'Colours plain Rooms in a genteel and neat manner, much superior to oil

⁶⁴ Ibid.

⁶⁵ Sue McKechnie, *British Silhouette Artists and their Work 1760-1860*, London, 1978, p. 774.

⁶⁶ Ibid.

colours.’⁶⁷ By 1787 he was informing potential customers that they could order ‘any kind of Paperhanging agreeable to their fancy’ in a ‘colour to suit their furniture.’⁶⁸

It is difficult to believe that John Colles painted the nobles of Britain and Ireland, as there are no portraits attributed to him, but it is likely that he was proficient in the art of miniatures just like his younger brother Isaac, as noted below. It certainly appears that John was economic with the truth in his advertisements, but how were his potential clients to know whether the facts were true or not? Just like his father, he was not shy when it came to self-promotion, but appears very prone to exaggeration. What we do know about John is that, he did set up a successful business as a paperhanger and stainer. His business ventures succeeded in America, where they failed miserably in Ireland. In America he had to fend for himself, rather than depend on hand outs from relatives. This, coupled with Colles tenacity, ensured a successful future for John in the New World.

On 23 July 1788, the Federal Procession was held in honour of the Constitution of the United States. The paper stainers of New York took part in the procession. They followed behind a flag printed with the figure of George Washington ‘borne by Mr. John Colles, attended by an apprentice in a coat and cap.’⁶⁹ John had set up his business in Pearl Street in New York and in 1810 the New York City Directory listed the proprietor of the paper hanging and staining manufactory as ‘Colles, Widow of John.’⁷⁰

William of Abbeyvale’s youngest son Isaac was born in 1752. It is stated that, as a young boy, Isaac left Kilkenny to further his education in Dublin. It appears that he did not further his education as planned, deciding instead to marry the daughter of his landlady in secret. According to family tradition, Isaac married ‘while still a boy’, however, according to Mary Pollard, he was apprenticed to a printer named Samuel Powell in about 1766 and married Margaret Eustace in 1775,⁷¹ which would make Isaac twenty three at the time of his marriage. This indicates that a certain caution should be exercised when examining the contents of the assorted family papers.

On completion of his apprenticeship the entrepreneurial spirit of the Colles family stirred in the young Isaac and he had soon set himself up in the printing business with

⁶⁷ Alfred Coxe Prime, *The Arts & Crafts in Philadelphia, Maryland and South Carolina, Part 1 1721-1785, Gleanings from Newspapers*, New York, 1969, no page number given.

⁶⁸ Victoria and Albert Museum Webpage, *Shopping for Wallpaper*, (http://www.vam.ac.uk/collections/prints_books/features/Wallpaper/Shopping_Wallpaper/index.html) (accessed 22 March 2010).

⁶⁹ Catherine Lynn, *Wallpaper in America: From the Seventeenth Century to World War I*, New York, 1980, p. 109.

⁷⁰ *Ibid.*, p. 110.

⁷¹ Mary Pollard, *A Dictionary of the Members of the Dublin Book Trade 1550-1800*, London, 2000, p. 112.

premises in various locations in Dublin. Pollard lists Isaac as a printer, bookseller, print seller and a miniature painter.⁷² Isaac painted transparencies of names etc. for shop windows and, as a miniature painter, he charged £2-5-0 for full-length miniatures and £1-2-9 for half-length ones.⁷³ Colles not only had a printing and book selling business, but he also had a print shop and lottery office at No. 13 Capel Street. In 1779 he became the publisher of the *Freeman's Journal* and in May of that year he advertised for apprentices who 'will be taught to paint, draw, engrave'⁷⁴. He also advertised that, along with his partner Campbell, he could 'take likeness in profile' and 'teach ladies to draw'.⁷⁵ On 22 March 1793 a fire destroyed his printing house and everything inside, but by 1795 he was back in business again and tendered, unsuccessfully, for printing the *Journal of the House of Commons of the Kingdom of Ireland*.

William of Millmount's eldest son, William, was born in 1772. He was educated at Kilkenny College and in 1790 he entered Trinity College Dublin. In 1793 he was awarded a scholarship and gold medal, but he left university without a degree, due to, according to family records, his outspoken political views. He was a friend and associate of Daniel O'Connell and stood, unsuccessfully, for parliament for Kilkenny in 1812. William did not take part in the family marble and flour business, but chose instead to take over the paper making trade at Maddoxtown. When exactly this business was set up in Maddoxtown is not known. A Robert Sherkley was listed in *Lucas's Irish Provincial Directory of 1788* as a papermaker at Maddoxtown.⁷⁶ William Tighe informs us that, by 1802, the amount of paper being produced at Maddoxtown did not exceed the duty on it by much. The paper mill consisted of one vat and a wheel, sixteen feet in diameter and the rags purchased to make the paper cost £1 per hundredweight.

In 1800 there was one person recorded as a paper manufacturer in Kilkenny, his name being Robert Shirley.⁷⁷ In May 1802 William took over the business from Shirley, as the location for the manufacturing works was at the lower flourmills at Maddoxtown. In the indented deed of lease it is stated that this mill was built by the 'late Christ. James' and that the mill pond, weir and the head and tail race waters were common to both the

⁷² Ibid.,

⁷³ Daphne Foskett, *Dictionary of British Miniature Painters*, 2 vols., London, 1972, vol. 1, p. 210

⁷⁴ Pollard, *A Dictionary of the Members of the Dublin Book Trade 1550-1800*, (see note 70), p. 112.

⁷⁵ Ibid.

⁷⁶ Edward Law, 'Maddoxtown Paper Mill', in *Clara County Kilkenny: A Social History of People and Places in the Parish*, Kilkenny, 2006, p. 150.

⁷⁷ Nat. Arch. Kew, CUST 112/11, Excise Statistics 1746-1822. Shirley is a variant of Sherkley.

paper mill and the flour mill.⁷⁸ An account for the year ending 25 March 1806 indicates that William Colles of the 'Marble Mills' was the only individual manufacturing paper in Kilkenny.⁷⁹ He is recorded as having one machine at work in the mill, which was liable for £347-4-0 'engine duty.' The total for all duties due for that year was £385-9-2¼. In January 1811, William was refunded £29-3-4 for an overcharge of duty in July 1810. For the year ending 5 January 1812, the duties payable were £55-1-0½, but in July of that year there are no duties shown for Colles or the Kilkenny area.

There are no further records regarding paper manufacture in Kilkenny after this time, which would indicate that William Colles had given up paper production at the marble mills. It is true what William Tighe stated about the profit on paper that was produced hardly exceeded the duties liable on it. The paper produced by Colles was writing paper. (Fig.1.7) The duties payable on writing paper were 2d for every pound produced and the duty on one engine was an astronomical £16-13-4 per month and a vat was liable for £12-10-0 per month⁸⁰

William and Mary Anne's second son, Abraham (1773-1843) did not take on the running of the family business either. Abraham took after his great grandfather and chose medicine as a profession, becoming one of Ireland's foremost surgeons. Abraham entered Trinity College Dublin in 1790 and in 1795 he moved to Edinburgh to further his studies. Returning to Ireland in 1797, after a period in London, he, according to family records, began his medical career 'among the haunts of the poor in the district called The Liberties.'⁸¹ Abraham became a member of the College of Surgeons in Ireland and, in 1804, he succeeded to the Chair of Anatomy and Surgery, a position he held for thirty-two years. He also held the position of President of the College on three occasions. During his career he wrote many medical treatises, which broke new ground and he was the first to discover and accurately diagnose a fracture of one of the bones in the forearm and is now known as the 'Colles Fracture.' He was awarded a baronetcy in 1839, which he refused.

Much has been written on the career of Abraham Colles that does not need to be addressed here, suffice to say that when he returned to Ireland in 1797, he had 'little but his own energy and knowledge to depend on,'⁸² just like his grandfather William of

⁷⁸ RD, Shirley to Colles, Memorial of Indented Deed, dated 19/20 May 1802, 557/345/370859.

⁷⁹ Nat. Arch. Kew, CUST 112/11, Excise Statistics 1746-1822.

⁸⁰ Ibid.

⁸¹ RCJ, Box 8, f. 234, p. 26.

⁸² Ibid.

Abbeyvale before him as he set out in the world. Abraham's son, William, became a distinguished physician and surgeon and was appointed Surgeon-in-Ordinary to the Queen in Ireland.

The marble business was eventually taken over by Richard Colles (1774-1849), third son of William of Millmount. (Fig.1.8) It was not his mother's intention that Richard should take over the business, as she had just about kept it viable and had little faith in its future. Due to this, Richard, on completion of his education at Kilkenny College, was sent to Dublin to begin a commercial career. The marble business was in the blood and about 1795, Richard returned to Kilkenny to revive the venture set up by his grandfather.

In 1810, Richard built his home Riverview, now known as Lavistown House, which looks down on the marble mills. (Fig.1.9) Richard brought about many changes to the mills, modernising and adapting the machinery invented by his grandfather. He exported marble to Britain and imported Italian marble to create fine chimneypieces and benefitted greatly from the French blockades of ports trading with Britain. No foreign marble could get through, so Britain turned to Ireland, not for the first time, as we shall see, for its marble needs. The revival of the Kilkenny marble works under Richard Colles and, later, by his son Alexander, followed by his son, also Richard, will be examined in greater detail when we look at the history of the marble works from the late eighteenth century right up to the early twentieth century.

Even after the Colles family departed Kilkenny and the marble business in the 1920s, some members still rose to prominent positions in different areas. One particular member of the family, H.C. Colles, edited the 3rd edition of the *Grove Dictionary of Music*, published in 1927. The 4th edition, also edited by Colles, was published in 1940 in five volumes plus a Supplementary Volume, making six volumes in all.

This has just been a selection of some of the members of the Colles family that have had an impact on the commercial and professional life of this country and further afield. A memorial to some of the family members who contributed to the political and economic life of Kilkenny can be seen today in St. Canice's Cathedral in the city. (Fig.1.10) The central character of the successful endeavours of the Colles family was William of Abbeyvale. His choice of embracing the new spirit of industry and enterprise over that of land ownership set the family on a steady course that saw them at the forefront of the marble trade for many generations. The lands amassed by his father and

by his brother Barry were, within a couple of generations, dispersed and in the possession of different families and occupiers, but the marble business and, to a lesser extent, the linen and flour manufacturing, ensured a financial stability that allowed future generations to pursue their various callings in life.

Chapter Two.

The Black Quarry and Kilkenny Marble Mills.

William Colles of Abbeyvale is regarded as the first person to have introduced water driven marble sawing and polishing machinery in Ireland or Britain. In examining the history of the Colles family in Chapter One, we have seen that there was no connection between the stonecutting and marble trade and the Colles family before William's involvement with this industry in the 1730s. This chapter will place the Kilkenny Marble Works in context by examining to what extent William Colles's inventions and designs can be seen as unique during the eighteenth century. Possessed of both an inventive and entrepreneurial spirit, William seems to have spent a number of years experimenting with and designing machinery that revolutionised the marble industry in the eighteenth century. Once his experiments were brought to their successful conclusions, he announced publicly that he was able to provide marble items in greater volumes and at more affordable prices than ever before.

In February 1731/2 William Colles of Abbeyvale wrote a letter to the recently formed Dublin Society. In it he mentions a quarry on the outskirts of Kilkenny city, formed of 'Excellent black Marble, beautifully Veind, with great Variety of White'.⁸³ He also mentions that he had just secured an interest in this quarry on foot of successful experiments carried out on cutting and polishing the marble, using machinery driven by waterpower. This feat was the first of its kind in this country and Britain.

Colles recognised that the traditional way of sawing and polishing marble was labourious and costly;

ye tedious & expensive Methods of sawing, & polishing which, in the comon Way renderd the Trade for the said Marble less extensive than it might be, if wrought by a more expeditious Manner, induced me to try some Experiments in relation to sawing the same by an Engine, wch appearing practicable, I obtained an Interest in the Quarry, & some Mills, on the River...where I have now ten Saws, wch are

⁸³ Royal Dublin Society Archives, Minute Book 1, 3 February 1731/2.

mov'd by Water, & going Night and Day, and saw the Marble more true, and expeditious, than it can otherwise be done.⁸⁴

Not only had Colles set up ten water driven saws to cut the marble, but he had also constructed another machine to grind the marble with sand so as to enable it to be polished by hand. He employed upwards of thirty men to polish and finish marble chimneypieces, tables, cisterns, mortars and tombstones 'wch I sell at more reasonable Rates, than heretofore they were Sold.' This would indicate that the marble mills were already in full production at this time and Colles was selling his marble items to the public. The success of the initial experiments led Colles to take things one step further. He developed a system enabling him to bore 'Pipes of the sd Marble, wch I have brought to such Perfection, that I can bore Pipes of any reasonable Length from 2 to 10 inches Diam fit for conveying water underground, or from the tops of Houses'. Colles sounded very confident indeed that his products were top quality and fit for their purpose and, as if to quell any doubts Society members may have had about the said items, he concluded his letter by stating that the pipes could be witnessed carrying out their task 'at Mr Stern Tighs (sic) Mercht on Ushers Quay'.⁸⁵ (Figs.2.1 & 2.2)

Sawing marble in the 'comon Way' was indeed a laborious affair. The basic technique for sawing stone was that a mixture of water and sand was fed between a flat toothless metal blade and this was moved back and forth along the stone. The blade ground the sand against the surface of the stone, slowly wearing a narrow channel in the stone. Pliny, writing in the first century AD, gave an account of this method of sawing stone. He stated that 'This division [sawing], though apparently effected by the aid of iron, is in reality effected by sand; the saw acting only by pressing upon the sand, within a very fine cleft in the stone as it is moved to and fro.'⁸⁶

According to Samuel Pepys it would appear that little seems to have changed in this method of cutting stone up to the seventeenth century, as revealed in an entry in his diary dated 24 February 1664. Pepys was observing a stonecutter sawing marble at Somerset House and recorded how 'He told me much of the nature and labour of the worke; how he could not saw above 4 inches of the stone in a day, and of a greater [amount] not above one or two [more inches]'. Once the marble had been sawed it was

⁸⁴ Ibid.

⁸⁵ Ibid.

⁸⁶ John Bostock and H.T. Riley, *The Natural History of Pliny, Book XXXVI*, London, 1857, pp. 325-26.

rubbed with coarse and then with ‘finer and finer sand till they come to putty, and so polish it as smooth as glass. Their saws have no teeth, but it is the sand only which the saw rubs up and down that doth the thing.’⁸⁷ (Fig.2.3)

Colles’s letter to the Dublin Society reveals a confident, determined figure persevering in his experiments to find a more economical and expeditious way to treat marble. As already noted, there was no tradition of stonecutting or working with marble in the Colles family, therefore we must assume that William Colles of Abbeyvale utilised the knowledge of stonecutting inherent in Kilkenny since medieval times. To improve stonecutting he had to understand the craft of stonecutting and would most likely have consulted with those associated with the trade in Kilkenny. Homan Potterton notes that, after Dublin, the Kilkenny school of sculptors operating throughout the seventeenth century were the most competent in the country, due mainly to ‘the existence of the local marble quarries.’⁸⁸ The Kilkenny sculptors flourished during the seventeenth century and their monuments, mainly architectural in design, are, according to Potterton, ‘relatively rare surviving documents of the use of classical architecture in seventeenth century Ireland.’ One excellent example of this type of monument can be found in St. Mary’s church in Kilkenny. The Richard Rothe tomb, executed by Patrick Kerin of Kilkenny in 1637, is carved from the marble of the Black Quarry. (Fig.2.4) This is just one of a number of fine memorials concentrated around Kilkenny where there is a ‘greater corpus of surviving seventeenth century memorials...than anywhere else in Ireland.’⁸⁹ Building upon this tradition, Colles brought stonecutting to another level by the use of water power. But Colles may not have relied on this tradition solely, he may have also been aware of previous studies and designs for such technology from further afield and may have incorporated something of them into his own designs.

At the time of Pepys’s observations on stonecutting in the mid seventeenth century, noted above, some designs for water powered saws for cutting stone had already been committed to paper on the Continent. It is questionable if these designs were ever executed and put into production, but William Colles’s water driven saws bear a remarkable similarity to such a design published in Italy in the late sixteenth century. An article written by J. B. Ward-Perkins and published in the *Proceedings of the British Academy* in 1971 notes that Vincenzo Scamozzi, writing in 1615, mentions

⁸⁷ Robert Latham and William Matthews (eds.), *The Diary of Samuel Pepys*, v, 1664, London, 1970, p.63.

⁸⁸ Potterton, *Irish Church Monuments*, p. 8.

⁸⁹ *Ibid.*, p. 9.

water powered mills being used in Milan for sawing large marble blocks.⁹⁰ This article was accompanied by an illustration of such a mechanism published in 1588. (Fig.2.5) Ward-Perkins states that this type of construction would have been regarded as ‘a marginal luxury, where water-power was abundant’ and that it was not until the eighteenth century that such technology was in operation at Carrara. It is debatable whether such designs ever made it into production due to economic restraints, limited application and, perhaps, the reluctance of the craft guilds to work with such equipment. If Colles was aware of this technology, then, in experimenting with variations of such designs, along with the local knowledge of stonework, a source of quality marble and a constant water supply, he was well positioned to create a successful business enterprise. This he duly did and he had the Kilkenny Marble Works in full production by the early 1730s at least.

William Colles may have based his designs for water powered saws on already existing designs and technology, but his grinding and boring machines appear to have been unique inventions. There does not seem to be any precedent for such technology in existence before Colles set up his marble mills in Kilkenny. No evidence has yet come to light to indicate that the processes of grinding and boring were carried out by any other method than by hand. To invent machinery such as this was a remarkable achievement and it allowed Colles to expand his marble business quite rapidly.

In November 1734 the following advertisement appeared in *Faulkner's Dublin Journal*:

Just arriv'd from Kilkenny, and...to be sold at the Kilkenny Marble Ware-house in Batchelor's-Lane, the lower End of the Batchelor's Walk, Marble Chimney Pieces, Tables and other Marble Furniture of the best kinds and newest Fashions; As also, a large Parcel of Flags, the best and cheapest, for flooring of any Flags hitherto brought to this City. At which Place, as also at the Marble Mills near Kilkenny, all Kind of Marble Work is made and sold at reasonable Rates, by Mr. William Collis.⁹¹

⁹⁰ J. B. Ward-Perkins, 'Quarrying in Antiquity: technology, tradition and social change', *Proceedings of the British Academy*, vol. lvii, 1971, pp. 152-153.

⁹¹ *Faulkner's Dublin Journal*, Saturday November 23rd to Tuesday November 26th, 1734. This same advertisement appeared in many subsequent issues. Some eighteenth-century documents use 'i' rather than 'e' when spelling Colles. For the purpose of this thesis 'i' will be used in direct quotations only.

This advertisement displays the business acumen of William Colles. Just a few years after informing the Dublin Society of his marble cutting and polishing ventures in Kilkenny, he is firmly established as a marble dealer in Dublin selling his own products. He was using a natural resource to craft items that were not only practical but fashionable also, appealing to a clientele that was busy in the construction of townhouses at this time. Colles was now bringing to fruition the ideals contained in his letter to the Dublin Society; he was providing marble more expeditiously than ever before by a process never before seen in this country, resulting in the price being more reasonable for a quality product and, ironically, rather than machinery replacing men it was creating much employment locally.

The marble Colles spoke of is, in fact, limestone. In geological terms 'marble' is formed by the metamorphism of sedimentary limestone i.e. limestone that has gone through a further change due to exposure to heat from molten igneous intrusions. Although the stone is limestone, in stonecutting terms, any stone that can take a polish is referred to as marble. For the purposes of this thesis, the term 'marble' shall be used throughout. The quarry Colles speaks of in his letter to the Dublin Society is the renowned Black Quarry of Kilkenny.

The Black Quarry lies in the great expanse of carboniferous limestone that stretches across central Ireland. Situated to the south-east of Kilkenny city on a sweeping bend of the river Nore, in the Gallowshill/ Archersgrove area, the quarry has been used by the people of Kilkenny for centuries. The area on the opposite bank is known as Quarrylands, an obvious reference to the use that this area had been put to in the past. According to Henry Kinahan, in the 1880's, marble was raised here but the quality was no match for that of the Black Quarry and these quarries on the opposite side of the Nore are shown as being overgrown and redundant in the Ordnance Survey map of 1900.⁹² (Fig.2.6)

The ownership of the quarry over the years has been somewhat difficult to establish. An entry in the *Book of Fee Farms and Leases*, contained in the archives of Kilkenny Corporation, dated 10th May 1590, records the exchange of land between Walter Archer and the corporation of Kilkenny. The following is transcribed (without comment) as an example of the type of deed contained in this book, by Bradley and

⁹² Henry, G. Kinahan, 'Marbles and Limestones', *Journal of the Royal Geological Society of Ireland*, vii, 1885-1889, p.142.

Brett,⁹³ and confirms that the quarry came under the jurisdiction of the corporation on that date:

The black quarry & a parcel of arrable land past to the corporation of Kilkenny from Walter Archer in exchange for five acres land by deede indented bering date the 10th of May 1590 for ever, which quarry and arable land lieth in breath from Sheekecks [Sherlock's] Rath in the west & the said quarry in the easte & in leingth as the ditche or meare there nowe erected is cast betwixt the same Walters lands & the said parcel of land in either syde.

It is evident from this deed that the quarry came under the control of the corporation towards the end of the sixteenth century and it appears to have been accessible to the public throughout the following century. In 1609 the corporation of Kilkenny ordered that the Market Cross and Croker's Cross in the city be repaired. The request was made to 'every person that have *plows* within the city, to send them to draw stones from the quarry' in order to carry out the necessary repairs. The crosses were to be repaired by the company of masons and their upkeep was under the direction of the mayor. Part of the Black Quarry was singled out for 'making up the south side of the market cross'.⁹⁴ While this stone was being quarried for use by the corporation, many later accounts of the quarry also give the impression that the quarry was open to the inhabitants of Kilkenny for their own use.

In an article by the Rev. J. Graves, written in 1858, there is an account of marble quarries in Kilkenny attributed to Bishop David Rothe, probably dating sometime between 1624 and 1641.⁹⁵ Rothe mentions two quarries, but, unfortunately, gives no indication as to the names of these quarries or the townlands they were located in. According to Rothe, one quarry lay to the east of the city, the other lay to the north. The marble from the northern quarry was of a rough grain, prepared in large quantities and dressed for building purposes. The inhabitants of Kilkenny were 'distinguished above

⁹³ John Bradley and Tom Brett, *Treasures of Kilkenny: charters and civic records of Kilkenny City*, Kilkenny, 2003, p. 48.

⁹⁴ This account appeared in the *Kilkenny Journal*, August 1878, p.34.

⁹⁵ Rev. James Graves and John G.A. Prim, 'The History, Architecture, and Antiquities of the City of Kilkenny', *The Journal of the Kilkenny and South-East of Ireland Archaeological Society*, vol ii, 1858-59, p.324. Rothe was bishop of Ossory from 1618 to 1650.

most others of the realm by their propensity to erect structures of marble of a large and more splendid class'. The other quarry to the east was 'remarkable for the variety, solidity, and abundance of its marbles'. This is most certainly the Black Quarry as the marble is described as 'cerulean, black, white, or variegated with divers [sic] hues' and is 'exported to a distance, or else stored at home for building purposes.' In 1640 Kilkenny had 148 houses built of local stone with slated roofs and 24 houses stone walled with thatch.⁹⁶ Whether the marble was exported a distance from Kilkenny or a distance from Ireland is unclear, but the fact that the marble was 'exported' from the region proves the estimable quality of the stone. We do know that in 1664 the Duke of Ormonde instructed John Morton to raise marble from the 'Quarry near Kilkenny' for a chimneypiece and that it be 'sent forthwith to Waterford that so it may be may be sent in the Spring on the first ship' to the Lord Chancellor of England, the Earl of Clarendon.⁹⁷

In 1652, Dr. Gerard Boate stated that 'Besides the freestones which is in every part of the land, there is marble found in many places... but most about Kilkenny, where not only many houses are built of the same, but whole streets are paved with it'.⁹⁸ It would appear from this statement that Boate was suggesting that, as well as the marble being more bountiful around Kilkenny, it was being put to better use here than anywhere else in the country at that time. He also suggested that the quarry 'belongeth to nobody in particular, lying in common for all the townsmen, who at anytime may fetch as much out of it, as seemeth good unto them, without paying anything for it', further indication that the quarry had been used by the people of Kilkenny as and when they needed it. The marble from the quarry was used by local sculptors for many monuments and memorials found in Kilkenny and the surrounding area, some splendid examples can be found in St. Canice's Cathedral and in the grounds of St Mary's church in the city. (Fig.2.7)

Boate also mentions that the quarry was 'like unto quarries of freestone, to wit, a wide open pit, whereout stones and pillars of great thickness and height may be digg'd'.

⁹⁶ Neely, *Kilkenny*, p. 70. Neely states that in 1613 the number of stone houses stood at forty. By 1640 this number increased by over four times indicating that the quarries in the area were being greatly exploited during this period.

⁹⁷ Oxford, Bodleian Library, Carte MS 145, f. 86, Duke of Ormonde to Mr. Morton, 31st December 1664 (Xerox copy with author). The Lord Chancellor was building Clarendon House in Piccadilly, London, at this time. Ormonde enclosed a design for a chimneypiece made from Kilkenny marble, but sadly, this no longer exists with the letter. Clarendon's house was demolished in 1683, see Rolf Loeber, *A Biographical Dictionary of Architects in Ireland 1600-1720*, London 1981, p.78.

⁹⁸ Gerard Boate, *The Natural History of Ireland*, London, 1652, p. 150.

The marble was a grey colour when extracted from the quarry but upon polishing it 'getteth a fine brownish colour, drawing somewhat toward the black'.⁹⁹

Thomas Dineley, believed to have visited Kilkenny in 1680/1, described the recent addition to Kilkenny Castle, the Waterhouse. This structure, adjoining the Bowling Green, had a summer banqueting room attached 'floor'd and lin'd with white and black marble, which abounds here.' Dineley also describes a very unusual feature, 'a fountaine of black marble in the shape of a large cup, with a...throw of water in the middle arising mounts into the hollow of a Ducall Crown.'¹⁰⁰

James Beeverell is understood to have visited Kilkenny in 1707. In the Irish volume of his *Les Delices de la Grande-Bretagne* he noted the following:

The quarry from which the inhabitants get their marble is only two or three hundred paces from the town and belongs to no-one in particular, so that anyone may take as much as he wants. The marble found there is greyish in colour when newly cut from its bed, but receives a fine polish and takes on a dark blue colour.¹⁰¹

This passage is not unlike that of Boate's above and it is an indication of problems that may arise when examining accounts in travel guides or gazetteers. The site of the quarry is approximately one mile (1.5km) south-east of Kilkenny Castle, on the Bennetsbridge road, a rock face is still visible today (Fig.2.8). Some of the accounts examined vary this distance, placing the quarry between a quarter of a mile and a mile from the city, James Beeverell even stating above that it was two or three hundred paces from Kilkenny. Other accounts place the quarry south of the city, rather than south-east. It is difficult to determine the reason for such discrepancies. Some distances may have been measured from different starting points or boundaries and others may be due to the difference between English and Irish measurements and, perhaps in Beeverell's case, the distance depended on the length of the traveller's step. Many authors, it would

⁹⁹ Ibid.

¹⁰⁰ Evelyn Philip Shirley, 'Extracts from the Journal of Thomas Dineley, Esquire, giving some Account of his Visit to Ireland in the Reign of Charles II', *The Journal of the Kilkenny and South-East of Ireland Archaeological Society*, vol. iv, 1862-1863, p. 106. In vol. i of this *Journal*, 1856-57, pp.143-46, Shirley gives an account of Thomas Dineley and his travel observations and suggests that it should not be taken for granted that Dineley visited every place noted in his Irish itinerary.

¹⁰¹ R.W. Lightbown, 'Some Eighteenth and Early Nineteenth Century Visitors to Kilkenny, Part 1', *Old Kilkenny Review*, 2nd series, vol iii, no. 1, Kilkenny, 1984, p. 4.

appear, display a careless attitude to detail and a penchant to copy descriptive passages found in other travel accounts. It seemed obligatory to comment on marble paved streets and coal that does not smoke, in reference to the coal of nearby Castlecomer, making one wonder if they had ever visited the city. It would be tedious to recount such commentaries for this thesis, but there are authors worth examining that offer a more informed view of the Black Quarry during the eighteenth and early nineteenth century and even some of these are culpable of varying the distance and direction.

In 1757, Emanuel Mendes da Costa gave an account of the fossilised stones and marbles which were known at the time. He stated that black marble can often contain coralloids, remnants of coral, composed of a whitish opaque spar and when polished can result in a beautiful finish and ‘Sometimes this marble has also many white sparry casts of shells, both turbinated and bivalve; but this is not common, and is only observable in the sort dug at Kilkenny’.¹⁰² He describes the Black Quarry, which, ‘is about half a mile from Kilkenny in Ireland; the quarry is vast, having been worked many years’. The ground above the quarry consists of small masses or ‘nodules of this same marble, no wise different from what is found in strata in the quarry’ which is used to pave the streets of the city.

In 1771 Adam Walker, writing from Dublin, informed the Royal Society of a visit made to the Dunmore Cave in Kilkenny. In his letter to the Society’s secretary, Charles Morton M.D., he comments on the stone of the area, ‘The country all round abounds with limestone, and quarries [sic] of beautiful black marble, variegated with white shells’.¹⁰³ In *A General History of Ireland in its Antient and Modern State*, published in 1781, it was stated that being quarried in Kilkenny was a ‘peculiar kind of marble which is of infinite advantage to Ireland’.¹⁰⁴

A French traveller, Aubry de la Mottraye, visiting in 1729, commented that Kilkenny was a ‘large City, one of the most magnificently built on account of the Marble Quarries’, following this with the ubiquitous comment, ‘the Streets are mostly

¹⁰² Emanuel Mendes da Costa, *A Natural History of Fossils*, London, 1757, p. 232. da Costa was a Fellow of the Royal and Antiquarian Societies of London and a Member of Imperial Academy of Germany. An interesting point arises in this article and that is da Costa uses the term ‘marble’ in the geological sense for the Kilkenny limestone, which would suggest that at this period in time the stone was regarded as such by the scientific and stonecutting fraternities.

¹⁰³ *Philosophical Transactions (1683-1775)*, vol. 63, p.16.

¹⁰⁴ John Angel (ed.), *A General History of Ireland in its Antient and Modern State, on a New and Concise Plan*, Dublin, 1781, p. 130.

paved therewith'.¹⁰⁵ de la Mottraye's fellow countryman, Charles Etienne Coquebert de Montbret was less impressed when visiting Kilkenny in 1790. In his travel recollections *Carnets de Voyage*, he remarked that the streets were 'badly paved, without footpaths or lamp-posts' and noted 'The river...is not navigable',¹⁰⁶ which, as we shall see, was a major obstacle to the distribution of the city's produce and to its commercial trade. It certainly appears from de Montbret's comments that Kilkenny was not the picturesque city that the earlier travellers described, or the corporation had become negligent in the upkeep of the city. However, he does portray the quarry in better light. The structure of the quarry is soil, gravel and several beds of limestone, which lie upon 'seven or eight bands of non-conchiferous marble two or three feet wide and then return to the black stone that does not take a polish'. The marble is worked at a depth of thirty or forty feet and is 'exploited from top to bottom entirely in the open air'. Hugh Dawson stated the marble was being worked at a depth of seventy feet from surface in his description to the Physico-Historical Society in 1740s, examined below, so should we assume that the Frenchman's measurements are wrong, or is he telling us that the depth of thirty or forty feet is the distance below the upper layers he described? We could assume that the Frenchman's measurement of thirty or forty feet was the thickness of the quality stone deposited below at least thirty feet or more of inferior material. This may suggest that not much marble had been quarried during this period, but it should be remembered that a quarry will advance in both vertical and horizontal directions in order to access the more lucrative beds of stone and in the Black Quarry the most lucrative beds were the black marble beds. Or, perhaps, after sixty years of working the quarry the Colles family had opened up another part of the quarry. Whatever the case may be, it certainly indicates that an enormous quantity of marble had been extracted from the quarry during this period, much of it used in Kilkenny itself, according to an entry in the *Traveller's Guide through Ireland (1794)*, recording that, 'Kilkenny, situate upon the river Nore is a large, handsome, well built city, remarkable for its black marble quarries, of which many of its streets are paved, and its buildings constructed'.¹⁰⁷

Anne Plumtre, writing in 1817, noted that the 'marble quarries are not above a quarter of a mile from the town; they are very extensive'. She stated that all the rock

¹⁰⁵ Lightbown, (see note 100), p.5.

¹⁰⁶ Síle Ní Chinnéide, 'A View of Kilkenny, city and county, in 1790', *Journal of the Royal Society of Antiquaries of Ireland*, vol. 104, Dublin, 1974, pp. 29-31.

¹⁰⁷ George Tyner, *Traveller's Guide through Ireland (1794)*, Dublin, 1794, p. 63.

was composed of marble, ‘differing only in quality, some courser, some finer’. The finer marble slabs were ‘reserved to be polished and used for the purposes of chimney-pieces and the like’ and the coarse marble was ‘employed in all the most ordinary uses...with this refuse the town is paved’. She also recorded that some of the ‘poorest houses in the town are in like manner built of marble, the roads are mended with marble, and some of the inclosures are fenced with marble’.¹⁰⁸

Henry D. Inglis, writing in 1834, felt compelled to mention the quarry at Kilkenny; ‘I must not omit to make mention of the beautiful black marble of Kilkenny, The marble quarry is situated about a mile from the city... The marble is extremely beautiful: it has a black ground, curiously variegated with madreporae, bivalve, and other organic impressions, and is used for chimney-pieces all over this part of the country’.¹⁰⁹

No detailed account of Ireland during this period is complete without examining Samuel Lewis’s *Topographical Dictionary of Ireland*, published in 1837. Lewis recognised the importance of the Black Quarry as he noted, ‘The most important quarry is that which produces the Kilkenny marble; it is called the black quarry, and is situated about half a mile south of the town’.¹¹⁰ Lewis follows this with a description and analysis of the marble;

The stone, when polished, has a black ground more or less varied with white marks, which appear more conspicuously when exposed to the air; but the jet black specimens only are esteemed at Kilkenny. This marble contains a great variety of impressions of madreporae, and of bivalve and turbinate shells: the spar which occupies the place of the shells sometimes assumes a greenish yellow colour. In some places there are iridescent spots: and sometimes martial pyrites is imbedded in the marble. A small specimen of pink fluor was found in it; but this is a very rare occurrence. The analysis of the most common kind gave 98 per cent, soluble in marine acid, and 2 per cent, of a black powder of carbon, which burned without leaving any ashes.¹¹¹

¹⁰⁸ Anne Plumtre, *Narrative of a Residence in Ireland During the Summer of 1814, and that of 1815*, London, 1817, p. 226.

¹⁰⁹ Henry D. Inglis, *A Journey Throughout Ireland, During the Spring Summer & Autumn of 1834*, London, 1836, pp. 55-56.

¹¹⁰ Lewis, *Statistical Observations*, ii, p. 106.

¹¹¹ *Ibid.*, p. 107.

On reading Lewis's account there are some pieces that have a familiar ring to them and, on closer examination, it becomes clear that the above quotation is almost entirely taken from an account of the quarry that was published thirty five years previously. This account was published in 1802 by William Tighe of Woodstock, Inistioge, County Kilkenny. Prior to examining Tighe's published account, we must first examine observations made at the Black Quarry and the Marble Works that were intended for publication but never made it to print, these are the accounts presented to the Physico-Historical Society.

The Physico-Historical Society was established in 1744 and the purpose of this society was to record the antiquities, natural history, geography, economy and society of the whole of Ireland. Information was gathered with the view to publishing individual county surveys, but only three were ever published during the Society's short lifetime, its affairs being wound up in 1752.¹¹² Fortunately much of the information gathered still exists in manuscript form and an excellent account of the quarry is contained in some of the Society's papers held in the Robinson Library in Armagh.¹¹³

The papers were based on topographical and statistical returns sent to Walter Harris from selected persons representing each county, the respondent for county Kilkenny being one 'Mr. Hugh Dawson near Kilkenny'. The account of the Black Quarry and the Marble Works is the most complete of all the reports for Kilkenny city and county. The author cannot confirm how long the quarry has been in use, but he does state that it has been mentioned as the 'Black Quarry' in grants to the borough of Kilkenny, as already noted above.

Dawson emphasises the quarry's reputation and that of its marble 'which being a Black Ground with good Variety of White figures Is Justly famous for Its Beauty; Solidity & ye High Polish It Takes & Retains'.¹¹⁴ The white particles are assumed to be broken shells of several types of sea creatures and they stand proud of the surface of the stone by a quarter to half an inch. An interesting point the author makes is that at some stage the marble was a 'Soft Blew Slab of Clay' and at a period of perhaps, 'ye Deluge',

¹¹² For an account of the Physico-Historical Society see Eoin Magennis, 'A Land of Milk and Honey': The Physico-Historical Society, Improvement and the Surveys of Mid-Eighteenth-Century Ireland', *Proceedings of the Royal Irish Academy*, vol 102C, no. 6, 2002.

¹¹³ Armagh Public Library, Topographical and Statistical Returns from Various Respondents sent to Walter Harris and the Physico Historical Society of Ireland, circa 1745. These papers are dated c1745 in the library catalogue, but Magennis believes that some may date from as early as 1738. See Magennis *op. cit.* p. 215.

¹¹⁴ The following quotations are all taken from the account to the Physico-Historical Society.

it was mixed with broken shells and on the ‘Withdrawing of the Waters or by Some Power In Nature to us as yet Undiscovered’ this mixture became ‘Pettryfyed’. The possibility is then considered that the white particles were never shells in the first instance and were formed in the stone at ‘the Creation of All things’. These comments display an enquiring mind trying to reason the formation of the marble in relation to Biblical teachings.¹¹⁵

Dawson’s next descriptions are physical rather than hypothetical and display a first hand knowledge of the quarry. A layer of about 20 feet of clay and loose limestone covers the uppermost part of the quarry. This rests upon another 30 feet of stone ‘which is made of use for Walling Stones’. At this time he says the quarry was being worked to a depth of about 70 feet from the surface. This is a considerable depth and indicates that the quarry had been producing stone over a long period of time. Dawson goes on to state that the beds of stone dip ‘about one yard In five from the North East to the South West’, and that the quarry was opened originally from the river and gradually worked into the rising ground, following the limestone beds.

The means by which the stone was quarried in the past are regarded as somewhat primitive by Dawson. As the stone was only being used for building purposes, those using the quarry ‘had not the Art of Sawing It for Marbles’, nor did they use gunpowder, resulting in ‘those Beds wch were Difficult to Raise’ being left behind. Most likely these beds were of valuable marble but rendered inaccessible due to the piecemeal method of quarrying being carried out. The quarrymen working the Black Quarry used gunpowder, which they ‘Ram with Dry Clay Into Holes bored In the Solid Stone’. This was the standard method of quarrying and upon reaching the superior beds all blasting ceased. He goes on to say that the quality marble was then raised with ‘Very long Crows and by Driving Iron Wedges under the Blocks of Marble & In the Back Joynts’, a method known as ‘plugs and feathers’.¹¹⁶ (Fig.2.9) Blocks have been raised that were over 20 feet long and weighing over 20 ton. This concurs roughly with Dr. Richard Pococke’s comments when he visited the quarry in 1752. Pococke informs us that the

¹¹⁵ The use of Biblical references tend to indicate that Hugh Dawson was actually the Rev. Hugh Dawson of Kilkenny mentioned in a deed in which Dawson had taken a house from Colles in Coal Market, Kilkenny. Registry of Deeds, Dublin, memorial dated 7th Oct. 1768, 271/18/173106.

¹¹⁶ A concise account of this method of quarrying is given by Patrick McAfee in *Stone Buildings*, Dublin, 1998, pp. 104-105. This method is also depicted in Thomas Roberts, *Lucan House and Demesne with Figures Quarrying Stone*, National Gallery of Ireland, NGI 4463. This painting was executed c1772 and, although it is not contemporaneous with the account by Dawson, it does depict quarry men inserting ‘crows’ into the naturally occurring beds and joints.

Black Quarry 'is half a mile to the south of the town, and is a very fine one', where he witnessed 'entire pillars and jaumes of doors of one stone' being raised, up to a length of fourteen feet.¹¹⁷ Blocks of such lengths would normally be used for external decoration, but, on occasion, they could be found internally also. William Tighe, writing an account of Bessborough, county Kilkenny, in 1802, described the entrance hall with its screen of 'four Ionic columns of Kilkenny marble, each shaft an entire stone [measuring] ten feet six inches high'.¹¹⁸ Bessborough was built in 1744 for Brabazon Ponsonby, 1st Earl of Bessborough, designed by Francis Bindon and was built by William Colles. The Ionic columns were, no doubt, hewn from such great blocks of marble raised from the quarry. Dawson informs us that 12 cubic feet of the marble equals one ton in weight. Pococke also provided a description of the marble during his visit in 1752. He said that there were two or three kinds of marble in the quarry, 'the white being made by petrified shells, but there is a sort called the feather marble from some resemblance of feathers'. At the time of his visit, he recorded that 'There are building here a handsom Session house and Jayl of Kilkenny Marble, with which marble the houses are built'.¹¹⁹

Dawson's description of the Marble Mills is a fascinating account of William Colles's inventions at work. He mentions how Colles had 'Erected Mills on the River Nore for Manufacturing the said Marble where by Iron Saws moved by two Waterwheels It Is Sawed with Much more Expedition and Truer than by Mens Hands:' After this initial process the marble is then 'Ground to Bring It Truly out of Winding by a Waterwheel fixed Horizontaly which Is moved by a Current Passing by One Side of the Wheel while the Rest Wades in an Eddy:' To take the stone 'out of Winding' or 'out of twist' was, and still is, a process to create a flat plane surface which up to this was always done by hand. Once this flat surface was achieved the other surfaces could be squared and measured from it. Placed above this horizontal waterwheel,

Is a Circular Bed of the Saw'd Marble of 27 feet In Diameter Laid
Levell and Bedded In Sand on wch are laid a parcelle of Marble

¹¹⁷ George T. Stokes (ed.), *Pococke's Tour in Ireland in 1752*, Dublin, 1891, p.129. Pococke was later to become bishop of Ossory in 1756.

¹¹⁸ Tighe, *Statistical Observations*, ii, p.586. Tighe erroneously attributes the design for the house to David Bindon. This description was given sixteen years earlier in W. Wilson, *The Post-Chaise Companion*, Dublin, 1786, p. 337.

¹¹⁹ Stokes, *Pococke's Tour*, (see note 116), pp. 127-8.

Slabbs Less than the Breadth of the Bed wch by an arm Passing from the Shaft are Moved Round over the Bed and by a Small wheel fixed on said arm are so Shifted to and from the Center That they Every round change their Possision so as to Make no Hollows In ye Bed:

It is difficult to picture this process but it appears to suggest that there were three waterwheels in action, two vertical wheels and one horizontal wheel. It does state that the smaller slabs of marble were rubbed over and back along the large circular piece and, most likely, sand was used as an abrasive in this process. It is also not clear whether the circular bed was a standard 27 feet in diameter or how such a large piece was cut into a circular shape. It would have to have been cut by hand as Colles would surely have mentioned if he had invented a machine for cutting blocks into circular shapes. Was it one whole piece of marble, or constructed from a number of pieces to form a circle? The latter is most likely. Even the quarrying of such a large piece, if it was one piece, is a mystery.

This description of the horizontal wheel is very likely a variation, or adaptation, of the horizontal-wheeled mills which was widely used in this country since early medieval times.¹²⁰ A mill of this kind consisted of a small two-storey wooden building, or stone in this case. The lower compartment where the wheel was situated straddled the millrace, the water entering through a chute at one end and flowing out the other, which was open. The millstones were placed in the upper compartment where the grinding was carried out. This would appear to be the basic mechanics of Colles's wheel. The mechanism consisted of a stout vertical wooden shaft which revolved on a pivot at its lower end. Near the bottom, a series of scooped shaped paddles radiated from the shaft, turning the horizontal wheel. The flow of water from the millrace passed the scoops at one side of the wheel, causing it to revolve. From the above complicated description, it appears that an iron spindle attached to the upper end of the shaft passed through the floor of the upper compartment and through a hole in the lower circular 27' diameter stone, which remained stationary. The end of the spindle was fixed to an iron bar, or rynd. This rynd must have been adapted in some way so as to move the marble slabs over and back along the circular bed of marble (Fig.2.10).

¹²⁰ Colin Rynne, *Industrial Ireland 1750-1930, An Archaeology*, Cork, 2006, pp. 30-31.

Whatever the case may have been, the time taken to complete this rubbing process is indicated in the following:

the Bed Stones [the circular 27ft dia. stone] take a fortnight or 3 weeks to Rubb Sufficiently but the Uper Stones wch are always In Motion are Rub'd twice In a Day Here the Marble after being Rub'd on the fface Is alsoe Rub'd on the Edges wch Makes It as True as if Chiselled and free from Gapps:

From this it appears that the process also involved the rubbing of the lower stone. This process moved the marble slabs over and back on the circular stone in order to render their faces as flat as possible. Once this was achieved the slabs were placed on their sides and ground or rubbed a second time until the sides and faces of each slab were square and true to each other. Once ground and rubbed the marble was now ready for the polishing process, which involved the slabs being placed in another mill,

where 3 or 4 Peices [sic] being Laid Side by Side there and fixed on Each of Them a piece of a Kind Greet [grit] Stone Called Black Hone found at a place Called Chappel in the Libertys of ye Citty of Kilkenny which being moved by ye Mills Backwards and forward the whole Length of the Marble Slabb Takes out ye Tracks of the Sand & Leaves the Marble Smooth Skin'd and Black:

This would indicate that the marks left by the sand during the grinding process were then removed by the honing process with the result that, 'Every part of It Is Equally Done:' This was the last mechanical process prior to the marble being worked on by the stonecutters before being returned to another mill for the finishing touch:

after It Is thus far Manufactured by the Mill It Is by Stonecutters Molded Into Chimney Pieces Tables & other work and the Moldings being Polished by Men It Is again Laid In a Mill like the last mentioned over the Sawmill & Moved by one of the wheels wch move ye Saws where the fflat part Is Polished with Emery & Putty &

Entirely finished; no hand being able to give It a Higher Gloss than this do's In a Short Time This Machine Moves In the same Manner wch that with the Hones and In like Manner Shifts from Side to Side So as to Polish the faces of all perfectly Equall,

Once fashioned by the stonecutters, the finished moulded marble items were then polished by hand, but it is obvious from this description that the results from Colles's mechanical polishing mill on the flat parts of marble were far superior to anything the human hand could achieve. It is evident from this description also, that one of the waterwheels was powering the cutting and the polishing of the marble. Alongside the waterwheel used in the honing process Colles had constructed a machine which was capable of producing some rather diverse objects, including the marble water pipes as mentioned earlier. This machine was used for

Boring Pipes of Marble...and Making Pumps for all wch uses they are Excellent He alsoe Turns & Polishes Marble Punchbowls, by the Same Mills. and Has thereby Made Engines for Extinguishing fires In one Solid Stone of 2ft 2in Long 1ft 10 In Deep and 1 foot 1 Inch Broad wch Is a Valuable Improvement of these Kinds of Engines being Less In Bulk more Durable Incapable of Rusting & Subject to fewer Repairs.

On the one hand Colles had invented machinery for cutting and polishing flat marble objects such as chimneypieces and table tops and, on the other, he had invented machinery involved in the turning, boring and polishing of more rotund items and all powered by water. Dawson concluded by stating that the marble mills were Colles's 'own Invention & Contrivance.'

William Tighe's *Statistical Observations Relative to the County Kilkenny made in the years 1800 & 1801*, is the oldest book devoted to the whole county and was produced under the aegis of the Royal Dublin Society. Tighe expands on some of the machinery Colles used in his marble business. William Colles had already stated seventy years previously that he had carried out experiments to ensure the machinery would function as he intended it to, but did not elaborate any further on these

experiments. Tighe, on the other hand, informs us that Colles tried out models of the machinery in a small stream and when satisfied that the machinery would work at full scale, he ‘took a perpetual lease of the marble quarry...and he applied his marble to the construction of a vast variety of articles’. So amazed were the local people by Colles’s ‘vast variety of articles’ that ‘to this day his feats are proverbial among them, and they speak of him as a necromancer’.¹²¹

Tighe described the beds of marble at the Black Quarry in detail. He stated that approximately 20 feet of clay and gravel rested upon the first bed of marble.¹²² Each bed differed from the other in terms of colour and quality and was referred to by the following names

Rock bed about	4ft thick
Thin bed	1 ft 4in
Silver bed, from	1 ft 6in to 2ft
Bad bed	2ft
Half moon bed	2ft 6in
Bottom bed	3ft
Lower thin bed	1 ft 6in
Black bed	1ft8in
Griddle bed	2ft ¹²³

The silver bed and the black beds that were most valued of all, followed by the half moon bed and the bottom bed. The half moon bed derived its name from the crescent shaped impressions of bivalve shells it contained. The stone from the black bed, when polished, had a black ground with white marks. These white marks were the impressions left by bivalve, madrepores and turbinite shells. Each bed varied from the other in colour and quality and the last bed opened at this time was difficult to work due to the content of siliceous stone it contained, ‘the workmen call it *flint*; it is in general a hard and blackish basanite intimately connected with the marble’. This is probably the black stone that does not take a polish described by de Montbret above.

¹²¹ Tighe, *Statistical Observations*, i, p. 105.

¹²² *Ibid.*, pp. 99-101.

¹²³ *Ibid.*, p.100.

Tighe stated that some coarse work on the marble was carried out at the Black Quarry, indicating that the quarry was still the source of the marble, and, ‘a few blocks are split in the town by handsaw; where a little of the polished work is also done.’¹²⁴ The main work was carried out at the marble mill ‘which is on the left bank of the river, near two miles from Kilkenny, to arrive at which blocks must be drawn across the bridge.’ Tighe recorded that the mill ‘is admirable for the simplicity of its structure, and for the power it exerts’.¹²⁵ Tighe informed his readers that this mill was invented by Alderman William Colles, grandfather of the present proprietor, Richard Colles, but that ‘many contrivances of the inventor’ are abandoned at this time. Richard had apparently streamlined the marble mills and it is worth, at this stage, examining an account of the mill published in 1748, to see what ‘contrivances’ Richard had abandoned.

Two anonymous English gentlemen, on visiting Kilkenny in the late 1740s, were very impressed by the ‘Invention & Contrivance’ they witnessed at the Marble Works. The mills were worked by ‘the finest Piece of Mechanism our Eyes ever beheld’.¹²⁶ The visitors were of the opinion that a statue ‘cut by the Chisel of a Praxitelles’ should be erected to the ‘Inventor, Mr. Collis’. The mills, situated ‘in a delightful Bottom, the Passage to it through a pleasant Grove...do their marvellous Work by the Help of the River; and are so wonderfully contrived, that they saw, bore, and polish at the same time.’ William Colles appears to have had a production line in operation at the mills, the machinery was ‘perpetually at Work, like a Ship at Sea, by Night as well as by Day, and required little Attendance’. The Englishmen felt that they ‘had not Judgement enough to describe it fully as it deserves. Had I not seen any thing worthy of notice in the Kingdom, but this one, I should think all my Labours fully paid’.

Alongside the marble mills, the gentlemen stated, were warehouses in which were stored chimneypieces, cisterns, buffets, vases, punchbowls, mugs of different dimensions, frames for mirrors and pictures that would ‘employ the Eye the longest Day, and yet find something to admire’.¹²⁷ Richard Pococke also provided a description of the marble products during his visit in 1752. The machinery ‘turned by water for sawing

¹²⁴ Ibid., p.103.

¹²⁵ Ibid.

¹²⁶ *A Tour through Ireland in several entertaining letters...by two English gentlemen*, London 1748, pp.191.

¹²⁷ Ibid.

and polishing...made punch bowls, tea dishes, saucers and frames of pictures'.¹²⁸
(Figs.2.11—2.14)

The English visitors also mentioned the quality of the marble, 'though it is not variegated like the Italian...it is full as durable, and bears as fine a Polish as any brought from Italy.' The smaller articles described by the Englishmen, such as mugs and frames, were some of the items that were no longer produced at the marble mills by the turn of the century, but it is interesting to see what other contrivances had been abandoned by Richard Colles.

Tighe mentions that Richard had only one waterwheel in operation. This wheel was ten feet in diameter, which had 'twelve floats or ladles' and moved a 'crank at one end of its axis, to a frame containing twelve saws, which do the work of about twenty men'. A second crank positioned at the other end 'moves a frame of five polishers, which do the work of about ten men.' This polishing frame had recently been fitted underneath with another frame containing eight saws. From this description we can see that one waterwheel, centrally positioned to operate the cranks, was powering three separate pieces of equipment for cutting and polishing the marble. Although the waterwheel moved these frames they did not reduce the waterwheels power output, 'the power of the machine [being] fully equal' to its task.¹²⁹

According to Tighe, the means by which the wheel was constructed ensured it was not dependent on a strong flow of water; 'The strength of the stream has some effect upon the working of the wheel, but not much' and, in any case, 'water is never wanting'. The operation 'may fairly be said to do the constant work of forty-two men daily'.¹³⁰ Due to the mill's method of construction it was stopped only for necessary repair work during the day, but at night the operation was completely shut down so that sand could be supplied to the saws and work could be carried out on the polishers. It certainly appears at this time that the mills were not in operation twenty four hours a day as William claimed in his letter to the Dublin Society in 1731/2, only one waterwheel was being used compared to three in William's time. Richard Colles definitely appears to have streamlined the operation and concentrated more on manufacturing chimneypieces, as Tighe enlightens us a little, stating that 'The working of these smaller articles [vases, punchbowls, frames etc.] is now abandoned'. Richard was 'extremely attentive to the

¹²⁸ Stokes, *Pococke's Tour*, p.129.

¹²⁹ Tighe, *Statistical Observations*, i, p.103.

¹³⁰ *Ibid.*

business, which seems in a very thriving state'. Due to the efficiency of the mills the marble was easily worked, resulting in it being sold at moderate prices, with a middle-sized chimneypiece costing about two or three guineas and the price of 'the common ones, usually made, varies from twenty five shillings to four guineas'.¹³¹

Tighe tells us that the saws used for cutting the marble 'are made of a soft iron, and last about a week.' There was a constant supply of water and sand provided for the saws, the sand being taken from the Nore, 'well washed and riddled until nothing remains but very fine and pure siliceous particles.'¹³² The rate of cutting at Kilkenny by water power was, according to Tighe, ten inches per day, twelve inches when the flow of water was stronger, this being equivalent to two men cutting with a handsaw.

After the cutting process the marble was then taken from the mill and polished with cove stones. Tighe tells us that this cove stone was a brown sandstone, or grit, and was imported from Chester and 'takes its name from being used in chimney coves.' The marble was now ready to be polished by the hone stone, 'a piece of a smooth nodule of the argillaceous iron ore, found in the hills between Kilkenny and Freshford'.¹³³ After this the marble was returned to the mills where it received its final polish with rags and putty. The main processes were the same as they were seventy years earlier when William first invented them, yet it is interesting to note that Tighe makes no reference to the grinding process. The horizontal waterwheel would at this time be obsolete as Tighe only mentions one waterwheel, undoubtedly the one portrayed in print of the marble mill by George Miller c1815 (Fig. 2.15). The marble was taken for polishing directly after being cut, but it appears that at this time the marble was squared prior to its arrival at the mills. A memorial of an indented deed in 1774, between William Colles of Millmount, Alderman William of Abbeyvale's son, and his cousin Christopher James, suggests that the horizontal mill was in operation at Archersgrove, just downstream from the Black Quarry (shown as flour mill in the OS map of 1900, see Fig. 2.6). This mill seems to have been part of a milling complex located at Archersgrove, the deed stating that William demised unto Christopher 'the mill formerly called the Flax Mill and Oven and which are part of the Mill heretofore called New Mills and also the

¹³¹ Ibid., p.104.

¹³² Ibid. See also Clara Heritage Society's *A Social History of the Parish of Clara in County Kilkenny*, Kilkenny, 2006, p. 80. One of the occupations mentioned at the Marble Works was 'sand risers', indicating that it was a specific, specialised job to take the sand from the river and render it fine and pure enough to be used for sawing and polishing the marble.

¹³³ Ibid., p.104.

Horizontal Mill for Rubing [sic] Marble situate lying and being at Archer's Grove in Parish of St. Patrick's.¹³⁴

Tighe stated that the price for raising and squaring the marble at the quarry was '9s 9d per week', per workman, indicating that the rubbing, or squaring process was carried out in the vicinity of the quarry. The overall wages varied from 8s to 20s per week and between forty and fifty men were employed in 'the marble business.'¹³⁵ Presumably these men were working at the quarry and the mills, indicating that the Colles family was still a good employer at this time.

Tighe, as mentioned above, stated that William Colles took out a perpetual lease on the Black Quarry after the success of his experiments. Hugh Dawson, in the 1740s, noted in his account that the quarry 'Is the Estate of Warden fflood Esq. and Mr. Richard Jacob and Is at present In the Occupation of Mr. William Colles a Native of this Kingdom'.¹³⁶ As yet a record of this purchase or lease has not come to light, but the above named Warden Fflood and Richard Jacob are linked with the ownership of the quarry in the early part of the 1700's (having taken over from Kilkenny Corporation).

Henry Kinahan stated, in his account noted above (see fn.7), that Colles took out leases on the quarry from Messrs. Minchin and Jacob in 1737. These individuals appeared to have had conflicting views on which of them had ownership of the quarry. Kinahan mentions that the case was the subject of a long drawn suit in Chancery and a court record of the outcome has proven elusive, but some evidence can be garnered from memorials of deeds and leases.

A memorial of a lease and release, dated 4th and 5th April 1738, between Richard Jacob of Kilkenny and Richard Connell of Dublin, involved land in Kilkenny that included 'a parcell commonly called Old and New Black Quarry' which were 'set out to George Jacob, Father of Richard Jacob, on a partition confirmed in the Court of Common Pleas and are situate in the Liberties of City of Kilkenny.'¹³⁷ This appears to confirm the outcome of the suit favoured the Jacob family, yet in 1753 a memorial of a deed between John Jacob, City of Waterford, and John Blunt of Kilkenny involving land, 'commonly called...Gallows Hill' (another name for the location of the Black

¹³⁴ RD, memorial of indented deed of lease, 31 August 1774, 300/651/201713.

¹³⁵ Clara Heritage Society, *A Social History of the Parish of Clara in County Kilkenny*, (see note 131), p.104.

¹³⁶ Armagh Public Library, Topographical and Statistical Returns from Various Respondents sent to Walter Harris and the Physico Historical Society of Ireland, circa 1745.

¹³⁷ RD, memorial deed of lease and release, 4th and 5th April 1738, 91/101/63519.

Quarry) in the ‘Liberties of City of Kilkenny and Parish of St. Patrick’s’ noted that ‘Boyle Minchin of Grange in Co. of Tipp. Gent. claims still to the inheritance of said lands as heir to his brother Humphrey Minchin, decd.’¹³⁸ This would suggest that the Minchin family were reluctant to sever their ties with this area. It is difficult to fathom the legal intricacies involved with the ownership of the quarry but the following is an attempt to throw some light on the individuals named in deeds associated with the quarry.

Kinahan’s date of 1737 for acquiring a lease is questionable, as Colles himself said he took an interest in the quarry prior to his correspondence with the Dublin Society, which, as we have seen, dates from 1731/2. The memorial of this lease appears to be absent from the Registry of Deeds, but, fortunately, a memorial exists of an Indented Deed of Lease between John Jacob of Waterford and William Colles bearing the date of the 15th November 1751.¹³⁹ The term of the deed was for three lives (Colles’s two sons, Barry and William and his nephew, Christopher James), the yearly rent being £15 for the first 31 years and £18 annually thereafter (Appendix A.3).

John Jacob was the son of one Richard Jacob, deceased, from Kilkenny city. The deed of 1751 grants Colles the use of ‘the parts of the Black Quarry formerly belonging to Richard Jacob’. The indication here is that there were two parts to the quarry. A parcel of land ‘called part of the old and new Black Quarry’ is included in this lease. William Tighe, in 1802, enlightens us here as regards to the quarry being in two parts, he is the first to comment on the division of the quarry, ‘the black quarry...lies half a mile south of the town...one side of it is rented by Mr. Darley of Dublin; but the principal part is held by Mr. [Richard] Colles’.¹⁴⁰ He continues, ‘the high road intercepts [intersects?] the quarry’, and this indeed appears to be the case. The quarry was opened originally from the river where it was easier to access the marble. On the 1839 Ordnance Survey map the main road to Bennetsbridge is shown cutting right through the quarry, that part between this road and the river would undoubtedly have been the ‘old Black Quarry’ and that part on the other side of the road would have been the ‘new Black Quarry’. (Fig.2.16)

To complicate matters further, this deed between Jacob and Colles includes the name of David Sheehan, city of Dublin, stonecutter, as occupier along with Colles.

¹³⁸ RD, memorial of deed, 22nd September 1753, 166/64/110303.

¹³⁹ RD, memorial of an Indented Deed of Lease, 15th Nov. 1751, 153/416/103355.

¹⁴⁰ Tighe, *Statistical Observations*, i, p. 99.

Sheehan is also mentioned in a lease dated 4th July, 1748, where ‘Humphrey Minchin of Inchmore, Kilkenny, Esq. did demise and set unto David Sheehan, Dublin, Stonecutter, all that and those said Humphrey’s part of the Black Quarry’¹⁴¹ (Appendix A.1). On the following day Minchin demised an identical lease unto John Ensor, City of Dublin, Gent. According to this lease Ensor and his heirs were to commence their occupation of Minchin’s part of the quarry on 25 March 1779, the day Sheehan’s lease terminated, for a period of sixty eight years (Appendix A.2). According to this information Sheehan had the use of the entire quarry, both Jacob’s and Minchin’s parts, with the privilege of being allowed to ‘digg search for and carry away all marble and other stones as should be found in said premises’. As David Sheehan passed away in 1756 and William Colles in 1770, there was an agreement drawn up in 1778 between their respective sons regarding the Black Quarry. This agreement mentions a further lease of 6 October 1755 whereby William Colles demised unto George Barton of Kilkenny the said lands in trust for David Sheehan (Appendix A.4). John Ensor passed away in 1787, which would suggest that he never became occupant of the quarry and whether his heirs ever took on the quarry is beyond the scope of this thesis. The ownership of the quarry and surrounding land certainly was a complex issue, but at least we can be certain that William Colles was the principal lessee of the Black Quarry until his death in 1770,¹⁴² in partnership with Sheehan in the 1740s and that by 1802 part of the quarry was sublet to Darley.

The inclusion of David Sheehan, John Ensor and ‘Mr. Darley of Dublin’ is an interesting development. David Sheehan was a sculptor, his workshop located in Marlborough St. in Dublin. Homan Potterton, writing in the *Bulletin of the Irish Georgian Society* in 1972,¹⁴³ suggests that he may have been a pupil of William Kidwell (c. 1664-1736), the English sculptor. Kidwell will be examined in the chapter dealing with the importation and exportation of stone during the eighteenth century. Sheehan was associated with the architect Richard Castle and it was Sheehan who carved and supplied chimneypieces, many of Kilkenny marble, to a number of buildings designed by Castle. There are many accounts in the muniments in Trinity College Dublin

¹⁴¹ RD, memorial of lease, 4th July 1748, 131/281/89052.

¹⁴² Within two weeks of Colles’s death the following advertisement appeared in *Finn’s Leinster Journal*, Sat. March 17th, 1770: ‘To be and entered on immediately, the famous black marble Quarry near Kilkenny, lately in the possession of Alderman William Colles, deceased. Proposals to be sent to Henry Flood, Esq; at Farmley near Kilkenny’.

¹⁴³ Homan Potterton, ‘William Kidwell, Sculptor, c. 1664-1736 and some contemporary Mason-Sculptors in Ireland’, *Quarterly Bulletin of the Irish Georgian Society*, vol. xiv, July-Dec. 1972, p. 105.

recording works carried out by Sheehan on order of Castle for work done at the college, an example being Sheehan's Kilkenny marble chimneypiece that is now located in the Common Room. These accounts will be examined in relation to the trade of Kilkenny marble. Potterton records that Sheehan's son, Cornelius, was also a sculptor, but there is no mention of his son William named in the deed mentioned above. Potterton also records that Sheehan, in his will, mentioned his 'stocks of stones in Dublin, Cork, Kilkenny and elsewhere.'¹⁴⁴ This would suggest that Sheehan may have had some involvement with other quarries around the country.

David Sheehan also worked with John Ensor. Ensor was clerk to Richard Castle and completed the Lying-In Hospital in Dublin, after Castle's death in 1751. Ensor was also one of the first to develop sites fronting the new gardens of the hospital on what is now Parnell Square. He is also regarded as the architect of the Phoenix Lodge in the Phoenix Park in Dublin. The Lodge, built in 1752-7 for the Park Ranger, Nathaniel Clements, is now *Áras an Uachtaráin*.¹⁴⁵ Ensor's design for the Rotunda of the Lying-In Hospital, now the Ambassador Theatre, is one of the most recognisable landmarks in the capital. Ensor was sacked from the surveyor general's office for accepting bribes from barrack masters and served time in Newgate for 'gross Prevarication' in submitting evidence to a Parliamentary committee.¹⁴⁶ Ensor was involved with his brother George in contracts for barrack building, or repair, in 65 sites around the country between 1748 and 1750. Barrack contracts were seen as a way to make an easy profit with minimal risks and John Ensor was involved with a barracks contract for Carrick-on-Shannon, which was severely criticised during an enquiry into poor standards of workmanship.¹⁴⁷ What Ensor's plans were for the Black Quarry we may never know, but William Colles was involved in the construction and repair of both horse and infantry barracks in Kilkenny after an associate of Ensor's, Patrick Gernon, failed to complete the contract to an acceptable standard. This will be examined when dealing with Colles's involvement in public building contracts in Kilkenny.

'Mr. Darley of Dublin' is an intriguing revelation by William Tighe. Members of the Darley family are believed to have arrived in Ireland during the late seventeenth century, from either Derbyshire or Yorkshire. There is a record of a Henry Darley in the

¹⁴⁴ *Ibid.*, p.102.

¹⁴⁵ Casey, *Dublin*, p.292.

¹⁴⁶ Edward McParland, *Public Architecture in Ireland 1680-1760*, New Haven & London, 2001, p.87.

¹⁴⁷ Arthur Gibney, 'Studies in eighteenth-century building history', Ph.D. Thesis, University of Dublin, Trinity College, 1998, p.66.

parish register at Newtownards, dated 1708.¹⁴⁸ Leases show Henry was a stonecutter and he and his sons were leaseholders of quarries in the Newtownards area, the quarry at Scrabo being the major one. Walter Harris, writing in 1744, stated that this quarry ‘furnished the hewn Stone for the College Library at *Dublin*.’¹⁴⁹ Two of Henry’s sons, Moses and Hugh, moved to Dublin and became involved in building works at Trinity College and much of the speculative building going on in Dublin at the time. Moses died in 1754 but his sons, Henry and George, carried on the building tradition. There was what might be called a ‘Darley Dynasty’ operating in Dublin and further afield during the latter half of the eighteenth century, as they became involved in building and quarrying operations in Wicklow, Meath and Louth. Tighe’s comment now places a member of the family as far away as Kilkenny at the end of the century. The likelihood is that it was George Darley who occupied part of the Black Quarry, as Henry had passed away in 1798 (George died in 1817). William Colles was familiar with the Darley family and this relationship will be examined later in the thesis.

It certainly appears that many people that were influential in the architectural developments of eighteenth-century Ireland recognised the quality of the marble from the Black Quarry and were very interested in securing their own supply. This was as a result of Colles’s remarkable endeavours to quarry, shape and, above all, promote the marble of Kilkenny, a feat that was recognised not only here, but also further afield.

William Colles’s ingenious endeavours were seen as a pivotal point in the development of quarrying and working marble. The Middlebury Historical Society of Vermont, USA, saw Colles as reinventing saws driven by waterpower in the cutting of marble.¹⁵⁰ His use of water-powered machinery to polish marble was regarded as most innovative. To put this in perspective we should examine to what extent the Middlebury Historical Society saw itself as an authority on the subject.

The town of Middlebury, Vermont, lies along a vast tract of limestone that runs through the western parts of the New England states. The first marble quarry opened in the United States was in Vermont in about 1800 and marble was discovered in Middlebury in 1804. In 1806 the marble was being exploited on an extensive scale with 65 saws in operation cutting the marble, all driven by waterpower. In 1809 the

¹⁴⁸ Nat. Arch. Dub., Notes on the Darley Family, M473.

¹⁴⁹ Walter Harris, *The Ancient and Present State of the County of Down*, Dublin, 1744, p.190.

¹⁵⁰ The Middlebury Historical Society was formed in 1843 and published a history of quarrying in the New England states titled *The Marble Border of Western New England, Papers and Proceedings of the Middlebury Historical Society* in 1885.

Middlebury Marble Manufacturing Company was incorporated and in that year and in 1810, upwards of 20,000 feet of marble slabs was sawn, worth \$11,000. It was estimated that the annual turnover for the company was between \$6,000 and \$8,000.¹⁵¹ The strata of superior stone appeared in this area in two parallel lines about two miles apart and ran to a depth of between 100 and 200 feet thick and this deposit was regarded at the time to be potentially the chief source of ornamental marble for all the United States. During the 1880s the New England states had 6,000 men employed in the marble industry. One quarry in Rutland, a short distance from Middlebury, had a floor area of an acre. The volume of marble produced annually in the area was 2,200,000 cubic feet valued at \$4,500,000 and of this Vermont accounted for 1,200,000 cubic feet worth \$2,400,000.¹⁵² One particular order from the government, in 1875, was worth over \$800,000, this being for 254,000 lettered headstones for military cemeteries.¹⁵³

In 1885 the Historical Society decided to research and publish a history of marble quarrying in the New England area of the United States. Professor Seely's¹⁵⁴ account of the development of tools and machinery associated with the marble trade was chronologically ordered in this publication. He began with the mallet, chisel and drill, used from earliest times. Hand saws were next, Seely using Pliny as the authority for this with the saws being fed sand and water by hand from 350 BC. Ausonius was the authority for the fact that saw mills for cutting stone, driven by waterpower, were used in Germany in the fourth century AD. The intervening centuries saw long, toothless saws, up to twenty three feet in length, in operation in the Pyrenees and a design by Leonardo da Vinci for two or more saws stretched on a frame, known as 'gang saws', from the sixteenth century. The water powered saws mentioned by Scamozzi in 1615 may have been a variation of this design, but Seely seems to have been unaware of them as, after such illustrious figures, he places William Colles next in the evolution of the marble industry. Saws driven by waterpower were 'reinvented by William Colles, Kilkenny, Ireland, 1730.' Polishing and boring marble was 'done at the same place...and by the same power.'¹⁵⁵ Colles had, according to Seely, 'restored and put

¹⁵¹ Zadock Thompson, *History of Vermont, Natural, Civil, and Statistical*, Burlington, 1842, pp. 114-115.

¹⁵² *The Marble Border of Western New England, Papers and Proceedings of the Middlebury Historical Society*, vol 1, pt 2, Vermont, 1885, p.52.

¹⁵³ *Ibid.* p.40.

¹⁵⁴ Prof. Seely was formerly secretary of the Vermont State Board of Agriculture and at the time of this publication was attached to the Chemistry and Mineralogy Department at Middlebury College.

¹⁵⁵ *The Marble Border of Western New England, Papers and Proceedings of the Middlebury Historical Society*. p.55.

into use the process of sawing marble by water power...it has been continuously in use down to the present day.’¹⁵⁶ Seely enhances his essay by quoting from William Tighe and the two English gentlemen in their work *A Tour Through Ireland*, supplied through correspondence with Richard Colles (William’s great-great grandson) and Rev. James Graves of Kilkenny.

The Kilkenny Marble Works was seen as the standard which all other marble industries should be encouraged to attain. In Scotland it was regarded as the best example by which that country’s marble industry could and should be developed. The description of the Marble Works given by the two English gentlemen was used to show how such an account could be used to encourage the government to develop Scotland’s natural resources. John Knox, writing in 1789, stated that the north of Scotland ‘abounds in marble of curious colours and qualities, [and] it may be proper to employ certain qualified persons to examine into the different veins, and make a report of their observations to government’.¹⁵⁷ The author then used the account of the Kilkenny Marble Works by the two Englishmen to portray how the ‘expediency and utility of such information’, such as that from Kilkenny, could assist in the exploitation of the marble and the creation of employment in areas where the ‘people are discontented, and strongly disposed to emigrate’.¹⁵⁸

William Colles’s inventions brought sweeping changes to the marble industry in Ireland, Britain and America. Sixty years after its foundation, the Kilkenny Marble Works was seen in Scotland as the epitome of a progressive industry, both commercially and socially. Over one hundred years later the contribution of William Colles to the marble industry is given international credit by the Middlebury Historical Society in the State of Vermont, USA, the greatest marble producing area of nineteenth-century America and still one the largest today.

¹⁵⁶ Ibid. p.28.

¹⁵⁷ John Knox, *A View of the British Empire, more especially Scotland; with some proposals for the improvement of that country*, London, 1789, p.465.

¹⁵⁸ Ibid., p.466.

Chapter Three.

The Nore Navigation.

Peter O’Keeffe and Tom Simmington, writing in 1991, stated that ‘The role of [William] Colles in the navigation and bridge building work in the 1750s and 60s in Kilkenny was vital and has been neglected in literature.’¹⁵⁹ The following chapter will examine the role played by William Colles in the campaigning for, and construction of, the navigation of the river Nore. Although the attempt to render the Nore navigable from Kilkenny city to the tidewater at Inistioge was a very expensive failure, Colles was aware from an early stage of the advantages and improvements a canal would bring, not only to the city, but to the surrounding countryside also.

O’Keeffe and Simmington are correct in suggesting that Colles’s role in the navigation works and bridge building in Kilkenny was ‘vital.’ A variety of sources have been examined which reveal that Colles was actively engaged in promoting the navigation of the rivers Nore and Barrow since 1737. What is also evident from these sources is that William Colles was the prime mover in the various attempts to establish the Nore navigation throughout his own lifetime. Transcripts of letters that make up part of the Prim Papers, contained in the National Archives of Ireland, display how Colles canvassed both local and national dignitaries and politicians in attempts to set up navigation projects in the Kilkenny area. This rich source, along with parliamentary reports contained in the *Journals of the House of Commons of the Kingdom of Ireland*, various acts passed in parliament to encourage inland navigation and a rare print of the navigation in the British Library, reveal how navigation works literally ebbed and flowed throughout most of the mid eighteenth century. We shall see how progress in inland navigation was hindered in the early decades of the century due to lack of private investment, but during the 1750s this all changed and vast sums were made available to carry out public works all over the country.

The management of the navigation of the river Nore became notorious due to the lack of any useful progress and also for the amount of funding it received. The common belief, in hindsight, is that the canal was started at the wrong end. If the work had begun at Inistioge, every foot it progressed would have cut transport costs from Kilkenny that little bit more, but Colles, as we shall see, was adamant the work should begin at the

¹⁵⁹ Peter O’Keeffe and Tom Simmington, *Irish Stone Bridges. History and Heritage*, Dublin, 1991, p. 236.

Kilkenny end. It should be borne in mind that, while Colles was aware of the advantages a canal would bring to the whole area, he was not wholly altruistic in this outlook. He had, after all, his own products of marble, flour and linen that required cheap and speedy transport to markets at home and abroad and, more importantly, he was also to become the main supplier of the hewn stone required to carry out the navigation project and the bridges and quay associated with the works.

Colles would have been about thirteen years old when the idea of making the Nore navigable was first considered. In 1715, an act was passed by the Irish Parliament in order 'To Encourage the Draining and Improving of the Bogs and unprofitable Low Grounds; and for easing and dispatching the Inland Carriage and Conveyance of Goods from one Part to another within this Kingdom.'¹⁶⁰ The objective of this act was to promote agrarian improvement and develop better systems of transportation and communication within the country. Eighteen different schemes were to be carried out under this act, but, due to lack of funding, very little came to fruition. However, as Ruth Delaney has stated, this act paved the way for future schemes and marks the 'beginning of the Canal Age in Ireland.'¹⁶¹

Of the local commissioners appointed by the act of 1715, one group were given the task to render navigable 'the Nore and lower Brosney' in a north north-westerly direction from Waterford to Eyrecourt in Galway.¹⁶² This truly ambitious scheme would, it appears, have linked Waterford with the Shannon approximately twelve miles north of Portumna, traversing eight counties along its route. It goes without saying that this project, along with other improvement schemes, never came to fruition and it took another forty years before anything more was contemplated regarding the river Nore. The following is a documented account of the events that led, eventually, to attempting to make the river Nore navigable from the city of Kilkenny to the tidewater at Inistioge.

The failure of the early schemes was seen as a deterrent to private investment in further navigation works and, in recognition of this, parliament passed an act in 1729, to resurrect and effectively execute the earlier act of 1715. The act of 1729 succeeded in setting up Commissioners of Inland Navigation for each of the four provinces. The Commissioners were to be publicly funded by duties placed upon 'Coaches Berlins

¹⁶⁰ *Statutes*, Act 2 Geo.I.c.12, vol. iv, pp.356-77.

¹⁶¹ Ruth Delaney, *Ireland's Inland Waterways, Celebrating 300 Years*, Belfast, 2004, p. 11

¹⁶² V.T.H. and D.R. Delaney, *The Canals of the South of Ireland*, Devon, 1966, p. 139.

Chariots Calashes Chaises and Chairs.’¹⁶³ Cards, dice, and items of gold and silver plate, made in, or imported into the country, were taxed in order to provide further funding. Such funding succeeded in the commencement of navigation works at Newry. Further works were carried out on the river Boyne and surveys were carried out in attempts to link Dublin with the Shannon.

As early as November 2nd 1737, Colles was championing the navigation of the Nore. In that year he presented his account of the probable expense of making the Nore navigable to Kilkenny. Included also was his estimate for making the river Barrow navigable to Athy. He wrote this letter in compliance with the wishes of Warden Flood and from the information contained within, it appears that this account was intended for someone, or some group, in a position of authority. Colles wrote,

As to the expence of making the River Nore navigable, It is from Ennistiog whither the tide comes to Kilkenny about 14 miles by water and as the river has a great number of falls will require many locks so that I apprehend it would cost about £12000 to make it navigable to Kilkenny wch some I am persuaded wd compleat It, including the making of a road along the Bank after the Turnpike manner, for drawing up loaded boats with horses ¹⁶⁴

Colles also included his estimate for making the river Barrow navigable from the tidewater below Graiguenamanagh to Athy. He stated that the distance was ‘abt 20 miles, but as the Barrow Runs on a fflat for Great part of that way, I apprehend that River may be compleated for about Eight Thousand pounds including the Road as above.’ Colles’s interest in the river Barrow can be explained by the fact that he was the occupier of a quarry at Royal Oak. In a letter to Charles Tottenham at Ross (New Ross), regarding the supply of cut stone for the Courthouse and Market House there, Colles wrote ‘I have a quarry of excellent stone at ye Royal Oak near the Barrow.’¹⁶⁵ This quarry has been filled in, but its outline is still visible today. It is situated close to the

¹⁶³ *Statutes*, Act 3 Geo.II.c.3, vol. v, pp.341-63.

¹⁶⁴ PRIM, letter dated 2 November 1737, no addressee. The majority of letters in the Prim collection are chronologically ordered. Prim placed a note beside this transcription stating ‘It is so dated’, due to the fact this letter was not chronologically placed among the others in the collection, therefore we must assume, as did Prim, that the date is correct.

¹⁶⁵ *Ibid.*, 5 March 1747, William Colles to Charles Tottenham Esq.

Barrow, less than a mile west of Bagenalstown, county Carlow. This route would have been an ideal one to transport goods to Dublin via Athy at the time.

According to W.G. Neely, writing in 1989, the prime movers on this project were William Evans Morres and William Colles.¹⁶⁶ Six years after his initial report, Colles wrote to Rev. John Perry in Dublin in November 1743.¹⁶⁷ In this letter he gave an account of the course of the river Nore and ‘its capabilities for being made navigable by a canal [from Kilkenny] to Inistioge.’ After the river ‘leaves this Citty It runs S.E. Thro a Beautiful Country to Bennets Bridge.’ He then continues, ‘These rivers Nore and Barrow might with great ease and no inordinate expence be made navigable by locks for boats of considerable Burthen.’ Such vessels would be able to navigate up and down the river throughout the entire year. The vessels would also be ideal, due to their convenient location, to transport coal from the collieries at Castlecomer. As Kilkenny had now ‘become a prodigious corn County’ the river Nore ‘would be of much greater service than any Rivers In the whole Kingdom that could be Done for the like sume of money.’ Colles made no reference to marble in this letter, perhaps not wishing to appear subjective, but it is worth noting that he was busy developing his flour business at this time and a canal would have been instrumental in accessing the lucrative Dublin market. He could see no physical obstacles that would impede the canal construction but he did have one major concern, the lack of will, political or otherwise, to carry out the task. As already noted above, the poor result achieved in navigation schemes during this period was a major deterrent for private funding. Colles, expressing his anxiety, stated ‘I fear we have no body who is of might enough to have his proposals hearkened to that has this matter so much at Heart as to be active In procuring such an Inestimable advantage to this County.’

This fear of not having a person ‘of might enough’ may have prompted Colles to write to the Bishop of Ossory, Michael Cox, on 28 November 1743. Pointing out that, as there was ‘a fund granted by Parliament for the Encouragement of Tillage and the Inland Navigation, which was for many years laid out in the Northern part of the Kingdom’, perhaps funding from this source could be sought for rendering the river Nore navigable in similar fashion.¹⁶⁸ Cox was curious as to the cost of the scheme and Colles, answering the bishop’s query, was of the opinion that a rough estimate of about

¹⁶⁶ Neely, *Kilkenny*, p. 192.

¹⁶⁷ PRIM, 15 November 1743, William Colles to Rev. John Perry.

¹⁶⁸ *Ibid.*, 28 November 1743, William Colles to the Bishop of Ossory.

£10,000, £2,000 less than his estimate of 1737, would complete the work, including the towpath by the side.¹⁶⁹ Colles was involved in the planning of the Charter School at Kilkenny under the direction of the bishop at this time and this, along with his involvement with the marble, flour and linen industries, appears to have taken up much of his time over the next number of years. Evidence of the lack of any progress on the canal construction can be garnered from the comments of the two English gentlemen in 1748. Aware of the advantages a canal could bring to the area, they wrote, ‘Were the River navigable, I believe it would be the richest inland Town in the Kingdom. I am told thirty thousand Pounds would have been the utmost to have completed its Navigation to Waterford, and that the D...ch.ss of M...h[sic] offered to give a third Part of the Expencc. It gives me some Concern the Terms were not complied with’¹⁷⁰

In 1751 parliament amended the act of 1729 by extending the above duties for a further twenty-one years and incorporated the provincial Commissioners into a single navigation board. The newly formed Corporation for Promoting and Carrying out an Inland Navigation, more commonly known as the Board of Inland Navigation, was to be supported by the aforementioned duties and was to meet four times a year in Dublin.¹⁷¹

The next correspondence from Colles regarding the Nore navigation is in December 1751. Writing to Richard Griffith Esq. in Dublin, he expresses his satisfaction that John Ponsonby MP, had been in contact with the Navigation Board with a view to securing funding in order to start the project. Estimating that the scheme could be completed all the way to the tidewater at Inistioge for £8,000, again a lesser sum than those of his previous estimates and significantly less than that relayed to the Englishmen, he would ‘be the undertaker of it for that sum if the Navigation Board think proper.’¹⁷² Ensuring that the work would be of the highest quality, he emphasised that he would do it in ‘ a Complete manner, all ye backs to be of Hewn stone, ye floodgates and sluices of good Oak and a complete gravel road along one side for Drawing up the Boats with horses.’ Here again, due to the prevailing political climate,

¹⁶⁹ Ibid., 28 November 1743, William Colles to the Bishop of Ossory. Prim has placed the same date on both these letters, the second one being addressed to Cox in Dublin. Prim appears meticulous in recording the dates and contents of each letter, but in this case no explanation is given as to how Colles could write to the bishop twice in one day, whilst also receiving a letter in return. The likelihood is that both men were in Dublin at the time, but Prim does not record this.

¹⁷⁰ *A Tour through Ireland in several entertaining letters...* by two English gentlemen, London 1748, p. 180.

¹⁷¹ *Statutes*, Act 25 Geo.II.c.10, vol. vii, pp.129-148.

¹⁷² PRIM, 12 December 1751, William Colles to Richard Griffith Esq.

the scheme was placed on hold, but by 1753, political manoeuvring in parliament had a positive outcome for the river Nore and William Colles.

Events in parliament in the early 1750s were to alter how funding for public works became available for the general good of the country. These proceedings are far too politically complicated for this particular thesis, but require addressing briefly due to the effect they had on funding major public projects, especially that of inland navigation.

In the years 1749, 1751 and 1753, the Irish House of Commons was in the unusual position of having a surplus in the treasury. This surplus was the result of better economic conditions, leading to greater prosperity. Revenue collecting had greatly improved also. This surplus proved problematic at the time as it exacerbated a rift that had developed in parliament. Questions arose over who should have ownership of this revenue and the right to its dispersal, the King or the Irish House of Commons. One group in parliament, led by the Speaker of the House, Henry Boyle, were known as the 'patriot' MPs. These MPs were a body of independent-minded men who claimed the right to this revenue did not solely lie with the crown.

Boyle's party, although small, included the Gores, a powerful family with strong Kilkenny connections.¹⁷³ Boyle was regarded as a parliamentary manager, or 'undertaker', whose main task was to ensure government business was carried out, or undertaken. This was not an easy task as member's loyalties often lay with individuals or families, rather than political parties. As David Hayton states, 'The pattern of parliamentary politics had become almost kaleidoscopic, with new combinations forming and dissolving in the space of a session.'¹⁷⁴ The role of conducting the smooth running of parliament lay with Boyle and his party and this placed them in a very influential and powerful position, but also in direct conflict with the government and the administration in Dublin Castle, culminating in the Money Bill dispute in 1753.

In 1753, public funding that had been provided for the construction of military barracks came under parliamentary scrutiny. The funding proved to be misappropriated and this led to the expulsion from parliament of the Surveyor General, Arthur Jones-Nevill, a subject that will be examined when we look at Colles's role in barracks

¹⁷³ Two members of the family represented Kilkenny city, William Gore 1727–48 and Sir Ralph Gore 1748–60, 1776–8.

¹⁷⁴ David Hayton, 'The Beginnings of the 'Undertaker System'', in Thomas Bartlett and D.W. Hayton (eds), *Penal Era and Golden Age*, Belfast, 1979, pp. 47–8.

construction. The expulsion of Nevill was only a part of the conflict between those that wished to secure the English interest in Ireland, such as Archbishop George Stone, and those feeling resentment towards such control and influence. Boyle's party were anxious that any future surplus revenue would remain in the country and not in the coffers of the Crown. The Money Bill of 1753, a complicated issue, was introduced 'to apply the surplus in the [Irish] treasury'¹⁷⁵ rather than being left to the discretion of the Crown as to its destination and Speaker Boyle and his party were out to make sure that the money needed to run the government remained in the country and not, as William Harward, MP for Doneraile, stated, 'be carried off to Hanover.'¹⁷⁶ Boyle's supporters won the day as the Money Bill was defeated. Ensuring that no surplus would accrue following this defeat, parliament set about making funds and grants available for public works throughout the country. A new era of improvement was about to begin.

In March 1755, the new lord lieutenant, William Cavendish, marquis of Hartington, recommended to the Commons that deserving enterprises should be encouraged by diverting any potential surplus revenue to them, rendering them beneficial to the country. Hartington, prior to his arrival in Ireland, was very aware that, due to the large amount involved, the surplus that year would be better used in financing bounties and grants, rather than being utilised for government expenses. Hartington had been approached by Richard Boyle, Henry's son, in England prior to his departure for Ireland, where certain terms were discussed to ensure greater cooperation among parties and individuals for the smoother running of government. This included the removal of Primate Stone, the 'principal incendiary and cause of all divisions and disturbances...amongst us.'¹⁷⁷ The Chief Secretary, Henry Conway, conscious of the fact that some questionable schemes might be included to avail of grants, stated that, due to the political climate at this time 'making seven or eight rivers navigable at once may appear burlesque...but I insist this is better than hoarding or appearing to hoard the money.'¹⁷⁸ Large sums of money were granted for the encouragement of industry and navigation works were one of the main beneficiaries of large grants voted by parliament. The floodgates were now, literally, open.

¹⁷⁵ Declan O'Donovan, 'The Money Bill dispute of 1753', *Penal Era and Golden Age*, pp. 55–87. This article provides a detailed account of the Money Bill and the individuals involved.

¹⁷⁶ Robert E. Burns, *Irish Parliamentary Politics in the Eighteenth Century*, 2 vols, vol. ii, Washington, D.C., 1990, p. 171.

¹⁷⁷ *Ibid.*, pp. 199–200.

¹⁷⁸ O'Donovan, 'The Money Bill dispute of 1753', (see note 173), pp. 81–2.

In October 1753, Sir William Fownes had requested that Colles send him a scheme for carrying out the Nore navigation. Fownes was, at this time, MP for Dingle, but his residence was Woodstock, near Inistioge, county Kilkenny. He was also a son-in-law of the Earl of Bessborough and a staunch supporter of Bessborough's son, John Ponsonby.¹⁷⁹ Colles duly responded to Fownes' request, quoting the figure of £12,960 in order to fully complete the project. He offered to undertake the work at that price, completing it in four summers from the time the work commenced.¹⁸⁰ Included in this correspondence is Colles's hope that Fownes will succeed in his efforts to get the navigation approved. If Colles's earlier fear of having no person 'of might enough' was cause for concern, he must surely have felt at this stage that things were looking very promising.

On 1 February 1755 Kilkenny Corporation agreed that a memorial be drawn up with the City Seal in place and that the trustees of the inland navigation be petitioned for approval for the navigation scheme. This was the beginning of a petition to parliament made in November 1755. William Evans Morres chaired the meeting as mayor of Kilkenny and already had a survey carried out of the river at his own expense, the corporation agreeing to reimburse the cost.¹⁸¹ It certainly appears that Morres was greatly involved with the political aspects of securing the funding for the navigation and, as we shall now see, William Colles was very vigorous in ensuring that the navigation went ahead without any further delay.

On 1 November 1755, a petition from 'several Gentlemen, Merchants, Farmers, and Inhabitants of the County and County of the City of Kilkenny', was presented and read to the Irish Parliament.¹⁸² This petition revealed that the greater part of the county of Kilkenny consisted of arable land that was suitable for the production of 'Grain of all Kinds.' The farmers that worked this land produced 'great Quantities of Corn'. It was emphasised that more grain could be produced but the prohibitive cost of land carriage to various markets discouraged the farmers from tilling the land further. The farmers were at a disadvantage for 'want of Water-carriage to the City of Dublin, and other Markets.' Grain was not the only produce mentioned in the petition. Castlecomer, for its collieries, and the Black Quarry were 'commodiously situated for sending the Coal and

¹⁷⁹ Edith Mary Johnston-Liik, *History of the Irish Parliament 1692-1800*, 6 Vols., Belfast, 2002, vol. iv, p.233.

¹⁸⁰ PRIM, 28 October 1753, William Colles to Sir William Fownes.

¹⁸¹ Watters, 'Kilkenny Canal', p. 85.

¹⁸² *JH of C*, vol. v, pp. 229-230.

Marble...Coast-ways to the several Sea-Ports of this Kingdom.’ It was essential that a good road system was properly maintained for land carriage, but this was very costly due to the conveyance of such weighty items as coal and marble. The river Nore flowed through the heartland of the county and to make it navigable to the tidewater at Inistioge would be of great benefit to the county and wider area. This navigation would allow large boats and ‘lighters’ (flat-bottomed barge used to transfer goods to and from ships in harbour) to travel from Kilkenny downstream to the ports of New Ross and Waterford.

The residents of Kilkenny city, highly aware of the handicap that dependence on land transport had on their trade, were extremely eager to see the Nore made navigable all the way to the tidewater. The movement of goods by water to and from Kilkenny had never been under the control of the merchants and businessmen of the city. A charter granted to a company of cotmen at Thomastown in 1707, ensured they were the ones in control of the transportation and the costs. According to W.G. Neely, writing in 1989, the chief business of the cotmen was carrying goods to and from Kilkenny, in flat bottomed boats 15 to 20 feet in length.¹⁸³ On the other hand, a report from Charles Vallancey in 1796 stated that ‘many large flat bottomed boats, in general 45 feet long, 8 feet wide, drawing only 20 inches water’ were very common on the rivers in the area.¹⁸⁴ These larger vessels were probably used to transport merchandise from Waterford and New Ross to Inistioge and the lighter, smaller vessels were then used to negotiate the Nore all the way to Kilkenny. These boats could only carry a very limited quantity of goods, and therefore, it was a matter of great urgency that a canal be constructed to link the city of Kilkenny to the sea. (Fig. 3.1)

The petitioners delivered a memorial of their petition to the Commissioners for Inland Navigation and they in turn made an order that Thomas Omer, ‘Surveyor and Inspector General of their Works’, was to survey the Nore from Kilkenny to Inistioge. Omer duly carried out the survey and reported to the Commissioners that the river Nore could be made navigable ‘for flat Bottomed Vessels of 100 Tons Burden’ for the sum of £10,000. Thomas Omer was a canal engineer of Dutch origins, who was invited to Ireland by the Commissioners of Inland Navigation. Omer, directed by the

¹⁸³ Neely, *Kilkenny*, p. 192.

¹⁸⁴ William O’Reilly, ‘Charles Vallancey and the Military Itinerary of Ireland’, *Proceedings of the Royal Irish Academy*, vol 106C, 2006. An excellent account of the cots on the river Nore can be found in Fidelma Maddock’s, ‘The Cot Fishermen of the River Nore’, *Kilkenny: History and Society*, Dublin, 1990, pp.541–65.

Commissioners, was to be involved with almost all the mid-eighteenth century Irish inland navigation schemes, many of which became notorious for their lack of progress and expense and the navigation of the river Nore was definitely no exception.

The petitioners, again reiterating the expense incurred by bringing their imported goods overland and having to ‘send down their corn...Coal, Marble’ in the same manner, concluded by ‘praying the House’ to take their predicament into consideration. The House ordered that the ‘Right Honourable John Ponsonby, Mr. Attorney General, &c. or any three or more of them’ form a committee to examine the petition and report back their opinions to the House the following week. John Ponsonby and the then Attorney General, Warden Flood, had Kilkenny connections. John Ponsonby was the son of Brabazon Ponsonby, 1st Earl of Bessborough, noted above, and a member of the Ponsonby dynasty that represented various constituencies in parliament from the latter half of the seventeenth century right up to the Act of Union. Ponsonby held many posts within parliament, becoming Speaker of the House in 1756. Warden Flood, a member of one of the most prominent Kilkenny families, was MP for Callan, Co. Kilkenny, at this time.

On 8 November 1755, John Ponsonby reported the findings of the committee to the House. The opinion of this committee, unsurprisingly, was that the petition to make the Nore navigable was fully justified and would be of great service to the public. It was agreed that the sum of £10,000 was the necessary amount to execute the project. It was then ordered that the petition should be referred to the committee of the whole House. The Right Honourable Thomas Carter, one of the major political figures and Principal Secretary of State at this time, reported from this committee on 12 November. It was agreed that £10,000 should be granted to the ‘Corporation for promoting and carrying on an inland Navigation in Ireland’ to make the Nore navigable from Kilkenny to the tidewater at Inistioge.¹⁸⁵ Parliament accepted Omer’s estimate instead of Colles’s more expensive one (see Table 3.3, p. 85).

The successful application for the funding of the Nore navigation prompted William Colles to write to Sir William Evans Morres in Dublin. Morres was MP for Kilkenny city, elected in 1752 replacing the deceased John Blunden and was instrumental in presenting the petition to parliament. Although written two days before the positive announcement by Thomas Carter, Colles congratulated Morres on the

¹⁸⁵ *JH of C*, vol. v, p. 245. See also *Statutes*, Act 29 Geo.II.c.1§.14. V.7. p.275.

‘success of ye application for ye Navigation of the River Nore’.¹⁸⁶ Colles stated that the city of Kilkenny should bestow all the honours it can on Morres. Colles went on to say that the citizens should show their gratitude to Morres, who had shown himself ‘so worthy a Representative by promoting and obtaining this fund’, as it would be of great benefit to Kilkenny, which would become ‘an Industrious and Trading Citty.’ Conscious of the decades of delay, Colles urged Morres to set the wheels in motion as soon as possible as tradesmen may become scarce, as ‘the Colledge, other rivers and many buildings which I know are to begin hiring’. The funding that had been made available following the money bill dispute of 1753 was now being put to great use up and down the country.

On 1 February, 1755, the day of the corporation meeting chaired by Sir William Evans Morres, noted above, Colles had informed the Earl of Bessborough of the surveying work carried out on the Nore and indicated that there was much work to be done, but this should not prove too difficult as the ground all along the river was most suitable for such work. He then provided a rough estimate of the probable expense of the project, £14,326, an accurate amount for a ‘rough estimate’ and considerably more than the quote of £12,960 he gave to Sir William Fownes in October 1753. Colles hoped that with ‘his Lordships influence the work may be agreed to be done.’¹⁸⁷ William Colles’s next correspondence on the subject was his congratulatory letter to Sir William Evans Morres on receiving the funding to carry out the navigation of the river Nore. The £10,000 granted by parliament was significantly less than the £14,326 Colles regarded as necessary to carry out the navigation of the river Nore.

Almost one year later, in January 1756, Colles again wrote to Morres in Dublin. He informed Morres of his visit to Lord Bessborough the previous week. The purpose of this visit was to ‘return my Lord thanks In the name and behalf of this Corporation for his assistance In winning the money for ye Navigation of the Nore.’¹⁸⁸ Although Colles was on official business for this visit, as he was Lord Mayor of Kilkenny at this time (1755–56), he revealed to Morres personal concerns regarding Bessborough’s thoughts on the navigation. Bessborough ‘strongly urged’ that work on the navigation should start ‘at the Inistioge end’ and ‘if Ld. B. should push It on Navgat Bd.’ to begin

¹⁸⁶ PRIM, 10 Nov 1755, William Colles to Sir William Evans Morres.

¹⁸⁷ Ibid., 1 February 1755, William Colles to the Earl of Bessborough.

¹⁸⁸ Ibid., 10 January 1756, William Colles to Sir William Evans Morres.

at this end, then Colles wished Morres to know of the problems he envisaged with this plan.

According to Colles, all the materials required ‘in the way of stone and oak, for locks, boats, gates &c are all at the Kilkenny end’, which suggests Colles had much of the material already prepared for beginning the construction. If the work began at the lower end, the materials would have to be ‘brought from Granny, or from the Royal Oak down the Barrow at double the expense.’ Granny was a large quarry just north of the town of Waterford and it has not yet been ascertained if Colles had an interest in it. The quarry at Royal Oak, as noted above, was ideally located for transporting quarried stone up, or down, the river Barrow. Even though he would be supplying the stone from Royal Oak and profiting more from it, Colles appears reluctant to incur any more expense towards the navigation scheme by transporting materials down to Inistioge.

Indeed, he was very conscious of wasting any of the funding, stating that ‘The money granted will do a great deal of work if properly and frugally Layd. out, but may be easily thrashed away by mismanagement.’ Another fear Colles imparted to Morres was, that if the navigation was to start at the Inistioge end and reach as far as Thomastown or even up to Bennetsbridge, ‘interested persons might try to have it stopped there’ with the result that Kilkenny would be deprived of its navigable access to the ports of New Ross and Waterford. Why Colles thought this, or even whom he had in mind, is not clear. Perhaps, after all the years spent in campaigning for the navigation and to have it snatched away now, made Colles feel paranoid. Again it is worth noting here that Colles had his own interests foremost in his mind and, perhaps, did not wish to overtly express his concerns over Bessborough’s suggestion. Whatever the reasons were, it is obvious Colles trusted Morres enough to express such sentiments.

In December 1756 the Corporation for promoting and carrying on an Inland Navigation in Ireland eventually met in order to authorise and appoint ‘Overseers, Managers, and Directors’ for the Nore navigation. A veritable list of ‘who’s who’ was appointed. Heading this list was the Earl of Bessborough, followed by the Earl of Carrick, Lords Mountgarret and Castlecomer, Bishop Richard Pococke, Lords Desart and Mountmorres and the newly appointed Speaker of the House of Commons, John Ponsonby. Sir William Fownes, Sir William Evans Morres and Warden Flood, Attorney General, headed the next list of dignitaries and local MPs and members of Kilkenny Corporation followed these. This group of men were granted the ‘full Power &

Authority to take all proper means for making the sd. River Navigable...by Employing Skilfull Persons, making contracts, and doing every other thing that may be necessary thereto.¹⁸⁹

It must have been a great relief to Colles to finally get construction work under way. At a meeting of the Local Board of Commissioners for the Nore navigation, held on 20 June 1757, the announcement was made that, ‘Mr. Ockenden, the Engineer, being come to town, it is ordered that messengers be sent to the several Commissioners in the county and city of Kilkenny.’ The messengers were to let it be known that a meeting was to be held on Thursday 23 June, in the city, in order ‘to concert proper measures to carry the work into execution.’¹⁹⁰ Present at this meeting, of 20 June, was George Carpenter, the Mayor, Arthur Bushe and Sir William Evans Morres, but at the following meeting, most of the dignitaries were there.

The Bishop of Ossory, Richard Pococke, chaired the meeting. The Earl of Bessborough, Lord Mount Morres, Sir William Evans Morres, Sir William Fownes and Mayor Carpenter, were also present. It was agreed that Bessborough would apply to the Navigation Board for £3,000 out of the £10,000 allocated by parliament and pay it to Pococke, Carpenter, Morres, Samuel Matthews and Folliott Warren, in order to begin the work. William Colles was in attendance at this meeting, where he delivered his proposal for supplying stone and other materials for the construction of the first lock. It was obviously agreed at this stage to concur with Colles’s wish to begin the canal at Kilkenny and not at Inistioge.

The proposal for the lock was fairly detailed and displays a good knowledge of the requirements necessary to construct a canal lock. It is quite obvious that Colles was a very resourceful man with a highly creative mind and, most likely, he easily understood the workings of a canal system, but the likelihood is that he would also have studied any literature available on canal construction at the time. The most readily acquired one would have been Richard Castle’s *An Essay on Artificial Navigation*, published in 1730. In about 1720, it is believed, Castle travelled in Germany, France and Holland, studying fortifications and canals.¹⁹¹ By 1725 he was studying waterworks and architecture in England. In his essay Castle examined many of the main problems

¹⁸⁹ Watters, ‘Kilkenny Canal’, p. 97.

¹⁹⁰ *Ibid.*, p. 86.

¹⁹¹ Irish Architectural Archive, Dictionary of Irish Architects 1720-1940, compiled by Ann Martha Rowan. ([http:// www.dia.ie/architects/view/347](http://www.dia.ie/architects/view/347)), (accessed 10-3-2009).

encountered in canal construction and how these could be surmounted using best continental practices. Such literature and many years spent in anticipation of the canal would have had Colles well versed on the best methods of its construction. The materials to be supplied by Colles included hewn stone, raised and cut to specific measurements and lime for mortar. Carriage and transport costs to the various sites were included.

Colles's proposals were agreed to and a further meeting was held on 4 August 1757, where William Ockenden was ordered to examine the ground through which the canal was to be cut and to return to the Board on 15 August with two routes proposed for the canal and to give his preference for the most eligible one.

William Ockenden was, like Omer, of Dutch origin. Both he and Omer are believed to have come over from England when they were appointed to take over the supervision of the construction of the Tyrone navigation in 1755. It has been noted, in hindsight, that these gentlemen had 'technical limitations' and due to having a 'multiplicity of navigation works superintended by them', this resulted in numerous problems occurring on the various navigation schemes they were involved in.¹⁹² From 1755 to 1767 they surveyed and were superintendents of the Nore navigation, with Omer continuing the work after the death of Ockenden in 1761. While Colles had already revealed his knowledge of the costing associated with canal construction, it is difficult to ascertain if he had any input into the design of the canal. The likelihood is that Colles was the main contractor and Omer and Ockenden were the designers.

In December 1757, Colles wrote to Thomas Wallis in Dublin, furnishing him with information regarding the cost of mason's work and wages. He also described how the work on the canal was progressing as follows;

Hewn stone in large blocks [are] raised, cut and delivered on ye spot and set at 20d per ffoot superficial the fface only measured; lime delivered at 8d a barrel and sand at 2d. Rough stone for back of hewn stone at 1s per perch of 21 feet long 18 inches thick and one foot high. The Master Mason pd 2s 6d per day and for each man 1s 6d, labourers 1s 8d per day. As to the price of digging our canal, it is all done by the day, the labourers pd 8d and an overseer to every 30 men pd. 13d p

¹⁹² A.W. Skempton, M.M. Chrimes, R.C. Cox, P.S.M. Cross-Rudkin, R.W. Rennison and E.C. Ruddock (eds.), *A Biographical Dictionary of Civil Engineers in Great Britain and Ireland*, London, 2002, p. 493.

day. The great variety of soyles, sand & stones make it very hard to be exact in an estimate, but I apprehend what we have done here and which has been done with the utmost economy has been done with the utmost economy [sic] has cost between 4d & 4½d p cubic yard. Our canal is 24 feet wide at bottom, six feet deep in water in ye shallowest part and 42 feet wide at ye surface of ye water, our locks are 21 feet wide in the narrowest part and 160 from gate to gate; and between every two locks is a lyeby of double the breadth of the canal and 160 feet long for boats to turn round or pass each other. Our Navigation is designed to allow fflat bottom Barges of 200 tun; and also fflat Built vessels of 30 or 40 Tun which will bear the sea and be able to go coastways to Bristol &c.¹⁹³

In 1757 the total expense of the navigation had been £1,866–12–4, of which Ockenden had paid Colles £400 for stonework and a further £34–0–9 in compensation for ‘Damage done his Mills.’ Colles had a two and a half year lease on a piece of land through which the canal was to be built and for this he was paid just over £8 ‘as recompense and satisfaction for his term yet to come and unexpired in said premises.’ On this parcel of land were three thatched houses and a wall belonging to Colles that required demolishing and he received over £25 in compensation for these, ‘he having the old materials, which we find the said William Colles is entitled to have.’¹⁹⁴ The following year, between July and December 1758, Colles received £200 for stonework and another £70 for supplying flagstones and lime and in October 1759 he was paid about £230 for stone and lime. In 1759 a further £4,000 was granted by parliament towards the Nore navigation.

The amount spent on the navigation for the three years ending 1759 was £7,735–9–4.¹⁹⁵ This amount was verified by an affidavit and was signed by the Commissioners for the Nore Navigation, they being Charles Gore, Mayor, Sir William Evans Morres, Nicholas Aylward, William Izod, John Gale and Arthur Bushe. Appended to this was a report by Ockenden, stating that four miles of canal had been completed at this stage, along with two stretches of navigable river, bringing the total to approximately five

¹⁹³ PRIM, 5 December 1757, William Colles to Thomas Wallis, Dublin.

¹⁹⁴ Watters, ‘Kilkenny Canal’, pp. 90–91.

¹⁹⁵ *Ibid.*, p. 92.

miles. This report was submitted to parliament in order to secure further funding for the navigation works. The report also stated that there were also seven locks and an aqueduct erected, itemised as one single lock, one rhymer lock and five double locks. The aqueduct directed a stream under the canal at Duke's Meadow. Four of the locks were finished and the other three were expected to be complete shortly.

By early summer 1761, Ockenden was back in England with health problems. Colles wrote to him congratulating him on his recovery and gave him an update on the progress of the canal. He admitted that nothing was done regarding his own part of the navigation during the winter months due to heavy flooding. He relayed the good news that the Speaker of the House, John Ponsonby, had visited and viewed the canal and the locks and was 'greatly pleas'd with Every Thing and sayd he Had no Idea of the Completeness of It Till he Saw It.' Of greater importance was Ponsonby's public announcement that 'money should not be wanting to compleat It if He and his friends Had Influence to obtain It.'¹⁹⁶ There is a certain irony that should be noted here and it is that Ponsonby, Sir William Fownes, Warden Flood and Sir William Evans Morres all voted for the Money Bill in 1753 and here we can see how this group had no problem in spending the money that would have been destined for the Crown had the Bill been passed. Colles wrote a further letter to Surrey a few months later, but this one was to Miss Mary Ockenden, consoling her on the death of William Ockenden.¹⁹⁷

On 9 November 1761, Sir William Evans Morres reported to parliament the findings of a committee appointed 'to inquire into the State of the Navigation of the Nore...what Progress has been made therein, and what Sum, in their Opinion, will be sufficient to carry on the same effectually.'¹⁹⁸ The committee interviewed 'several Persons in the most solemn Manner', the first being George Smith, appointed Director of the Navigation of the Nore, having previously been its Deputy Director, on the 5 June 1761, upon the death of William Ockenden. Smith is said to have worked with George Semple¹⁹⁹ and was also involved in bridge building in the county during this period. Smith explained, with the aid of a plan and section of the Nore from Kilkenny to Inistioge, that a quay was almost complete in Kilkenny, 'with all its Slips and landing Places, 300 Feet in Length and 80 Feet in Breadth.' Almost four miles of the canal was

¹⁹⁶ PRIM, 3 May 1761, William Colles to William Ockenden, Surrey.

¹⁹⁷ Ibid., 27 July 1761, William Colles to Miss Mary Ockenden.

¹⁹⁸ *JH of C*, vol. vi, appendix, xxxvii.

¹⁹⁹ R.C. Cox and M.H. Gould, *Civil Engineering Heritage: Ireland*, 1998, London, p. 94.

cut and along with two parts of the river being naturally navigable, this brought the total navigation to five miles, *the same distance as Ockenden had reported in 1759*. All the locks portrayed in the plan were completed, except the coping of one, ‘the cut Stone of which is ready to be laid on.’ A report, compiled in 1973, described the locks as being ‘turf sided...with rough stone abutments faced with substantial masonry.’²⁰⁰ The report noted that much of this stone had been removed for house building, or overgrown with vegetation, and hardly any of it is visible today. The lack of advancement of the canal from 1759 to 1761 would suggest that most of the work carried out during this period was concentrated on the construction of the quay in Kilkenny city, the completion of the locks and putting the ‘substantial masonry’ in place.

The map that was appended to this report provided sectional drawings of the locks, indicating details of their construction (Figs.3.2, 3.3 & 3.4). This map is a fanciful representation of the principal structures erected along the route of the navigation from Kilkenny to Inistioge. A copy of this map can be found in the British Library²⁰¹, but its origins are obscure. The library has placed the date ‘1810?’ on the map. It is possible that this is the date this particular print was made. Patrick Watters mentions that the report to parliament in 1761 ‘is illustrated by a map and plan...and were it not for this report and map it would be incredible’²⁰² that such a structure ever existed. This would indicate that the map was still attached to the parliamentary report when examined by Watters, but no such plan now exists with the report printed in *The Journals of the House of Commons*.

A variety of river craft are depicted negotiating the locks, four of which are accompanied with captions commenting on the materials used and difficulties involved in ensuring their foundations were secured to solid rock. The first lock on the canal was Scot’s Lock, a short distance west of the Black Quarry. Constructed of Kilkenny Marble, this lock penned fifteen feet of water during floods. The foundation was cut into solid rock and the gates were made of oak ten inches thick, no doubt part of the consignment

²⁰⁰ Roger Burnett and Geoffrey Wheat, ‘A Study of the Kilkenny Canal’, July 1973, Library of the Kilkenny Archaeological Society. It is not known the reason why this unpublished report was compiled, or how it came into the possession of the library. These gentlemen compiled their report after consulting accounts of the navigation in various volumes of the *Journal of the Royal Society of Antiquaries of Ireland*, the *Kilkenny Archaeological Journal* and *The Journals of House of Commons of the Kingdom of Ireland*. Ordnance Survey maps were also consulted and the planned route of the navigation was physically inspected to record what evidence of the navigation remained.

²⁰¹ BL, Maps 24.e.18. Plan and Section of River Nore from city of Kilkenny to the town of Ennesteaue [sic], etc.

²⁰² Watters, ‘Kilkenny Canal’, p. 93.

of materials prepared by Colles at the Kilkenny end. The second lock shown was that at Crow's Well and, again, was made from Kilkenny Marble. Archerstown Lock was expensive to build as its foundation had to be excavated very deep as loose gravel was encountered under the river bed. It had to be secured by a strong oak timber frame and deeply driven piles. Dunbell Lock had similar problems and took two summers to complete. The legend on the map described how this canal, when linked with the river Barrow and, in turn, the Grand Canal, could distribute many useful commodities throughout the country. These items would be more inexpensive and quicker to market and included 'Corn in great plenty, Butter, and...Black Marble (the best in Europe).'

Of the £14,000 granted by parliament up to and including 1759, £10,149-6-1 was paid towards carrying on the work. William Ockenden was paid the sum of £1,125 for four and a half years salary. Smith stated that in 1761 the amount left over from the £14,000, with other payments taken into account, was a total of £302-15-8 which was in the hands of the local Navigation Board. Out of this sum around £136 was due to William Colles and John Butler for 'the Purchase of Land and Houses to make the Quay and towing Path from John's Bridge, in the City of Kilkenny, to the first Lock,' Scot's Lock. This quay was complete by September 1762, as Colles laid a wager with a gentleman by the name of Godfrey Cooksey, an attorney, as to the possibility of bringing up a load weighing 40 tons on a boat from the quay at the Black Quarry to the new quay at John's Bridge in the city in 1762.²⁰³ Whether Colles won his bet or not was never recorded. This also reveals that there was a quay at the Black Quarry. Whether it was constructed as part of the navigation is not known, but would have been very likely, as the map accompanying this report shows the canal running between the river and the quarry, and marble had been mentioned as one of the commodities that would benefit greatly from the navigation, in the petition to parliament in 1755.

It is worth mentioning, at this stage, another commodity, coal, that was to have benefited greatly from the canal. Coal from the collieries at Castlecomer, approximately twelve miles north of the city, would have been the most useful and valuable of all the produce to be transported by the canal, yet there was never an attempt to begin the navigation there. The carriage of coal may have been a great incentive in acquiring the funding for the navigation, but it was never to benefit from it.²⁰⁴

²⁰³ PRIM, 12 September 1762, addressee not stated.

²⁰⁴ It was not until 1791 that the Act 31 Geo.III.3.c.42 granted £4,370-2-4 to the Grand Canal Company to carry out a navigation from the Grand Canal towards the Kilkenny collieries at Castlecomer.

Two names appear on the parliamentary report of November 1761 by Sir William Evans Morres, which require some comment. Christopher James and Christopher Colles were interviewed regarding their role as pay-clerks for the navigation. Christopher James was a nephew of William Colles and also his son-in-law, having married William's daughter, Hannah. They lived in a house known as 'The Rocks', which still stands along the banks of the Nore, at Maddockstown.

James reported to the committee that he had paid out the sum of £10,149-6-1 towards carrying out the navigation. An account of this sum was provided to the committee. James stated that he was pay-clerk to the navigation from the commencement of its construction to August 1761. William's other nephew, Christopher Colles, then assumed the position of pay-clerk to the navigation on 27 July 1761. (Fig.3.5) Christopher Colles was the son of William's brother, Richard Colles of Skinner's Row, Dublin. William took him into his care after Richard's death in 1749. The relationship between uncle and nephew will be examined later.

The committee proceeded to enquire into the sum of £687-0-4 that was paid to Christopher Colles towards the navigation and also into the sum of £921-10-0 ordered to be laid out towards the construction of a bay and bridge at Inistioge. George Smith informed the committee that at Inistioge 'in Obedience to an Order of the Navigation Board in Dublin, to build a Bridge and Bay, there is a fine Stone Bridge 300 Feet in Length nearly completed,' and was finished 'all to the Battlements, filling and paving.' The amount remaining in Christopher's possession, along with that held by the commissioners, was due to 'the several Tradesmen, and Workmen, now actually employed in carrying on the said Works.' The committee then requested the amount estimated to complete the work. George Smith estimated that £8,471 was necessary to carry the navigation as far as Thomastown, where it would 'become of great Use, as the small Vessels that come up to that Place, and carry from twelve to twenty Tons, could constantly pass up and down to and from the City of Kilkenny.'

In this report Smith enlightened the committee on vessels that had already made use of the navigation. Reporting on the progress of constructing the locks, Smith stated that 'all said locks and navigations are fit for use, and that boats have passed up and down through them.' In March 1761, the *Universal Advertiser* reported the following:

Yesterday arrived here [Kilkenny] for the first time, to the great joy and satisfaction of the inhabitants of this city, three large lighters to take goods for Waterford, which were this day laden with tallow, butter, and marble for exportation; they sailed up and down our new canal, thro' all the locks, gates etc., with the greatest ease and safety. It is with pleasure that we see this great work, begun but three years ago, already become of real use to the public, and will speedily be, when finished, a most useful navigation.²⁰⁵

The report, compiled by Burnett and Wheat in 1973, states that, in order to secure further funding, a loaded boat had to pass along the navigation from Thomastown to Bennetsbridge and, 'according to tradition', a boat loaded with animal skins for a tan yard in Kilkenny, was hauled through the incomplete navigation works below Dunbell by a large number of horses.²⁰⁶ This report, along with that in the *Universal Advertiser*, indicates that at least part of the project was now navigable and capable of transporting goods along its completed stretches, but although the loaded boats were bound for Waterford, according to the newspaper, the canal was still not complete. Burnett and Wheat's report indicate that the navigation remained incomplete below Dunbell. To rectify this, parliament saw fit to grant the sum of £4,000 towards the navigation, less than half the amount Smith requested in order to complete the navigation as far as Thomastown.²⁰⁷

If the flooding of the Nore in the winter of 1761 inhibited William Colles with the progress of the navigation works, then the great flood of the winter of 1763 swept away much that stood in its path, but, as Colles wrote, the canal works escaped virtually unscathed. He vividly portrayed the devastation caused by the flood of 2 October, in a letter to his nephew, Christopher James, then in Earl Street in Dublin.²⁰⁸ Informing James that all the family in Kilkenny were safe 'after the most Exorbitant fflood that ever was known or Heard of In this River', he then described how the water rose to 'within one Inch of ye ffloor of ye Room I lye In and up to ye Ceiling of the Parlor.' Both bridges in the city, Green's Bridge and John's Bridge, were completely swept

²⁰⁵ *Universal Advertiser*, 10-14 March 1761.

²⁰⁶ Roger Burnett and Geoffrey Wheat, 'A Study of the Kilkenny Canal', July 1973, (see note 198).

²⁰⁷ *Statutes*, Act 1.Geo.III.c.1.§.14.V.7.

²⁰⁸ PRIM, 5 October 1763, William Colles to Kitt (Christopher) James, Mercht., Earle Street, Dublin.

away. The bridges at Bennetsbridge, Thomastown, Durrow, Callan, Kells, Ennisnag and Garryduff, followed suit. At Thomastown, half the town and many inhabitants were carried away. The bridge at Inistioge was partially damaged and was only passable on foot. The only bridges left standing between Abbeyleix and the sea, were Ballyragget Bridge, eight miles north of Kilkenny city and 'Lord Carick's new Bridge wch he Built at his own expense opposite his House', Mount Juliet, near Thomastown.

Despite all this destruction, 'the Canal Has Escaped most wonderfully with only a few Breaches In ye Banks all wch will be Easily Repaired.' The locks and gates were all intact despite the water rising to a height of six feet above the stonework. Colles aired his concerns regarding the loss of life and the commercial ramifications of this catastrophe. He knew the reconstruction of the bridges would be impossible without extra parliamentary aid. The destruction wrought on Colles's own property was insignificant compared to the problems the navigation would face if funds were diverted to bridge building; 'In my own mind I much Question whether the Great sume of money wch will be Demanded on this occasion will not Put a stop to all Navigation and other Public Works and make the Parliament Deaf to applications [sic] for Private Encouragement.' He had made his mind up to speak to his friends 'both In and out of Parliament on this Head and act as I shall be advised.' Colles finished his letter by letting his nephew know that his flour mills suffered no damage, but many others had been swept away, or were so badly damaged that they would not be producing flour for some considerable time.

On 15 November 1763, six weeks after the flood, a parliamentary committee was informed of the progress of the navigation. George Smith once again relayed how, since the last session of parliament, a canal had been cut from the ford at Ballyredding, through the highlands at Kilree and Bennetsbridge. This particular tract of navigation 'proved a very heavy and expensive Piece of Work.' A stone lock was almost complete at Kilree and a large rhymer, or rimer, sluice placed near the guard lock at Archerstown in order to keep the canal clear of mud that lodged during winter flooding, had succeeded in this task. Smith then explained how all the locks erected along the navigation withstood the 'amazing Violence of the late great Floods.' Some damage had been done to the banks, but nothing serious and these could be easily repaired. The river

ran four feet over the banks, which were constructed two feet higher ‘than the greatest Floods ever known in the River Nore before.’²⁰⁹

Once again Christopher Colles provided accounts for the expenditure on the navigation. £180 of the £187-7-0 debt due from Ockenden had been paid and the balance was expected soon. It was announced that the navigation was near completion to Bennetsbridge Mill, about a mile downriver from the town, making the total distance from Kilkenny city, six miles. With the money from Ockenden estate and money still held by Christopher Colles, added to the £4,000 granted by parliament in the last session in 1761, there was a total of £4,482-15-0 available to spend. Christopher Colles provided vouchers for a sum of £3,776-17-0½, which had been paid out to tradesmen and workmen, but on this occasion, the parliamentary committee examined the amounts closely and either reduced, or disallowed, several articles contained in the accounts. It seems that parliament was now becoming concerned with the costly and sluggish progress of the navigation works. On enquiring of the cost of completing the work, the committee were informed by Smith that a sum of £6,210 would be required in order to complete the stretch from Bennetsbridge Mill to Thomastown, over £2,200 less than he estimated in 1761. This work included clearing 1,300 perches of canal and the construction of five double locks costing £550 each. It is interesting to note that the sum of £6,210 did not include officers’ salaries, treasury fees, bridge construction, or the purchase of land, which would greatly add to the cost of completing the navigation of the river Nore. Sir William Evans Morres reported back from the committee that a sum of £6,000 was the necessary sum for the navigation. It was then ordered that this report should be referred to the committee of the House.

A petition submitted on the same day by Sir William Fownes, ‘and others’, contained an estimate for rebuilding the bridges of Kilkenny city and county. The estimate for Green’s Bridge and John’s Bridge was £5,617-13-0. With the rebuilding of Castlecomer Bridge, on the river Dinan, a tributary of the Nore, Thomastown Bridge and that of Bennetsbridge, added to the repair of the bridge at Inistioge, the total amount requested from parliament came to £10,384-10-2.

On 22 November 1763 the parliamentary committee returned and ordered that a lesser sum of £8,000 be given to the Corporation for Promoting and Carrying on an Inland Navigation, to enable them to rebuild the bridges and carry out repairs to the

²⁰⁹ *JH of C*, vol. vii, appendix, p. ccxvii.

bridge at Inistioge.²¹⁰ They further resolved that a sum of £4,000 be granted to the Corporation for the Nore navigation, Lords Bessborough, Mountgarret et al, as opposed to Smith's request for £6,210. William Colles's fears of the funding being diverted away from the navigation had now become a reality, even though he was contracted to rebuild the bridges in the city, a subject which will be examined in due course. And worse was to follow when parliament eventually granted only £1,500 towards the navigation in the session of 1763.²¹¹

In November 1765, parliament granted £500 towards the completion of John's Bridge. Of the £8,000 granted in the last parliamentary session, £2,231 was allocated to the work on John's Bridge. Kilkenny Corporation granted a further £600 and added to this was £100 granted by the Grand Jury of the County and City of Kilkenny at the summer assizes. The parliamentary committee also granted £140 to add to the £800, granted the previous session, to complete the repairs to the bridge at Inistioge.²¹² During this session of parliament a sum of £3,000 was granted towards the Nore navigation.²¹³

A notice appeared in *Finn's Leinster Journal* in April 1767, notifying the public that a meeting of the Commissioners was to be held in the Tholsel in the city, on Monday 20 April.²¹⁴ At this meeting it was decided to fix a following meeting on 25 May, in order to 'receive proposals for making the bed of the said river navigable from Thomastown to the cut of the canal below Bennet's bridge, to be proposed for, and let out at different lengths and lots, and they will then and there agree for the same.'²¹⁵ The main intention of the board was to speed up the progress of the work, as from this report, the canal had not advanced beyond Bennetsbridge. (Figs.3.6 & 3.7)

On 6 June 1767, it was reported that, 'The Commissioners for making the river Nore navigable, was held at the Tholsel;[sic] when they contracted by the lump with Ald. William Colles, for compleating three feet and a half of water from Bennet's Bridge to Thomastown, agreeable to the plan laid down by Mr. George Smith, director of said works.'²¹⁶ It is interesting to note this depth of three and a half of water required to complete the canal to Thomastown, as Colles stated in 1757, in his letter to Thomas Wallis in Dublin, that the canal was six feet in depth at its shallowest parts. It appears

²¹⁰ *Statutes*, Act 3 Geo.III.c.1.§.13.V.9, p.5.

²¹¹ *Ibid.*, p.6.

²¹² *JH of C*, vol. viii, pt 1, p. 45.

²¹³ *Statutes*, Act 5 Geo.III.c.1.§.7.V.9

²¹⁴ *Finn's Leinster Journal*, Sat. 11 April to Weds. 15 April, 1767.

²¹⁵ *Ibid.*, Weds. 22 April to Sat. 25 April, 1767.

²¹⁶ *Ibid.*, Weds. 3 June to Sat. 6 June, 1767

that it was an economic necessity at this stage to plan a shallower depth in order to expedite the navigation without further delay.

On 18 November 1767, a parliamentary committee deemed that ‘considerable progress’ had been made in carrying out the navigation of the river Nore, since the last session of parliament in 1765. Of the £3,000 granted in that session, £2,123-2-0 had been spent. The ‘considerable progress’ was not elucidated upon and, as the excavation of the canal cut had not progressed beyond Bennet’s Bridge Mill, the point it reached in 1763, we must assume this progress was concentrated on developing the canal itself up to this location. The walls and sides of the canal required to be lined with sods of turf or earth and, in some cases, stone and the bridge building and repairs along with other works associated with the navigation, i.e. towpaths, locks, lock keeper’s houses etc. would, without doubt, have taken up much of labour involved in the intervening years. The parliamentary committee resolved that it appeared a sum of £5,500 was necessary to finally complete the work to Inistioge, providing that it was finished on, or before, 1 November 1769. The committee were informed that ‘William Colles, Esq; is ready and willing to contract to finish and complete the said Navigation by that Time, for said Sum, and to give good and sufficient Security for the Performance of the same.’²¹⁷ But this resolution was amended and the final wording omitted the sum of £5,500. It appears parliament was not prepared to commit the full amount towards the navigation just yet.

In September 1768, the Navigation Board met in Kilkenny and agreed to carry out Colles’s proposals, ‘wch I made to Parliament last Winter.’ In a letter to his brother Barry, William stated that £2,750 was in his possession, half the grant being released by parliament only. The Navigation Board were to meet on the last day of the next assizes ‘to perfect an agreement with me; and that I may give security for my performance.’²¹⁸ The sum given to him was to fund the stretch from Inistioge to ‘the End of the Kings River’, approximately eight miles in length. If parliament granted the further sum of £2,750, he wrote, ‘I am with that further secure to ffinish It to Kilkenny.’ It was also Colles’s intention to involve his son, William, in this part of the navigation; ‘I Design to joyn my Son Wm. with me In this agreement; and give him Halfe the Clear Profit to begin the World wth.’ William’s nephew Christopher was, since the summer of 1766, in Limerick working for the architect Davis Dukart on the Custom House and later on the Shannon navigation.

²¹⁷ *JH of C*, vol. viii, part 1, p. 190.

²¹⁸ PRIM, 12 September 1768, William Colles to Barry Colles, Stephen’s Green, Dublin.

The main purpose of William's correspondence with his brother Barry, was to ask him permission to name him as 'one of our Securitys.' Offering Barry a counter bond to lessen the financial risk involved in this request, William assured him that when the money was released from the Treasury, it would be placed directly into the navigation's fund and drawn only when required for the work. If Barry was in agreement with this proposal, William requested that, by return post, his answer 'be such as I may show to the Board.'

It is most likely Barry agreed to William's request, as a parliamentary report, containing a synopsis of the Nore navigation from the date of the petition to parliament in 1755, to the end of 1768, confirms William Colles as sole contractor for the stretch of navigation from Maidenhall to Thomastown.²¹⁹ However two gentlemen from Inistioge, Mr. Heydon and Mr. Dwyer, were contracted 'for carrying on the Navigation from the Place Mr. Colles's Works end, at Thomastown, to Ennisteaige.' This contradicts Colles's statement in his letter to Barry, where he stated he was to complete the work from Inistioge to 'the End of the Kings River', giving the impression he was to complete the whole navigation and starting it at the Inistioge end, which he was reluctant to do all along.

At the end of 1768, a total sum of £25,250 had been granted by parliament to carry out the Nore navigation. William Tighe, in 1802, accounted for the sums granted thus:²²⁰

Year	Amount Granted
1755	£10,000
1759	£4,000
1761	£4,000
1763	£1,500
1765	£3,000
1767	£2750

Table 3.1. Sums granted by parliament to carry out the Nore Navigation.

It is obvious from this list that funding was not a problem during the initial stages of the navigation, £18,000 being granted to the project in the first six years. Tighe's list

²¹⁹ *JH of C*, vol. viii, pt. 2, appendix, p. ccxlv.

²²⁰ Tighe, *Statistical Observations*, i, p.134.

corresponds exactly with the acts passed in parliament during these years. The relevant acts were as follows:

Parliamentary Act	Amount Granted	Year
29G.2.c.1§.14.V.7	£10,000	1755
33G.2.c.1§.14.V.7	£4,000	1759
1G.3.C.1.§.14.V.7	£4,000	1761
3G.3.c.1.§.13.V.9	£1,500	1763
5G.3.c.1.§.7.V.9	£3,000	1765
7G.3.c.1.§.7.V.9	£2,750	1767

Table 3.2. Parliamentary Acts and sums granted for Nore Navigation.

The following graph displays the sums estimated by Colles and Smith for the navigation works over the period covered. It is very noticeable the discrepancy between what these men regarded as a necessary sum for the project and what parliament felt was the correct sum for the work.

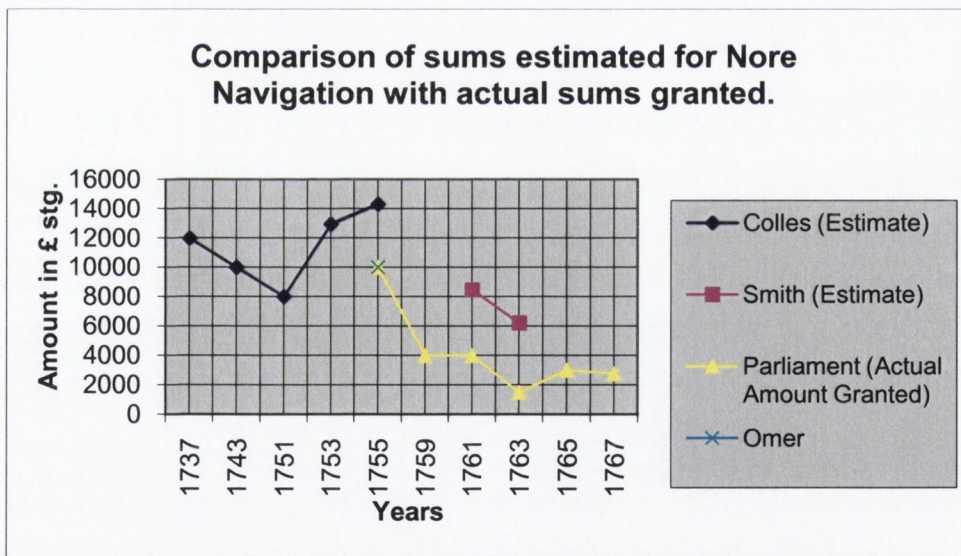


Table 3.3. Comparison of sums estimated for Nore Navigation with actual sums granted.

The sum of £1,500 granted in 1763 is extraordinary considering George Smith regarded the sum of £6,210 was necessary to carry on the navigation. As the navigation suffered only minor damage due to the great flood of that year, parliament diverted more funding towards the bridges on the Nore. Accounts published in *Journal of the House of Commons* show, that in the two years from Lady Day 1763 to Lady Day 1765,

£750 was paid to the Navigation Board 'in Part of 1500l. granted, Session, 1763, towards making the River Nore navigable.'²²¹ The remainder of the money was paid out in the two years from Lady Day 1765 to Lady Day 1767, along with the £3,000 granted in 1765.²²² It is worth noting how Colles's estimate increased significantly in 1755, the year parliament granted funding towards the navigation for the first time.

Colles, examined by the parliamentary committee in 1767, reiterated the works completed to date. Stating that the navigation had been carried approximately four miles from Kilkenny city under William Ockenden, he then followed this with an account of the gates and locks constructed along this route. The canal crossed the Nore below Kilfera Lock for the first time, where, according to Colles, it ran for nearly a mile. This stretch is still visible today downriver from the Marble Mills. (Fig.3.8) On the death of Ockenden, the work was carried out under the direction of George Smith, with the canal cut as far as Maidenhall where it was to fall into the river. (Fig.3.9)

Colles was to widen, deepen and clear the bed of the river at Maidenhall all the way to Thomastown. He informed the committee that he had already constructed a double lock at the rape mill at Thomastown. For finishing this work he was to be paid the sum of £1,200. As there were several breaches in the work executed by Ockenden, due to heavy flood damage and the settlement of the construction work, it was deemed necessary to construct a large gate at the entrance of the canal at Kilkenny. Several platforms of cut stone were required to carry off wastewater in order to prevent further damage to the canal. This work was also to include the cleaning and scouring of the whole canal and several weirs were to be raised to direct water into the canal. Between Kilrea and Maidenhall two double locks were to be erected and a track, running alongside the canal for a distance of sixteen miles, was to be put in place. The committee estimated that £5,500 was required to carry this out. Half of this sum had already been granted, as stated by Colles in the letter to his brother, above, and the remaining half would complete the navigation.

It should be safe to presume, knowing his long commitment to the Nore navigation that William Colles spent the following year, 1769, carrying out the work he was contracted to do on the Nore navigation. It is also reasonable to believe he was engaged in this project right up to the time of his death in March 1770, but it appears very little progress was made during this time and the money from parliament had not

²²¹ *JH of C*, vol. viii, pt. 1, appendix, p. iv.

²²² *Ibid.*, 22 October 1767, appendix, p. cxii.

been utilised. The parliamentary committee granted £2,750 in November 1767, with the proviso that the navigation was finally completed on, or before, 1 November 1769. This deadline was never met. In fact, in 1777 a parliamentary committee was appointed to enquire into the sums spent on the navigation works. This committee reported back to parliament on 3 March 1778, noting that a further sum of £3,000 had been granted by parliament in 1775. Their report did not reflect well on William Colles. They found ‘That no part of the sum of £2,750, granted in the session of 1767, to the commissioners for carrying on the inland navigation of this kingdom, to be by them applied towards... navigation of the river Nore, hath been expended, but the whole of said sum remains to be applied, or accounted for.’²²³

The committee further resolved that, it appeared to it,

That a contract was entered into, having date 1st June 1767, by William Colles, since deceased, with the commissioners of the Navigation Board, whereby the said William Colles contracted to carry on the navigation of the Nore from Maidenhall to Thomastown, in manner therein mentioned, for the sum of £1,200, and that it appears by the book containing the proceedings of the said navigation, and by the testimony of Mr. William Waters, attorney, secretary to said navigation, that the said William Colles received the whole of said sum.²²⁴

George Smith gave testimony that ‘the said Work was not completed in any Part agreeable to the said Contract’. As Director of the Navigation of the Nore since 1761, surely it was Smith’s responsibility to ensure that the contract was carried out to the satisfaction of the Navigation Board. William Waters stated Colles received a sum of £1,200, but was this not the sum he was owed for constructing the double lock at the rape mill at Thomastown. Colles was no longer present to speak for himself.

The committee also concluded ‘That all the sums granted for the navigation of the Nore, since the death of William Ockenden...were received by Sir Wm. Evans Morres, Bart, since deceased, and that the whole sum remains applicable to the completion of the said navigation...and that his representatives are answerable to the

²²³ Tighe, *Statistical Observations*, i, p. 138.

²²⁴ *Ibid.*, p. 138.

public for the same.²²⁵ Heydon and Dwyer did not fulfil their contract from Inistioge either. These contracts were now to be enforced and executed and any monies remaining in the hands of Morres's representatives, was to be handed to the local commissioners.

Was the navigation of the Nore underfunded throughout the period by parliament? Were Colles and Smith overzealous in their estimations? And, was the money properly managed and applied to the navigation? It is difficult to surmise which was which, but these questions are indicative of the many problems involved in the fruitless attempt to render the river Nore navigable to the tidewater at Inistioge.

William Tighe aptly summed up the debacle of the Nore navigation;

The plan of this old canal, was in every way ill conceived. It crossed the Nore three times between Kilkenny and Thomastown, and made use of a dead part of the river for a good length, below Sheestown mill: the inconvenience of a navigation interfering with a rapid river, is too obvious; and it is obvious too, that as it began at Kilkenny, no part of it could be of use, until the whole was completed. The navigation, ill projected, was abandoned, the money not accounted for, and the works fell into decay.²²⁶

If the canal was begun at the Inistioge end, every inch it progressed would have brought it closer to Kilkenny, lessening the distance and cost of overland carriage. Even if it had come as far as Thomastown, it would have been more advantageous to the commercial life of the city and county, but this was not the case. There appears to have been too many cooks delving into the parliamentary pot, which overflowed in the beginning, but emptied over time. Was William Colles culpable of misappropriating funds towards the end? It seems unlikely. He certainly got it wrong by insisting the work should begin at the Kilkenny end. But, he did have the materials already prepared at Kilkenny and to organize these materials to be transported to Inistioge, or have them sourced elsewhere, would have added more expense to the project. After years of proactive campaigning to secure the navigation, surely his enthusiasm and drive waned over the protracted years involved in the project. His health became more problematic

²²⁵ *Ibid.*, p. 139.

²²⁶ *Ibid.*, p. 140.

in his later years and must have affected the zeal he displayed for over thirty years in attempting to complete the Nore navigation. Had this project proved a success, then Peter O'Keeffe and Tom Simmington would not have to wonder why the role of William Colles in 'the navigation...work in the 1750s and 60s in Kilkenny...has been neglected in literature.'

Chapter Four.

The Import and Export of Stone.

The following chapter will examine the transportation of Kilkenny marble from Ireland during the eighteenth century. This is a complex issue, as many of the sources examined require a speculative approach in order to interpret the role played by the Colles family in the marble trade in this country and abroad. Customs records, examined in the National Archives at Kew, London, are extremely vague in recording the movement of stone during the period, with certain records, e.g. CUST 15 (ledgers containing the imports and exports of Ireland 1698-1829) showing much produce exported and imported but not stone or marble. Other customs records examined, CUST 3, which show the origin, nature and quantity of goods imported and exported at the Port of London and the Outports during the period 1697-1780, indicate that decorative items of polished marble were exported to Britain, coinciding with increased production at the Kilkenny marble works, but seem to record only part of this trade. Presentments examined in Bristol indicate marble would have been imported there from Waterford, the main port through which Kilkenny produce was exported. But, like other sources, the Bristol presentments, while indicating that marble and marble objects were exported from this country, they do not indicate the quarries and marble works that produced the products in both rough and finished form.

Newspaper extracts and certain building accounts, used here illustratively, were also examined and these often refer to Kilkenny marble, supporting the argument that the Colles family supplied much of the marble exported to Britain and America during the eighteenth and early nineteenth centuries. Prior to this period, stone had been exported across the Irish Sea in large quantities to be used by prominent statesmen and architects on some of most notable buildings under construction at the time, yet this business is not reflected in the CUST 3. It is worth examining some of these projects briefly in order to place in context the great improvements and advances that William Colles and the Kilkenny marble works brought about to the marble industry both at home and abroad.

In the late 1570s Sir Henry Sidney was involved in shipping Irish marble to London. Sidney came to Ireland in 1556 as vice-treasurer to the Earl of Sussex, Lord Deputy of Ireland. Sidney was himself appointed Lord Deputy in 1565, a position he

held on two occasions and in about the year 1577 the sum of £16-13-4 was paid for the 'fraught [sic] and carriage of my lord's great marble stones, and Mr. Pakenham's from Yreland [sic] to Towerwharf.'²²⁷ Who Pakenham was and where Sidney procured this marble from is not mentioned. There is also no explanation given for the reason it was being shipped to London but 'great marble stones' and the cost involved in shipping them would indicate that this shipment consisted of a large quantity of quality stone that was not readily available in England.

On January 30 1584, William Paget wrote to the English Secretary of State, Sir Francis Walsyngham.²²⁸ In this letter Paget outlined a project for supplying Barbary with marble out of Ireland. No doubt this was bound for the new palace being built by the Shereef of Fez, Mulai Ahmed El-Mansur, in Marrakesh at the time. El-Mansur imported Italian and Irish marble for thousands of columns required for his palace. The Irish were believed to have been bartering marble in Morocco for an equal weight of sugar.²²⁹ Shipping Irish marble to North Africa was indeed a very ambitious plan and Paget advised Walsyngham to be a partner in the project. Whether or not Walsyngham took Paget's advice is unknown, as is the source of the marble, but it indicates that Irish marble was seen as a valuable commodity and worth exploiting. The carboniferous limestone beds of the country were host to untold quantities of marble, unparalleled in the oolitic limestone beds of England at that time. It has been stated that the area covered by carboniferous limestone in Ireland is about three times greater than that in the United Kingdom.²³⁰ It is no wonder that agents were despatched from England and granted the freedom, by the governing bodies of both England and Ireland, to search the country in order to procure the necessary material required for the works across the Irish Sea. Such agents were operating in Cork in the early part of the eighteenth century, as noted below. Fifty years after Paget's letter to Walsyngham we discover another group of agents sent to Ireland by prominent Englishmen intent on setting up a business to exploit the country's quarries in order to supply London with marble.

²²⁷ Royal Commission on Historical Manuscripts, Report on the Manuscripts of Lord De L'Isle and Dudley preserved at Penshurst Place, vol. i, London, 1925, p. 250.

²²⁸ The National Archives of the UK, Secretaries of State: State Papers Domestic, Elizabeth I, SP 12/167 f.137, William Paget to Sir Francis Walsyngham, 30 Jan. 1584, (<http://go.galegroup.com.elib.tcd.ie>), (accessed 20 July 2009).

²²⁹ E. W. Bovill, *The Golden Trade of the Moors*, London, 1958, p. 137.

²³⁰ John Ashurst and Francis G. Dimes (eds.), *Conservation of Building & Decorative Stone*, 2 vols, v. i, Oxford, 1998, p. 94.

In 1634 Thomas Howard, Lord Arundel and Inigo Jones, the first significant British architect of the modern period, were involved in shipping Irish marble to England. Writing in 1985, David Haworth suggests that Jones, commissioned to design an annexe for Arundel House in London, was so impressed while using Irish marble there that he decided to use it, along with ‘other stones from Ireland’, for the portico of St. Paul’s Cathedral, which was under construction at the time.²³¹ Jones wrote to Thomas Wentworth, Earl of Strafford and Lord Deputy of Ireland, in July 1637, requesting black marble for the steps, which ‘will goe for the worke of St Pauls.’²³² In this letter, Jones provided Strafford with the measurements he required to put the steps in place.

Haworth states that the location of the quarry Arundel and Jones were using was at Drean in county Donegal. The workers employed by the Englishmen ‘dugged and prepared a good quantity of Marble’ on lands belonging to ‘Captain Dutton’.²³³ Situated on the eastern shores of Lough Swilly the quarry would have been ideally placed for the loading of stone onto ships to transport it around the country and across to Britain, yet Haworth does not enlighten us as to the colour of this marble. The British Geological Survey has in its collection, a sample of rock from Drean. This piece of rock is called phyllite and is of a green or silvery grey colour, not black or dark grey.²³⁴ Adjacent to Drean is an area known as Whitehill, most likely known by this name due to the pale colour of its soil and underlying rock. Both these factors would indicate that dark or black marble was not in abundance here and the likelihood is that the black marble requested by Jones was sourced elsewhere. Samuel Lewis, writing in 1837, states that ‘Many species of valuable marble have been discovered’ in the Donegal, including ‘Grey and black marble of very fine quality’, yet he does not elaborate on the exact location of this marble, or exactly when these deposits would have been worked.²³⁵

In his reply to Arundel, 14 September 1635, Strafford does not mention the northern part of the country at all. Recognising the possible public and private benefits of Arundel’s enterprise, Strafford wished ‘your trade for marbles may succeed...to breed a greater Commerce and familiarity betwixt the two nations.’ Strafford informed

²³¹ David Haworth, *Lord Arundel and his Circle*, London, 1985, p. 117.

²³² Sheffield Archives, Wentworth Woodhouse Muniments, WWM/Str P/24-25/133, Inigo Jones to Thomas Lord Viscount Wentworth, 14 July 1673.

²³³ Haworth, *Lord Arundel and his Circle*, (see note 229), pp. 116-117.

²³⁴ British Geological Survey mineralogy and petrology collection record, sample no. MR458, (<http://www.thebgs.co.uk/data/britrocks/recordView.cfm?id=197888>), (accessed 5 January 2010).

²³⁵ Lewis, *Topographical Dictionary*, i, p. 474.

Arundel that the agents he had sent over ‘will find very good black and mingled with white, about Galway and, in some part of Munster, excellent good white and red.’²³⁶ Strafford considered that he himself might ‘get a barque laden to send about to Hull and so into Yorkshire’, in order to have the marble made into chimneypieces for the house he was building at Woodhouse, near Wentworth in South Yorkshire.²³⁷ Whether Strafford ever sent the marble is unknown. The stone would have to have been of exceptional quality to justify the expense of shipping it such a distance.

We know too that Strafford sent marble to the Duke of Ormonde to be used in Kilkenny Castle. Although the origin of this marble is not revealed, it is possible it came from Ulster (again no exact location given) as Strafford had paid over £100 to acquire a quarry there.²³⁸ The Duchess of Ormonde, in a letter to Dr. Hall, states that the marble offered by Strafford was the ‘marble door cases and chimney pieces in the ruinous house near Naas’, which is obviously Jigginstown House.²³⁹ Ormonde wrote back to Strafford in December 1674, thanking him for the marble that ‘will much adorne some old Roomes in this place’.²⁴⁰ It is unlikely that this marble was black, as Ormonde would have had access to as much black marble as he wanted from the Black Quarry. In 1678 Ormonde’s son, the Earl of Arran, wrote from London requesting that ‘marble for two chimney-pieces’ be sent to England for Lady Arlington.²⁴¹ As Ormonde was in Kilkenny at the time, it would be safe to assume that Arran was looking for black Kilkenny marble to be shipped to England for the chimneypieces.

Giles Worsley, writing in 2000, suggests that the doorcase installed in the stables of Osterley Park, West London, is possibly ‘an impressive survival of fully-blown mid-sixteenth-century Classicism,’²⁴² the date being suggested by the crudeness of its design. Worsley states that this doorcase was revealed to be constructed of grey Kilkenny marble when stripped of its coating of white paint. To protect it from the elements the stone would not have been polished, hence the marble retained its natural dark grey

²³⁶ Ibid.

²³⁷ Jules Lubbock, *The Tyranny of Taste: The Politics of Architecture and Design in Britain 1550-1960*, New Haven and London, 1995, p. 167.

²³⁸ Haworth, *Lord Arundel and his Circle*, (see note 229), p. 237.

²³⁹ Royal Commission on Historical Manuscripts, *Calender of Manuscripts of the Marquis of Ormonde*, K.P. preserved at Kilkenny Castle, vol. iii, London, 1904, p. 357.

²⁴⁰ Bodleian Library, Carte Papers, MS Carte 50, fol. 207, Ormonde to the Earl of Strafford 23 Dec. 1674.

²⁴¹ Royal Commission on Historical Manuscripts, *Calender of Manuscripts of the Marquis of Ormonde*, K.P. (see note 237), p. 170.

²⁴² Giles Worsley, ‘The Osterley Stables’, in Tim Knox and Anthea Palmer (eds), *Aspects of Osterley*, Bucks., 2000, p. 31.

colour. If Worsley's dating is correct, then this would suggest Kilkenny marble was part of the consignments of Irish marble exported to England in Elizabethan times.

On 22 April 1882, the newspaper *The Ipswich Journal* reported that workmen carrying out work on the floor of St. Matthew's Church in the city unearthed a very large slab during excavations there.²⁴³ The newspaper stated that this large slab, weighing about two tons, was formed from Kilkenny marble. The slab, moved from its original location, marked the resting place of John Smyther Marchant, who died on 19 March 1665 and his wife, who passed away on 27 June 1669. If this slab was indeed of Kilkenny marble, then this is an early example of it being used in England for funerary monuments. Another interesting memorial exhibiting the geological characteristics of Kilkenny marble can be found in the church of St. Mary Redcliffe, Bristol. White circular fossils are clearly visible next to the inscribed coat of arms carved on a memorial laid in remembrance to three daughters of Sir William Lewis, former Lord Mayor of Bristol. This black marble tombstone, marking the entrance to the vault where the sisters were interred, is set in the floor of the church. The dates inscribed on the marble range from 1703 to 1710, with a later addition of 1799, indicating that Kilkenny marble was shipped to Bristol very early in the eighteenth century. (Fig. 4.1)

Black marble was not used exclusively for tombstones during this period; it was used for decorative features in churches also. In 1687, William Moreton, bishop of Kildare and later of Meath, presented Chester Cathedral with a font of black Kilkenny marble. Moreton was baptised in the cathedral in 1641 and chose the Kilkenny marble to adorn the cathedral. Above the font was placed the following inscription, translated from Latin, 'when an infant he found the baptistery of brick, when a bishop he formed it of marble'.²⁴⁴ This would indicate that Kilkenny marble had a reputation as a highly decorative stone with little, or no equal to be found in England at this time. Bishop Rothe's comment that the Kilkenny marble was 'exported to a distance', examined in Chapter Two,²⁴⁵ was possibly referring to such contemporary examples of the marble being used in England.

²⁴³ *The Ipswich Journal*, Saturday, April 22, 1882.

²⁴⁴ J.H. Cooper, 'Board, of Pax Hill', *Sussex Archaeological Collections, Relating to the History and Antiquities of the County*, vol. xlii, Lewes, 1899, p. 244.

²⁴⁵ Rev. James Graves and John G.A. Prim, 'The History, Architecture, and Antiquities of the City of Kilkenny', *The Journal of the Kilkenny and South-East of Ireland Archaeological Society*, vol ii, 1858-59, p.324.

After the Great Fire of 1666, Christopher Wren, following in the footsteps of Jones, continued with the use of black Irish marble, internally and externally, in the reconstruction of St. Paul's. Records indicate that in 1698, John Oliver, Master Mason to the Crown, was paid £115 for '575ft of Irish Black Marble Steps'.²⁴⁶ A vessel called 'Unity', after transporting supplies to the navy base at Kinsale, was directed to Dublin 'for a lading of black Irish marble for St. Paul's Cathedral' by orders of the Admiralty Office on 25 August 1705.²⁴⁷ In 1707, Francis Collins, a merchant from London, was contracted to supply 'the surveyor for rebuilding St. Paul's cathedral' with 8,000 feet of black Irish marble.²⁴⁸ These are just some of the many references to the vast amount of black Irish marble being used on St Paul's over a protracted period and they highlight one of the major problems encountered throughout research on the subject: the location of the quarries supplying the marble is not mentioned in any of the accounts. The fact some of the marble was loaded at Dublin would suggest that not all of the marble was sourced in Donegal, Galway, or Munster, although, as noted below, most of the stone from Cork had to be sent to Dublin first. As Inigo Jones was using a variety of Irish stone, it is not unreasonable to suggest that some of it may have come from Leinster and specifically, Kilkenny: as we have seen, marble described as Kilkenny was being sent to England as early as the middle of the sixteenth century.

One possible reason for no locations being provided in these accounts may have been the fact that Wren was using vast quantities of marble and stone from such diverse locations that to individually name the sources was not practical. Alternatively, perhaps Wren did not know the exact location, as John Oliver was responsible for the procurement of most of the Irish marble and Wren simply noted it as 'Irish marble'. Examining the numerous accounts recorded in *The Volumes of the Wren Society*, materials are named simply after the country from which they were sourced; therefore, marble is referred to as 'Irish', with foreign stone referred to as 'Swede stone', or 'Denmark stone'.

Accounts indicate Wren also used Irish marble in Chatsworth House, Marlborough House, Kensington Palace and had intended using it at Hampton Court. Wren had planned to construct the great stairs at Hampton with 'Steps of the Irish Stone,

²⁴⁶*The Volumes of the Wren Society*, 20 vols., Oxford, 1924-1943, vol. xv, 1938, p. 43.

²⁴⁷The Third Report of the Deputy Keeper of the Public Records in Ireland, Dublin, 1871, p. 36.

²⁴⁸House of Commons Parliamentary Papers Online, *Deputy Keeper of Public Records, Thirtieth Report*, 19th Century House of Commons Sessional Papers, Command Papers; Reports of Commissioners, (London, 1869), p. 431, (<http://parlipapers.chadwyck.co.uk.elib.tcd.ie>), (accessed 13 August 2009).

such as are at Kensington' and the floor and hearth spaces were to be paved with marble also.²⁴⁹ Wren also utilised 1,394 feet of black Irish marble that had been ordered for St. Paul's, but never used, in work at Marlborough House. Accounts for the 'Valuation of the Building of Chatsworth. By Sir Christopher Wren in 1692',²⁵⁰ reveal an interesting detail. Whilst the stone used for the house was sourced locally, the marble was brought from London up the east coast to Hull and then overland to Derbyshire, similar to Strafford's plan sixty years earlier. A Mr. Goodfellow was reimbursed for the days he spent at London and Hull to oversee the loading of the marble. This payment also included remuneration for the time he had spent at Bantry, overseeing the loading of the marble there. Another man, 'Natt. Hall', was paid for fourteen days spent at Bantry, indicating that the marble supplied for Chatsworth House was shipped from Cork, yet it still has to be ascertained why these men were stationed at Bantry, as most of the Cork marbles were sourced in the eastern half of the county. There is the possibility that the marble loaded at Bantry was quarried in nearby Kenmare in county Kerry. According to Samuel Lewis in his *Topographical Dictionary of Ireland*, Sir William Petty was actively involved in quarrying marble there during the latter half of the seventeenth century. He 'extensively worked' quarries of grey marble located on islands of limestone situated in Kenmare Bay.²⁵¹ Petty, keen to exploit the natural resources of his estate, had also set up iron works in the area and this would indicate that some form of transport infrastructure was in place in the area at this time.²⁵² Bantry, less than thirty miles away, although over rough terrain, would have been the major port for the southwestern area through which most of this produce would have been exported. It may also have been possible to transport goods by boat around the Beara Peninsula from Kenmare and loaded onto larger ships berthed at Bantry.

On 6 October 1712, an accountant by the name of William Turner wrote a letter to Sir John Perceval regarding the opening of a quarry specifically to dig out slabs of black marble to make a number of chimneypieces for a relative of Perceval. Turner was writing from Churchtown in county Cork. Perceval was MP for Cork at this time, later to become 1st Lord Egmont, and the marble quarry was on his estate at Templemurry in

²⁴⁹ *The Volumes of the Wren Society*, vol. iv, 1927, p.59. The stairs at Hampton were eventually constructed from Portland stone.

²⁵⁰ *Ibid.*, vol. xvii, 1940, p. 24.

²⁵¹ Lewis, *Topographical Dictionary*, ii , p. 45.

²⁵² J.G. Simms, 'The Restoration, 1660-85', in T.W. Moody, F.X. Martin and F.J. Byrne (eds.), *A New History of Ireland*, 9 vols., Oxford, 1993, vol. iii, p. 446.

Cork. A grey marble was quarried here, along with some red marble and a little white. An unfossiliferous black marble was available at nearby Doneraile. Turner's query in the letter was what size and type of stones were to be sent for 'the two chimney pieces and slabs for Sec. Southwell'.²⁵³ Edward Southwell, then Secretary of State of Ireland and Perceval's relative, was building Kings Weston House, near Bristol, and the marble was destined for there. Perceval's correspondence reveals much about the conditions involved in the marble trade in early eighteenth-century Ireland. In examining these conditions, the impact of the improvements and advances brought about by William Colles a few decades later, become very apparent.

A follow-up letter from Turner to Perceval on 4 December 1712, from Burton in north Cork, highlights the difficulties of transporting blocks of marble by road. Informing Perceval of a load of marble delivered to Cork by road, Turner states that the costs incurred were greater due to the death of three of the bullocks used to haul the stone. Seasonal problems also arose. Turner had black marble ready to be raised from the quarry, but this load would not be sent to Cork until 'next summer by reason Cattle are Weake & ye roads badd & no fodder to support them'.²⁵⁴ No doubt the same problems prevailed all over the country, so it is not surprising that when William Colles commenced his marble business, he was extremely eager to have an improved transport system put in place, such as the Nore navigation, in order that such a weighty commodity could be transported throughout the year regardless of seasonal obstacles.

Other problems encountered by Turner included beds of marble not being of sufficient thickness to be of proper use and having to send to Cork for saws to cut the marble when it was eventually raised from the quarry, possibly taking a number of days in the process. A letter from Mr. Knapp in Cork to Perceval, reveals further problems encountered with 'severall masters of small vessels bound to Dublin' in trying to persuade them to take on board heavy marble blocks.²⁵⁵ Marble had to be shipped to Dublin first and then onwards to other destinations.

A letter to Perceval from Lewis Payzant, in December 1714, stated that Southwell's chimneypiece was in Dublin 'cas'd up waiting for a ship to carry it to

²⁵³ BL, Egmont Papers, Add 46964 B, f. 214, William Turner to Sir John Perceval, 6 Oct. 1712. The following accounts regarding the marble from Cork are taken from transcripts of the Egmont Papers in the Irish Architectural Archive.

²⁵⁴ Ibid., Add 46965 B, ff.1,2, William Turner to Sir John Perceval, 4 Dec. 1712.

²⁵⁵ Ibid., ff. 18,19, E. Knapp, Cork to Sir John Perceval, 2 Jan. 1712/3.

Bristoll.²⁵⁶ This indicates that the chimneypiece was carved in Ireland rather than on site at Bristol. This is confirmed in a letter from Southwell at Kings Weston, stating that one of the chimneys was for the great parlour ‘according to ye wooden Model I sent’.²⁵⁷ It would also appear to have been the commencement of finished marble products being exported from the country, as subsequent correspondence reveals. Perceval, assisted by the sculptor William Kidwell, supplied many customers in England with chimneypieces and marble tables.²⁵⁸ The quarrying of the marble expanded over the next few years and Thomas Davis, announcing he was employed by Sir John Vanbrugh and Nicholas Hawksmoor, visited the quarry at Templemurry in Cork. Davis was sent to search for marble quarries to supply stone for ‘the 50 churches that are building in London, and for some of the King’s Pallaces.’²⁵⁹ Berkeley Taylor wrote to Perceval in March 1715/6 indicating a demand for the marble in Holland.²⁶⁰ Customs records indicate only £195-10-0 worth of stone or marble was sent to London during the period from Christmas 1700 to Christmas 1714, with £135 worth of marble being sent in the one year, Christmas 1707 to Christmas 1708.²⁶¹ Perhaps there was a sudden increase in exports as suggested by Davis and Taylor in 1715/16, but it is tempting to suggest that there was a large discrepancy between what was officially recorded as being exported and what was described to have been exported in private correspondence.

These letters portray what we may regard as the norm for sourcing, quarrying and supplying marble prior to William Colles’s association with this enterprise in Kilkenny. It is interesting to note that from the time William Turner wrote to Perceval informing him that the quarry was cleared and ready to dig out the stone for Southwell’s chimneypieces, in October 1712, until Payzant stated that the finished article was awaiting a ship to carry it to Bristol, in December 1714, was over two years. Payzant mentions only one chimneypiece rather than two, making one wonder if Southwell’s order was only partially complete at that stage. How long this cargo waited in Dublin to be shipped to Bristol, especially in winter, is another point and is indicative of the time consuming process involved in the marble trade at this time. In comparison, William Colles, in just over two year after writing to the Dublin Society in February 1731/2, had

²⁵⁶ Ibid., Add 46966 B, f. 4, Lewis Payzant, Dublin to Sir John Perceval, 16 Dec. 1714.

²⁵⁷ Ibid., Add 47027, f. 58-60, Edward Southwell to Sir John Perceval, from Kings Weston, 6 Dec. 1713.

²⁵⁸ Gunnis, *Dictionary*, p. 228. See also Homan Potterton, ‘A New Pupil of Edward Pierce: William Kidwell’, in *The Burlington Magazine*, vol. 114, no. 837 (Dec., 1972), p. 864.

²⁵⁹ BL, Egmont Papers, Add 46966 B, f. 136, Berkeley Taylor to Sir John Perceval, 1 Dec. 1715.

²⁶⁰ Ibid., Add 46967 B, f. 21,22, Berkeley Taylor to Sir John Perceval, 3 March 1715/6.

²⁶¹ Nat. Arch. Kew, CUST 3/5-16.

set up his warehouse in Dublin and was selling a variety of marble products from his marble mills in Kilkenny to the public, such were the improvements made by him in the marble trade.

The Earl of Strafford stated that he was supportive of the quarrying and marble business in Ireland and acknowledged the benefits it would bring to both countries, whereas the other interested parties main concern was to exploit the marble as much as possible for their own benefit. Granted there would have been employment provided in the quarrying of the stone, but the craftsmen working at the site in London and elsewhere, would have carried out the actual cutting and polishing. The Duke of Ormonde's instructions to raise marble from the 'Quarry near Kilkenny', in 1664, already noted in Chapter Two, indicates that the marble was sent in block form, along with Ormonde's design for a chimneypiece, to London, where it would have been made into a chimneypiece there. The diarist John Evelyn, on visiting the house of Arthur Capell, 1st Earl of Essex, at Cassiobury in Hertfordshire, noted that some chimneypieces there were of Irish marble 'brought by my Lord from Ireland, when he was Lord Lieutenant [1672-1677], and not much inferior to Italian.'²⁶² Whether the chimneypieces were made up in Ireland, or at Cassiobury, is unknown, although Rolf Loeber suggests that on 19 December 1673, Essex was shown a chimneypiece at Dublin Castle made from Irish marble by a Dutch marble dresser by the name of Francis Cavenburghe and it may have been at this time he had chimneypieces made up and sent to Cassiobury.²⁶³ What we do know is that many Irish quarries were being used by important architects of the day, to supply superior stone to wealthy clients, as they set about constructing and refurbishing cathedrals, churches and country seats. The quarries were on the estates of the wealthy, often relatives, or associates, of the clients, a different entrepreneurial circumstance to William Colles's exploitation of the Black Quarry.

In his letter to Perceval, December 1713,²⁶⁴ Southwell stated that the white and red marbles that were also found in the Cork quarry would sell well in England if they were moderately priced, but the black marble would not sell at all except for gravestones. Southwell's comment is at odds with what has been examined above regarding the

²⁶² William Bray (ed.), *Diary and Correspondence of John Evelyn*, 4 vols., v. ii, London, 1859, p. 148.

²⁶³ Rolf Loeber, 'The Rebuilding of Dublin Castle: Thirty Critical Years, 1661-1690', in *Studies: An Irish Quarterly Review*, vol. 69, no. 273 (Spring, 1980), p. 58.

²⁶⁴ BL, Egmont Papers, Add 47027, f. 58-60, Edward Southwell to Sir John Perceval, from Kings Weston, 6 Dec. 1713.

earlier demand for black marble in England in the preceding century, e.g. the steps of St. Paul's. If black marble had fallen from fashion early in the eighteenth century, then William Colles, three decades later, set about changing this attitude towards black marble, as he began making a concerted effort to begin shipping Kilkenny marble to Britain on a large scale. Writing to a prominent craftsman and builder in Bristol in 1742, Colles's correspondence unwittingly displays a major transformation in the quarrying and marble trade. This trade was no longer in the control of an elite minority, but in the hands of entrepreneurs and craftsmen, who placed the emphasis on improving and modernising an industry that had remained unchanged over the centuries.

On May 1st 1742, William Colles wrote a letter to 'Mr Thos Pattye, Carver, near Coledge Green, Bristoll.'²⁶⁵ Discussing the prices for various sizes of Kilkenny marble, Colles informed 'Pattye' that, 'I have a great indication to Encourage a Trade for this stone In Bristoll.' The ever-astute Colles was writing to Thomas Paty, a member of the prominent Bristol family of masons and carvers and one of the foremost stone and wood carvers working in England at the time. Paty would later become better known as an architect, playing a major role in the development of Georgian Bristol.²⁶⁶ In order to entice Paty to import his produce, Colles assured him that he would be willing to supply him with marble at the lowest prices possible,

The prices of Kilkenny marble (to you whom I presume design selling it again) is for flat marble Chimneypieces well wrought and polished, delivered on ship...at ye Key, 2s 6d per English foot, Tables moulded and polished, if under 4 feet long 3s per foot, if upwards of 4 feet long and under 6 feet long 3s 6d, and if upwards of 6 feet long 4s per foot: ffor the marble in slab fitt for chimney pieces saw'd and Rub'd True out of winding 1s 8d per foot...Marble In the Block is 6s 8d per foot solid Delivered...I paying all Dutys and charges on this side of ye water and ye ffreight and you paying all Dutys and Charges on yr side ye Water.

²⁶⁵ PRIM, May 1st 1742, William Colles to Thomas Paty, Bristol.

²⁶⁶ Howard Colvin, *A Biographical Dictionary of British Architects 1600-1840*, 3rd edition, New Haven and London, 1995, p. 743.

What is evident from Colles's letter is that he was willing to supply Paty with Kilkenny Marble slabs cut and polished in any dimension he might require, or in the form of solid cubic blocks. It is also worth noting that the chimneypieces consisted of flat, smooth and polished marble, but the tables were of polished moulded marble, indicating the chimneypieces were plain and undecorated and the tables were of a higher finish. What is also evident from the letter is that Kilkenny marble does not appear to have been imported in any large quantities to Bristol prior to 1742. Customs accounts for the year Christmas 1709 to Christmas 1710 record that tombstones worth £18 were shipped to Britain's outports, the number of which is not recorded, but a good indicator of the amount, or value, of the tombstones can be garnered from the following year's account when six gravestones were shipped at a cost of £3-10-0.²⁶⁷

Colles was either unaware of, or unconcerned about, the attitude that prevailed among the Bristol merchants regarding the industrial and commercial developments in Ireland at this time. The Society of Merchant Venturers of Bristol were vehemently opposed to what they saw as 'the great design of the Irish...to cramp the Export Trade of England as well as its produce' in attempts to encourage their own manufactured goods. They were also opposed to direct trade between Ireland and the colonies, which would be detrimental to the Bristolians role as middlemen, in effect they wanted complete control over Irish trade.²⁶⁸ From 29 September 1479 to 3 July 1480, 98 ships entered in Bristol carrying customable good, 62 of these came from Ireland. The departures for the same period indicate that of the 59 ships that left Bristol, 31 were bound for Ireland.²⁶⁹ Three hundred years later, in 1787, out of a total of 485 ships entering Bristol, 185 came from Europe and 161 came from Ireland, the rest from the West Indies, America and Africa.²⁷⁰ These figures show how important Ireland was to the port of Bristol and its merchants over the centuries, so their reluctance to relinquish any control over this trade is understandable.

Whether Paty was influenced by such sentiments is difficult to know and if he ever used the marble to sell on, as Colles suggested in his letter, or carve chimneypieces is not known, but there is a strong possibility that he may have used the marble in many of the tablets, memorials and monuments that bear his signature in churches in Bristol

²⁶⁷ Nat. Arch. Kew, CUST 3/13-14, Christmas 1709 to Christmas 1711.

²⁶⁸ Patrick McGrath, *The Merchant Venturers of Bristol*, Bristol, 1975, p. 127.

²⁶⁹ J.W. Sherbourne, *The Port of Bristol in the Middle Ages*, Bristol, 1971, p. 23.

²⁷⁰ W.E. Minchinton (ed.), *The Trade of Bristol in the Eighteenth Century*, Bristol, 1957, p. xv.

and the surrounding counties. Inspections of memorials in St. Mary Redcliffe, Bristol, would indicate that certain memorials, signed by Paty, consisting of white marble urns and plaques in high relief, are mounted on oval tablets of black marble containing small amounts of the white cerulean markings that are prevalent in Kilkenny Marble. (Fig. 4.2) Wharfage accounts in the Bristol Records Office show that Paty imported nine tons of marble on 3 December 1760, the origin of which is not stated. This account also states that nine days earlier, the *Industry*, sailing from Waterford, paid wharfage fees in Bristol.²⁷¹ Could there have been blocks, or slabs of Kilkenny marble on the *Industry* and could it have been part of the marble consignment imported by Paty? There is the possibility that this may have been the case, but unfortunately the accounts do not provide any further information on the subject.

The fact that the transportation of stone has not been adequately recorded in customs accounts would tend to lead one to believe that, perhaps, no duty was payable on the export or import of this commodity, therefore it was never necessary to include it in custom records, but this was certainly not the case. William Colles's letter to Thomas Paty indicates that duties were payable on both sides of the Irish Sea. The CUST 3 records examined at the National Archives at Kew suggest very little marble entered Britain through its 'Outports' up to this time. These outports are not individually named, but they may be regarded as all ports in Britain through which Irish goods were imported, except the port of London. These records also indicate that marble was exported to England in an unpolished state, the first recorded instance of polished marble exported from Ireland was in the year Christmas 1724 to Christmas 1725, when 67ft of it was shipped to an 'Outport' at a cost of £2-4-8.²⁷² The following year saw a paltry 25ft of polished marble shipped to London, but the subsequent years witnessed an increase in polished marble entering into England, along with gravestones, paving stone, flag stone and deliveries of limestone, yet these are outweighed by the amount of stone entering into Ireland from England, made up mainly of paving stone, flag stone and freestone. Ireland was importing stone items that were abundantly available here, except the freestone, indicating that, perhaps, the stone trade was more politically, rather than economically, driven, as noted above regarding the Bristol merchants.

The aforementioned dates are too early for the marble to have been produced at Colles's Marble Works in Kilkenny, the records giving no indication as to the source of

²⁷¹ Bristol Records Office, Wharfage Accounts, SMV/7/1/1/52, from 29 Sept. 1760 to 29 Sept. 1761.

²⁷² Nat. Arch. Kew, CUST 3/27 Christmas 1724 to Christmas 1725.

the marble. In the years 1727 to 1730 polished marble tables were imported through the outports, but these may have been produced in Cork, possibly from Kidwell's yard, as it is highly unlikely Colles was exporting marble goods at this early stage, but during the 1730s there was a noticeable increase in marble, polished and unpolished, and paving stone, some of it polished marble, along with tombstones, entering England through London and the outports. In 1968 L.M. Cullen stated that the sustained growth of Ireland's exports to England 'dates from the beginning of the 1730s.'²⁷³ William Colles's Kilkenny Marble Works would have a significant part to play in this growth.

From Christmas 1731 to Christmas 1733, 717ft of polished marble paving stones were shipped to London, along with 130ft of unpolished marble. A further 60ft of polished marble was shipped to the outports, along with 582ft of paving stone. Six feet of unpolished marble gravestones completed the record for those years. The total value of this merchandise was £53-14-4. This sum pales into insignificance when compared to the volume of stone imported into Ireland during the same period. Freestone and flagstone, valued at £339-5-0, was imported into Ireland from the outports.²⁷⁴ The freestone was imported in great quantities during this period and although it is not described as anything other than freestone, it is highly likely that this stone was mostly Portland stone that was being used in the construction of public and private buildings in Dublin at this time. During the 1730s, over £1,400 was spent on the importation of freestone and it has been suggested that William Colles was involved in this importation, but this has not been confirmed as yet.²⁷⁵ There is one curious item included here that is worth noting, 202ft of foreign black marble, costing £45-9-0, was entered into the country in 1732/3. The likelihood is that this marble was from Tournai in Belgium and was possibly ordered in for a particular project requiring pure black marble, rather than the speckled Kilkenny type. Belgian Black, or Touchstone, was extensively imported to England since the twelfth century for use as fonts and grave slabs in many cathedrals and larger churches.

William Colles's finished marble products could have been quite easily transported to England from his marble warehouse in Batchelor's Lane in Dublin. An entry in the Dublin Assembly Roll for 1739 recounted how a 'Bristol man fastened [a ship] to a post on the Batchelor's Walk, the post gave way and the ship came down

²⁷³ L.M. Cullen, *Anglo-Irish Trade 1660-1800*, Manchester, 1968, p. 49.

²⁷⁴ Nat. Arch. Kew, CUST 3/32-33, Christmas 1731 to Christmas 1733.

²⁷⁵ Casey, *Dublin*, p. 6.

upon another ship...and broke loose six or seven other vessels.²⁷⁶ Although no records examined to date indicate such a thing occurred, it is not unreasonable to speculate that Colles could have loaded his goods onto any of the ships that were berthed so conveniently alongside his warehouse.

Throughout the 1730s the exportation of polished and unpolished marble increased. The exportation of paving stone, listed as 'not marble', increased also, making one wonder if this stone consisted of 'Carlow flags' that Colles was quarrying at Shankill in Kilkenny. In the year 1737 to 1738, 4,434ft of this paving stone was sent to London along with 489ft of polished marble.²⁷⁷ The exports were also made up of gravestones and marble in block form. But in the year 1746 to 1747, a new item is recorded, 365ft of polished marble 'basons' at a cost of £18-5-6.²⁷⁸ Two years later 200 cubic feet of marble, in block form, was shipped to London along with 'Marble Basons, Tables &c.' and two years later we see the same items being shipped to the outports.²⁷⁹

During the 1750s records indicate that a constant supply of these marble items were being shipped to England. A curious addition to these entries is the addendum '&c', which would signify similar marble items were included in the shipments. Perhaps some of these could have been the diverse marble objects such as cisterns, buffets, vases, punchbowls etc. that were described by Bishop Pococke and the two English gentlemen in their respective accounts of their visits to the Kilkenny Marble Works. Pococke noted on his visit to the Marble Works in 1752, that the Kilkenny marble 'makes very fine Cisterns, which have been carryed into Italy & much valued.'²⁸⁰ Two vases of black Kilkenny marble were among items being auctioned by 'Mr. Christie, at his Great Room, in Pall Mall', in 1788.²⁸¹ These vases may have been among those made in Kilkenny, as the English men informed us in their commentary that the 'ingenious Gentleman [Colles] sends yearly several Ship loads to England', which indicates that much of the marble products entering into England were manufactured in the Kilkenny Marble Works.

²⁷⁶ *CARD*, vol. viii, p. 359.

²⁷⁷ Nat. Arch. Kew, CUST 3/38.

²⁷⁸ *Ibid.*, CUST 3/47.

²⁷⁹ *Ibid.*, CUST 3/50-51.

²⁸⁰ John McVeagh (ed.), *Richard Pococke's Irish Tours*, Dublin, 1995, p. 107.

²⁸¹ James Christie, A catalogue of the reserved collection of statues, busts, vases, urns, sarcophagi, &c. and Other Select and Valuable Pieces of Antiquity; London, 1788, p. 2, Eighteenth Century Collections Online (<http://find.galegroup.com/ecco/infomark.do?&contentSet=ECCOArticles&type=multipage&tabID=T001&prodId=ECCO&docId=CW106270180&source=gale&userGroupName=tcd&version=1.0&docLevel=FASCIMILE>), (accessed 18 Jan 2010).

When Lady Oxford decided to carry out alterations to Welbeck Abbey, Nottinghamshire, she had a chimneypiece made for the new dining room. This piece was made in 1744 by the noted carver Thomas Carter the elder and it cost the princely sum of £526. Executed in the Gothic style, the chimneypiece was ‘composed of a great variety of English, Scotch and Irish marbles.’²⁸² Another chimneypiece, designed by John James for the drawing room, had panels of ‘Irish Black & White’ marble.²⁸³ This description can be somewhat confusing as it does not mean the separate entities of a pure black marble and a pure white marble, it means Kilkenny marble, it is ‘black and white’ due to its black ground and its white fossils, therefore it is quite likely to have been this that was used at Welbeck Abbey.

By the mid eighteenth century Kilkenny marble was the prime Irish marble available in England. In his seminal work *A Complete Body of Architecture*, Isaac Ware listed a wide range of marbles imported into Britain from Italy, Spain and Egypt. Regarding domestic marbles, Ware suggests that a plain green marble near Bristol would be ideal for chimneypieces, ‘but it is not regarded’, as are some other marbles he mentions, but he does say that a ‘black marble beautifully spotted in white, with shells and coral, brought from Kilkenny in Ireland’ was available ‘in great plenty.’²⁸⁴

As mentioned above, the main accounts of goods being shipped to Britain are contained in the CUST 15 ledgers, but marble does not appear anywhere in these records and it is difficult to understand the reason why. The following table illustrates the amount of marble, polished and unpolished, which was shipped to England from 1700 to 1780, as covered by CUST 3 records. Marble, in its many forms, is to be found under the heading of ‘Stone’ in the alphabetised list of goods within these records. Included in the table are records of the marble shipped to Scotland, contained in CUST 14 records, covering the period 1755 to 1785, but these are incomplete and it is unclear if Scottish ports were included among the ‘Outports’ in the accounts up to 1755. For clarity, the table represents the value of the marble in £’s sterling, rather than the amount shipped, as there is much inconsistency regarding the form of the stone, i.e. blocks or slabs, and different measurements, such as solid [cubic] feet or superficial inch. The measurement ‘superficial’ appears in many records as a standard

²⁸² Peter Smith, ‘Lady Oxford’s Alterations at Welbeck Abbey, 1741-55’, in *The Georgian Group Journal*, vol. xi, 2001, p. 144.

²⁸³ *Ibid.*, p. 146

²⁸⁴ Isaac Ware, *A Complete Body of Architecture*, London, 1768, pp. 49-50.

measurement for marble, yet how it is derived is still confusing. In a proposal to be added to the Book of Rates by merchants, the Irish Parliament in 1764 stated that marble tables, slabs and ‘all other Pieces of polished Marble, the Foot superficial Measure, being twelve Inches long, twelve Inches broad, and one Inch thick’ would have a three shilling custom and excise duty placed upon it.²⁸⁵ It is not clear how this measurement was affected if the marble was more than one inch thick and it is also not clear if the English measurement was comparable to this.

Also omitted from this graph are flagstones and paving stone not made from marble. Limestone utilised both for agricultural purposes and the making of lime mortar is not included. This would increase the value of exports greatly, as vast amounts of it was exported throughout the eighteenth century to Britain, which, as noted above, had not been gifted the wealth of limestone that nature bestowed on Ireland.

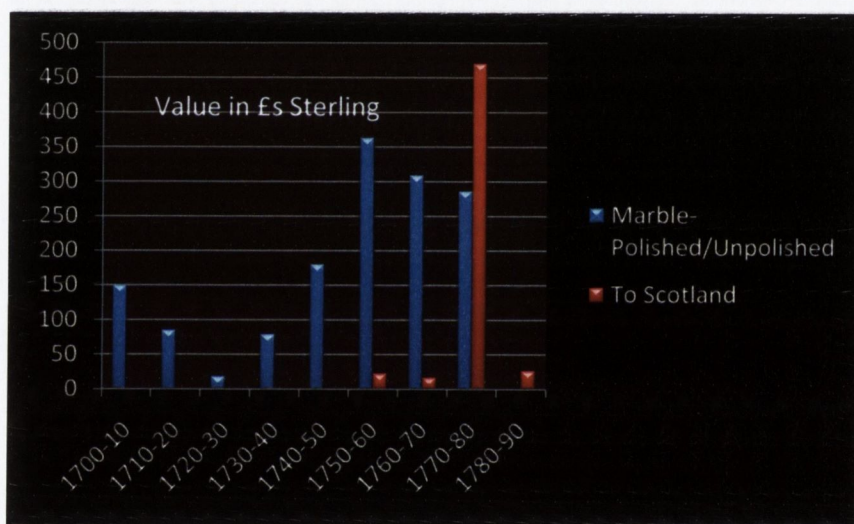


Table 4.1. Table of marble exports from Ireland to Britain. Source: CUST 3 and CUST 14.

A noticeable aspect of this chart is the decline of marble exports in the early decades of the century. This would coincide with the decline of marble production on the Perceval estate. From Michaelmas 1697 to Michaelmas 1698, accounts indicate that large marble stones were shipped to London, valued at £50, followed by 33½ tons of paving stone, valued at £67-6-0 and marble tables, valued at £3, the subsequent year.²⁸⁶ The year 1707 shows that marble to the value of £135 was shipped to London, but whether it was in block, or slab form is not indicated. According to the available records, the exportation of marble peaked in the first decade of the eighteenth century and

²⁸⁵ *JH of C*, vol. vii, appendix, p, cclxix.

²⁸⁶ Nat. Arch. Kew, CUST 3/1-3, Michaelmas 1697 to Christmas 1699.

gradually declined thereafter. There is the possibility that much of the quality stone was being used to supply an increasing demand in the home market as improvement schemes started getting under way at this time.

From 1730 onwards there is a significant increase in the marble being exported, reaching a peak to England in the 1750s. The values indicated are not substantial by any stretch of the imagination, the highest value of exports to England peaks at just over £350 during the 1750s, but when one considers that the price of marble varied depending on the form it was despatched in, then the increase in volume exported becomes very significant. If we look at the year Christmas 1752 to Christmas 1753 as an example, rough blocks of marble were 4s per foot and 22 solid feet were exported to the outports. Basins, tables and other ornaments of polished marble were not charged per item, but at 1s per foot and the amount recorded is 366 superficial feet, the surface area of the marble being principal measurement.

The 'spike' indicated in the exports to Scotland during the 1770s was result of one year in particular, when 5,700 feet of polished marble was shipped to Scotland in the year from January 1773 to January 1774, costing 1s 6d per foot, the total coming to £427-10-0. When one considers that this delivery consisted of over one mile of polished marble, then we would have to recognise the fact that only one marble enterprise could provide such an amount of marble in one year, that being the Kilkenny Marble Works.

This increase in exports coincides exactly with William Colles's involvement in the marble industry. It can be argued that the output of marble reached a level never witnessed before due to Colles's mechanisation of the cutting and polishing process. Colles stated in his letter to the Dublin Society in 1731/2 that the cutting and polishing of marble 'in the comon Way, rendered the Trade for the said Marble less extensive than it might be' and now with its water-powered machinery, the Kilkenny Marble Works was expediently supplying the trade with high quality marble products. As Colles had mills highly mechanised with its 'ten Saws...going Night & Day', he would have been the only one with the capability to produce large volumes of sawn and polished marble to satisfy the home market whilst also supplying the foreign markets.

Accounts of marble shipments to Bristol are recorded in the Bristol *Presentments*, which are to be found in the Bristol Reference Library and a lesser number in the Bristol Records Office. These printed records cover the years 1770 to 1808 and although incomplete, they provide much information on the shipments of marble from

various ports in Ireland. These records give the name of each ship, its master, the port from which the ship sailed and the date it docked in Bristol. The ship's cargo and the merchant, or business, the cargo was destined for, are also recorded. The value and volume of the cargo is the only information that is omitted. The first recorded instance of stone being imported into Bristol in these accounts is on 26 January 1778, when 18 gravestones were shipped from Waterford on the *Leinster Packet* for Mr. William Sheltran.²⁸⁷ It is highly likely that these were Kilkenny marble gravestones, as this was an item constantly being produced at the Marble Mills and Waterford was the port through which marble produce from Kilkenny was exported. Colles did state that the Nore navigation was designed in order 'to allow fflat bottom Barges...and also fflat Built vessels...bear the sea and be able to go coastways to Bristol &c.'²⁸⁸ The next reference to marble is one of the more interesting revelations in these documents.

On 17 February 1778 the *Dispatch*, sailing from Waterford, delivered five blocks of marble for William Sheehan.²⁸⁹ This is, in all probability, the same William Sheehan, son of the sculptor David Sheehan, named in the agreement drawn up regarding the occupation of the Black Quarry in 1778 with William Colles of Millmount, son of Alderman William Colles of Abbeyvale, as mentioned in Chapter Two. Sheehan was having his own Kilkenny marble delivered to himself in Bristol. Why Sheehan was in Bristol and supplying marble is unknown, his name is not listed in any trade directories for the period, perhaps he was using it to set up a market for this commodity in Bristol. If so, then he had some success, as records indicate a number of further deliveries were shipped to Bristol in the following years.

In January 1791, the *Happy Return* left Waterford with seven boxes of marble for Mr. J. Gurney of Bristol. In April of that year the *Thomas and Mary* delivered ten blocks and six boxes of marble to Thomas Kift and the following September, fifty one Irish marble blocks were shipped from Waterford on the *Helen*, the recipient is not recorded. (Fig.4.3) All this marble shipped from the port of Waterford was, most probably, from Kilkenny, as other entries indicate that Cork and Kerry marble was also shipped to Bristol from the respective ports of Cork and Tralee. On 22 March 1791 eight blocks of marble were imported on the *Mary and Margaret* from Kinsale via Cork for Robert Hurst and on 13 July of the same year, thirty pieces of marble were shipped

²⁸⁷ *Presentments*, January 26, 1778.

²⁸⁸ PRIM, William Colles to Thomas Wallis, Dublin.

²⁸⁹ *Presentments*, February 17, 1778.

on the *Bacchus* from Tralee. A number of marble items were also shipped from Dublin, but the origin of the marble is not indicated. Nine blocks of marble were shipped to John McCullom on 22 June 1792²⁹⁰ and in 1794 John McCullom Jnr. received a marble chimneypiece on the *Bristol* from Dublin.²⁹¹ In November 1795 the *Presentments* indicate that two cases of chimneypiece ornaments arrived in Bristol on board the *Flora* from Dublin.²⁹²

Whilst these records inform us of the source of the marble and who it was shipped to, the amounts of marble and its value are not revealed. What the contents of a box of marble was and its weight are unknown, as is the size and weight of a marble block, therefore it is difficult to estimate whether these shipments of marble were large or small. What is interesting about the receivers of the marble shipments is that some of them were not involved in the marble trade in any way. Gurney was a watchmaker and jeweller and Thomas Kift was an insurance broker, while others are listed as merchants who obviously traded in a wide range of commodities. Marble must have been a very profitable item to have attracted such an interest from merchants not involved in the marble trade and one entry in the *Presentments* is worth noting. In November 1792, a clerk by the name of Isaac Hancock received a shipment of one hundred and eighty marble slips on *The Warren* from Dublin.²⁹³ Marble slips are specific items that make up part of a chimneypiece. They are the rectangular pieces of stone or marble used to reduce the size of the fireplace opening. Regardless of what type of marble is used for the actual chimneypiece, the slips are invariably made from black marble, especially as a contrast to the white of Carrara marble. It is a strong possibility that these slips sent to Hancock were made from Kilkenny marble. The final mention in the presentments of Irish marble imported into Bristol is an entry dated 22 July 1806, when four blocks of marble were brought in on the *Lord Nelson* from Cork for the merchant H.F. Brooke. As far as the information in these records go, we can safely assume that the last shipment of Kilkenny marble from the port of Waterford was the cargo of fifty one marble blocks unloaded on 19 September 1791. It would be reasonable to assume that marble was shipped to Bristol in the years prior to those covered by these records, but

²⁹⁰ *Presentments*, June 22, 1792.

²⁹¹ *Presentments*, March 21, 1794.

²⁹² *Presentments*, November 7, 1795.

²⁹³ *Presentments*, November 21, 1792.

by the end of the eighteenth century marble shipments to the port declined, some of the reasons for this will be examined below.

One final aspect of the Bristol Port *Presentments* worth noting is that none of the above named individuals were the largest importers of marble in Bristol, that honour went to the Paty family, which is why William Colles wrote to Thomas Paty in the first instance. The *Presentments* indicate that various members of this family, working in Bristol and the surrounding countryside, were importing large amounts of marble from the Italian port of Leghorn during the period covered by these records. William Paty, Thomas's son, was the major user of Italian marble that included blocks of marble, statuary marble and a large amount of marble mortars. The white marble was used for the great array of memorials in the Bristol area and it is reasonable to speculate that if Paty required black Kilkenny marble to place these memorials upon, he could acquire this easily enough from any of the above named gentlemen without having to import it himself. It is worth noting that some of this Italian marble could have been sent on to Ireland. As noted in Chapter Two, the Kilkenny Marble Works was advertising 'a large assortment of Kilkenny Marble Chimney Pieces of the newest kinds of Italian and Kilkenny Marble' in 1785,²⁹⁴ so, perhaps, Paty could have been sending over a ship load of Italian marble and receiving a cargo of Kilkenny marble in return.

Newspapers are another useful source for displaying the widespread use of Kilkenny marble in memorials and decorative features. A particular memorial is referred to in a newspaper article in 1776. A letter appearing in the *Morning Post and Daily Advertiser*, recounting a visit to Margate in the south east of England, describes a memorial erected there to the late Lady Hillsborough known as the Countess Pillar. Placed in the garden of St. Mildred's Convent, the memorial consists of column, the shaft of which is 'grey Kilkenny marble' among steps of lava from Vesuvius.²⁹⁵ The marble would be grey due to its location out of doors.

On 14 April 1795 the *Cumberland Pacquet* newspaper reported that a monument had been erected to the memory of Henry Littledale Esq. in the church of St. Nicholas in Whitehaven. The monument was executed by Francis Dawson and was 'composed of very beautiful white veined Italian and Kilkenny marble.'²⁹⁶ Dawson had opened his yard near Whitehaven in 1793, having previously worked in marble yards in Dublin and

²⁹⁴ *Finn's Leinster Journal*, 29 January, 1785.

²⁹⁵ *Morning Post and Daily Advertiser*, Tuesday, September 24, 1776.

²⁹⁶ Potterton, *Irish Church Monuments*, p. 43.

London. Dawson also made and sold chimneypieces and other articles made from marble and, no doubt, would have been very familiar with the assorted varieties of Irish marble. It is most likely that the Kilkenny marble was shipped to Whitehaven, as this was one of the outports that carried on a sizeable trade with Ireland, or the marble may have been shipped to Liverpool and transported overland to Whitehaven. A good example of a Kilkenny marble chimneypiece in this locality can be seen in *Country Life*, in an article on Wordsworth House, Cockermouth, which is just a few miles from Whitehaven and the childhood home of the poet William Wordsworth.²⁹⁷ The house was built in 1690 and in 1745-6 it was refurbished. The style of the chimneypiece is consistent with the date of refurbishment, suggesting that it is the original drawing room chimneypiece, and would also suggest that Kilkenny marble had been shipped to Whitehaven long before the arrival of Dawson to the area.

In June 1795, the *Bath Chronicle* advertised an auction of goods belonging to Thomas Lovett who had recently been declared bankrupt. Among the goods up for auction was a quantity of Irish marble.²⁹⁸ Lovett's was among a number of smaller firms of marble masons reported as being bankrupt in the *Bath Chronicle* around this time. It was also about this time that the status the port of Bristol enjoyed for centuries began to decline and Liverpool had now become the prominent port on Britain's western shore. One of the main reasons for this was that Liverpool was the gateway to Lancashire and with its growing population due to the industrialisation of the area, new markets were now opening up.

In the early nineteenth century the reputation of Kilkenny marble was firmly established in Britain and further afield. It has been stated that the Kilkenny Marble Works prospered greatly during Britain's war with France, as Napoleon's blockades, set up to ruin British commerce, prevented foreign marble entering into Britain much to the benefit of the Colles family enterprise.²⁹⁹ This was very likely the case as other commodities, such as grain and butter, 'soared in volume and price during the period of the Napoleonic wars'.³⁰⁰ William Tighe wrote in 1802 that the Kilkenny Marble Mills was sending marble to Liverpool and Glasgow in rough form due to duties placed on finished marble products. A newspaper report in 1789 stated that troops at Liverpool

²⁹⁷ Mary Miers, 'Wordsworth House Cumbria', in *Country Life*, July 26, 2007, pp. 66-68.

²⁹⁸ *Bath Chronicle*, June 4, 1795.

²⁹⁹ Mrs. J.C.J. Murphy, 'Kilkenny Marble Works', in *Old Kilkenny Review*, No. 2, 1948, p. 18.

³⁰⁰ L.M. Cullen, *An Economic History of Ireland since 1660*, London, 1972, p. 53.

were to be despatched to Dublin on board ‘two of the six packets that constantly sail from thence’. It states that among the many improvements being carried out at Liverpool docks was the ‘expeditious intercourse between that Port and Dublin, which by means of these packets is nearly daily.’³⁰¹ It would appear that concerted efforts were being made to attract more of the Irish trade to Liverpool and away from Bristol.

Accounts of imports into Ireland for the year ending 5 January 1802 indicate that foreign marble to the value of £29-15-00 was brought into the country, but the port of origin is not stated.³⁰² Records for the year 1809 shows that marble worth £935-8-4 was imported and in 1810 the value of foreign marble entering the country was £1,091-2-1.³⁰³ Some of this must have been destined for the Kilkenny Marble Works, as Tighe stated that Richard Colles was bringing in Italian marble from Liverpool around this time to be used on chimneypieces. In fact Richard Colles had been advertising Italian chimneypieces for many years. In 1799 *Finn’s Leinster Journal* carried the following advertisement placed by Richard Colles, ‘An elegant assortment of ITALIAN MARBLE CHIMNEY-PIECES—remarkable for Elegance of Design, and Superior neatness of Workmanship.’³⁰⁴

Accounts of imports from Ireland into Liverpool for the years 1812 and 1824, provided to the House of Commons by order on 17 March 1825, display the increase of Irish produce entering the port over the years in question. In 1812, a total of 2,255 cwts. 3qrs. 12lbs, (just under 113 tons) and 288 solid [cubic] feet of marble were imported from Ireland. Paving stone was also imported, 94 tons in total. The records indicate that for the year 1824 there was a total of 130 tons of marble imported from Ireland, along with 24 marble mortars and 15 tons of paving stone.³⁰⁵ In 1820 an account was published on articles that were imported duty free from Ireland into Britain in the year 1819. Include in these articles were 101 superficial feet of polished marble, 1,374 solid feet of marble block and 2,790cwts 2qr 6lb (approx. 140 tons) in block form also.³⁰⁶

³⁰¹ *World* (1787), June 9, 1789

³⁰² HCPP Online, *Imports and Exports of Ireland; for the year ending fifth January 1802*, (<http://parlipapers.chadwyck.co.uk.elib.tcd.ie>), (accessed 5 August 2009).

³⁰³ HCPP Online, *Comparative statement of the quantities of goods, wares, or merchandize, imported into Ireland, in the years 1809 and 1810*, (<http://parlipapers.chadwyck.co.uk.elib.tcd.ie>), (accessed 7 November 2009).

³⁰⁴ *Finn’s Leinster Journal*, 19 March, 1799.

³⁰⁵ HCPP Online, *Port of Liverpool. Imports of certain articles, and value of exports, 1825*, (<http://parlipapers.chadwyck.co.uk.elib.tcd.ie>), (accessed 5 August 2009)

³⁰⁶ HCPP Online, *An account of articles imported duty free (of customs) from Ireland into Great Britain, during the year 1819*, (<http://parlipapers.chadwyck.co.uk.elib.tcd.ie>), (accessed 5 August 2009)

Although such evidence shows that Liverpool was the main port for shipping the marble to at this time, newspaper advertisements for the period reveal that London was still an important destination for Kilkenny marble. In London in 1812, Messrs. Robins advertised marble chimneypieces for sale. Their advertisement, carried in *The Times*, informed the public that they had ‘THIRTY-SIX statuary, vein, Derbyshire, Kilkenny, and other MARBLE CHIMNEY PIECES’ for sale at Black Horse-yard in High Holborn.³⁰⁷ On 24 September 1812 *The Morning Chronicle* carried an advertisement by Robins informing the public they had twenty ‘Statuary, Vein, Dove, and Kilkenny MARBLE CHIMNEY PIECES’ for sale in their showrooms in Covent Garden.³⁰⁸ The following January *The Times* carried the same style advertisement but the company had now included five ‘African Chimney-pieces’. By February 1816, Robins were still selling Kilkenny marble chimneypieces along with an assortment of other chimneypieces and in November 1817 they were advertising Kilkenny marble chimneypieces ‘adapted for libraries, parlours, &c.’³⁰⁹ These advertisements confirm that Kilkenny marble was still being shipped to London at this time. Messrs. Robins were not the only business in London dealing in Kilkenny marble chimneypieces, as other advertisements testify. Mr. F.G. Fisher, also of Covent Garden, advertised Kilkenny marble chimneypieces of ‘handsome modern designs, and superior workmanship’.³¹⁰ Shuttleworth and Stevens advertised ‘Statuary, Veined, and Kilkenny marble chimneypieces, with Slabs to correspond’ in 1817.³¹¹ Mr. Laxton advertised Kilkenny marble chimneypieces among the many different marble types in his premises in Holborn bar.³¹² In 1819 Laxton was selling thirty marble chimneypieces of veined, dove and Kilkenny marble ‘of the manufacture of Mr. Robert Cook’, some of which were partly carved ‘in the immediate taste of the day’. The sales were to be held at Cook’s yard, near Tottenham Court in London.³¹³ Cook, or Cooke, was also a monumental carver and is likely to have used Kilkenny marble in some of his works, which according to Rupert Gunnis ‘are important’.³¹⁴

³⁰⁷ *The Times*, Monday, March 9, 1812.

³⁰⁸ *The Morning Chronicle*, Thursday, September 24, 1812.

³⁰⁹ *The Morning Chronicle*, Tuesday, November 18, 1817.

³¹⁰ *The Times*, Tuesday, March 28, 1815.

³¹¹ *The Times*, Tuesday, June 10, 1817.

³¹² *The Times*, Friday, September 25, 1818.

³¹³ *The Times*, Wednesday, November 17, 1819.

³¹⁴ Gunnis, *Dictionary*, p. 112.

In 1820 a sale was held at the Scagliola Manufactory and Marble Works in New Road, Euston Square, London.³¹⁵ The sale was the result of the dissolution of the partnership of Browne and Young, a firm that specialised in scagliola work. Also advertised was a large quantity of marble slabs and blocks of statuary, veined, black and gold and Kilkenny marble, all of superior quality. The firm carved many tablets and memorials in London and the surrounding counties, their tablets having ‘delicately carved details’³¹⁶ and, no doubt, Kilkenny marble would have been a suitable frame for such tablets.

Another interesting advertisement appeared in the newspapers in 1821.³¹⁷ Directed at sculptors, statuaries, masons and builders, the contents of a mason’s yard in Westminster were offered for sale. The marbles, ‘an ASSORTMENT of the most costly...selected with the utmost care, at a very considerable expence’, were a wide variety from many countries and included ‘Irish marble of all dimensions’ and Kilkenny marble chimneypieces ‘well worthy the attention of Noblemen and Gentlemen.’ Other articles that may have been made with Kilkenny marble included tables, monuments, vases, plinths and headstones. The yard belonged to William Marshall, who also had a yard in Regent’s Street, and all contents of these yards were put up for sale probably due to Marshall being declared bankrupt that year.³¹⁸

What is noteworthy about the various advertisements is that the marble is referred to as ‘Kilkenny Marble’, not ‘Irish Marble’, ‘black Irish Marble’, or ‘black and white Irish marble’ as in previous times. Most of the other marbles mentioned in the newspapers are not referred to in such specific terms. Italian marble is not always specified as being Carrara marble or Siena marble and as to the source of the marble for the ‘African Chimney-pieces’, well that is really anyone’s guess. What this reveals is that Kilkenny marble was a recognised high quality marble, used by the best craftsmen of the day and fit for only the most discerning clientele, it did not warrant any further description, other than its name. As we would now say, Kilkenny marble had become a ‘brand name’, no other description was necessary. A number of this discerning clientele chose, or at least considered, Kilkenny marble for chimneypieces to decorate their homes with, two of which lived in Sussex.

³¹⁵ *The Times*, December 5, 1820.

³¹⁶ Gunnis, *Dictionary*, p. 65.

³¹⁷ *Morning Chronicle*, Monday, February 12, 1821.

³¹⁸ Gunnis, *Dictionary*, p. 256.

It was decided in 1811 to erect a new vicarage in the town of Mayfield, East Sussex. Edward Lapidge of Green St. Grosvenor Sq., London, the architect of the project, wrote to the Rev. John Kirby to inform him that he had agreed on the designs of the chimneypieces for the bedrooms in the vicarage, but would not proceed until Kirby approved the designs and also the choice of stone for the chimneypieces.³¹⁹ The chimneypieces, including the hearth slabs, were to be carved from Scotch marble, or Kilkenny marble, at a cost of £10 per item. The cost was to be £1 less if no moulding was required. The same style of chimneypiece with moulding, but made from Portland stone, would cost £3-10-0 and to paint the pieces to imitate marble would cost about 12s. Lapidge also included prices for chimneypieces for the dressing room, the marble ones costing £5-10-0 and the same in Portland stone at £2-10-0. Which stone was chosen for the chimneypieces is not known, a Mr. Parsons was paid £165-15-6 in September 1812 for 'slating and stone' work, but no chimneypieces are mentioned. An entry for 31 July 1813 mentions a payment of £11-16-11 for 'Black Marble in Chimneypieces and slabs', the likelihood is that this was Kilkenny marble. In 1815 the firm of Oldfield and Turner of Berkeley Sq., London provided a black marble slab, costing £4-8-9 for a dove marble chimneypiece and a black marble slab for a Siena marble chimneypiece at a cost of £3-17-0. They also supplied black marble slips for the chimneypieces at a cost of £2. This record, at least, gives a comparison of the value of the different materials. The source of the Scotch marble is unknown, it is possible it was from the island of Iona, as a serpentine marble was commercially available from there in the late eighteenth century, although it was not a very successful venture.³²⁰ The Portland stone was less expensive as, due to its relative softness in comparison to the marble, it was much easier to work. The Kilkenny marble had by now become a symbol for quality and prestige.

On 13 July 1816, William Knapman paid Benjamin Waterman £4 for a Kilkenny marble chimneypiece for Petworth House in Sussex.³²¹ The cost of carriage from Waterman's yard in London was 3s 6d. Petworth was being renovated by George Wyndham, 3rd Earl of Egremont, at this time and Waterman was also paid for a veined marble chimneypiece, but what is unusual about the use of Kilkenny marble and for that matter, veined marble, was that Petworth had its own supply of marble, known as

³¹⁹ East Sussex Records Office, Lewes, Kirby of Mayfield Vicarage, KIR/28/11/4, 17 June, 1812.

³²⁰ Monica T. Price, *Decorative Stone, the complete sourcebook*, London, 2007, p. 182.

³²¹ West Sussex Record Office, Chichester, Petworth House Archives Vol. IV, Receipted bills paid by William Knapman on behalf of the 3rd Earl of Egremont, PHA/10,419 1815-1816.

Sussex marble, Petworth marble, or Winklestone. Quarried on the estate at Kirdford, it was used in the house for chimneypieces and table tops.³²² It was also used further afield and was regarded as a quality marble, but it would appear that the Earl required variety and chose Kilkenny marble for one of his chimneypieces, the price of which would indicate that it would not have been placed in any of the main rooms of the house, but possibly in a bedroom, or servant's quarters. The exact location, or whether the chimneypiece is still extant are, as yet, unknown.

William Field, in his book *New Guide. An historical and descriptive account of Warwick and Leamington*, describes the pump room of the new baths built in Leamington in 1810. The pump room was lit by a large stained glass window, under which was placed 'two beautiful chimney-pieces, of Kilkenny marble.'³²³ He also describes the exquisite decoration of the ballroom in Leamington's Assembly Rooms. One side of the ballroom has a range of seven windows and the opposite side has two chimneypieces 'of highly polished marble, from the quarries of Kilkenny.'³²⁴ Again Kilkenny marble was chosen to decorate buildings frequented by people of high social standing.

Travelling much further north, Kilkenny marble can be found in Taymouth Castle in Scotland. Taymouth was built on the area where a tower house, Balloch Castle, built about 1550 by Sir Colin Campbell, once stood. The Castle was remodelled c.1733 by William Adam who added two flanking pavilions linked to the main block. The centre block of the present building dates from 1806-10. During this period accounts show that four Gothic chimneypieces, costing £184-1-4, were placed in the building. Three of the four chimneypieces were made from Kilkenny marble, the fourth being of Roach stone. The chimneypieces were carved by Lancelot Wood who had his yard in the King's Road, Chelsea in London,³²⁵ which is probably where the chimneypieces were executed, rather than being carved in Scotland.

CUST 16 is a single volume ledger that records items imported into America during the period 1768 to 1773. Amongst these items are 'saw'd stones', imported in 1768, but no other description, value or volume is provided. What is of greater interest

³²² The National Trust, *Petworth House*, 1981, p. 7.

³²³ William Field, *New Guide. An historical and descriptive account of Warwick and Leamington*, Warwick, 1816, p. 125.

³²⁴ *Ibid.*, p. 143.

³²⁵ Architecture Notes Taymouth Castle, (http://www.rcahms.gov.uk/canmore/details_gis?inumlink=24893), (accessed 2 Mar 2007).

to us is 'An Account of the Produce or Manufacture of Great Britain & Ireland Imported into the Several ports of North America...from 5th January 1769 to 5th January 1770.' This account reveals that thirty marble chimneypieces and 178ft of marble was shipped to New York. Over 140 tons of paving stone was shipped to Charlestown in West Virginia³²⁶ and tombstones to the value of £40 were unloaded at 'Patuxent', most likely the mouth of the Patuxent River in the State of Maryland, and from there they could be easily transported to Baltimore and Washington. The following year, January 1770 to January 1771, saw 800 paving stones and 1,350ft of marble shipped to Philadelphia and 35ft of marble entered New York. In January 1771 to January 1772, a delivery of 123 tons of marble entered New York along with 20 cases of marble slabs, 1 case of marble slabs were sent to Salem, 5 cases to Boston, 1 case to Rhode Island, 9 cases were shipped to Charlestown and 2 to Savannah. No cargoes of marble are recorded for the subsequent year, but we are informed that 92 ships and 3 sloops carrying a combined tonnage of 9,118 tons left Ireland for America and Canada.³²⁷ With such an amount of ships sailing from Ireland, it is highly likely that most of the marble mentioned above was Irish and part of that was Kilkenny marble: this is confirmed by the survival of Kilkenny marble chimneypieces described below.

The CUST 16 records display marble that was legitimately entered into America, but Thomas Truxes, writing in 1988, states that items such as woollens, shoes, laces, wigs, books, clock and even Kilkenny marble chimneypieces, were smuggled into America in the eighteenth century.³²⁸ Francis G. James, writing in 1963, states that among the commodities being shipped to the colonies in the eighteenth century was Kilkenny marble.³²⁹ Many of these items, he presumes, were shipped via British ports legitimately, but some items were smuggled in, concealed amongst the legal cargoes.

One Dublin merchant who shipped Kilkenny marble to America by legal means was William Alexander. Alexander was a leading exporter of linen to Britain and America in the 1760s and 1770s and, on occasion, according to Truxes, he would supply colonial buyers with Kilkenny marble for table tops and chimneypieces.³³⁰ It was common for Irish merchants involved in the flaxseed trade to exchange items of Irish

³²⁶ This town is on the Potomac River and is not to be confused with the state capital, Charleston.

³²⁷ Nat. Arch. Kew, CUST 16

³²⁸ Thomas M. Truxes, *Irish-American Trade, 1660-1783*, Cambridge, 1988, 1st paperback ed., 2004, p. 44.

³²⁹ Francis G. James, 'Irish Colonial Trade in the Eighteenth Century', in *The William and Mary Quarterly*, 3rd series, vol. 20, no. 4, October 1963, p. 579.

³³⁰ Truxes, *Irish-American Trade, 1660-1783*, (see note 326), p. 75.

manufacture for seed from dealers in New York and Philadelphia.³³¹ This was likely what Alexander was doing at the time, but there is the possibility that William Colles was transporting Kilkenny marble to America with the help of Alexander. Colles's involvement in linen production in Kilkenny, which often received premiums in Dublin, could possibly have brought the two gentlemen in contact with each other.

One American gentleman who purchased a Kilkenny marble chimneypiece in the early 1770s was Colonel Samuel Washington, brother of George Washington. Samuel built his home in Harewood, Virginia in 1771. In the house is a relatively plain Kilkenny marble chimneypiece, decorated with egg and dart moulding about its edges.³³² The hearth stone appears to be polished marble also. (Figs.4.4 & 4.5) George Washington visited the house sometime after its completion and intended, in the light of what follows, to use Kilkenny marble in the construction of Mount Vernon in 1784, perhaps after seeing it at Harewood.

William Rumney of Alexandria, Virginia, was preparing to leave for England when Washington wrote to him requesting him to enquire about flagstone and paving for the colonnades and covered walkways of Mount Vernon upon his arrival in England. Washington provided Rumney with the exact dimensions he required to complete the work. He also provided a list of the preferred stone he wanted. Rumney was to find out what the best terms would be for Whitehaven flagstone, black and white in equal quantities, delivered to the port of Alexandria by the superficial foot, 'workmanship, freight, and every other incidental charge included.' The stone had to be 2½ inches thick and exactly a foot square, with a rich polished face and good joints. Washington's next request was for Rumney to find out 'Upon what terms the common Irish Marble (black and white if to be had)—same dimensions, could be delivered as above.'³³³ This must have been Kilkenny marble, again referred to as 'black and white' and 'common', as in widely available. In 1785 Rumney was at Whitehaven and from there he sent Washington three samples of stone that could be used for his flooring, but Kilkenny marble was not one of them. Washington, excusing himself for not replying to Rumney sooner stated 'I delayed making choice of either of the samples of Flagstone, until I had

³³¹ R.C. Nash, 'Irish Atlantic Trade in the Seventeenth and Eighteenth Centuries', in *The William and Mary Quarterly*, 3rd series, vol. 42, No. 3, July 1985, p. 346.

³³² The photographic evidence of this chimneypiece was kindly provided by the Knight of Glin.

³³³ Benson J. Lossing, *Mount Vernon and its Associations, Historical, Biographical, and Pictorial*, New York, 1859, p. 138, George Washington to William Rumney, Mount Vernon, 5 July 1784, (<http://www.archive.org/details/mountvernonand00lossiala>), (accessed 18 March 2008).

seen the Irish marble, and was made acquainted with the cost of it', but as the Irish marble had not arrived at this stage, he chose the whitest and cheapest of the three samples that had arrived.³³⁴ It could be inferred from this that Washington would have preferred the Irish marble, but was not willing to delay the construction of his house. From his correspondence it appears that Washington's meticulous attention to detail in the planning of his house was akin to that of one of his military campaigns.

In 1997, the *New York Times* printed an article on the forthcoming 103rd birthday of Mrs. William Hatch Wemyss.³³⁵ The article also mentioned her home Fairvue in Gallatin, Tennessee. The house, regarded as 'the most splendid house in Tennessee', was built in 1832 by Isaac Franklin, a slave trader and planter. The twin parlours had 'black marble mantels imported from Ireland.' (Fig. 4.6) Wendell Holmes Stephenson, writing about Franklin's house in 1938, stated that the chimneypieces, costing \$500, 'were of the finest Kilkenny marble.'³³⁶ The Historic American Buildings Survey carried out an examination of the house in 1971 and noted that the 'two elegant fireplace mantels...are said to have been made of black Kilkenny marble imported from Ireland.'³³⁷

In the 1830s special rates for American stonecutters working with foreign marble were published. For working with Italian veined marble for table tops '1 inch thick, per foot super. from \$1.50c to \$2', but for Italian dove, or Irish black marble, the rate was \$1.75c to \$2. Chimneypieces for dining rooms cost from \$60 to \$120, depending on the choice of materials and style, but for chimneypieces that were 'superior...got up in the best style' for dining rooms, the Irish black and Egyptian marbles commanded a rate of \$150 to \$200 per piece.³³⁸ Even though stonecutters and masons were receiving a good rate for working with Irish marble, the importation of this marble to America was regarded, by some, as a threat to the development of the fledgling native marble business.

In January 1832 a resolution was passed in the House of Representatives to collect information on the manufactures of the United States. There appears to have been a set

³³⁴ John C. Fitzpatrick (ed.), *The Writings of George Washington from the Original Manuscript Sources, 1745-1799*, vol. 28, Washington D.C., 1931, p. 171, (<http://www.questia.com>), (accessed 30 July 2009).

³³⁵ *New York Times*, 13 November, 1997.

³³⁶ Wendell Holmes Stephenson, *Isaac Franklin, slave trader and planter of the Old South*, Louisiana State University Press, 1938, p. 97.

³³⁷ Library of Congress, *Fairvue, U.S. Highway 31-E, Gallatin vicinity, Sumner County, TN*, HABS TENN,83-GAL.V,1-, Documentation compiled after 1933, Addendum, p. 17, (<http://hdl.loc.gov/loc.pnp/hhh.tn0149>), (accessed 23 November 2009).

³³⁸ James Gallier, *The American Builder's General Price Book and Estimator*, Boston, 1833, p. 24.

list of forty questions drawn up and presented to various factories and places of manufacture. The responses of one particular business make for interesting reading.³³⁹ The marble works of Ferris & Co. of Franklin County, Vermont, were very concerned about the importation of Irish marble. The company was established in 1825, employed forty men and its equipment was water powered. In response to a question regarding the cause of increase, or decrease, of profit, the company stated that ‘Foreign importations of Irish marble’ had a negative effect on its profits. When asked where the main markets were for their marble products, the company answered that New York, Albany and Boston were its main areas of sale, but that Irish Marble, ‘to a great extent’, was their main competition in these markets. The major question asked in the survey was that ‘If the duty upon the foreign manufacture of the kind of goods which you make were reduced to 12½ per cent...would it cause you to abandon your business, or would you continue to manufacture at reduced prices?’ It ‘would destroy the business’, was the pessimistic response from the company.

William Colles’s inventions and improvements took the marble trade, literally, out of the Stone Age and into the Age of Enlightenment. He also took the marble trade out of the control of the few and brought it to a wider range of discerning customers. The newspaper advertisements indicate that customers could avail of a wide variety of bespoke marble items, with chimneypieces proving to be very popular at prices to suit all pockets and tastes. Kilkenny marble was a trademark for quality and excellence, judging from the amount of prominent masons and stonecutters using and advertising the marble. His letter to Paty indicates that he was proactive in marketing his product to the leading craftsmen and developers of the day in Britain. The marble was so desirable that there were some willing to risk smuggling it into America and it almost became the choice of presidents. What is most remarkable is, that Colles and the Kilkenny Marble Works exploited an inland natural resource and, considering the handicap involved in getting this product to port and Colles’s futile attempt to construct a canal, succeeded in exporting it to Britain and across the Atlantic to America. It is difficult to understand the reasons behind the lack of information in customs and excise and other accounts of the periods examined in this chapter, perhaps further research will unveil much more. The exportation of Kilkenny marble proved a very successful chapter in the life of the

³³⁹United States Congressional Serial Set, *Documents Relative to The Manufactures in the United States, collected and transmitted to the House of Representatives*, 2vols., Washington, 1833, vol. 1, p. 902, (<http://www.books.google.com>), (accessed 6August 2009).

Marble Works, much to the chagrin of marble workers in Vermont. But by the late 1830s the Kilkenny Marble Works went in to a decline for over a decade until it was revived by the next generation of the Colles family.

Chapter Five.

The Colles Family and Public Works in the Eighteenth Century.

During the eighteenth century the Kilkenny Marble Works was to the forefront of marble production in this country. As noted, a great variety of decorative objects, both large and small, were produced at the marble mills, but the Colles family were also major suppliers of building stone. The single biggest project involving the family and funded with public money was the Nore navigation works, but they were also engaged in many, if not all, of the public works carried out in Kilkenny during the mid to latter half of the eighteenth century i.e. during William's lifetime. This chapter will examine the role played by the Colles family in the construction, or rebuilding, of public buildings and structures in Kilkenny during this period. The main emphasis will be placed upon the building and rebuilding of the city's infantry barracks and the horse barracks and also the rebuilding of John's Bridge and Green's Bridge in the city after the devastation caused by the great flood of October 1763. William Colles's correspondence reveals much about his involvement in these projects, but there are cases where we cannot definitely ascertain whether the family executed the work, or were only providing estimates for various jobs, an example being the supply of stone for the courthouse and market house in Ross, as examined below.

It is not the intention of this chapter to include tablets and memorials erected by private commissions in churches or graveyards, even though they are placed in a public place. Such works will be examined in the following chapter, but there is one memorial worth some attention, as it was not erected by the family of the deceased and was, according to contemporary newspaper reports, viewed by a large number of the general public. Its date of execution is important, because, if William Colles supplied the marble directly for the memorial, or supplied it to a marble yard in Dublin to be carved there, then it would have been a very prestigious commission for Colles just as he was setting out in the marble business.

In July 1731 it was announced in the newspapers that, after a period of forty years, a memorial had been lately erected to the memory of the Duke of Schomberg in St. Patrick's Cathedral in Dublin. Schomberg, serving with William of Orange, lost his life at the Battle of the Boyne in 1690. After repeated attempts by the Dean and Chapter of the cathedral to encourage the duke's heir to erect a memorial in his honour, all in vain apparently, they took it upon themselves to place a memorial in the cathedral to mark

his final resting place. The Latin inscription was composed by Jonathan Swift and ‘with all possible Care and Elegance engraved on a beautiful Table of black Kilkenny Marble, about 8 Foot long, and 4 or 5 broad.’³⁴⁰ The newspaper reported also that ‘People of all Ranks are continually crowding to see it.’ This, as stated above, would have been a very important piece for the fledgling Kilkenny Marble Works and an excellent example of the sawn and polished marble slabs that Colles was beginning to produce at his marble mills on the banks of the Nore.

We know for definite that William Colles had taken over the Black Quarry in Kilkenny by 1731, as his letter to the Dublin Society proves. What is not known is, how long before this had he been occupier of the quarry? Colles must have spent some considerable time experimenting with many variations of his water driven-saws before being satisfied that they would fulfil their task of cutting and, in the case of pipes, boring the marble from the quarry and making it more commercially viable. Could Colles have been working the quarry one, two, or even three years prior to announcing publically that he was manufacturing a variety of marble products? As we shall see below, he was in full production by 1730 and possibly by the late 1720s when Edward Lovett Pearce was submitting his designs for the new Parliament House which was to be built in Dublin. Pearce was considering using Kilkenny marble ‘which is equal in goodness and Beauty to any foreign Marble and Produce of the Kingdom’, in his designs for the layout of the House of Lords.³⁴¹ Pearce submitted his plans to the building committee on 7 March 1727/8 and had planned using Kilkenny marble for the four ‘Principall Columns [that] divide the Barr and Throne from the House’ in this chamber. The parliament building was to be the pride of the nation, exhibiting the best of craftsmanship and materials and Kilkenny marble was held up to be the best of its kind available in this part of the world. It is difficult to say whether Colles had any involvement in supplying the marble for Pearce, but as the building was not fully complete until December 1739,³⁴² Colles may have supplied marble for the building before this date. It is certainly the case that Kilkenny marble was supplied to the building, as the chimneypiece in the House of Lords proves. The timber surround of this chimneypiece, carved by Thomas Oldham a cabinet maker and stonecutter, frames the marble chimneypiece of white Italian marble and the black marble of Kilkenny. (Fig.5.1)

³⁴⁰ *Daily Courant*, Saturday 17 July 1731.

³⁴¹ Edward McParland, ‘Edward Lovett Pearce and the Parliament House in Dublin’, in *The Burlington Magazine*, Feb. 1989, no. 1031, vol. cxxxi, p. 100.

³⁴² *Ibid.*, p. 93.

Although Oldham completed the timber carving of this chimneypiece in 1749³⁴³, the marble chimneypiece itself would have been inserted during the initial construction and could possibly have been supplied by Colles. After Pearce's death in 1733, his successor, Richard Castle became a prominent user of Kilkenny marble, a subject which will be addressed in the following chapter.

The correspondence of William Colles reveals that he was very much involved in the planning and construction of the Charter School in Kilkenny. Writing to Rev. Robert Wheeler in 1743, Colles states that a grant of twenty acres of land and the sum of £30 a year has been secured for the school.³⁴⁴ In further correspondence, this time to Rev. John Perry, Colles notes that the Corporation of Weavers have agreed to weave yearly one hundred yards of wool and one hundred yards of linen for the use of the school. The Corporation of Shoemakers will make forty pairs of shoes and the Corporation of Tailors will provide the school with '20 shutes of cloathes' for free.³⁴⁵

In March the following year, Colles, writing to his wife in Dublin, apologises for not joining her there, as the Bishop of Ossory, Michael Cox, 'wished him to remain in order to fix with him on the place for building the Charter School'.³⁴⁶ By May the bishop was in the process of acquiring £100 to begin building the school. Colles had the twenty acres set out and '3 mapps in parchment made of it to be affixed to ye leases'.³⁴⁷ The following month William wrote to his brother Barry informing him of his concerns as to the expense of building the school. He believes the cost will be 'much more than the £200 granted' and enquires of Barry how to meet the remainder. The bishop was busily engaged in raising funds to clothe the children in the first instance, the clothing supplied by the different corporations must not have been sufficient. Next on the bishop's list was furniture for the houses and, the final priority was to enclose, divide and stock the land attached to the school. We do not know for certain if Colles was involved in the design or building of the school, but this correspondence shows that he was involved in the planning process at least. All must have progressed slowly and eventually by 1751 the school was completed, as Colles informed Rev. Perry that 40 boys were constantly employed on its farm.³⁴⁸ Richard Pococke, on visiting Kilkenny in

³⁴³ The Knight of Glin and James Peill, *Irish Furniture*, New Haven and London, 2007, Appendix 1, p. 287.

³⁴⁴ PRIM, William Colles to Rev. Robt. Wheeler, 11 October 1743.

³⁴⁵ Ibid., William Colles to Rev. John Perry, 15 November 1743.

³⁴⁶ Ibid., William Colles to his wife, 31 March 1744.

³⁴⁷ Ibid., William Colles to Barry Colles, 19 May 1744

³⁴⁸ Ibid., William Colles to Rev. John Perry, 28 September 1751.

1752, noted that ‘The Charter School for forty boys is a mile out of the town & is very well regulated.’³⁴⁹

In February 1742/3 William Colles wrote in reply to the Mayor of Waterford regarding the use of marble pipes for the supply of water in the city. He was willing to supply pipes of ‘3 inches diameter 2s 5d p foot, of 4 inches 2s 9d, and of 5 inches 3s 3d, delivered on the Quay of Waterford.’³⁵⁰ These were the same pipes as mentioned by Colles in his letter to the Dublin Society in February 1731/2, which were ‘fit for conveying water under Ground, or from the tops of Houses’.³⁵¹ The pipes were never used in Waterford, as we shall see below, but almost twenty years later Colles writes to the architect Davis Dukart in Cork explaining how he had hoped to have used the pipes in Dublin ‘in the Pipe water works in 1730’.³⁵² This comment confirms that Colles had fully developed his marble cutting machinery by 1730 at least and had perfected it to such a degree that he could produce enough marble pipes to consider supplying part of the city of Dublin with water. In his transcription of Colles’s letters, J.G. Prim notes that Colles relays to Dukart the history of what occurred in Dublin, but, disappointingly, does not enlighten us as to the results of his attempts in laying the pipes. It is not until December 1764, in a letter to Kevan [sic] Izod, a merchant in Cork, that we discover how Colles’s attempt to supply Dublin with water through marble pipes was thwarted by the authorities.

Colles was writing to Izod in answer to a proposal to use his marble pipes for supplying the city of Cork with water. He informs Izod that he can ‘supply the City of Corke with Pipes of Kilkenny Marble’ and has ‘an Inexhaustible stock of Material to make them of’.³⁵³ He then enlightens Izod on his ill-fated attempts to use the pipes in Dublin, as he recollects how ‘the only Tryal I ever had an opportunity of making of the strength was in Dublin abt 34 years agoe [c1730] when I Proposed them to that City at which Time they made an essay of them by Laying about 100 feet In Length.’ As this was the ‘only Tryal’ that was carried out on the pipes, it would confirm that the pipes had never been used in supplying water to the city of Waterford.

The site of this trial was in Dublin on Arran Quay, the lowest point of the city, according to Colles, where the pressure on the pipes was greatest. Colles suggests that

³⁴⁹ John Mc Veagh (ed.), *Richard Pococke's Irish Tours*, Cambridge, 1995, p. 107.

³⁵⁰ PRIM, William Colles to the Mayor of Waterford, 5 February 1742/3.

³⁵¹ Royal Dublin Society Archives, Royal Dublin Society Minute Book 1, 3 February 1731/2.

³⁵² PRIM, William Colles to Davis Dukart in Cork, 22 November 1761.

³⁵³ *Ibid.*, William Colles to Kevan Izod, Merchant, Cork, 12 December 1764.

the pipes were never going to be used as ‘the officer of ye Citty then Concerned In ye management of the pipes Did not Chose that any pipes but timber should be used, and were Determined to bring these [stone] pipes Into Disrepute by Bursting Them.’ To do this the water was pumped through the pipes at the highest pressure possible. The ‘Pipes stood without Bursting tho’ the Timber Pipes above them and adjoining them burst in a considerable way, as Did alsoe the Leaden pipes wch lay across the Bridewell Bridge.’ However, opposition to the stone pipes was maintained despite their success in this trial. William Tighe, writing in 1802, gave a different account of why the pipes were not utilised in Dublin. When Colles sent the pipes to the Corporation in Dublin, the delivery was met by ‘a combination of pump-borers and other mechanics, who rose in a mob and destroyed them on their arrival.’³⁵⁴ Both of these accounts would indicate that, not only the city officials, but also the workers, had no intention of allowing the pipes to be used to supply Dublin with water. We must be a little sceptical about Tighe’s account, as it would have been difficult for the trial to have been carried out if the pipes were destroyed on arrival in Dublin and, as Colles stated that the corporation were never going to use his pipes, it is highly unlikely that it placed an order for a large delivery of pipes for the capital in any case.

The *Calendar of Ancient Records of Dublin* does not record any such events taking place in the city around this time, but there is further evidence to suggest that Colles and his marble pipes were not welcome in Dublin. An application, dated 16 October 1730, by Thomas Doyle, a plumber employed by the city for the previous three years, was that ‘all warrants for laying in pipes’ in the city should be carried out by ‘the petitioner, and no other.’³⁵⁵ Further evidence states that timber was the only material to be used for pipes. In December 1731 many of the inhabitants of Dublin were frequently complaining about the lack of proper piped water to their homes and businesses. While this was seen as a great inconvenience to these people, it was also seen as a great economic loss to the city. It was decided that an application be made to Parliament to rectify the matter.³⁵⁶ By April 1732 a committee appointed to examine the matter requested ‘several merchants who deal in timber in this city’ to send in their proposals for supplying timber pipes for the supply of water.³⁵⁷ This would imply that the authorities in Dublin were not considering anything but timber for the pipes and this

³⁵⁴ Tighe, *Statistical Observations*, i, p. 105.

³⁵⁵ *CARD*, vii, p. 513.

³⁵⁶ *Ibid.*, viii, pp. 42-43.

³⁵⁷ *Ibid.*, p. 51.

was to be supplied by Dublin merchants only. The city officials persisted with the timber pipes, depending on timber supplies from Norway, which was not always reliable due to poor weather conditions and cost the city £25,000 by 1740.³⁵⁸ Prim notes that a further letter to Izod, written in January 1765, would indicate that Colles was, yet again, unsuccessful in his attempts to supply a major urban area (this time Cork) with water through his marble pipes.

In January 1742/3 William Colles wrote to Dean Mossom at St. Canice's Cathedral in Kilkenny. Mossom had requested a quotation for paving the interior of the cathedral with marble and in this letter of reply Colles provided Mossom with his pricing of the work. The central aisle of the cathedral measured 376 feet in length, 'from the Door to ye first step' of the altar.³⁵⁹ This area was to be paved with 'black and white marble in squares & half squares.[sic]' The white marble paving cost 4s per linear foot and the black marble cost 2s per foot, indicating that, as the black marble was sourced locally it would naturally be cheaper than the imported white marble. We are not informed if this was imported Italian marble, but the likelihood is that it was, indicating that Colles was importing, or had access to, white Italian marble much earlier than first thought.

Colles informed Mossom that the total cost of paving the central aisle of St. Canice's would be £56-8-0, with a further £16-10-0 to similarly pave the 110 feet of the cross aisles, bringing the total to £72-18-0. Colles also provided Mossom with an alternative, cheaper quotation for paving the aisles. To pave the aisles with 'squares and half squares' of Shankill flags, at 1s per foot, would cost a total of £24-6-0. Which option Mossom chose is not clear. Renovations in the nineteenth century by Dean Vignoles have either covered up, or caused the removal of the eighteenth-century floor. Rev. Graves and J.G. Prim, in their account of the history of St. Canice's, states that, during the renovations carried out under Vignoles, 'several specimens of the original floor tiles of the church were turned up,' but they do not enlighten us as to their colour or size.³⁶⁰ An indication of how this paving may have looked can be seen today in the south porch, although these marble tiles are all squares of the same size. (Fig.5.2)

Further stonecutting work was carried out in the cathedral by Colles in 1763. Writing to the Bishop of Ossory, Richard Pococke, Colles is seeking a portion of the

³⁵⁸ Ibid., ix, p. 7.

³⁵⁹ PRIM, William Colles to Dean Mossom, 29 January 1742/3.

³⁶⁰ Rev. James Graves and John G. Ausustus Prim, *The History, Architecture, and Antiquities of the Cathedral Church of St. Canice, Kilkenny*, Dublin, 1857, p. 61.

monies due to him for the work.³⁶¹ He instructs the bishop to deduct one and a half guineas from the amount for his expenses for procuring velvet cushions and prayer books for the cathedral. What the work was we are not informed, but it is very likely that Colles was carrying out further renovations for Pococke, including a colonnade between the bishop's palace and the cathedral, which will be examined in the following chapter.

The use of Kilkenny marble in church architecture was not the exclusive preserve of Anglican churches, as, during the first half of the eighteenth century, it was used on the interior of the chapel of St. Nicholas of Myra in Francis Street, Dublin. Built in the later part of the reign of Charles II by the Franciscan community in Cook Street, the interior was decorated by the Catholic merchants of the city intent on embellishing the chapel with fittings and fixtures of the highest quality.³⁶² This appears to have been a well-constructed, purpose-built chapel on which expense had not been spared. Nuala Burke, writing in 1974, states that St. Nicholas of Myra 'seems to have been the only chapel which, in 1749, had not been extensively repaired or reconstructed since its foundation.'³⁶³ The interior was richly decorated with pictures of the Assumption, St. Peter, St. Paul, St. Patrick, St. Nicholas and St. Thomas and the altar piece, four pillars, and steps were all made from Kilkenny marble. The church was recorded as being in a state of ruin in 1821 and had been considered for demolition.³⁶⁴ The building of the present structure began in 1829 and was dedicated in 1835. A replacement altar for the one of Kilkenny marble was bought in Rome in 1832.³⁶⁵ When the Kilkenny marble was placed in the church is not known, but it was certainly before 1749, as noted by Burke, and it does signify once again that the marble was regarded as the best of its type for such prestigious work.

In February 1747/8 Charles Tottenham wrote to Colles with a request to supply stone for the new courthouse and market house at Ross in County Wexford. Replying in March, Colles thanked Tottenham 'for the preference you give me of the stone cutting work', but he regretted that he could not supply stone from Kilkenny at a reasonable

³⁶¹ PRIM, William Colles to Bishop of Ossory, 12 March 1763.

³⁶² Brian Mac Giolla Phádraig, 'Dr. John Carpenter: Archbishop of Dublin, 1760-1786', in *Dublin Historical Record*, vol. 30, No. 1, Dec., 1976, p. 11.

³⁶³ Nuala Burke, 'Hidden Church? The Structure of Catholic Dublin in the Mid-Eighteenth Century', in *Archivium Hibernicum*, vol. 32, 1974, p. 88.

³⁶⁴ Casey, *Dublin*, pp. 631-632.

³⁶⁵ *Ibid.*, p. 632.

cost ‘as we have not ye conveniency of water Carriage.’³⁶⁶ Colles informs Tottenham that it would be cheaper to convey the stone from Granny in the south of the county, than it would from the Black Quarry. Granny, or Grannagh, as noted previously, is located on the north shore of the river Suir, a short distance north west of Waterford city. The stone from here could be transported through Waterford city and up the Barrow to Ross. It is not known if Colles had any involvement in this quarry, but he does reveal that he has ‘a quarry of excellent stone at ye Royal Oak near the Barrow.’ The village of Royal Oak, again as noted previously, is located a little over a mile west of Muinebeag, or Bagenalstown, Co. Carlow, the quarry lying a further half mile west of the village. This quarry, now filled in, was ideally located near the Barrow for the convenient loading of marble which could then be transported up, or down river. This quarry was also within a few miles of the flag quarries at Shankill which were being worked by Colles at this time.

Colles informs Tottenham that ‘I would not undertake to deliver the work in Ross nor could I attend ye setting it up myself’, but he confirms that ‘if my Delivering it [the marble] into boats at the Royall Oak would do I would do that on reasonable terms.’ As noted above, we cannot be sure whether Colles did supply Tottenham with the stone from Royal Oak, or, whether taking Colles’s advice, Tottenham procured the stone from Granny.

The following year, in February 1748/9, William Colles wrote to Samuel Penrose in Waterford city. Penrose was a merchant there and Colles wished to know the price of scaffolding poles. These poles were to be used for the planned renovation of St Mary’s church in Kilkenny, Colles informing Penrose that ‘Our Parish Church’ was to be ‘this summer repaired and in a manner rebuilt.’ St. Mary’s was Colles’s parish church (and both his and his father’s final resting place) and he was contracted to carry out some of the reconstruction work on the church. Colles assured Penrose that ‘As the money for this church is in my Lord Bishop of Ossory’s hands, it will be ready money for you.’³⁶⁷

With its origins in the 13th century, St Mary’s Church has experienced many alterations since that time. It is one of the earliest ecclesiastical buildings to be erected in Kilkenny and was built some time before 1205. The graveyard has a unique collection of unusual and elaborate grave slabs, including prominent Kilkenny families

³⁶⁶ PRIM, William Colles to Charles Tottenham, 5 March 1747/8.

³⁶⁷ Ibid., William Colles to Samuel Penrose, 18 February 1748/9.

like the Shees and the Rothés, all of national importance and made of Kilkenny marble. These will be examined in the following chapter.

In October 1739 reconstruction work was carried out on the church in order to 'make the church warm and staunch.'³⁶⁸ This renovation included the blocking up of the arches supporting the side walls of the nave, but we do not know if Colles had any involvement in this work. In March 1748 a committee, formed from members of the congregation and the ministry, agreed that the 'eastern Ile [aisle] or chancel be pulled down within twenty-one foot of the pulpit.'³⁶⁹ This is the work Colles was contracted to carry out. The following March there were discussions held regarding the installation of seating for the mayor and corporation members in 'ye new church.'³⁷⁰ By September 1749 the vestry book records that the accounts of 'the building of ye church of St. Mary's [were] referred for inspection to a committee' and by January 1749/50, the Mayor and others were requested 'to undertake ye direction of the work of the church and finishing it.' In 1750 it was reported in the Register of St. Mary's that the parish church had 'very much gone to decay, and almost reduced to a ruinous state' and it was agreed that a tax of £100 in conjunction with voluntary subscriptions would completely finish the work in six years.³⁷¹ The above references indicate that the rebuilding of St. Mary's Church was a protracted affair, with further repairs and renovation works being carried out well into the nineteenth century. The old steeple, erected in 1343, was removed in 1819, with its replacement completed in 1820. As there is no information yet available to suggest otherwise, it would be reasonable to assume that the Colles family were involved in some way with the continual work being carried out on their parish church.

In August 1750 William Colles wrote to the foreman of the Grand Jury in Kilkenny informing him of the condition of both the courthouse and the gaol house in the city. Colles states that 'I have at the Desire of the High Sheriffe Viewed the County Court House'.³⁷² On his inspection Colles discovered that 'the Side Wall & End Is given out from the Foundation.' He also stated that repairs could not be carried out without first removing the roof, but there were major problems here as he informs the foreman that 'on inspecting the Roof I find Several of the Principles are broken and all the Roof

³⁶⁸ William Carrigan, *The History and Antiquities of the Diocese of Ossory*, 4 vols., Dublin, 1905, vol. iii, p. 91.

³⁶⁹ *Ibid.*

³⁷⁰ *Ibid.*

³⁷¹ *Ibid.*

³⁷² PRIM, William Colles to the foreman of Grand Jury of the County Kilkenny, 25 August 1750.

Totally Decayed'. Most of the timber was in no condition to be reused and new timber would be required to carry out the repairs. Colles continues 'the Gaol is alsoe In Very Ill Repair both in the Roofe and Floors' and that 'In my opinion Both the Courthouse and Gaol Require to be Rebuilt'. Ending his correspondence with a word of warning, he emphasises that the courthouse is in 'so Great Danger of Falling that It will not be safe to Hold another assizes In It'.

What is very interesting here is that Colles personally inspected the work, he did not send his foreman, or any craftsmen, which indicates that he was very familiar with the structural and architectural features of building. He appears to have had a very 'hands-on' approach to business; not content with setting up the Marble Works and appointing someone to manage it, he seems to have been very involved with the daily running of his enterprise and was not averse to getting his hands dirty. Of course there is the possibility that he was touting for business and, by sounding authoritative and highlighting the dangers, he sounded like the right man to be trusted with the rebuilding work. But we should remember that Colles was a very prominent member of Kilkenny Corporation and, most likely, felt it was his civic duty to see things were put right.

The site of Kilkenny Courthouse was formerly the county gaol, handed to the Crown by James Grace in 1566. It is not known exactly when it became the city's courthouse and Colles's work here was completely revamped in 1828 by William Robertson. It was still recorded as the county gaol in Rocque's map of 1758, but in the account of his visit to Kilkenny in 1752, Richard Pococke states that construction was underway of a 'handsome Session house & Jayl of Kilkenny Marble',³⁷³ which would suggest that Colles was at least supplying the stone for the rebuilding work, if not carrying out the complete project.

As noted in Chapter One, William Colles was reputed to have had made some attempts at writing poetry and several tragedies, indicating that he had an interest in the literary and performing arts. This interest, combined with his business sense, saw him play the leading role, as it were, in the early attempts to establish a theatre in Kilkenny. In May 1751 he wrote to Thomas Sheridan, 'Manager of the Theater In Dublin', stating that he

³⁷³ John Mc Veagh (ed.), *Richard Pococke's Irish Tours*, p. 105.

was Informed that some person belonging to you was Enquiring for a Piece of ground In this Citty to Erect a Theater on, I therefore write you this to let you know that I have a Plott of ground ffronting the Parade which would be very Comodious for that purpose,³⁷⁴

Thomas Sheridan (father of Richard Brinsley Sheridan) was the manager of Smock Alley Theatre in Dublin at the time and Colles, in a fine show of entrepreneurial flexibility, provided him with a number of options regarding the construction and ownership of the theatre. Firstly he proposed that he would let the ground to Sheridan ‘that you may Build an House yr selfe’, or, secondly, he would rent the ground to Sheridan and that he, Colles, would undertake to build a structure ‘according to any Draft you ffurnish’ for an agreed sum. Colles’s third option was that he would build the theatre at his own expense and then let it out to Sheridan when complete. Sheridan could have the use of it all year round, or use it for as many weeks, or months as would be agreed upon and it would be at Colles’s disposal for the remainder of the time. It would appear that none of these options proved successful, as any theatrical performance during the latter half of the eighteenth century took place in either the Tholsel or the Courthouse in the city. One reason for the lack of progress on the development of the theatre may have been that, as a result of staging a controversial play in his Dublin theatre in 1754 that resulted in the audience wrecking the venue, Sheridan left the country for London never to return, thus ending Colles’s attempt to establish a permanent playhouse in Kilkenny.³⁷⁵

In February 1753 William Colles wrote to Robert Law, Inspector of Barracks at the Barrack Board in Dublin, informing him that he had examined the condition of the old horse barracks in the city and found it in great need of repair, in fact he was of the opinion that whole structure should be rebuilt.³⁷⁶ The rear wall of the barracks had been constructed on the old town walls and this was deemed by Colles to be in a very dangerous condition. In the 1740s the barracks were occupied by ‘4 Com of foot & 2 troops of Horse’ and were ‘both pleastly [sic] situated near the river Nore.’³⁷⁷ The following July Colles acknowledges the receipt of a letter from Law approving him as

³⁷⁴ PRIM, William Colles to Thomas Sheridan, 20 May 1751.

³⁷⁵ Peter V. Farrelly, *600 Years of Theatre in Kilkenny, 1366-1966*, Kilkenny, 1994, p. 48.

³⁷⁶ PRIM, William Colles to Robert Law, The Barrack Board, Dublin, 24 February 1753.

³⁷⁷ Armagh Public Library, Topographical and Statistical Returns from Various Respondents sent to Walter Harris and the Physico Historical Society of Ireland, circa 1745.

contractor for ‘ye Barracks of this City’.³⁷⁸ Colles was now the sole contractor for both the horse barracks and the foot barracks in the city.

Initially, in 1747, Patrick Gernon had been appointed contractor for the foot barracks at Clonmel, Cashel and Kilkenny. He was also involved with Denis Hogan in the work carried out on the horse barracks at Kilkenny. Gernon did not carry out the work he was contracted to do, or at least not to the required standard, as Colles’s observations above suggest. This was also found to be the case in a parliamentary report compiled in March 1752 which reported that many of the barracks built, rebuilt or repaired during the period were ‘extremely ill executed.’³⁷⁹ Why Gernon was appointed in the first place instead of Colles was symptomatic of what was happening at many of the country’s barracks at this time. Contracts issued for the renovation, or rebuilding the barracks was a complicated issue and not a topic to be thoroughly examined in this thesis, but it does require some addressing in the context of the Kilkenny barracks.

Patrick Gernon was a carpenter from Dublin who acquired the barracks contracts through the auspices of George Ensor. Gernon paid Ensor a gratuity of £10 to become involved in the contract process.³⁸⁰ Ensor was the clerk of Arthur Jones Nevill, the surveyor general from 1743 to 1752 and MP for County Wexford, and was involved as contracting builder for a number of barracks around the country. In 1748 Nevill was granted the sum of £39,000 to spend mainly on the enlargement of the country’s barracks. This money was not spent as intended and five years later Nevill was relieved of his position as surveyor general and expelled from parliament.

The type of contract used in the barracks construction was known as an in-gross, or lump-sum contract. Examining this type of contract, Arthur Gibney reveals the three conditions required for the contract’s success. Firstly, the prior provision of all information on the full extent of building in order to accurately estimate the costs involved. Secondly, there should be an avoidance of delays in the construction programme to prevent any over runs on costs. Finally, there was the need for stable costs of labour and materials.³⁸¹ Colles fulfilled all three conditions when he completed the work Gernon was contracted to do. His assessment of the condition of the barracks was revealed in his letter to Robert Law in February 1753, noted above. Colles

³⁷⁸ PRIM, addressee not stated, probably Robert Law, 11 July 1753.

³⁷⁹ *JH of C*, vol. v, p. 144.

³⁸⁰ *Ibid.*, Appendix, xciv.

³⁸¹ Arthur Gibney, ‘Studies in Eighteenth-century Building History’, unpublished PhD Thesis, Trinity College Dublin, 1997, vol. I, p. 48.

completed the work on the barracks in two years and, as he was in control of his own supply of stone, one of the major costs in the project, he was also in control of its costs.

In November 1751 a parliamentary committee was set up to examine into ‘the Accompts of the Money expended in building, rebuilding, and repairing the Barracks’³⁸² In January 1752 this committee resolved that John Ensor, George’s brother, contractor for the barracks at Carrick-on-Shannon, ‘grossly prevaricated in his Evidence given to this Committee’ and issued a warrant for his arrest.³⁸³ In March the committee found that Arthur Jones Nevill did not ‘contract proper workmen and allowed extravagant Prices to the Contractors’, while George Ensor was found to have received ‘several Sums of Money and Presents’ from contractors and was guilty of receiving a bribe from a Barrack-master. Many of the barracks were found to be ‘unfit for the Reception, and Dangerous to the Health of his Majesty’s Troops.’ It was suggested that a sum not exceeding £24,000 be made available to remedy the conditions of the barracks.³⁸⁴ This money was granted on 7 March 1752.³⁸⁵

In November 1753, Nevill was found not to have used ‘reasonable and proper Endeavours towards making good the Defects of the Barracks built, re-built, or repaired by him’ and a motion was carried that he be expelled from the House and that a new writ be made for electing a new member for County Wexford.³⁸⁶ McParland suggests that Nevill was ‘sacrificed’ in the political battles being carried out in parliament at the time.³⁸⁷ Nevertheless, Nevill and the Ensors were irresponsible in their conduct and in their appointment of contractors and, as they were relieved of their positions, so was Patrick Gernon, who was heavily criticised for bad workmanship and supplying poor materials,³⁸⁸ even though, in February 1749/50, the mayor of Kilkenny and a number of aldermen certified that they had visited the new barracks built by Gernon and thought ‘to the best of our Skill and Knowledge’ that the work was ‘completely finished with very good Materials.’³⁸⁹ Alderman William Colles was not a member of this inspection party and, if present, would surely have noticed the shortcomings of Gernon’s work. Colles’s absence was possibly the result of a split in Kilkenny Corporation at this time,

³⁸² *JH of C*, vol. v, 25 November 1751, p.106.

³⁸³ *Ibid.*, 17 January 1752, p. 123.

³⁸⁴ *Ibid.*, 6 March 1752, pp. 143-144.

³⁸⁵ *JH of C*, vol. vi, Appendix xxxvii.

³⁸⁶ *Ibid.*, 23 November 1753, p. 196.

³⁸⁷ Edward McParland, *Public Architecture in Ireland 1680-1760*, New Haven & London, 2001, p. 134.

³⁸⁸ Arthur Gibney, ‘Studies in Eighteenth-century Building History’, p. 63.

³⁸⁹ *JH of C*, vol. v, Appendix, cxlix.

as W. G. Neely recounts, when William Evans Morres and his supporters broke an alliance with John Blunden in favour of the Gore family.³⁹⁰ It appears that Blunden challenged ‘Mr. Gore, of Barrowmount’ to ‘meet him alone with his sword in a private place’, but common sense prevailed and the duel did not take place.³⁹¹ It is most likely that Blunden’s opponent was Ralph Gore who became MP for Kilkenny in 1748 on the death of his father William, MP and founder member of the Dublin Society. Again, this political wrangling does not need to be examined here, suffice it to say, that William Colles was removed from the position of city treasurer and replaced by Morres, one of the inspectors of Gernon’s work. By 1753 all differences had been settled and Colles was reappointed as city treasurer and was contracted to complete the barracks of the city.

By November 1753, as Nevill was being expelled from parliament, Colles was busy at work constructing the new foot barracks in Kilkenny. Writing to the surveyor general, Thomas Eyre, appointed after Nevill’s dismissal, he reports the progress of the work to date. Working on new foundations at the time, Colles stated that he had ‘got an excellent foundation the whole length at 7 feet below the surface.’³⁹² He had ten masons at work here who were very fortunate not to have been seriously injured or killed when a wall collapsed as a result of working on the foundations. Relaying the incident to Eyre, Colles explained how, as work was being carried out sinking the cellars for the barracks, part of the foundations of the adjacent St. John’s Abbey were disturbed, which eventually caused the collapse of the great steeple. St. John’s Abbey was built by Augustinian Monks in the 13th century and served as the parish church of the suburb of St. John’s. Colles added that it was ‘by the Great Mercy of God It fell on Sunday morning and Hurt nobody.’ Ever the optimist, Colles saw this incident as advantageous to the barracks, as with the steeple now razed to the ground this allowed the access of more light ‘to the corner Rooms where little could be otherwise had.’

In October 1755 Colles writes again to Eyre regarding glass for the barracks’ windows. Unable to procure a sufficient quantity of ‘white English glass’ in either Waterford or Bristol’ he was ‘obliged to glaze the officers appartmnts & ffront of the Building with crown glass.’ He ends by stating that ‘All the officers and men In Town are In ye Barrack.’³⁹³ The initial plans were that the foot barracks should have thirty two rooms to accommodate 12 officers and 156 men and the horse barracks should have

³⁹⁰ Neely, *Kilkenny*, pp. 148-149.

³⁹¹ PRIM, William Colles to Barry Colles, 22 January 1749/50.

³⁹² *Ibid.*, William Colles to Thomas Eyre Esq. Surveyor General, 6 November 1753.

³⁹³ *Ibid.*, William Colles to Thomas Eyre Esq. Surveyor & Engineer General, 18 October 1755.

forty three rooms for 16 officers and 96 men.³⁹⁴ Colles was describing the foot barracks and was subtly letting Eyre know that the barracks were now occupied and payment was now due. The following month Colles wrote to Inspector Robert Law informing him that he had sent the completed certificates for the foot barracks to be signed off. This barracks was finished on the 6 October and Colles was reminding Law that Thomas Eyre promised him in a letter of the 26 September that Law would sign the certificates on his return from Carlow. Confirming that the barracks was 'Intirely finished this Month past', he was 'In hopes before now to have Had a measurer sent Down to measure the severall Workes.'³⁹⁵

By the following January both barracks were completed and, in an uncharacteristically impatient letter, Colles wrote to Eyre enclosing his 'Charges for the Two Barracks of this Citty, agreeable to the prices in the estimates, and agreeable to the measurements made by Mr. Covey.'³⁹⁶ This comment indicates that Colles did not go over budget and did not go beyond the specifications given. Colles reveals that he had written to Eyre on 18 December and had not received a reply, therefore he was now requesting 'the very considerable Balance Due to me' and hoped that Eyre would do all in his power to 'expedite the payment of the balance.'

In January 1758 Colles wrote to the Chief Secretary in Dublin Castle on the subject of the barracks in Kilkenny. Confirming that an agreement was made between himself and Thomas Eyre on 19 September 1753, he informs the Chief Secretary that 'I Built the new foot Barracks of Kilkenny according to His [Eyre's] plans wch I finished by the 29th September 1755.' If it was Colles's intention to eventually receive his payment by writing to the Chief Secretary, then this strategy appears to have been successful, as Eyre paid Colles a total of £606-10-6¾ on 14 March 1758.³⁹⁷ In fairness to Eyre, he records that he received a warrant on 11 March 1758 authorising him 'in further part of his Majesty's Letter of 23rd May 1753' to 'discharge Exceedings in Bray Arklow Kilkenny and Castle Island Barracks.'³⁹⁸ Colles received his payment as soon as Eyre was permitted to pay him. In his report in November 1757, Eyre informed a parliamentary committee that the cost for the new foot barracks in Kilkenny was £1,900

³⁹⁴ *JH of C*, vol. v, Appendix, cxlv-cxlix.

³⁹⁵ PRIM, William Colles to Robert Law Esq. Inspector of the Barracks In Dublin, November 1755.

³⁹⁶ *Ibid.*, William Colles to Thomas Eyre, 15 January 1756.

³⁹⁷ Irish Architectural Archive, Thomas Eyre's Letterbook, 86/149 (ii), p. 116.

³⁹⁸ *Ibid.*

and the repair work on the old horse barracks was £540.³⁹⁹ A further report in April 1758 stated that the new foot barracks in Kilkenny was ‘certified to have been extremely well executed with good Materials, fit and convenient for the Accommodation of his Majesty’s Troops.’ The work that had been carried out on the horse barracks was itemised in this report also, stating that added to the old barracks was ‘a Kitchen, a Stable, and a Straw-house, which, together with repairs, were estimated to the Sum of 540l. and the work is certified to be well done.’⁴⁰⁰ From these reports it would appear that William Colles executed his part of the contract to the complete satisfaction of the surveyor general and parliament.

Kilkenny marble was also supplied to other barracks around the country during this period, but not for building purposes. Kilkenny marble chimneypieces were installed in a number of military establishments. An example of this occurred in 1767 when Christopher Myers, an English architect, was appointed to carry out work on the Royal Barracks in Dublin. Among the additions to the barracks was a ballroom for the officers, in which Myers placed a Kilkenny marble chimneypiece.⁴⁰¹ Colles may have supplied the chimneypiece, but it is quite possible that David Sheehan executed the piece from his own supply of marble from the Black Quarry.

As noted above, William Colles was treasurer of Kilkenny Corporation during the 1750s. John Hogan, writing in 1882, examines the history of the city’s Tholsel and states that the building occupying the site then and still *in situ* today, is the third Tholsel to have been erected in Kilkenny. (Fig.5.3) The original Tholsel was known to have existed in 1517 when extensive repair work was being carried out on it, indicating that it was already an old building by that date.⁴⁰² The second Tholsel constructed in the city occupied the site of the current building and was known as the ‘new Tholsel’. The date of the erection of this second structure is not known, but it was known to have existed as early as 1619.⁴⁰³ Hogan, with the aid of Colles’s treasurer’s ledger, then in the possession of Richard Colles, William’s great-great grandson, recounts how, during the 1750s, repair work was being carried out on this structure. By 1759 funding was being

³⁹⁹ *JH of C*, vol. vi, Appendix, xxxviii.

⁴⁰⁰ *Ibid.*, Appendix, cx.

⁴⁰¹ Mairead Dunlevy, *Dublin Barracks: A Brief History of Collins Barracks, Dublin*, Dublin, 2002, p. 29.

⁴⁰² John Hogan, ‘The Three Tholsels of Kilkenny’ in *The Journal of the Royal Historical and Archaeological Association of Ireland*, vol. v., Fourth Series 1879-1882, 1882, Dublin, p. 237.

⁴⁰³ *Ibid.*, p. 243.

put in place to rebuild the Tholsel and Colles records that between 1759 and 1764 the total sum spent on the city's third Tholsel came to £1,315-5-8.⁴⁰⁴

Katherine Lanigan and Gerald Tyler, writing in 1977, believe that the Tholsel was 'almost certainly built by Alderman William Colles who supplied the unpolished black marble.'⁴⁰⁵ There were a number of entries in Colles's ledger recording payments to himself, but these entries do not specify marble which would indicate that his role in rebuilding the Tholsel was more than just supplying stone for the project. What these payments were for is not known, but we do know that he definitely supplied the stone, as his correspondence with Sir William Evans Morres shows.

In March 1760, William Colles writes to Morres offering to do the stonecutter's work on the Tholsel. Colles then provides Morres with his prices for the columns, 18 shillings each, with the capitals for the same costing 30s each.⁴⁰⁶ This seems very little for such large pieces of stonework, Colles does not elaborate on what exactly these prices involved. Also included in his pricing was 'quarrying & finding the stone & conveying it to the place' and finding a stonecutter to carry out the work. He was willing to set up the required scaffolding, but not willing to source it or the labourers needed for the project. In May he tenders for the execution of the cornice and the stone casings of the windows.⁴⁰⁷ The following August he writes again to Morres informing him that he has now completed the columns and arches of the Tholsel, the total of which comes to £56-9-10, and he would be 'much obliged' if Morres would send him the balance due.⁴⁰⁸

Maurice Craig suggests that William Colles may have been the designer of the Tholsel,⁴⁰⁹ although this is not evident in Colles's correspondence. In fact there is no direct evidence in any of the available correspondence to indicate that Colles designed any of the projects he was involved in, though we may suspect that he was involved in designing a project for Richard Pococke at St. Canice's Cathedral in Kilkenny which will be examined in the following chapter. It is not known who the designer of the

⁴⁰⁴ Ibid., p. 247.

⁴⁰⁵ Katherine M. Lanigan & Gerald Tyler (eds.), *Kilkenny: Its Architecture & History*, Kilkenny, 1977, p. 66.

⁴⁰⁶ PRIM, William Colles to Sir William Evans Morres, 18 March 1760.

⁴⁰⁷ Ibid., William Colles to Sir William Evans Morres, 22 May 1760.

⁴⁰⁸ Ibid., William Colles to Sir William Evans Morres, 2 August 1760.

⁴⁰⁹ Maurice Craig, *The Architecture of Ireland from the earliest times to 1880*, London & Dublin, 1982, p. 202.

Tholsel was,⁴¹⁰ but Hogan reveals that an entablature was to have been included in the design of the building recording the date of completion and the names of the dignitaries involved in its construction; the inscription (which had been found by Alexander Colles, William's great-grandson, among family papers at Millmount and which was written in the hand of William Colles) makes no reference to the involvement of William Colles in the rebuilding of the city's Tholsel.

In 1753, two weeks after informing Thomas Eyre about the collapse of the steeple of St. John's Abbey during the construction of the barracks, Colles wrote a letter to Sir William Fownes at the Parliament House in Dublin. Fownes, as already noted, was influential in securing funding for the Nore navigation and had, apparently, recommended Colles as the person to contract for the building of 'the lower bridge'.⁴¹¹ We are not informed which bridge this is, possibly Green's Bridge, but whatever this project may have been, Colles declined to be contractor for it on the grounds that it would be 'too hazardous an undertaking', but he was willing to oversee and direct the work for a certain sum of money. It is also likely that, as Colles was busy with the barracks work at this time, he may have felt that he could not fully commit himself to the job. There seems to have been a problem with funding for this project also. This scheme 'won't doe', but if all the money could not be obtained he suggests to Fownes that the sum of £2,000 could be applied for from the Navigation Board and repaid in two years, providing a 'foundation' in order to get the project underway. If this 'lower bridge' was indeed Green's Bridge, work on it was postponed until after its destruction in 1763.

The River Nore is crossed in Kilkenny city at Rose Inn Street and John Street by St. John's Bridge, more commonly known as John's Bridge. Between 1590 and 1596, the Nore's notoriety for flooding had been alluded to by Edmund Spenser in his epic poem *The Faerie Queene*. Spenser contrasts the calmness of the rivers Barrow and Suir with the dark flood waters of the Nore:

The first the gentle Shure, that making way
By sweet Clonmell, adornes rich Waterford;

⁴¹⁰ John Hogan, 'The Three Tholsels of Kilkenny' (see note 400). According to Hogan there was 'a tradition existing in the town down to twenty years since, and still remembered by a few, that the architect was an Italian.' p. 247.

⁴¹¹ PRIM, William Colles to Sir William Fownes, Parliament House, Dublin, 19 November 1753.

The next the stubborne Newre, whose waters gray
By faire Kilkenny and Rosseponte board,
The third the goodly Barrow, which doth hoord
Great heaps of salmons in his deepe bosome:⁴¹²

The great floods of the ‘stubborn Newre’ carried away Kilkenny’s bridges in 1447 and again in 1564. During the early seventeenth century repair works were carried out on John’s Bridge utilising stone from the Black Quarry. There were a number of documents in the archives of Kilkenny Corporation, that are now lost, which recorded contracts between the corporation and local masons to carry out repairs to the bridge. One such contract, dated 10 December 1613, was a bond by which James and John Coursey were ‘to have ashler stones prepared at the Black Quarry for the repair of John’s Bridge.’⁴¹³ The following day, according to the *Kilkenny Moderator* in 1851, a bond of £10 was entered into by three masons, O’Hegan, O’Hee and O’Roe, that they were to deliver 394 square feet of ashlar stone ‘hewed at the Black Quarry of the said citty’, for the repair of John’s Bridge.⁴¹⁴ This stone was measured by the direction of the corporation and was, presumably, prepared by the Coursey’s. A further agreement, dated 1 December 1618, between the corporation and O’Hegan along with a mason named Conway, was for ‘erectinge, repairinge and making upp of the nowe two broken or decayed arches and the Pillars’ of John’s Bridge.⁴¹⁵ To assist the masons in carrying out the repairs, they were granted permission to ‘take all the wrought astler [ashlar] stones which the Corporacon have now in the black quarry and were formerly bought by them towards the making upp of the said bridge.’⁴¹⁶ This would indicate that the stone had already been quarried and dressed in preparation for the repair work and is further evidence that the corporation was the principal occupier of the Black Quarry prior to the eighteenth century and Colles’s involvement with it.

⁴¹² Edmund, Spenser, ‘The Faerie Queene’, in *The poetical works of Edmund Spenser*. In eight volumes. From the text of Mr. Upton, &c. With the life of the author...Volume 4, London, 1787-88, p. 250, Eighteenth Century Collections Online, Gale, Trinity College Dublin, (<http://find.galegroup.com/ecco/infomark.do?&contentSet=ECCOArticles&type=multipage&tabID=T001&prodId=ECCO&docId=CW3311437666&source=gale&userGroupName=tcd&version=1.0&docLevel=FASCIMILE>), (accessed 8 June 2010).

⁴¹³ Ian Doyle, ‘River Nore (Kilkenny City) Drainage Scheme: Archaeological excavations at John’s Bridge, Kilkenny, 2001-2003’, unpublished report made by Margaret Gowan & Co. Ltd. for Mott MacDonald EPO, Consulting Engineers, on behalf of The Office of Public Works, 2004, p. 12.

⁴¹⁴ *Kilkenny Moderator*, 6 September 1851.

⁴¹⁵ Ian Doyle, ‘River Nore (Kilkenny City) Drainage Scheme’, (see note 411), p.12.

⁴¹⁶ *Ibid.*, p. 14.

In October 1761, Colles wrote to his nephew Christopher James informing him that ‘we have Had great floods here this winter but It did not Come Into the House.’⁴¹⁷ Exactly two years later, October 1763, Colles again writes to Christopher James about the winter floods, but this time there were catastrophic consequences.

As already noted in examining the Nore navigation, in this letter Colles relayed to his nephew the destruction caused by the flood on the county. While relieved that his own property was not destroyed, his main concern lay in the loss of life and the cost to the commercial life of Kilkenny. It is believed that fourteen people were killed when John’s Bridge collapsed.⁴¹⁸ The city’s other bridge, Green’s Bridge, was washed away without any loss of life. Colles’s other major concern was the diversion of funding away from the navigation and to the rebuilding of the bridges of the county and, as noted, parliament granted a sum of £8,000 towards the bridges of the county at the expense of the navigation.

In 1781, the clergyman and antiquarian Edward Ledwich, examining the papers of Richard Pococke, provided Pococke’s estimates for the ‘losses sustained’ by the destruction of John’s Bridge and Green’s Bridge at £2,789-5-0 and £2,828-8-0 respectively. He also revealed that parliament granted a sum of £5,417 for both bridges, supplemented by a tax on the county of £4,967, a donation of £200 from the Lord Lieutenant and £273 from neighbouring church collections, bringing the total amount for rebuilding the bridges to £10,857.⁴¹⁹

If Colles had the choice to accept or decline the earlier offer from Fownes to build the ‘lower bridge’, he had no option regarding the rebuilding of the city’s two bridges; this was a job that had to be done. As George Smith was in charge of both the navigation and the construction of the bridges, it followed that the same contractor, Colles, should be employed on both projects.

In August 1764 Colles wrote to John Blunden and the Lord Mayor, John Blunt, requesting a further £100 for carrying on the building of John’s Bridge.⁴²⁰ The money previously granted had been spent by Colles on providing the materials and carrying out the work, indicating he was the supplier and contractor for the bridges. Kilkenny

⁴¹⁷ PRIM, William Colles to Kit James, 26 October 1761.

⁴¹⁸ James Norris Brewer, *The Beauties of Ireland: being original delineations, topographical, historical, and biographical, of each county*, 3 vols. London, 1825, vol. i, pp. 314-315.

⁴¹⁹ Edward Ledwich, ‘The History and Antiquities of Irishtown and Kilkenny’, in *Collectanea de rebus Hibernicis*, vol. ii, no. ix, Dublin, 1781, p. 453.

⁴²⁰ PRIM, William Colles to John Blunden and John Blunt, 16 August 1764.

Corporation records indicate that in August 1767 Colles was owed £109-12-9 for work on John's Bridge and by January 1768, a further £51 was due to him.⁴²¹

In January 1765 severe flooding hit Kilkenny again. This time some damage was done to Colles's marble mills, but only 'a few stones of ye upper course of the Peers of St. John's Bridge were Disturbed' and were easily replaced. The temporary bridge that Colles had erected had been broken in the flood and a boat that was being used in the construction had been washed away. This temporary structure had now been repaired and was passable for pedestrians and carriages. Colles noted that this flood was 'within 2 feet 4 inches as High as ye f flood of ye 2d Oct 1763.'⁴²²

It is highly likely that the boat Colles mentions in this letter would have been used as part of the temporary bridge. In 1844, further flooding in Kilkenny prompted the *Kilkenny Journal* to print accounts of previous major flooding in the city. This article noted that as a result of the floods of 1763, 'The Lord Lieutenant, Hugh Smithson Percy...caused wooden bridges floating upon boats, to be erected, until stone bridges should be built.'⁴²³ This description suggests that the temporary bridges were pontoon, or bateau bridges, a type often used by the military. The temporary bridge erected across the Nore may have been constructed by Colles, but not designed by him or Smith, as, in August 1769, the mayor and other prominent Kilkenny officials placed a notice in the newspaper thanking 'Major Vallancey' for his 'great skill, expedition and readiness in erecting Temporary Bridges over the river Nore, and thereby opening the communications with this City, when John's Bridge and Green's Bridge were broken down by the floods' in 1763.⁴²⁴ From this we may deduce that Colles was working under the direction of the military engineer and bridge designer Charles Vallancey, who would have been instructed by the Lord Lieutenant to attend to the temporary bridge construction in Kilkenny. As noted in Chapter One, William Colles had a brother-in-law, Major William Clenahan, whom he wrote to in 1744. Clenahan was stationed in Gibraltar during the 1740s, as was Vallancey;⁴²⁵ therefore it is possible Colles knew of Vallancey prior to his return to Ireland and arrival in Kilkenny.

We might in passing notice that many years later, in 1809, Vallancey, in his role as vice-president of the Dublin Society, sent twenty nine specimens of Irish marble to

⁴²¹ Ian Doyle, 'River Nore (Kilkenny City) Drainage Scheme', p. 18.

⁴²² PRIM, William Colles to Rev. Arthur Jacob 30 January 1765.

⁴²³ *Kilkenny Journal*, 6 November 1844

⁴²⁴ *Finn's Leinster Journal*, 23 August 1769.

⁴²⁵ William O'Reilly, 'Charles Vallancey and the Military Itinerary of Ireland', in *Proceedings of the Royal Irish Academy*, Vol. 106C, 2006, p. 127. Vallancey was stationed in Gibraltar up to 1750 at least.

the Society for the encouragement of Arts, Manufactures and Commerce in London.⁴²⁶ In his short accompanying letter, Vallancey mentions only Kilkenny marble, although the adjoining list notes specimens of marble from many counties in Ireland. He states that the type of Kilkenny marble the stonecutters call 'candle drop', formed from the remains of a madrepora, is not used to any commercial degree as 'the owner of the common shell-marble' has monopolized 'all the trade for chimney-pieces', this being Richard Colles, William's grandson. Vallancey also informs us that the marbles were being shipped to Liverpool and then by canal to London, which would indicate that this is the same route Colles would use to ship his blocks of marble to the London market.

In 2001 the Office of Public Works appointed Mott MacDonald EPO, a UK-based engineering consultant, to design a long-awaited scheme for flood relief in Kilkenny City and work began in August that year. As the contract involved significant widening of the existing river channel and deepening of the river-bed, it was necessary to conduct an archaeological assessment prior to the flood relief work being carried out. Initial underwater surveys carried out during the summer months identified the remains of a medieval bridge and its eighteenth-century replacement just below i.e. downstream of the existing John's Bridge. There was also evidence that further bridge remains were buried below the river bed.

During the summer of 2002 excavation works were carried out on this area beneath the present John's Bridge. This bridge was built in 1910, a little downstream of Colles's bridge which was demolished in order to make way for this new bridge. A report of this work, compiled by Ian Doyle, provides us with an excellent insight into bridge building during the mid-eighteenth century. In order for the excavation to be carried out, the Nore was dammed and diverted by specially designed and constructed earthen dams. The work was aided by low water levels at the time and the remaining water was removed by the use of pumps.

As the excavations progressed, a series of softwood timbers were found inserted in the river bed. These are believed to be the remains of the pontoon bridge that was constructed across the river under Vallancey's direction immediately following the 1763 flood. The timbers form three parallel lines, and some of the timbers retain the hand-forged iron socks, or shoes, that would have served to break into the underlying gravels during the pile-driving operation to insert the timber posts. These posts were

⁴²⁶ *Transactions of the Society, Instituted at London, for the Encouragement of Arts, Manufacture, and Commerce*, vol. xxviii, London, 1811, p. 68.

most likely used to fasten the boats together to form the pontoon bridge. Several of the posts survive, some of which exceed 2m in length.

These excavation works also revealed the remains of at least two earlier stone bridges, as indicated by the underwater survey, one being that constructed by Colles and the other (i.e. the medieval one) which was destroyed in the flood of 1763 which Colles had replaced. These remains are located immediately north of the existing bridge. The excavations revealed the remnants of two masonry piers, which would have supported the three-arch bridge constructed by Colles. (Fig.5.4) These bridge piers, located upstream, were each 13m long by 3.5m wide and 1.5m high, with pointed cut-waters upstream and downstream. Key features of their construction were three courses of fine ashlar limestone blocks filled with a rubble core which sat on a further two composite courses comprising what might be described as a wooden and stone raft foundation. (Fig.5.5)

In a published article based on this report, Doyle notes that this raft foundation for Colles's bridge is an unusual feature, as many bridges up to this would have been constructed on timber piles driven into the river bed.⁴²⁷ The foundation consisted of two rafts of pine and spruce timber. One raft was placed on top of the other. The lower raft was fixed in the gravel of the river bed with its timber beams laid across the width of the piers, i.e. an east-west orientation. The upper raft was then positioned upon the lower raft, but with the timber beams running along the length of the piers, perpendicular to the lower beams, i.e. a north-south orientation. Gaps between the timbers were filled in with ashlar blocks of limestone, strapped together with iron ties. Some of the ashlar blocks had numbers carved into them for correct positioning in the foundations of the piers.

Doyle also notes similarities between the construction work carried out by Smith and Colles on John's Bridge and that carried out by George Semple on Essex Bridge in Dublin, built between 1753 and 1755. Semple used a system of coffer dams and pumps to enable the construction of the piers at Essex Bridge, the first recorded use of this system in this country.⁴²⁸ Doyle believes that Smith and Colles used the same system to construct the pier bases at Kilkenny, with the raft foundations very similar to at least

⁴²⁷ Ian Doyle, 'The lost bridge of Kilkenny City: John's Bridge, 1765-1910', in *Archaeology Ireland*, Spring 2003, p. 9.

⁴²⁸ R.C. Cox & M.H. Gould, *Civil Engineering Heritage: Ireland*, London, 1998, p. 43.

one of Semple's foundations at Essex Bridge.⁴²⁹ If Smith had worked under Semple, as suggested in Chapter Three, then it would be highly likely that he was familiar with this method of construction and utilized it to great effect in Kilkenny, as the foundations of the piers show no sign of subsidence, or scouring (excessive wear), over a period of almost two and a half centuries.

Smith's design for John's Bridge consisted of three elliptical arches with blind aedicules in the spandrels. Both John's Bridge and its upstream neighbour, Green's Bridge, designed by Smith and constructed by Colles, were based on the work of the Italian architect Andrea Palladio, 1508-1580. Green's Bridge still exists and is based directly on the Roman bridge at Rimini in Italy. (Fig.5.6) Rimini Bridge, built between 3 BC and 2 AD, was described and illustrated by Palladio in his famous work *I quattro libri dell'architettura* (*The Four Books on Architecture*), first published in Italy in 1570. The bridge has a horizontal roadway over most of its length, reached by symmetrical approach ramps with a softer gradient than at John's Bridge. Green's Bridge consists of five arches, of which the middle three are equal, and a blind pedimented aedicule on every spandrel, as at John's Bridge. The arches are elliptical, rather than semi-circular as at Rimini and the arch rings sharply moulded but banded with square blocks. Ted Ruddock regards this bridge as 'almost as true a copy of Rimini as was ever built in Britain or Ireland.'⁴³⁰

As there is little contemporary information available on Green's Bridge compared to John's Bridge, we must assume that it was constructed in the same manner as John's Bridge. The faces of both John's Bridge and Green's Bridge were of dressed squared blocks of limestone from the Black Quarry. It is also worth noting at this point that George Smith also carried out the rebuilding of the bridge at Inistioge in County Kilkenny. The bridge had been only partially damaged in 1763 rendering it passable on foot. According to Ronald Cox and Michael Gould, Smith applied the concept of Robert Mylne's design for Blackfriars Bridge in London, built between 1760 and 1769, to the downstream face at Inistioge.⁴³¹ As Smith was responsible for rebuilding Inistioge Bridge, it is reasonable to suggest that Colles may have been the contractor for the bridge. If Colles was the contractor for this bridge, it is certainly the case that the stone supplied was not from the Black Quarry, as the Ionic pilasters decorating the spandrels

⁴²⁹ Ian Doyle, 'The lost bridge of Kilkenny City: John's Bridge, 1765-1910', (see note 425), p. 11.

⁴³⁰ Ted Ruddock, *Arch Bridges and Their Builders 1735-1835*, Cambridge, 1979, p. 105.

⁴³¹ Ronald Cox and Michael Gould, *Ireland's Bridges*, Dublin, 2003, p. 83.

and the moulded arch rings are composed of granite, which partially encroaches into this area of Kilkenny from the granite of the great Leinster Massif that covers counties Wicklow and Wexford.

The antiquarian William Ledwich stated that, after the flood of 1763, John's Bridge 'has been since rebuilt with three light elegant arches, as has also Green's bridge with equal beauty and elegance.'⁴³² Richard Twiss, on his visit to Kilkenny in 1775, noted that of the two bridges in the city, one consisted of seven arches and the other of three which 'was neatly built of blue stone.'⁴³³ Charles Etienne Coquebert de Montbret visiting Kilkenny in 1790, as noted in Chapter Two, was not impressed with many of Kilkenny's features, but he stated in his travel recollections that the bridges were to be admired, especially John's Bridge 'of unpolished marble [which] is very attractive.'⁴³⁴ In 1801 a letter appeared in the *Gentlemen's Magazine* in which the writer, Anthony Sinnot, recounts a visit made to Kilkenny in 1792. Describing John's Bridge as a 'beautiful bridge, built with black marble' the author noted that the bridge was 'remarkable for the curious elliptical arches.'⁴³⁵ William Tighe mentions the two bridges very briefly, only noting that they were 'handsome', built after 'the designs of Mr. G. Smith.'⁴³⁶

In the following decades the bridges were still highly esteemed, Rev. Hansbrow, writing in 1835, noted that there were 'two very fine bridges of cut marble over the Nore; John's-bridge, particularly, is light and elegant.'⁴³⁷ Two years later Samuel Lewis noted that 'There are two elegant stone bridges over the Nore, erected after designs by Mr. G. Smith, to replace two which were destroyed in 1763.'⁴³⁸ John's Bridge appears to have been more favourably spoken of than Green's Bridge, partly due to its location close to and overlooked by Kilkenny Castle and also to it being more compact and better proportioned than the elongated Green's Bridge. (Fig.5.7) However, not long after Lewis's comments problems with shortcomings in the design and location of John's Bridge were becoming apparent.

⁴³² Edward Ledwich, 'The History and Antiquities of Irishtown and Kilkenny', (see note 417), p. 453.

⁴³³ Richard Twiss, *A Tour in Ireland in 1775*, London, 1776, p. 140.

⁴³⁴ Síle Ní Chinnéide, 'A View of Kilkenny, city and county, in 1790', *Journal of the Royal Society of Antiquaries of Ireland*, vol. 104, Dublin, 1974, p. 31.

⁴³⁵ *Ibid.*, p. 21.

⁴³⁶ Tighe, *Statistical Observations*, ii, p. 563.

⁴³⁷ Rev. G. Hansbrow, *An Improved Topographical and Historical Hibernian Gazetteer*, Dublin, 1835, p. 274.

⁴³⁸ Lewis, *Topographical Dictionary*, vol. ii, p. 110.

Within a century of the opening of the new bridge there were calls for it to be replaced. The humped profile of the bridge explains why it was referred to as 'the Pyrenees' in 1864.⁴³⁹ With the arrival of the railway in Kilkenny, the transportation of goods through the city and across the river to the train station increased. Transporting heavy goods across the raised roadway was often a difficult task, especially during wet or frosty weather. The location of the bridge also seems to have been an issue. As the bridge was constructed upstream of the former medieval bridge, crossing it required traffic travelling from Rose Inn Street to turn left sharply and then to veer right onto John's Street on the opposite side, it did not link these streets directly as the previous bridge did and the current bridge now does. (Figs.5.8 & 5.9) It is presumed that this location was chosen so as to avoid the fallen masonry of the medieval bridge on the river bed, as well as avoiding the probable location of the temporary pontoon bridge.⁴⁴⁰ Eventually the bridge was replaced by the modern-day John's Bridge and was opened to the public in 1910. At that time it was famous for being the largest single-span bridge of concrete to have been built in Ireland or Britain, but lacking the grace and grandeur of its predecessor.

There is one final public building worth examining in relation to the Kilkenny Marble Works and that is the Custom House, now the Hunt Museum, in Limerick city. According to John Ferrar, writing in 1767, the Custom House was begun on 9 June 1765 'from a Design of Mr. Davis Dukart Engineer, and is now carried on under his Directions by Mr. Christopher Colles.'⁴⁴¹ Christopher Colles is listed as an 'architect' in the list of subscribers to Ferrar's book. Colles came to Limerick to work under Dukart through the influence of his uncle William and the relationship between Dukart and Christopher Colles will be examined later.

Ferrar informs us in the second edition of his book, printed in 1787, that the Custom House was completed in 1769 at a cost of almost £8,000. Local limestone has been used on the street façade, but Judith Hill states that the river front façade is composed of 'fine exterior stone work originated from William Colles's efficient

⁴³⁹ *Kilkenny Journal*, 10 January 1864.

⁴⁴⁰ Ian Doyle, 'The lost bridge of Kilkenny City: John's Bridge, 1765-1910', p. 18.

⁴⁴¹ John Ferrar, *An History of the City of Limerick*, Limerick, 1767, p. 106. See also John Logan, 'The Irish Career of Davis Dukart', in *Irish Architectural and Decorative Studies*, Vol. X, 2007, pp. 43-45 for a succinct account of Colles's work on the Custom House.

marble works.⁴⁴² Hill believes that it was through Christopher Colles, acting as an agent for Kilkenny marble in Limerick, that Kilkenny marble was used on the river front. This was certainly possible, as Christopher had corresponded with his uncle on the subject of Kilkenny marble chimneypieces for certain clients in Limerick during his tenure in the city, but he never discussed building stone from Kilkenny. None of the correspondence of either William or Christopher, examined to date, mentions anything about supplying the Limerick Custom House with stone from Kilkenny.

Christopher Colles's letters to his uncle and, following his death in 1770, to his cousin William, are held in the Richard Colles Johnson collection in the Newberry Library in Chicago and will be examined in due course. The lengthy period between some of the dates on Christopher's letters indicate that there may be many missing from the collection, but we can only examine what is there. His first letter to his uncle from Limerick does reveal that he was given the task of 'Numbering & taking dimensions of Stones by which means I am able to find any stone I want Immediately',⁴⁴³ indicating that much of the stone was already in situ at the Custom House site. As this letter was written in August 1766, it also reveals that Christopher arrived in Limerick a year after the building of the Custom House commenced, therefore the stone required would have been quarried and moulded by stonecutters long before Christopher's arrival. At the end of 1766, Christopher took an interest in a quarry in Limerick to supply his own stone for building works, much to the displeasure of his uncle and Dukart, but by the end of January 1767, he had agreed to surrender his interests in the quarry and concentrate all his efforts on carrying out Dukart's wishes.⁴⁴⁴

A visit to the Custom House in 2008 reveals that the stone used on the river front is different in appearance from that used in the rest of the building. Although this part of the museum was inaccessible at the time, it could be viewed from outside the perimeter fencing and with the aid of digital photography, it was possible to determine that the visual appearance of the ashlar facing of the river front is consistent with that of Kilkenny marble, circular white fossils standing out in contrast with the dark blue ground of the stone. (Fig.5.10) Without evidence to suggest otherwise, it would appear that, at some stage during the construction work, the Colles's supplied Kilkenny marble

⁴⁴² Judith Hill, 'Davis Ducart and Christopher Colles: Architects associated with the Custom House at Limerick', draft copy of an essay for the Hunt Museum Catalogue 1998, kindly donated to me by the Knight of Glin.

⁴⁴³ RCJ, Box 7, file 8, Christopher Colles, Limerick to William Colles, Kilkenny, 8 August 1766.

⁴⁴⁴ *Ibid.*, file 9, Christopher Colles, Limerick to William Colles, Kilkenny, 25 January 1767.

for use on the Custom House in Limerick. As this façade consists of more decorative stonework than any of the others, it would indicate that a different type of stone, one more susceptible to carved detail, was needed, the local stone not being of good enough quality to complete the task.

The public buildings covered in this chapter are those that have a definite association with the Colles family during the eighteenth century. The family are also associated with many public buildings, both in Ireland and Britain during the nineteenth century, many of which will be examined in due course. William Colles appears to have been somewhat of a perfectionist, in that all the work carried out by him was executed with care and precision. Cost effectiveness was always to the forefront of Colles's mind, as, in his role as alderman and treasurer of the corporation, value for public money was of paramount importance. There is also an element of civic pride at play here too, as Colles set about bestowing a classical elegance to his native city, most of which is still in existence today.

Chapter Six.

The Colles Family and Some Private Commissions in the Eighteenth Century.

As William Colles was engaged in the public works examined in the previous chapter, the order book of the Kilkenny Marble Works was continually being filled with private commissions. As noted previously, the purpose of Colles's letter to the Dublin Society in February 1731/2 and his advertisement in *Faulkner's Dublin Journal* in 1734 was to notify the public that the Kilkenny Marble Works was open for business. It was Colles's prime intention to supply decorative marble objects to the wealthy clientele that was now emerging in Irish society and also to those of more modest means. While Kilkenny marble was well known throughout the land for its quality, durability and appearance, it was not until Colles set up his marble mills that the reputation of the marble was, literally, set in stone. This chapter will examine the involvement of the Colles family and the Kilkenny Marble Works in some private commissions during the eighteenth and early nineteenth centuries. Documented evidence will also be examined in order to reveal to what extent William and Christopher Colles could be regarded as designers as well as contracting builders during this period. Much has been written on the life and career of Christopher Colles in the USA, but very little is known of his formative years in Ireland. Letters written by Christopher, newly examined in the Newberry Library in Chicago, will give a more comprehensive account of these early years than was heretofore available.

Due to the prevalent use of Kilkenny marble in chimneypieces and other decorative features, a number of illustrative examples have been chosen for inclusion in this chapter. Added to these examples will be many documented references to Kilkenny marble found during the research for this thesis. The information contained within family papers and accounts is often found wanting in regards to those involved in building works carried out on town and country houses, especially the supplier of stone for such projects, therefore photographic evidence and information garnered from physical examination of some buildings and sites will be the basis for some of the findings in this chapter. Kilkenny marble is easily recognisable when used internally in buildings, especially for chimneypieces, but difficulties can arise when attempting to

identify the stone when used externally. With a background in the extractive industry and the knowledge gained from discussions with experts in the area of geology and stonecutting over the past number of years, I have the confidence to recognise Kilkenny marble in both its natural and finished states. My approach has been to exercise caution when encountering dark fossiliferous marble used on the exterior of buildings constructed some distance from County Kilkenny. However, where documented evidence does not exist, close examination of the stone can support the argument that marble from the Black Quarry has been transported to various sites around the country for building purposes.

It should be mentioned at this point that one particular case examined here, that of Woodstock in Inistioge, Co. Kilkenny, was problematic due to the closure of the Public Records Office of Northern Ireland (PRONI) for relocation purposes. The Tighe family papers could not be consulted as a result of this closure, however research based on previous examinations of these papers by reliable commentators has been used in conjunction with other contemporary accounts in an attempt to reconstruct the involvement of the Colles family with the various improvement schemes carried out at the Woodstock estate.

The esteem for and political recommendations in favour of Kilkenny marble find their grandest expression in building projects connected with Speaker Conolly, the Parliament House and Castletown House. We have seen how Edward Lovett Pearce sought to place Kilkenny marble in the Parliament House in 1728 as a symbol of national pride and esteem. But Pearce was only echoing sentiments that were voiced a number of years previously. In July 1722 Bishop George Berkeley wrote to Sir John Perceval updating him with news of Castletown, Co. Kildare. Berkeley informed Perceval that ‘the most remarkable thing now going is a house of Mr. Conolly’s at Castletown.’⁴⁴⁵ Conolly, the wealthiest man in the country and Speaker of the Irish House of Commons, was engaged in building the country’s largest and grandest Palladian country house at Celbridge, Co. Kildare. The house was to be faced with native stone ‘harder & better colour’d than the Portland.’ Berkeley hoped that this house would be ‘an Ornament to the Country.’ The following week Perceval wrote back to Berkeley remarking that ‘I am glad for the honour of my Country that Mr. Conolly has

⁴⁴⁵ BL, Egmont Papers, Add 47029, f. 126-7, Bishop Berkeley to Sir John Perceval, 29 July 1722. Information taken from transcripts of the Egmont Papers in the Irish Architectural Archive.

undertaken so magnificent a pile of building.’⁴⁴⁶ Perceval instructed Berkeley to advise Conolly to make use of ‘all the marbles he can get of the production of Ireland for his chimneys, for since this house will be the finest Ireland ever saw’ it will be regarded as the ‘Epitome of the Kingdom & all the natural Rarities [sic] she affords should have a place there.’ Of course Perceval could have been touting for business for his own quarries in Cork, but his sentiments that Castletown House should epitomise all that is great about this country do sound sincere.

On entering the house, it is obvious that Conolly did indeed use Irish marble for his chimneypieces, as the large Kilkenny marble chimneypiece in the entrance hall proves. (Fig.6.1) The simply moulded three-part chimneypiece is mounted on a Kilkenny marble hearth stone, making a grand statement as one enters the house. A number of other chimneypieces in the house, although not all made from Irish marble, do contain decorative elements formed of Irish marble. In the Print Room can be found a Carrara marble chimneypiece with Kilkenny marble inserts.

Castletown’s owner was instrumental in the building of the new Parliament House and Edward Lovett Pearce was involved in both schemes. Castletown was to the private sphere as the Parliament House was to the public sphere. The finest examples of craftsmanship and materials to be found in the country were placed on show as a portrayal of an improving Ireland. It is not the intention of this chapter to examine as many decorative features of Kilkenny marble as possible, but there is a need to look closely at how Kilkenny marble became the choice of architects, sculptors and craftsmen for use on the interior and exterior of many of this country’s buildings during the eighteenth and early nineteenth centuries. There are a number of important country houses associated with Pearce that contain decorative elements made from Kilkenny marble, two of these being Bellamont Forest in Co. Cavan and the Palace of the Archbishop of Cashel, now the Cashel Palace Hotel, Co. Tipperary.

Bellamont Forest, designed by Pearce about 1728 and completed by 1730, ‘remains the most important example of a thoroughly designed Palladian villa in Ireland.’⁴⁴⁷ The house, built for Thomas Coote MP for Co. Monaghan, consists of two storeys over a rusticated basement. Coote’s first wife was Anne Lovett, Pearce’s aunt which, no doubt, would have assisted in Pearce getting the contract. Constructed of red brick with sandstone dressing, the house commands wonderful views on all sides. The

⁴⁴⁶ Ibid., f. 129, Perceval to Berkeley, 5 August 1722.

⁴⁴⁷ David Griffin, ‘Ireland’s Palladian Gem’, *Irish Arts Review*, Winter, 1986, p. 24.

large entrance hall is paved with Portland stone squares with smaller, black Kilkenny marble inserts and edged all around with black marble tiles. The bedrooms on the first floor, arranged around a central lobby, contain small, simply carved Kilkenny marble chimneypieces. In the entrance hall the current owner, John Coote, has placed a mahogany table which has been reproduced from a drawing by Pearce. To complement the black marble on the entrance hall floor, Coote has chosen Kilkenny marble as the top for the table.⁴⁴⁸

As the building of Bellamont neared completion, Pearce provided Archbishop Timothy Godwin with a design for a new palace at Cashel, Co. Tipperary.⁴⁴⁹ The building commenced in 1730 and was completed by 1732. The large entrance hall contains a pair of Kilkenny marble bolection chimneypieces facing each other on either side of the hall. Similar to the chimneypiece in Castletown, but smaller in scale, these symmetrically placed chimneypieces add to the overall internal harmony of the building. (Fig.6.2) The dates of construction of the palace would indicate that William Colles would have supplied the marble for the chimneypieces, or, possibly, the chimneypieces themselves.

Pearce also used Kilkenny marble on the interior of Dublin townhouses in the early 1730s. No. 9 Henrietta St. was designed by Pearce for Thomas Carter⁴⁵⁰ who, as we have seen in Chapter One, was known to Colles in the following years through their mutual involvement in the linen industry. Part of a Kilkenny marble chimneypiece, believed to be from another part of the house, has been reused as a hearthstone in what is now the meeting room.⁴⁵¹ Black marble is used for floor paving here and in No. 10 Henrietta St. which was built by Luke Gardiner with the assistance of Pearce.⁴⁵² It is safe to assume that Kilkenny marble was high on Pearce's list of materials for decorating the interiors of public and private buildings, but to suggest that chimneypieces are original to a building must always be treated with caution, as they could be easily removed and relocated elsewhere. However, it is somewhat safer to assume that chimneypieces made of Kilkenny marble found in houses designed by Pearce's successor are the original ones placed there during the construction phase.

⁴⁴⁸ Information from John Coote of Bellamont.

⁴⁴⁹ Edward McParland, *Public Architecture in Ireland 1680-1760*, New Haven & London, 2001, p. 166.

⁴⁵⁰ Dublin Civic Trust, *Numbers 8-10 Henrietta Street*, Dublin, 2003, p. 13.

⁴⁵¹ *Ibid.*, p. 33.

⁴⁵² *Ibid.*, p. 12.

Employed as a draughtsman on the plans for the new Parliament House by Pearce, Richard Castle inherited the private practice of the Surveyor General on his death in 1733. Castle, a native of Germany, arrived in Ireland in 1728 and over the next thirty years he became the most sought after architect in the country. His list of clients included seventeen M.Ps. (6 later became peers), eight peers, two peeresses, five bishops and two archbishops.⁴⁵³ Kilkenny marble was the preferred material for many of the chimneypieces in his designs for such clientele in their town and country houses, a select sample of which will be examined here.

No. 85 St. Stephen's Green, Dublin, was designed by Richard Castle for Captain Hugh Montgomery. Building began in 1738 and the house still contains many of its original features, including the Kilkenny marble chimneypiece in the entrance hall. (Fig.6.3) No. 85 and the adjoining No. 86 are now known as Newman House and they contain 'some of the best C18 plasterwork in Dublin.'⁴⁵⁴ The Kilkenny marble chimneypiece in No. 85 would have made an impression on the eighteenth century-visitor on entering the house and acted as a precursor to the stunning interior that lay ahead.

Richard Castle was involved in the designs for many buildings throughout the country during his working life. Part of Westport House in County Mayo was built in 1730 by Castle, the rest of the current structure was added to Castle's design in 1778.⁴⁵⁵ Built for John Browne, later 1st Earl of Altamont, the entrance hall contained a Kilkenny marble chimneypiece which was removed at some stage and shipped to an unknown location in Paris.⁴⁵⁶ Another of Castle's great Irish houses is Russborough House in County Wicklow, designed for Joseph Leeson, later 1st Earl of Milltown. Building began in 1741 and here again Castle has placed a large, impressive Kilkenny marble chimneypiece in the entrance hall which would have made an impact on visitors to the house, just as Pearce's chimneypiece did at Castletown some twenty years earlier. It was here that the architect Francis Bindon would have learned how dramatic a statement a large Kilkenny marble chimneypiece could make in an entrance hall, something he would later use to great effect in his own work which will be examined below.

⁴⁵³ The Knight of Glin, 'Richard Castle, Architect: his biography and works', *Quarterly Bulletin of the Irish Georgian Society*, vol. vii, Jan-March, 1964, p. 33.

⁴⁵⁴ Christine Casey, *Dublin*, New Haven and London, 2005, p. 506.

⁴⁵⁵ Mark Bence-Jones, *Burke's Guide to Country Houses*, Volume 1, Ireland, London, 1978, p. 283.

⁴⁵⁶ The chimneypiece was last seen in this country lying badly damaged in a dealer's yard in Dublin. This information was kindly given to me in correspondence with Desmond Guinness, 22 August 2006.

Kilkenny marble was not the exclusive preserve of the great houses in Castle's *oeuvre*; he used it in lesser buildings also. In 1735 he designed Whitewood Lodge in County Meath for the Preston family. Overlooking Whitewood Lake just two miles north west of the village of Nobber, the house was built as a hunting lodge for the family. The lodge is a square block of two storeys over a basement, consisting of three bays on all sides. The house is symmetrical in plan, two rooms deep with a central entrance hall. The hall is flanked on both sides by large rooms which contain Kilkenny marble chimneypieces.⁴⁵⁷

Many of the chimneypieces used by Castle in his buildings were carved by David Sheehan. As we have seen, Sheehan had access to his own supply of Kilkenny marble from the Black Quarry and, perhaps, this is one reason why the marble was such a popular choice for the chimneypieces in so many of Castle's buildings. Sheehan was employed by Castle on work in Trinity College and he could access his own supply of marble without having to get it from a middle man, thereby ensuring a constant supply of the material and cutting his costs at the same time. In examining some of Sheehan's work it should be borne in mind that it is highly likely that William Colles assisted in quarrying and cutting of the marble for Sheehan, his partner in the occupation of the Black Quarry. The cutting of the marble into slabs at Kilkenny was important as the cost of transporting rough blocks of marble to Dublin would have been an expensive process. On the other hand there were risks involved in transporting finished stone, therefore the sawn marble slabs would have been worked into finished chimneypieces by Sheehan in Dublin.

Sheehan used Kilkenny marble on a number of works for Trinity, such as the setting up of a Kilkenny chimneypiece in the college library in 1743.⁴⁵⁸ Sheehan was also paid for stonecutters work in the New Hall in 1746. He used '66ft 6in of Kilkenny Marble Molded [sic] work in the Cornice, jambs; & Architrave & in the Chimney Piece' for the hall.⁴⁵⁹ A further 5ft 9in of the marble was used for the 'Twist Molding' in the chimneypiece, 31ft 6in for 'Plain Work in ye jambs & plain Mantle' of the chimneypiece and 18ft 6in 'Sollid of Kilkenny Marble in the Molded work & the blocks.' For this and other stone work in the New Hall, Sheehan was to be paid a total

⁴⁵⁷ Christine Casey and Alistair Rowan, *The Buildings of Ireland: North Leinster*, London, 1993, p. 532.

⁴⁵⁸ TCD Muniments, MUN/P/2/85/30, Stone Cutters Work Done in Trinity by David Sheehan, Measured by John Ensor, Sept 30 1743.

⁴⁵⁹ TCD Muniments, MUN/P/2/84/16, Stone Cutters Work in the New Hall in Trinity, signed by Rich. Castle, June 21 1746.

of £183-2-1, this account being signed by Castle. This is the chimneypiece that is now placed in the Common Room in the College. Sheehan was not exclusively employed by Castle, he had his own business based in Marlborough St. in Dublin, from where he supplied marble items to his own clients, one of which was James Hamilton, 8th Earl of Abercorn.

During the 1740s Abercorn was carrying out improvements to his estate of Baronscourt, Co. Tyrone. Abercorn spent most of his time living in London and was an occasional visitor to Baronscourt. He was kept well informed of the improvements by regular correspondence from the estate agents, much of which related to improvements being carried out on the house itself. Part of this renovation work involved chimneypieces by Sheehan which were being carved by him in Dublin. Could this marble have been cut by William Colles and sent up to Sheehan in Dublin? Unfortunately, we do not know. A letter from the agent John Colhoun in Strabane to the Earl in London, written on 18 March 1745, explains that at the time of writing no chimneypiece had left Dublin for the estate, but ‘one David Sheehan’ has written to Benjamin Martin, the builder at Baronscourt, informing him that ‘he has made by your Lordship’s order one Kilkenny marble and two Blackston [sic] chimney pieces.’⁴⁶⁰ Colhoun also states in the letter that, as Martin is very ill and has not been at Baronscourt, he, Colhoun, was at a loss ‘how to send for them [the chimneypieces] for fear of danger by sea, or by land for the costly carriage.’ This indicates that transportation by sea from Dublin northwards along the coast was the cheaper option, but carried a greater risk of the cargo being lost at sea. By December 1745 the chimneypieces had not been delivered to the estate and in January 1745/6 Abercorn wrote to Colhoun from London to inform him that ‘I write this night to Sheehan to hasten the chimney pieces.’⁴⁶¹

The following April Abercorn wrote again to Colhoun to relay his doubts about whether he requested Sheehan to send the chimneypieces by sea, ‘but lest I mistake,’ he instructed Colhoun to send Sheehan the instructions to send them by ship. He informed Colhoun that Sheehan had sent him word that ‘he has four, two marble ones for the two

⁴⁶⁰ John H. Gebbie, *An Introduction to the Abercorn Letters (as Relating to Ireland, 1736-1816)*, Omagh, 1972, pp. 8-9. As the Abercorn Papers are kept at PRONI, they are unavailable for examination, therefore the information supplied here is from Gebbie’s work. These other chimneypieces are referred to as ‘black stone’ in other parts of the text, making it difficult to ascertain whether the stone is from a specific area called Blackstone, or it is just a generic description of the stone.

⁴⁶¹ *Ibid.*, p. 262.

large rooms below, and two black stone for the two large rooms above.⁴⁶² This would indicate that a further marble chimneypiece had been made by Sheehan, whether this was also made from Kilkenny marble is not stated. Both marble chimneypieces were to be placed in prominent positions within the house. What the 'black stone' was is not elaborated upon, but as they were to be placed on the upper floor, they must have been of lesser quality than the marble ones. The following month, May 1746, Colhoun was able to inform Abercorn that 'four chimney pieces came to Derry a fortnight past,' and were sent to Baronscourt to be put in place.⁴⁶³

Though Sheehan, with his partnership in the Black Quarry, is of special interest, he was not the only sculptor to use Kilkenny marble extensively. Another person who was involved in carving memorials was John Van Nost the younger, who had a very successful practice in this country up to his death in 1780. Black Kilkenny marble was the ideal material for memorials, especially as a contrasting background to white Italian marble. While it is not the intention to examine a whole host of such works here, it is important to examine two of Van Nost's works to show how Kilkenny marble was the choice of one of the most important sculptors working in Ireland during the eighteenth century. Van Nost came to Ireland in about 1749 and, according to Homan Potterton, his church memorials are 'almost without exception on a large scale.'⁴⁶⁴ Two of these large scale works will be examined below.

Van Nost was paid £500 to sculpt the memorial for the Lord Chancellor, John Bowes, who died in 1767. This memorial has been partly dismantled and is now placed in the crypt of Christ Church Cathedral in Dublin. A full size figure of Justice, carved in white marble, holds a portrait of Bowes. (Fig.6.4) Justice sits on the end of a coffin that is draped in white marble representing the regalia of the Lord Chancellor's office. This coffin is carved from Kilkenny marble. Van Nost repeats this motif in the memorial to Nicholas and John Fitzgerald in Christ Church Cathedral in Waterford who died in 1770. (Fig.6.5) The winged figure of Time approaches the white marble figure of Piety reading a book and leaning on the marble medallion portrait of the deceased men. As with the Bowes' memorial, the figure of Piety rests on the end of a Kilkenny marble coffin along which the figure of Time walks. Van Nost recognised not only the quality

⁴⁶² Ibid., p. 258.

⁴⁶³ Ibid., p. 17.

⁴⁶⁴ Potterton, *Irish Church Monuments*, p. 85.

of Kilkenny marble, but also the aptness of the material as a symbol of mourning and death.

On the adjacent wall of the cathedral in Waterford is mounted a memorial to Benjamin Morris who held the office of Mayor of Waterford on several occasions during the eighteenth century. The white marble memorial, lacking a signature, is framed with black Kilkenny marble. (Fig.6.6) Such smaller scale memorials containing elements of Kilkenny marble can be found in many churches dotted around the country, one among many being the memorial to the Earl of Bective, Sir Thomas Taylor, in St. Colmcille's Church in Kells, Co. Meath, the pediment of which is supported by two columns of Kilkenny marble. James Solas Dodd, writing in 1801 noted that the monument was 'extremely well carved; and the whole makes an elegant appearance.'⁴⁶⁵ (Fig.6.7) We have also seen in Chapter Four how Kilkenny marble may have been used by Thomas Paty in the Bristol area in a similar fashion.

William Colles was not solely a supplier of Kilkenny marble to prominent architects, sculptors and craftsmen, he utilised much of the stone on his own private building contracts, some of which will now be examined.

During the 1730s, Colles was involved in supplying stone to various locations throughout County Kilkenny, as we shall see below, but it appears that stone was also being transported to locations outside the county during this period. William Smyth, whom we have met earlier in Chapter One, had set about improving his estate in County Westmeath and was at this time building his house, Barbavilla, on his estate. Smyth was related to Thomas Burgh who may have had a hand in its design and this may account for the description that the house was 'decidedly old-fashioned for its date of 1730.'⁴⁶⁶ Colles was somehow involved in supplying (or, at least, contracted to supply) stone to Smyth for his house. The only evidence of Colles's association with this contract is revealed through the correspondence of a third party.

In April 1734, Patrick Dolan, a stonecutter in Dublin contracted to supply carved stone for Barbavilla, wrote to Smyth informing him of his concerns about information that had reached him stating that William Smyth felt that he, Dolan, had made a 'breach of trust' between both men. What this breach of trust was is not elaborated on, but it does involve 'the marble slabs of Mr Collis [sic].'⁴⁶⁷ Dolan includes the following,

⁴⁶⁵ James Solas Dodd, *The Traveller's Director through Ireland*, Dublin, 1801, p. 66.

⁴⁶⁶ Casey and Rowan, (see note 454), p. 151.

⁴⁶⁷ NLI, Smyth of Barbavilla Papers, Ms 41,590/8, Patrick Dolan to William Smyth, 30 April 1734.

‘Before Mr Collis should impose it on you by not keeping up the agreement I will supply yr honr at his [Colles’s] price and with more faluabler [sic] marble’ for Barbavilla. Exactly what was happening here is not clear, but what can be garnered from Dolan’s letter is that William Smyth believed this breach had occurred due to a ‘false report’ of Colles’s to Smyth about Dolan, resulting in Dolan being ‘wrongfully accused’ in this particular matter. What Colles accused Dolan of is not revealed, but Dolan goes to great lengths to assure Smyth of his innocence in the affair. It is very difficult to assess what the situation was regarding the stone supply at Barbavilla as this letter does not make it clear which of the two men was granted the main contract for the stone, but Dolan does state that he was carving the pediments, which were ‘near finished’ and was also working on the family crest and coat of arms for the house. Dolan may have felt his work for Smyth was under threat from this newcomer to the marble business. It is hard to believe that Colles would have relied upon some unscrupulous methods to win contracts, but he was a blatant self-promoter at this time and who knows what he may have been capable of? Whatever the reason for Dolan’s trepidations, the fact is that Colles had successfully set up his marble business which seemed to be causing some concern amongst his competitors by attracting a wealthy clientele from many different areas of the country and from different walks of life.

In 1865, the *Kilkenny Moderator* reported on the progress of the restoration work being carried out on St. Canice’s Cathedral in Kilkenny city. This work began in 1843 under the direction of Dean Vignoles and over the next sixty or so years, transformed the cathedral into what we see today. When Vignoles arrived in Kilkenny he found St. Canice’s in a very poor state of repair and immediately set about reinstating the cathedral to its former Gothic glory. In order to do this, much of the restoration works that had been carried out by Richard Pococke in the mid eighteenth century ‘were swept away’⁴⁶⁸ when the cathedral underwent its restoration under Vignoles. As Pococke’s restorations were classical in style they were deprecated by the nineteenth-century adherents of the Gothic style. The *Kilkenny Moderator* reported that the greatest improvement visitors would note was ‘the removal of the colonnade which connected the entrance of the north transept with the north gate of the cemetery.’⁴⁶⁹ This, according to the newspaper, would display the ‘fine proportions of the north gable’ for the first

⁴⁶⁸ Michael McCarthy, ‘Eighteenth-Century Cathedral Restoration (correspondence relating to St. Canice’s Cathedral, Kilkenny)’ in *Studies*, Winter 1976, p. 331.

⁴⁶⁹ *Kilkenny Moderator*, 22 November 1865.

time in a century. The roof of the colonnade had concealed the doorway and the fine double lancet window above it and this removal restored proper proportion to this part of the cathedral. While we may not dwell very long on most of Pococke's eighteenth-century restoration and the subsequent removal of it, this particular colonnade is very significant regarding William Colles's involvement, not only in carrying out the stonework for Pococke, but also in the design of Pococke's additions to the cathedral.

The *Kilkenny Moderator* noted that, although this colonnade was 'not by any means an unsightly or ill-proportioned structure in itself' if it had been erected in a more suitable location, it was 'an incongruous addition to the Cathedral, being in the Doric style of Grecian architecture.' The article revealed that Pococke received permission to erect the colonnade on 30 May 1758 and that 'Alderman William Colles, the great grandfather of the ex-Mayor [Alexander Colles, mayor of Kilkenny 1862 and 1863], was the designer and contractor for the work.' This claim, though late (1865), is interesting as it is the only reference to Colles being involved in architectural or decorative design of any kind during the research for this thesis. As noted in the previous chapter, Maurice Craig put forward Colles as a possible contender for designing the Tholsel in Kilkenny, but nothing in Colles's correspondence shows that he was involved in anything other than executing the designs of others. This article, however, does indicate that Colles may have been more involved in the planning and design of many projects involving the Kilkenny Marble Works. It would be reasonable to suggest that, as Colles designed the water-driven machinery for cutting and polishing marble, along with his inventions for the flour and flax industries, it would not be inconceivable for him to have set his enquiring mind to designs of an architectural nature also.

Pococke had intended the colonnade to have been a covered passage from the palace direct to the cathedral, but the newspaper suggests that it would have been better if the structure had never been built at all. Colles's colonnade interfered with the proportions of the cathedral and was looked upon as 'a most unsightly and undesirable adjunct.' Unfortunately no image exists of the colonnade to help us decide whether Colles's architectural designs were amateurish, or naïve in nature, or, as the newspaper suggests, were not in line with the prevailing architectural tastes.

Katherine Lanigan and Gerald Tyler, writing in 1977, mention that within the garden of the palace is a small building which is still known locally as the 'Robing

Room' or 'The Colonnade' in reference to Colles's colonnade.⁴⁷⁰ (Fig.6.8) If Colles was the designer of the colonnade, could he also have been the designer of the Robing Room? A road runs between the palace and the cathedral now which would have necessitated the removal of Colles's work in any case. Colles's external architectural design was not the only work that received harsh retrospective criticism, some of his internal work received the same treatment.

In May 1763, William Colles wrote to Lord Mountgarret to inform him that the restoration work his lordship had commissioned him to do on the family monument in St. Canice's was now complete. The monument was erected to the memory of Richard Butler, third Viscount Mountgarret, who died in 1651. (Fig.6.9) The viscount was an important figure in seventeenth-century Ireland, joining his father-in-law Hugh O'Neill, Earl of Tyrone, in his conflict with Elizabeth I and later, being reconciled with the Crown through the intercession of his cousin Thomas, Earl of Ormonde. Graves and Prim, writing on the history of St. Canice's Cathedral in 1857, describe the monument as being executed in the 'Renaissance style', but 'not all of one age' as the base, the inscription panel and part of the frieze 'are ancient' and the rest being 'comparatively speaking...modern'.⁴⁷¹ This 'modern' and 'very incongruous' work was carried out by William Colles.

In his letter to Mountgarret, Colles states that the monument is 'finished and Set up'.⁴⁷² It appears that Colles had kept the costs within estimate, as he notes that the bill he sent to Mountgarret by his foreman Michael Coffee was 'according to the Estimate given you and approved of by you.' The final cost of the work mentioned in this letter would indicate that the above mentioned estimate provided by Colles and approved by Mountgarret was a revised one, as certain deductions are explained in the letter. Not all of the work was finished, or did not need to be finished as Colles explains that the estimate for work on the pediment and 'arms', presumably the coat of arms, was £16, but 'as the arms were Left out £8-0-0 Is Deducted for them.' Also the initial estimate included a new pedestal for the monument as the original was 'supposed to be Deficient', but this was found 'behind the Wainscot' and was deducted from the bill, Mountgarret only being charged 'for what was done, amounting to £37-0-6.' There was

⁴⁷⁰ Katherine M. Lanigan & Gerald Tyler (eds.), *Kilkenny: Its Architecture & History*, Kilkenny, 1977, p. 31.

⁴⁷¹ Rev. James Graves and John G. Augustus Prim, *The History, Architecture, and Antiquities of the Cathedral Church of St. Canice, Kilkenny*, Dublin, 1857, p. 305.

⁴⁷² PRIM, William Colles to the Rt. Hon. Lord Mountgarret at Ballycondre, 9 May 1763.

also a separate bill for scaffolding ‘wch is always ffound by the Imployer’, Colles indicating that he hoped that his lordship might pay the bearer of the letter for this. This correspondence does not inform us as to the extent of Colles’s involvement in the design of the monument. Graves and Prim wrote that ‘Should the chancel be ever restored in accordance with the style of the remainder of the building, the removal of this monument would be absolutely necessary.’ Fortunately for us the memorial still commands its place in the cathedral as evidence of the craftsmanship employed in Colles’s marble mills.

Pococke and Mountgarret were just two of the many prominent local and national figures for whom Colles carried out commissions. The work carried out at St. Canice’s for both men is minor in comparison to that carried out for many other influential individuals in the county, a number documented examples of which shall now be examined.

At the general meeting of the Kilkenny and South-East of Ireland Archaeological Society in 1856, founder member John G. A. Prim read a letter to the members present. This letter, along with comments by Prim, was printed in the *Journal of the Kilkenny and South-East of Ireland Archaeological Society*.⁴⁷³ The letter had been given to Prim by Alexander Colles, proprietor of the Kilkenny Marble Works and great grandson of William Colles. Written in August 1749 by William of Abbeyvale, this letter contained an account of the assizes that had just been taken place in Kilkenny. Colles informed the recipient of the letter of events surrounding the capture and trial of highwaymen and thieves operating in the Kilkenny area. The contents of the letter do not concern us here, but the recipient of the letter does, as this person was the painter and architect Francis Bindon. The letter was addressed to Bindon at ‘Ennis & Clonmell.’⁴⁷⁴ Prim announced to the assembled members that Bindon, the ‘eminent architect of the day’, was the designer of the mansions of Woodstock and Bessborough in the county and that William Colles was the contractor for both. Nothing in Colles’s letter hints at any business relationship between Bindon and himself, but an earlier letter written by Colles to Bindon in 1747, reveals a close personal bond between both men.⁴⁷⁵

⁴⁷³ *The Journal of the Kilkenny and South-East of Ireland Archaeological Society*, New Series, Vol. 1, No. 1 (1856), p. 54.

⁴⁷⁴ PRIM, William Colles to Francis Bindon Esq., 13 August 1749.

⁴⁷⁵ *Ibid.*, William Colles to Francis Bindon, 1 August 1747.

This earlier letter was addressed to Bindon at Bessborough, Co. Kilkenny where the architect was engaged in the design and construction of a new residence for Brabazon Ponsonby, 1st Earl of Bessborough. Before his death in 1733, Sir Edward Lovett Pearce had considered the designs for a new house at Bessborough for Ponsonby, but nothing seems to have happened until 1744 when Bindon was contracted to design and oversee the work.⁴⁷⁶ Related through marriage to Pearce and a collaborator with Richard Castle, Bindon was regarded as ‘a gentleman amateur turning his hand from the easel to the drawing board with equal interest.’⁴⁷⁷

The content of this letter of 1747 concerns the christening of Colles’s twin sons John and Richard, though there is no mention again of any business dealings between the two men. Colles informs Bindon that he was godfather by proxy to one of the boys. The second godfather, also by proxy, was Sir William Fownes who, as we shall see below, engaged Colles as a contractor for a number of projects, including the construction of his house at Woodstock. This would indicate that there was a close personal relationship between Colles and Bindon (and Colles and Fownes) and, presumably, this would have placed Colles in an advantageous position regarding any building contracts involving Bindon in the Kilkenny area during the 1740s.

Bindon’s design for Bessborough House, now known as Kildalton College, consisted of a large central block linked by quadrants to the flanking wings, these being no longer extant. A description of the house in 1786 noted that it was ‘built of hewn stone, in a neat, plain manner.’⁴⁷⁸ The house was faced almost entirely of Kilkenny limestone supplied by Colles, but the stone was also used to great effect on the interior of the house. On stepping in to the entrance hall, one was met with a screen of Ionic columns of Kilkenny marble ‘each shaft of which is one entire stone, ten feet six inches high.’⁴⁷⁹ These columns must have been similar to those in the entrance hall of Castletown Cox, mentioned below. The columns at Bessborough are no longer to be seen as the interior of the house was burned in 1923 and the Kilkenny marble was not replaced in the rebuilding of the house in 1929.

Prim notes on the transcript of Colles’s letter to Bindon in 1747, that Colles was at this time ‘engaged in building Woodstock house, of which Bindon was architect.’ The

⁴⁷⁶ The Knight of Glin, ‘Francis Bindon (c1690-1765): His Life & Works’, *Quarterly Bulletin of the Irish Georgian Society*, vol. x, April–September 1967, p. 11.

⁴⁷⁷ *Ibid.*, p. 3.

⁴⁷⁸ W. Wilson, *The Post-Chaise Companion*, Dublin, 1786, p. 337.

⁴⁷⁹ *Ibid.*

current structure of Woodstock House in Inistioge was built for Sir William Fownes and his wife Elizabeth, daughter of Brabazon Ponsonby of Bessborough. Elizabeth's dowry of £4000 assisted in financing the building, the construction work commencing in early 1742. Colles and Bindon were busily engaged with the construction of Bessborough and Woodstock during the mid 1740s, but, according to a recent publication, Colles had already been involved in construction work for Fownes at Inistioge since 1737 at least.

Writing in 2007, Thomas J. Whyte, following Terence Reeves-Smyth and Belinda Jupp's work on the Tighe manuscripts in PRONI, states that Francis Bindon agreed to furnish Fownes with plans for his new house by 1737 at the latest,⁴⁸⁰ indicating that Fownes had approached Bindon well before this date, but exactly when is not known. According to Whyte, Fownes approached Colles about the same time to build Woodstock which Colles agreed to do once the drawings had been executed and approved. It is believed that Fownes persuaded Colles to oversee the work, acting as supervisor, preparing the site, laying roads, and acquiring the necessary materials. As well as carrying out the preparatory work at Woodstock, Colles was also required to carry out building work in the village of Inistioge. Fownes wished to have mud cabins removed from the outskirts of the village and replaced with conventional cottages as part of an overall improvement scheme for the estate and surrounding area. This project appears to have been well under way by the time Fownes left for Dublin in 1737 to attend to his business there and seems to have continued for a number of years after. During this period Colles continued to work at Inistioge, acting as supplier of materials and clerk of works for the project. It is thought that Colles was given the contract to build the house around 1740. It is not known whether a detailed estimate and schedule of works was obtained at that time, but the actual building work did not commence for another two years due to the requirement of further preliminary work.⁴⁸¹ If this is correct, and there's no reason to think otherwise, then this may fill in some gaps that appear in some of the sources pertaining to Colles and the Kilkenny Marble works during the latter half of the 1730s.

During the early 1730s we know that Colles was busily engaged in the development and promotion of his marble business. He was supplying marble from his

⁴⁸⁰ Thomas J. Whyte, *The Story of Woodstock in Inistioge*, Dublin, 2007, p. 57. Whyte's account of the construction of Woodstock is based on information contained in preliminary studies carried out by Terence Reeves-Smyth and Belinda Jupp for the restoration of Woodstock gardens by Kilkenny County Council in 2000. See note 485.

⁴⁸¹ *Ibid.*, p. 62.

Dublin warehouse in Batchelor's Lane in 1734, but by 1738 no reference can be found to Colles and his marble business in the trade directory for Dublin.⁴⁸² We may assume that he was so preoccupied with his duties at Inistioge that he was unable to maintain his warehouse in Dublin. The main body of Prim's transcripts of Colles's letters begin in the 1740s, those that refer to the 1730s are sparse and have very little information that is relevant to this thesis, so we are left somewhat in the dark by this particular source, as to Colles's business projects during this period, but some of Whyte's information helps to solve this problem.

Whyte reveals that about two hundred tons of ashlar stones were delivered to the site by horse and cart, indicating that the stone was already carved and moulded and ready to be put in place. Colles hired local carpenters, joiners, plasterers and plumbers and all of the unskilled labour was also recruited from the locality. The moulds for the various architectural stone sections were, according to Whyte's information, made in Colles's premises near Ballyragget in the northern part of the county. This is a very interesting comment and raises the question of why Colles had premises some twelve miles north of Kilkenny city.

In his *Statistical Observations Relative to the County of Kilkenny*, William Tighe mentions a quarry of black limestone located north of Ballyragget, situated on the east bank of the Nore. The limestone is hard 'and might be polished for marble.'⁴⁸³ The beds of limestone were about three feet in thickness and blocks of a very large size were raised. Tighe gives the price for quarrying stone here at 3½d or 4d per load for building stone, but he does not say who the occupier of the quarry was. It is quite possible that Colles worked this quarry and brought the stone the short distance to a workshop set up in Ballyragget where it was carved and moulded into the required shapes for Woodstock.

However, there is also the possibility that the stone was sourced from another quarry in this region and brought to Colles's workshop where it was worked on for Woodstock. A newspaper report of 1930 mentions a quarry near Freshford, Co. Kilkenny, which had been in operation since 1702, referring to it as 'One of Kilkenny's most ancient quarries.'⁴⁸⁴ Freshford lies approximately five to six miles south west of Ballyragget with a road linking both towns. This newspaper article states that the quarry

⁴⁸² See *A Directory of Dublin for the year 1738*, Dublin, 2000. Colles does not appear in the alphabetic list of names and occupations compiled for this directory.

⁴⁸³ Tighe, *Statistical Observations*, vol. i, p. 94.

⁴⁸⁴ *Leitrim Observer*, 5 July 1930.

is known as the 'Colles Quarry'. The stone from the quarry was held in high esteem by the masons and stonecutters and was 'ideal for building purposes.' How long this quarry had been worked by the Colles family is unknown, but it is quite possible that this stone was transported the few miles to Ballyragget and worked into the required shapes and sizes for Woodstock.

Both of these scenarios raise questions which are difficult to answer. It is strange to think that the stone for Woodstock was being sourced and worked on at such a distance from Inistioge. The Black Quarry would seem to have been a much more convenient and less expensive source of stone, cutting the transportation costs considerably. Colles must not have had possession of the quarry at Royal Oak at this time because this would have been the ideal quarry to source the stone from as it could be transported all the way on the river Barrow, which appears to have been the route taken by the timber for Woodstock.

Whyte gives some indication on how the timber was transported to Inistioge commenting that both Fownes and Colles visited the timber yard to select the best material there. The location of this timber yard is not revealed, most likely it was at New Ross, as Whyte states that the mahogany timber was imported directly from South America which was then conveyed up the river Barrow by a specially hired barge to Graiguenamanagh, where it was carefully unloaded and drawn by two horses to Woodstock, a distance of about six miles.⁴⁸⁵ It is possible that the stone was transported in similar manner, but from a northerly direction, as Whyte notes that over two hundred trips were made to the quayside in Inistioge to bring the two hundred tons of ashlar stone to Woodstock, indicating that the river systems were utilized wherever possible. It may have been during this period that Colles realized the great advantage a canal would bring to the county.

This information for the construction of Woodstock relies heavily on that contained in Whyte's book, but as noted above, much of what is written explains the movements of Colles in the 1730s and other related excerpts concur with contemporary accounts of Woodstock, an example of which occurs in the early nineteenth century.

In the early 1790s the Woodstock estate passed to William Tighe, grandson of Sir William Fownes and almost immediately Tighe began a series of improvements to the

⁴⁸⁵ Whyte, *Woodstock* (see note 477), p. 68. As the river Nore was navigable as far as Inistioge, it is not explained why the timber could not be transported directly from New Ross to Inistioge along the Nore instead of using the Barrow and having to transport the material to its destination across land.

estate. Tighe approached the architect William Robertson to prepare detailed drawings and specifications for work on the house, but problems arose in finding a builder who could match the required additions to the main house exactly in terms of appearance and quality of finish. Whyte tells us that this prompted Tighe to travel to north Kilkenny (this would suggest that Ballyragget was again the destination) to visit the Colles workshop which supplied the stone for the original house. This visit took place on, or before 1802, as Richard Colles, William's grandson, was now the proprietor of the marble business. Colles informed Tighe that, as his firm had received several orders based on the original Woodstock design, the moulds, or templates, for all of the limestone and granite sections had been retained and were kept oiled and were fully useable again, though whether this was in Kilkenny or Ballyragget is unclear.⁴⁸⁶ This would indicate that many houses constructed in the Kilkenny area after the completion of Woodstock were supplied with moulded stone features from the Colles Marble Works. Colles declined to undertake the building contract as the firm no longer did major building work, confining themselves to the manufacture of marble decorative pieces. This is exactly the same account William Tighe himself gives in his *Statistical Observations Relative to the County of Kilkenny*. The Kilkenny Marble Works was no longer supplying building stone, concentrating mainly on the manufacture of chimneypieces and smaller items and exporting marble in rough block form to Britain because of the tax then in place on finished marble products. There is one noticeable discrepancy between both accounts and it is that Whyte states Tighe went to north Kilkenny, suggesting Ballyragget, yet Tighe in his account of the marble works, states that all the work is carried out at the marble mills 'on the left bank of the river, near two miles from Kilkenny.'⁴⁸⁷ Did Tighe visit the quarry at Ballyragget to view the source of the stone which would then have been brought to the workshop in Maddoxtown? This, once again, highlights the problems encountered when attempting to piece together the ownership of quarries and sources of stone.

Richard Colles agreed to prepare all of the stone sections in his marble works and also to act as clerk-of-works under the supervision of the architect. It would appear that the Kilkenny Marble Works was now back in the business of carrying out building

⁴⁸⁶ Ibid., p. 164.

⁴⁸⁷ Tighe, *Statistical Observations*, vol. i, p. 103. It should be noted of course that both Ballyragget and Maddoxtown lie to the north of Inistioge, but as Whyte specifies 'north Kilkenny' this would indicate that the location was in the northern part of the county.

projects. By the end of 1802 the limestone and granite pieces had been delivered on site for the builder Henry Watters to place in position. In 1812 Robertson added a fine stable range at Woodstock which was overseen by Colles.⁴⁸⁸ The stable block was not finished until 1814, as Watters did not arrive on site in time and Colles had to finish the work instead.

Francis Bindon's third great house in Kilkenny was Castle Morres. Located some twelve or so miles south of Kilkenny city, near the village of Kilmaganny, the house was the country seat of Hervey Morres, the first Viscount Mountmorres. Morres's first wife was Letitia Ponsonby, daughter of Brabazon Ponsonby, highlighting once again how family ties influenced architectural and building contracts in the county during the mid-eighteenth century. The house was built in the early 1750s, but nothing remains of the house itself today, except what is noted below. Existing photographs indicate that it was 'one of Bindon's most accomplished performances'.⁴⁸⁹ Bindon used the Richard Castle motif of placing a Kilkenny marble chimneypiece in the entrance hall. (Fig.6.10) Bindon would have been familiar with this design from working with Castle at Russborough House. This chimneypiece, measuring 6 feet high and 6 feet 1 inch in length, displays how more adventurous and elaborate the stonemason's decoration had become since the time of Pearce, each part of the chimneypiece being decorated, including the insert. The decoration of this chimneypiece is almost identical to a smaller chimneypiece that is now located in Leixlip Castle (Fig.6.11), which makes one wonder if there was a pattern book available for customers to peruse, or, did Colles have available a variety of moulds suitable for chimneypieces as he had moulds for external decorative pieces?

Castle Morres was partially demolished in the 1930s and nothing now remains except the entrance gates and a piece of the doorframe lying on the ground just inside the gates. A gate lodge stands inside the entrance gates, but this was constructed sometime around 1850. A visit to Castle Morres in September 2009 provided evidence

⁴⁸⁸ Terence Reeves-Smyth, 'Arcadia Regained: The Park and Gardens of Woodstock, Co. Kilkenny' *Irish Arts Review*, vol. 19, no. 2, Autumn, 2002, p. 107. This article is based on the research carried out by Reeves-Smyth and Belinda Jupp as mentioned in note 477 above. This information comes from the Tighe Papers in PRONI, ref. D2685/15/6-12. Reeves-Smyth notes that the contractor was 'Mr. Colles of Kilkenny.' Access to these papers is unavailable until May 2011 at least, due to the relocation of PRONI, but, as Whyte has used information supplied by Reeves-Smyth, who, in turn, has based his research on the Tighe Papers, we can accept that the above information pertaining to the Colles involvement in Woodstock is correct.

⁴⁸⁹ The Knight of Glin, 'Francis Bindon (c1690-1765): His Life & Works', *Quarterly Bulletin of the Irish Georgian Society*, vol. x, April—September 1967, p. 16.

that Colles was involved in the supply of stone to the house and, most likely, was contracted to build the house also.

The remains of the limestone doorframe, recognisable as such by the indentation carved out for the doorbell, exhibits fossilisation consistent with marble from the Black Quarry. (Fig.6.12) This site visit was carried out in the company of Donal McDonald, stonecutter, whose family can be linked to the Kilkenny Marble Works over several generations. Donal's observations confirm that the limestone used on the doorframe was sourced from the Black Quarry, therefore it would be reasonable to suggest that all of the limestone used in the construction of Castle Morres was from this source.

As noted above, the likelihood is that many, if not all, of the larger houses built around the county of Kilkenny during the mid to latter half of the eighteenth century contained decorative elements that were fashioned by the Kilkenny Marble Works. Kilkenny limestone was used on Bonnetstown Hall which lies a few miles north west of Kilkenny city. Built in 1737-8, the house was the residence of Samuel Matthews a member of Kilkenny Corporation and Mayor of Kilkenny in 1744. A fellow alderman of William Colles, it would have been likely that Colles was approached by Matthews to supply the limestone for the construction of the house. Indeed Colles had dealings with many prominent Kilkenny figures through his links with the corporation, the linen trade and the Nore navigation, as noted in previous chapters. Castle Blunden, built around 1750 for the Blunden family who were linked to Matthews through marriage, exhibits 'finely carved detailing on its County Kilkenny limestone window sills and doorcase.'⁴⁹⁰ Larger houses in the county such as Mount Juliet, completed between 1768 and 1771, exhibit elements of dressed Kilkenny limestone. As Colles appears to have had something of a monopoly in Kilkenny regarding building stone and, considering his network of contacts, it is highly likely that the Marble Works supplied most, if not all, of the limestone for these Kilkenny houses. But the firm supplied stone to surrounding counties also, one such county being Queen's County. After the death of William Colles in 1770, his son, William of Millmount, became proprietor of the Kilkenny Marble Works. In August 1772 young William entered into a contract to execute the entire stonecutter's work for Lord Knapton's new house at Abbeyleix. (Appendix B)

⁴⁹⁰ National Inventory of Architectural Heritage, *An Introduction to the Architectural Heritage of County Kilkenny*, Dublin, 2006, p. 20.

Abbeyleix House was designed by James Wyatt for the second Lord Knapton, Thomas Vesey, and building began in 1773, as noted on the foundation stone.⁴⁹¹ The three storey, seven bay house has been remodelled a number of times since the 1770s. The contract drawn up between Colles and Knapton reveals a number of interesting points, one of which is that, should Colles be held up due to the lack of stone, Knapton was responsible for the procurement of this stone ‘at his own Expence of Quarrying Raising & Loading & Drawing the Stones from the Quarry to the sd Intended House.’⁴⁹² Which quarry the stone was to be obtained from is not mentioned, but Ballyragget lies only ten miles south of Abbeyleix and the quarry at Freshford only another five miles beyond that again; could either of these have been the source of the stone? Once again, this highlights the problems encountered in identifying the source of stone.

Another stipulation in the contract was for Knapton to cover the ‘Expence of Scaffolding & Labourers to raise such Cutt Stones on the Walls In a Convenient Manner for the sd Wm Colles to sett.’ The onus was on Knapton to provide the means for Colles to set the stone in place. It appears to have been a standard condition in such contracts for the owner to supply and pay for the scaffolding and the labour as noted above when Alderman William Colles informed Viscount Mountgarret that the bill for scaffolding ‘is always ffound by the Employer.’ We have also met with this in the previous chapter when Colles informed Sir William Evans Morres that he would erect scaffolding for work on the Tholsel, but he was not willing to source it or the labourers required to carry out the work.

William Colles was also involved in the construction of many town houses in Kilkenny city during the mid eighteenth century. One such dwelling being his own house. Colles built Nos. 7 and 8 Patrick Street in the city in 1759. No. 8, (Fig.6.13) now known as ‘Colles House’, is a three-storey, two-bay house, the stone surround of the entrance door featuring large stone lintels of unpolished Kilkenny marble. The chamfered marble blocks display a delicate use of the chisel to enhance the aesthetic appearance of the entrance and also act as practical means of assisting the drainage of rain water from the building’s façade. (Fig.6.14) This house is now used as a medical surgery and, due to renovations carried out for this purpose, the interior contains none

⁴⁹¹ David J. Griffin, ‘Country Houses of County Laois’, in Pdraig G. Lane and William Nolan (eds.), *Laois – History and Society*, Dublin, 1999, p. 565.

⁴⁹² NLI, De Vesce Papers MS 38,910, Agreem^t. Between Lord Knapton & William Colles for the StoneCutting Work for sd. Lord Knaptons house ye 4 Augt. 1772.

of the building's original features, although the windows retain their glazing bars and the iron lamp holder above the door is an original feature. Both houses are likely to be those mentioned in a memorial of an indented deed dated 1778, wherein William Colles of Millmount rented out '2 houses situate lying & being in Patrick St.'⁴⁹³ Other deeds examined show that Alderman William Colles built a number of buildings in different locations in Kilkenny city.

We have seen how Colles may have been involved in the construction of Bonnetstown Hall for Samuel Matthews, but Colles also set newly constructed buildings in the city to Matthews in 1755. The memorial of a deed, dated 27 January 1755, records that 'the stable & coach house lately built by Colles on part of the grounds whereon ye Malthouse lately stood' was rented to Matthews for ten shillings per annum.⁴⁹⁴ On the same day a further memorial records that 'a new house lately built by Colles in Coal Market, Kilkenny bounded on West by street called Coal Market & and on South by house lately built by Colles' was also set to Matthews.⁴⁹⁵ Coal Market was the former name of Parliament St. which now forms part of the city's main thoroughfare.

There is also another deed regarding the renting of a property described as 'the new built messuage tenem^t or dwelling house situate in Patrick St' belonging to Colles.⁴⁹⁶ The occupier of this property, Mr. Fleming, his family and servants were granted permission to use 'the pump now erected on the ground of said Colles' for an annual rental of £12. It appears that Colles had designed his own water supply for this property, no doubt using his own marble pipes in doing so.

William Colles had property in Dublin which he rented out also. A parcel of land on the north side of Strand St. in Dublin was mortgaged to Henry Betagh in 1762. This land was formerly let to John Colles by Sir Humphrey Jervis in 1684 and the deed of mortgage between William Colles and Betagh mentions 'houses buildings and improvements made' on this land.⁴⁹⁷ It is quite possible that Colles carried out the building of the houses and the improvements made on this land. After Colles's death in 1770, the administrators of his will, sons William and Richard, set about sorting out

⁴⁹³ RD, Memorial of indented deed of annuity or rent charge dated 16 Oct. 1778, Colles to Young, 320/432/219498.

⁴⁹⁴ RD, Registered 27 Jan. 1755, Colles to Matthews, 175/13/115916.

⁴⁹⁵ RD, Registered 27 Jan. 1755, Colles to Matthews, 172/213/115915.

⁴⁹⁶ RD, Registered 10 Nov. 1759, Colles to Fleming, 202/224/133816.

⁴⁹⁷ RD, Registered 3 Jan. 1763, Colles to Betagh, 225/25/144946.

their father's property. According to an indented deed between the sons and their cousin Christopher James, William Colles possessed four houses in Patrick St. in Kilkenny along with property in New St. in the city. The property in Strand St. in Dublin is not mentioned for some reason, but 'other houses in Drumcondra Lane...and one other house in ?tre Street in Dublin' are noted.⁴⁹⁸ The properties in Kilkenny were built by Colles, but whether he built the properties in Dublin is not known, but if he did it appears that they and the Kilkenny houses were for rental rather than selling purposes.

The majority, if not all, of the houses constructed in eighteenth-century Kilkenny city are decorated with quoins, steps, door cases and window sills of Kilkenny marble. Colles may not have built them all, but his marble mills supplied some wonderful decorative features that still impress today. A fine example of quality stonework using Kilkenny marble can be seen on Nos. 88 and 89 John's St. Lower, better known as 'The Bridge House'. Marble steps lead up to a double doorcase, an unusual local motif, consisting of two engaged Tuscan columns supporting a double fanlight. (Fig.6.15) A similar design is also found on Parliament St. and John St. in the city. In complete contrast to the more delicate architectural style of these doorcases, the Bishop's Palace, now the headquarters of the Heritage Council, has its doorcase of Kilkenny marble modelled in the robust Gibbsian style. (Fig.6.16) The chimneypieces within the palace are worth a mention at this point. Almost all the chimneypieces are carved from Kilkenny marble, but a number of them contain inserts made from flagstone.⁴⁹⁹ (Fig.6.17) Flagstone, like limestone, is a sedimentary stone, but of inferior quality. It can be split into layers along bedding planes with relative ease. The stone is removed from the quarries in large flat slabs ideal for flagging, hence the name. It forms a large part of the geological landscape surrounding the Castlecomer coalfields, in an area of transition from the limestone beds to those of coal. This flagstone was, most likely, that which William Colles was quarrying in Shankill, as mentioned in the Physico-Historical Society papers examined in Chapter Two. The skill of the stonecutter is evident in the detailed carving on the flagstone.

⁴⁹⁸ RD, Registered 16 Mar. 1774, Colles to James, 303/19/199753. It is impossible to figure out from the memorial the name of this Dublin street.

⁴⁹⁹ These chimneypieces were examined in the company of Donal McDonald, stonecutter. His examination of the inserts confirmed that they were made of flagstone. As the Physico-Historical Society papers state that Colles was occupier of the flagstone quarries at Shankill, Co. Kilkenny during the 1740s, it would be safe to assume that Shankill was the source for the stone for these insert.

Renovations carried out on older houses in the county during the eighteenth century also have architectural elements of Kilkenny marble on their façades. One example is Castlefield House near the village of Dungarvan, approximately seven miles south east of Kilkenny city. A house has stood here since Elizabethan times, but is indiscernible now due to Gothic renovations carried out in the 1820s. Still to be found in this house are elements of its eighteenth-century incarnation. The portico is carved from Kilkenny marble (Fig.6.18). An awkward structure, incorporating Tuscan columns with carved garlands and cornucopias, this portico is incongruous with the later Gothic restructuring. Castlefield's interior has some fine examples of Kilkenny marble chimneypieces, one being a 'keyhole' style chimneypiece, so called due to the shape of the grate which was designed specifically for the burning of coal.⁵⁰⁰ (Fig.6.19) This particular piece is not unlike the Kilkenny marble chimneypiece portrayed in a painting in the collection of the National Gallery of Ireland, *An Interior with Members of a Family* attributed to Strickland Lowry. (Fig.6.20) Painted during the 1770s, this painting shows a wealthy Irish family surrounded by the latest taste in interior decorative features. This was the type of clientele William Colles targeted in his advertisements in *Faulkner's Dublin Journal* in 1734 and almost half a century later the Kilkenny marble chimneypiece is portrayed as still being in fashion and one of the preferred marbles for the discerning wealthy classes. The monumental Kilkenny marble chimneypieces of Pearce, Castle and Bindon were, by the latter half of the eighteenth century, unfashionable. The Colles family could rapidly adapt to changing tastes, the neater, smaller chimneypieces were very popular for townhouses and bedrooms of the larger houses, as were the neo-classical chimneypieces made from Italian marbles, many of which were manufactured and sold by the Kilkenny Marble Works.

The marble of the doorcase of Castlefield House is very similar in appearance to that in the doorcase of Glin Castle in County Limerick, although the stonework carried out here is far superior to the work executed at Castlefield. (Fig.6.21) Like Castlefield House, Glin has gone through many modifications in its long history. The doorcase would have been part of the work carried out on the building during the 1780s. The present Knight of Glin is of the opinion that the stone used in the doorcase is Kilkenny

⁵⁰⁰ Bowen's Court in Co. Cork also had such a Kilkenny marble chimneypiece in the dining room, indicating how widespread these chimneypieces were. See Maurice Craig, *Classic Irish Houses of the Middle Size*, Dublin, 2006, p. 174, for an image of this chimneypiece.

marble and he may be correct in this. The stone contains fossils that resemble those found in the Kilkenny stone to a remarkable degree. The limestone itself appears paler than that of Kilkenny, but as the building's façade is exposed to the onshore winds emanating from the open expanse of the Shannon estuary, the salty weathering of the stone would be greatly dissimilar to that of a more sheltered structure placed far inland.

Kilkenny marble had already been used in Limerick, as noted on the Custom House in the city. As Christopher Colles was involved in the building the Custom House, we can deduce that it was he who arranged for the stone to be delivered from Kilkenny, but how the stone was sent to Glin is unclear. We do know that marble was shipped to Cork by sea, as mentioned below, therefore it is quite possible that the marble was delivered further up the coast to Limerick, stopping at Glin on the way. The work carried out at Glin during the 1780s would have been after the departure of Christopher Colles for America in 1771. It is possible that, during his stay in Limerick, Christopher had set up a network, or agent, to supply Limerick with Kilkenny marble, but there is no clear evidence of this. There is however, evidence to show that he was involved in supplying Kilkenny marble chimneypieces to various wealthy clients in Limerick city whilst employed by Davis Dukart on the Custom House and later during his time working on the Shannon navigation. It is worth examining in some detail the role played by Christopher in his uncle's business.

During his time in Limerick Christopher corresponded with his uncle William in Kilkenny on many occasions. William took Christopher into his care following the death of his father Richard in Dublin in 1749 when Christopher was ten years old. In a letter written to his sister following the death of Richard, William asked that Christopher be sent to him in Kilkenny where 'he shall be taken proper care of and kept constantly to school.'⁵⁰¹ In order to ensure that Christopher had a good education, William enrolled him in the Quaker School in Ballitore, Co. Kildare.⁵⁰² William must have seen something of his own inquisitive spirit in his young nephew and, as he was older than William's own sons, he probably saw Christopher as a reliable manager of the family business, at least until his own sons came of age. We learn more about Christopher's early years from his correspondence that makes up part of the Colles

⁵⁰¹ RCJ, Box 6, file 202, William Colles to Hannah Clenaghan, 24 April 1750.

⁵⁰² Mary Leadbeater, *Leadbeater Papers*, London, 1998, reprint of 1862 edition, Appendix, p. vii-viii. Christopher enrolled on 7 January 1753, his cousin William (of Millmount) enrolled four years later on 5 April 1757.

Johnson papers in the Newberry Library in Chicago. His first letter, sent from Ballitore in 1754, informs his uncle that he has ‘learnt Arithmetich [sic], Mensuration, & Trigonometry, and am now proceeding on with pleasure & profit in Geometry.’⁵⁰³ (Fig.6.22) These were all subjects which would be of great benefit to this young man as he set out in the world. Christopher wished to discuss with his uncle at their next meeting ‘about my going Apprentice, & what Business you wou’d Judge most proper for me.’ It is evident in a letter written four years later that, on leaving Ballitore, Christopher was employed by his uncle in the family business in Kilkenny.⁵⁰⁴

In February 1758 Christopher wrote to his uncle in Dublin. William was staying with his brother Barry on Stephen’s Green at this time. From the contents of the letter it would seem that William had left Christopher in charge of the Black Quarry and the Marble Works while he was in Dublin. Christopher relayed his concerns regarding an order for stone to build a wall across some land, Christopher not being willing to allow this to be done until William gave his permission. He also requested that William send putty from Dublin for use in the marble mills ‘for there is none to be had in this Town.’⁵⁰⁵

As already noted in Chapter Three, Christopher was appointed to the position of pay-clerk on the Nore navigation in 1761, on the surety of his uncle to the tune of £500 and the recommendation of Richard Pockocke.⁵⁰⁶ He appears to have carried out his duties on the navigation with some diligence until, in November 1762. William, in a letter to his daughter Hannah in Dublin, informed her that Christopher had set up a business in Kilkenny as a ‘stone-blue maker’ to manufacture dye.⁵⁰⁷ William voiced his concerns as to the success of this venture, ‘He neither advised with me...on this project...which I am very apprehensive will at last bring him to destruction.’ Christopher had a partner in this venture, an ex-soldier, whom Christopher had ‘either bought out, or by the bishop’s influence’ got released from service. This would indicate

⁵⁰³ RCJ, Box 7, file 1, Christopher Colles to William Colles 20 February 1754.

⁵⁰⁴ The information discussed here is in relation to Christopher Colles’s involvement in matters relating to the Kilkenny Marble Works and the Colles family. For more detail on his association with Davis Ducart and his work in Limerick see Judith Hill, ‘Davis Ducart and Christopher Colles: architects associated with the Custom House at Limerick’, *Irish Architectural and Decorative Studies*, Vol. II, 1999, pp. 118-145 and John Logan, ‘The Irish Career of Davis Ducart’, in *Irish Architectural and Decorative Studies*, Vol. X, 2007, pp. 34-89.

⁵⁰⁵ RCJ, Box 7, file 2, Christopher Colles to William Colles, 8 February 1758.

⁵⁰⁶ Christopher J. Colles, ‘Ancestry of Christopher Colles in Ireland’, *The Journal of the American Irish Historical Society 1930-31*, vol. xxix, New York City, 1931, p. 69.

⁵⁰⁷ *Ibid.*

that Christopher had a close relationship with Pococke. There is a definite tone of exasperation in this letter; William's patience was waning.

During his brief involvement in the dye trade, Christopher married a daughter of the woman from whom he was renting his business premises. With a wife and the arrival of children it was imperative that Christopher found proper employment as, it would appear from William's letters, he was no longer working for his uncle and his new business was foundering. It was up to William to help his mercurial nephew find some stability in life.

By August 1766 William had successfully approached Davis Dukart to take Christopher into his employment. Writing again to his daughter Hannah in Dublin, William states that Christopher's affairs in Kilkenny were 'in a desperate way,' but he got Christopher 'into an employment under one Mr. Dukart, an engineer, in which if he behaves with care I doubt not but he will do very well.'⁵⁰⁸ William informs his daughter that Dukart liked Christopher 'very much' and trusted him to 'conduct the building of the Custom House in Limerick' during his absences from the city. Christopher must have shown some initiative to be left in charge of such an important project so soon after gaining his position of employment. However, less than six months later, William was compelled to write to Christopher in Limerick after being paid a visit in Kilkenny by Dukart. Apparently Christopher had taken over the occupancy of a quarry in Limerick in order to supply stone to individuals on a private commercial basis. Dukart relayed his fears for such an enterprise to William and requested that he, William, should write to Christopher to dissuade him from this venture. William duly complied with Dukart's request and wrote the following letter to Christopher on 17 January 1767:

Mr. Dukart has been in Kilkenny, and has asked me to write to you. He tells me you have taken a quarry, and employed men for the purpose of dressing and disposing of the stones, which he thinks will not be profitable for you. I know how disagreeable it is to give advice unasked, but my love for you, and desire for your success in the world makes me write this to you to press you to consider seriously whether any business you can engage in at Limerick will be more certain than your employment under Mr. Dukart at present, and the prospect of

⁵⁰⁸ PRIM, William Colles to Hannah James, 27 August 1766.

what he may promote you to in the future, which he seems to have much at heart, and expresses great friendship for you.⁵⁰⁹

What is evident in this letter is the affection William has for his nephew and it also appears that Dukart has much faith in the young man's ability and is willing to keep him in his employment, despite his dalliance in the quarry business. This letter also gives us another insight into the flighty character of Christopher, something that was to plague him most his life, as he flitted from one project, or scheme, to another, the majority of which were never brought to conclusion.

There is another interesting piece of information in this letter. William Colles states that Dukart had visited him in Kilkenny. It would seem a long distance to travel from Limerick to Kilkenny just to discuss Christopher's ill-advised business venture, something which could so easily have been done in a letter, but Dukart had another reason to visit Kilkenny and Colles in particular. Dukart was returning to Tyrone and visited Kilkenny on his way there. Busily engaged on the navigation works for the Tyrone coalfields, Dukart also had a project underway at the same time in Kilkenny, this being the construction of Castletown Cox.

The building of Castletown Cox began in 1767. Built for Michael Cox, Archbishop of Cashel, the house is 'what many consider to be Ireland's most beautiful house' and also Dukart's 'most important country house.'⁵¹⁰ The house is faced with dressed sandstone and unpolished Kilkenny marble, this marble forming the giant fluted Composite pilasters on the façade. The entrance hall has a screen of monolithic fluted Corinthian columns again made of unpolished Kilkenny marble, similar to what was in Bessborough. Dukart's visit to William Colles could have included discussions on the stonework required for the house, but no evidence of this has come to light to date.⁵¹¹

Christopher wrote back to his uncle on 25 January informing him that 'I shall loose no time in withdrawing myself from these things I am engaged in since tis not agreeable to Mr. Dukart.'⁵¹² Thanking his uncle for his 'kind & affectionate advise [sic]' Christopher ensures that he will 'make what haste I can with the building' [Custom

⁵⁰⁹ Christopher J. Colles, (see note 503), p. 70.

⁵¹⁰ The Knight of Glin, 'The Last Palladian in Ireland: The Architecture of Davis Duckart-II', *Country Life*, Oct. 5th 1967, vol. cxlii, p. 798.

⁵¹¹ John Logan, 'The Irish Career of Davis Dukart', *Irish Architectural and Decorative Studies*, vol. x, 2007, pp. 53-54. William Colles, we may assume, supplied the marble for the house and this was probably his only involvement here. Logan's recent article notes that the resident builder at Castletown was John Nowlan and there is no mention of the Colles name in relation to the building of the house.

⁵¹² RCJ, Box 7, file 9, Christopher Colles to William Colles, 25 January 1767.

House] as Dukart proposes to ‘remove me to the North.’ It would seem that Dukart was willing to bring Christopher north to work on the Tyrone navigation.

In another letter written to his uncle in January 1767 he relays the news that he cannot get money that is owed to William by Mr. Shepherd. This may have been for a chimneypiece or some such item that had been delivered to Limerick and Christopher was to have collected the payment for his uncle. He informs William that Dukart is lodging at ‘Mr Anthony’s Grocer in College Green Dublin’ if he wishes to write to him.⁵¹³

The following month Dukart has returned to the north of the country as William writes to him at Dungannon updating him on events:

I wrote to Kit Colles as promised, and received from him a very satisfactory answer, that he would throw aside all projects and undertakings, and give up his whole time and attention to your business, which I hope will turn out to both his advantage and yours. His wife is gone to him to Limerick a few days ago.⁵¹⁴

The presence of Christopher’s wife seems to have brought about some stability to the young man. In August 1769 we find him issuing *Proposals for publishing an accurate plan of the City and Suburbs of Limerick...* as part of the development in the city which was to be called Newtown Pery.⁵¹⁵ By Christmas 1769 Christopher and family were living at Gilloge, County Limerick. Working now on the Shannon navigation, Christopher still found time for business relating to the Marble Works. Writing to his cousin Billy (William of Millmount), he thanks him for the delivery of marble and hones sent from Kilkenny. He appears to have been working in partnership with a man named Bennis. He inquires about the completion of a polishing engine at the marble mills which William was working on. Christopher was busying himself with this marble delivery as ‘Our Navigation works are now at a stand till the days grow longer Dukart & his schemes are quite laid aside.’⁵¹⁶ Christopher’s next letter written to his cousin on 31 March 1770 was to commiserate with him on the death of his father, William Colles of Abbeyvale.

⁵¹³ Ibid., Christopher Colles to William Colles, 15 January 1767.

⁵¹⁴ Christopher J. Colles, (see note 503), p. 70.

⁵¹⁵ Logan, (see note 511), pp. 45-48.

⁵¹⁶ RCJ, Box 7, file 11, Christopher Colles to William Colles (of Millmount), 23 December 1769.

In September 1770 Christopher wrote to his cousin William of Millmount, informing him that he was so busy with work that he was 'sometimes hard set for time to eat my victuals.'⁵¹⁷ He was having problems with his business partner, noting 'as to the Marble Work here Mr. Bennis & I are upon a separation about it.' Christopher wished to buy him out of the business, but Bennis would not agree to this. This partnership must have dissolved shortly after as, by November, Christopher writes that he is 'once more a Broken Merchant being almost out of Business as the Gentlemen of the Navigation have given me notice.' His position was terminated through no fault of his own, his salary was thought to be too large.⁵¹⁸ He has been assured that the Navigation Board will provide him with certificates as proof of his abilities and good behaviour. He is hoping to be recommended to the Navigation Board in Dublin, but failing this, he is considering emigrating to America. On this letter are a number of additions referring to chimneypieces, the handwriting appears to be different from the handwriting of Christopher which would indicate that this writing was from the hand of the recipient of the letter, William Colles of Millmount. A large marble chimneypiece was sent to Mr. Rossiter, a merchant at Ross [New Ross]. The chimneypiece for Mr. Philip Stackpole was to have a flag hearth at a cost of £5-10-5, but a marble hearth was used instead which added a further £1-19-5. There is also mention in this same order of a mantelpiece sent as a replacement for one which was broken in Cork. It appears that this order was being shipped to Cork through the port of New Ross, another indication of how the marble was transported around the country. If the marble was being dispatched to Cork by this route, then it is very likely that it was carried by ship further up the coast to Limerick, as suggested above.

Christopher mentions further orders for chimneypieces in a letter sent from Limerick almost two weeks later. There are problems with payments for the carriage of the chimneypieces. Mr. James Brown refuses to pay the carriage because 'Mr Ed Wright who had some Chimneypieces from you did not pay for the Carriage' and there were several faults with the chimneypiece.⁵¹⁹ The following month Christopher informs Billy (William of Millmount) that he has measurements for '7 Chimney pieces which are wanting in this town [Limerick] which I beg you may forward here as soon as

⁵¹⁷ Ibid., Box 7, file 13, Christopher Colles to William Colles (of Millmount), 10 September 1770.

⁵¹⁸ Ibid., Box 7, file 14, Christopher Colles to William (of Millmount), 3 November 1770.

⁵¹⁹ Ibid., Box 7, file 15, Christopher Colles to William (of Millmount), 15 November 1770.

possible.⁵²⁰ He is still without work, but by February he informs his cousin that ‘I am at present drawing Plans &c for our new Bishop who intends to lay out 5 or 6 Thousand pounds for a See House...I will superintend his work at the rate of 5 p Cent.’⁵²¹ The present four-bay, three-storey house has a Kilkenny marble doorcase, further indication that the marble was used in Limerick.⁵²² Christopher now saw himself as an architect, as noted in Chapter Five, to judge from the list of subscribers to Ferrar’s *An History of the City of Limerick* and in this role he asked William to recommend him to any gentlemen ‘near you or with your Influence’ who may wish to begin building. He says his rate is 6% for costs under £3,000. He says that he is angry with himself for not ‘pushing for buildings &c while I was in the navigation,’ but that he will now provide plans and proposals to any gentleman ‘who I hear intends Building.’ By March Christopher was still ‘up & down striving for Business’ with little success.⁵²³

In May 1771, Christopher wrote to William in response to a request for advice regarding William’s new house that was under construction at the time. This house, named Millmount, is believed to have been built sometime around 1770, although no definite date exists for its construction. This letter confirms that the house was well under way at this time. William’s question was in relation to external plasterwork on the house. In reply Christopher advises ‘As to the Plaister work in imitation of Brick work I do not know.’⁵²⁴ This plaster is made up by ‘several Stucco men? & Plaisterers but I do not approve of it for your house.’ He is unsure if the plaster would stand up to the elements ‘in so open an Expanse as yours’, therefore, he recommends that it would be better if the exterior was ‘well rough cast with good course rough cast well tempered which we are sure will stand well & be much cheaper.’

Millmount is an ‘exceptionally formal house for its size.’⁵²⁵ Built on high ground overlooking the Nore at Maddoxtown, the house has a full basement, but, due to the fall in ground, the western side of the basement is fully above ground. (Fig.6.23) As noted previously, Alderman William Colles’s house, Abbeyvale, was prone to flooding, which suggests that it was located on lower ground close to the river. The exact location of

⁵²⁰ Ibid., Box 7, file 16, Christopher Colles to William (of Millmount), ? December 1770.

⁵²¹ Ibid., Box 7, file 17, Christopher Colles to William (of Millmount), 14 February 1771.

⁵²² Judith Hill, ‘Davis Ducart and Christopher Colles: architects associated with the Custom House at Limerick’, *Irish Architectural and Decorative Studies*, Vol. II, p. 129. Hill suggests that the current See House may have been built by the succeeding bishop, Rev. William Cecil Pery, who was bishop from 1784-94, long after Christopher Colles had emigrated to America.

⁵²³ RCJ, Box 7, file 18, Anne Colles [Christopher’s wife] to William Colles, 1 March 1771.

⁵²⁴ Ibid., Box 7, file 26, Christopher Colles to William Colles, 3 May 1771.

⁵²⁵ Maurice Craig, *Classic Irish Houses of the Middle Size*, Dublin, 2006, p. 148.

Abbeyvale is unknown, but it is likely that it was attached to, or very near the mills on the river bank. William of Millmount ensured that his house would not suffer the same fate as his father's and chose to position his on the elevated roadside overlooking the river and his marble and flour mills. Could Christopher have been the designer of this house? It is possible that he may have supplied the design. If he asked William to recommend him to anyone considering building a new house, surely, one would think, his cousin would have been one of the first to have commissioned a design from him.

Family records indicate that Christopher and his family left Cork for Philadelphia on, or about, 25 May 1771, but in his final letter to his cousin, he states that he had to change his plans. On 24 May 1771 Christopher wrote that he and his family had now booked their passage on the *Duke of York*, bound for Baltimore and due to sail on 1 June.⁵²⁶ Even at this stage Christopher took it upon himself to inform William of an order for Kilkenny marble. The Colles's were staying with Arthur St. Clare in Cork and blocks of the marble had been sent to his nephew. One block had a joint running through its middle. These blocks were numbered and Christopher could tell William that the damaged block was 'No. 9 — 3-10 by 1-8 by 1-4 = £8-6s-2d.' This gives us some idea of the pricing of marble blocks at the time. Asking William to make an allowance for this block, Christopher goes on to state that St. Clare wants 'some jamb Blocks & a Broad one for Hearths.' Thus ends Christopher Colles's association with the Kilkenny Marble Works. Christopher and his family left Ireland in June 1771, settling first in Philadelphia where, in 1772, he gave public lectures on pneumatics with the aid of an air pump of his own invention. In 1773 he was in New York lecturing on the advantages of lock navigation. Ten years later Christopher made a proposal to George Washington to make part of the Ohio river navigable which would be of 'considerable utility to the United States.'⁵²⁷ Informing Washington that he had much experience in this field, he wrote 'I have made Inland Navigation, & other branches of Civil Engineering my study, & executed some works in Ireland with success.' Unfortunately for him Washington could only agree with him in sentiment, but 'nothing can be attempted in the Works you project, so long as the War continues.'⁵²⁸ Christopher

⁵²⁶ RCJ, Box 7, file 29, Christopher Colles to William Colles, 24 May 1771.

⁵²⁷ George Washington Papers at the Library of Congress, 1741-1799: Series 4. General Correspondence. 1697-1799, Christopher Colles to George Washington, January 17, 1783, (<http://memory.loc.gov/cgi-bin/ampage?collId=mgw4&fileName=gwpage089.db&recNum=1048>), (accessed 7 February 2011).

⁵²⁸ *Ibid.*, George Washington to Christopher Colles, January 25, 1783, (<http://memory.loc.gov/cgi-bin/ampage?collId=mgw4&fileName=gwpage090.db&recNum=80>), (accessed 7 February 2011).

exaggerated his role in the Nore and Shannon navigation schemes, the former could not be regarded as a 'success' by any stretch of the imagination, but he was willing to utilise the knowledge he gained working with his uncle William on the Nore navigation, coupled with that working on the Shannon navigation, to assist in the improvement of his new homeland in true Colles spirit.

Kilkenny marble was a desirable commodity and suitable for such diverse objects as chimneypieces and memorials, one bringing warmth to the living, the other representing the coldness of death. William Colles of Abbeyvale succeeded in supplying the market with such a quality product that the best architects, sculptors and craftsmen working in Ireland chose it to adorn the interiors and exteriors of cathedrals, churches and some of the most important private buildings of the period. Colles assisted the many gentlemen, politicians and clergymen as they set out in their quest to join in the spirit of improvement and modernisation that pervaded the nation. Not only did he succeed in this, but he ensured that his ethos of constant improvement and quality was firmly instilled in future generations of the Colles family at home and abroad.

Chapter Seven.

The Kilkenny Marble Works: Innovation, Competition, Expansion and Decline.

So far we have examined how the Colles family and the Kilkenny Marble Works were to the forefront of the marble trade in this country during the eighteenth and early nineteenth centuries. After the death of the company's founder William Colles in 1770, the business was ably carried on by his son William until his untimely death in 1779. William's widow, Mary Anne Colles valiantly continued with the business until about 1795. It is safe to assume that it was during the tenure of Mary Anne Colles that the Kilkenny Marble Works discontinued its involvement in supplying the construction trade with stone and concentrated on the production of chimneypieces and smaller decorative marble features. This would have been an opportune time to sell the business and leave the marble trade to others. Mary Anne struggled to keep the business afloat and her two eldest sons had no desire to run the business, as noted in Chapter One. It was left to her third son Richard to set about building up the business again, ensuring the Kilkenny Marble Works remained a successful operation and in the control of successive generations of the Colles family right up to the 1920s. The Kilkenny Marble Works had much competition in the marble trade, especially during the nineteenth century, therefore it is important to examine how the business was constantly adapted and reinvented by the Colles family in an effort to maintain its edge over its competitors. But first let us look at what competition William of Abbeyvale faced during his tenure of the Kilkenny Marble Works.

William Colles of Abbeyvale was not the only person to have used water powered machinery for producing works of marble during the eighteenth century. Nearly twenty years after setting up his marble mills in Kilkenny, an almost identical industry, utilising the same technology, was in operation in England, producing decorative articles from black marble; the Kilkenny Marble Works now had competition.

The main area for the production of black marble in Britain during the eighteenth and nineteenth centuries was Derbyshire. The carboniferous limestone beds of the Peak District contain thinly bedded, dark, fine-grained limestone. One group of these beds however, was consistently fine and even-grained and were known as the Black Marble Beds and they formed the basis of an industry that eventually died out in the early twentieth century. The Derbyshire black marble was extracted from a number of

deposits in the area just to the west of the village of Ashford-in-the-Water. This village is located on the banks of the River Wye and it was here in 1748 that Henry Watson was credited with inventing an ingenious method for sawing and polishing marble by water driven machinery powered by the Wye.⁵²⁹ Watson took out a patent for a complex series of three waterwheels that powered the machinery for sawing marble blocks into slabs which were then used for a variety of items such as chimneypieces, table tops, floor panels and funerary monuments. The waterwheels were also used to power lathes for turning pillars, table legs and various smaller items such as vases, tazzas etc.⁵³⁰ The use of lathes for working the stone would suggest that this would have been the most likely method used by William Colles to bore the marble water pipes, described previously, at the Kilkenny Marble Works. In 1802 Watson's machinery was regarded as 'the first of the kind ever established in Great Britain,'⁵³¹ but, as we shall see, this industry was set up in the same manner as William Colles's mills were almost twenty years earlier.

The earliest recorded use of the Derbyshire marble was in about 1590 when it was used for chimneypieces at Hardwick Hall. The marble was produced mainly by underground mining methods, but in the earlier period it was quarried. The quarries, mines and marble mills were on the estates of the Dukes of Devonshire and the marble was used extensively in the family's country seat, Chatsworth House. Much of the stone carving at Chatsworth was executed by Samuel Watson and his son and it was this business that Henry, Samuel's grandson (or possibly great-nephew) inherited around 1740. It is believed that Watson purchased an existing marble works in 1742 and six years later he had his marble mills in production.

The stone mined and quarried in Derbyshire was carboniferous limestone, but was marketed as marble, just as it was in Kilkenny. The main objective in the mining process was to remove the largest marble blocks possible which were about four feet square and one foot thick. The larger pieces were used in the manufacture of table tops and chimneypieces, while the smaller stone was used to manufacture smaller items such as vases etc. The beds of marble worked were about seven feet high and as the tunnel

⁵²⁹ John Michael Tomlinson, *Derbyshire Black Marble*, Peak District Mines Historical Society, 1996, p. 11.

⁵³⁰ Trevor D. Ford, 'The inlaid black marble of Ashford-in-the-Water, Derbyshire', *Geology Today*, July-August, 1997, p. 144.

⁵³¹ John Britton and Edward Wedlake Brayley, *The Beauties of England and Wales: or Delineations, topographical, historical, and descriptive, of each County*, London, 1802, vol. iii, p. 484.

face advanced, waste rock and inferior blocks of marble were used as pillars to support the roof. Such working conditions contrasted greatly with those of the Black Quarry in Kilkenny. The volume of marble removed from the Black Quarry would have been much greater than that at Ashford. We know from Pococke's description that large blocks, upwards of fourteen feet in length, could be removed from the quarry face in Kilkenny without fear of the collapse of the surrounding beds, but this could not be done in an underground environment. Underground mining must take into account many factors that are not associated with an open quarry. To remove such large blocks from underground beds could lead to the destabilisation of the rock above and to the sides, causing damage to the quality beds and possibly causing the roof to collapse. The limit on the height and width of the quarry face is governed by the quality of the stone in the face; the same does not apply to the underground mine, the wider the expanse, the greater the chances are of roof failure. Underground mining and architecture are similar in many aspects. Pillars, arches, spans and load-bearing beams for the correct distribution of weight and stress are just some of the features that are essential to both disciplines; an underground void, just like a building, must be properly designed and supported to ensure it does not collapse.

The best beds of marble were highly sought after in Ashford, just as they were in Kilkenny. Many of the beds contained the fossilised remains of crinoids, corals and brachiopods. Kilkenny marble also contains such fossils, but this is where the similarities end. The appearance of the fossils differs greatly in both limestone formations as they are more abundant and compacted in the Derbyshire marble. (Figs.7.1 & 7.2) The highest quality beds in Ashford were those that were 'largely free of fossils and chert nodules, and free of microscopic blebs [blisters] of quartz' which would have caused difficulties in the polishing process.⁵³² The cherts and blebs were geological elements that made the stone more difficult to work with and were aesthetically less desirable. Another author described the quality marble as 'very black, and of a close and solid texture.'⁵³³ These descriptions suggest that only the pure black fossil-free beds were more valued; the beds containing fossilised sea shells and entrochites tended to take on a grey or buff colour.

⁵³² Tomlinson, *Derbyshire Black Marble*, (see note 526), p. 78.

⁵³³ James Pilkington, *A view of the present state of Derbyshire: with an account of its remarkable antiquities*, 2 vols., vol. i, London, 1789, p. 153.

While the extraction of the rock may have been different at Ashford and Kilkenny, the methods of sawing and polishing were remarkably similar. The sawing process consisted of iron plates arranged in banks of eight or ten running vertically and spaced up to 2in apart. As at Kilkenny the toothless blades were lubricated with water and fed with crushed grit to act as an abrasive. When sawing was complete, the slabs were taken to the sweeping mill. This mill was housed in a round building where large slabs were ground smooth before polishing. An account of this process in Ashford was published in 1819 and described it thus;

For this purpose a floor is made with the slabs, and others [slabs] are so fastened with chains, as to be drawn upon the floor in a circular direction, which motion, is given by means of a vertical shaft, in the centre of the building being turned by the water wheel; the slabs are then completely covered with water, and supplied with sand; by this process, the whole is brought to a level surface together.⁵³⁴

Another description of the Ashford marble works ten years later noted that this floor contained '80 superficial feet of marble.'⁵³⁵ A similar process, described in the papers of the Physico-Historical Society and described in Chapter Two, was carried out at Kilkenny where Colles's marble slabs were laid on a circular bed of sand measuring 27 feet in diameter and, by the aid of smaller slabs, were rotated by an arm passing through a shaft powered by water, being eventually rubbed level.

After the sweeping process was complete at Ashford the slabs were brought to the polishing mill and laid upon a platform. Polishing was carried out by the use of rolls of cloth placed in a wooden frame and worked in a longitudinal direction the length of the prepared slabs. This process was carried out in a very slow motion by means of a worm and crank driven by water power in order to remove any marks left by sawing, leaving the surface smooth. Similarly at Kilkenny the marble was taken to the water powered polishing mill where a hone 'being moved by ye Mills Backwards and forward the whole Length of the Marble Slabb Takes out ye Tracks of the Sand & Leaves the Marble Smooth Skin'd and Black.'⁵³⁶ The polishing processes are very similar, but we

⁵³⁴ Tomlinson, *Derbyshire Black Marble*, p.20.

⁵³⁵ Thomas Noble (ed.), *The History, Gazetteer, and Directory of the County of Derby*, Derby, 1829, p. 48.

⁵³⁶ Armagh Public Library, Topographical and Statistical Returns from Various Respondents sent to Walter Harris and the Physico Historical Society of Ireland, circa 1745.

should remember that the machinery in operation on the banks of the Nore at Maddoxtown was in production almost twenty years before Watson had set up his in Ashford.

Many of the published accounts by visitors to Kilkenny during the eighteenth century make reference to the Kilkenny Marble Works. Some, such as the two English gentlemen, writing in 1748, are very descriptive in their account of the mills the year Watson was only setting his water wheels in motion. Other accounts mention that the Kilkenny Marble Works were open to any visitor wishing to see the cutting and polishing of marble in operation. Could Watson have been a visitor at some stage, or could the workings of the mills have been relayed to him by some person who may have visited Kilkenny and subsequently reported to Watson, inspiring him to set up the same operation in Ashford? It is also possible that this information could have come from journeying stonemasons or stonecutters as they travelled the length and breadth of these isles plying their trade. Or, perhaps, Watson may have been aware of the same earlier developments in water powered saw mills, as noted in Chapter Two, and, like Colles, had developed his business aided by a quality marble supply and the power of the River Wye. The Kilkenny Marble Works had set the standard to which all other marble manufacturers aspired and tried to copy, however, there may be another link between both marble mills, albeit a very tenuous one, which should be examined at this point.

From examining the Colles family in Chapter One, we know that William's uncle Christopher was minister of the parish of Dronfield in Derbyshire. Dronfield is a little less than fourteen miles by road from Ashford and it would not be inconceivable to think that, somehow, the idea to use water as the power source to cut and polish marble made its way through family connections from Kilkenny to Ashford via Dronfield. A highly speculative assumption no doubt, but we should not underestimate the methods and speed involved in the transfer of ideas and technological developments from one place to another during the eighteenth century.

William Colles had an advantage over Henry Watson in that the Derbyshire marble could only be used for internal decorative features, whereas Colles could use the marble from the Black Quarry for both internal and external purposes. The volume of stone produced by Colles would have dwarfed that of Watson's by comparison and this was possibly one of the reasons why Watson concentrated on and specialised in, the manufacture of smaller decorative ornaments using the jet black marble of Ashford.

Watson developed a wonderful decorative effect on the black marble by inlaying it with a variety of coloured native and foreign stones. (Fig.7.3) This process of inlaying the black marble with coloured stone greatly enhanced the appeal of Derbyshire marble, especially when inlaid with the local fluorite spar known as 'Blue John' which Watson was also responsible for mining at nearby Castleton in 1765. However, the large profits expected from this business venture failed to materialise. Watson's genius for technological design and execution was not matched by his business sense, unlike William Colles who was very adept at both. The marble works at Ashford changed hands many times well into the nineteenth century with varying degrees of success and concentrating exclusively on inlaid work. The Kilkenny Marble Works on the other hand, remained at the forefront of the marble trade due to the improvements, innovations and expansions carried out by the many generations of the Colles family during their long association with the marble business in Kilkenny. This is very evident from an advertisement placed in *Finn's Leinster Journal* by Richard Colles of Riverview in 1799. Advertising a great variety of Italian and Kilkenny marble chimneypieces, both plain and speckled, along with monuments, tombstones, gate piers, doorcases etc. the notice went on to state,

The exclusive possession of Water Machinery, admirably constructed to facilitate and abridge Labour, with the command of an extensive Quarry...gives RICHARD COLLES, Proprietor of the Marble Mills, a decided advantage over every Person engaged in the Business.⁵³⁷

If Richard Colles had a 'decided advantage over every Person' involved in the marble business at the turn of the century, by the early decades of the nineteenth century he was facing increasing competition from others involved in the marble industry. This competition came not from England, but from somewhere much closer to home, the new black marble quarries of County Galway.

In 1843 George Dodd published *Days at the Factories; or the manufacturing industry of Great Britain described*. This book explains the workings of a wide variety of industries established in London during the first half of the nineteenth century. Dodd gives fascinating accounts of industries such as candle making, printing, glass making etc., but of interest to us is the account of a day spent at the London Marble and Stone

⁵³⁷ *Finn's Leinster Journal*, 19 March 1799.

Works. The introduction contains a general description of a variety of marbles, mainly Carrara marble, and the method by which it was quarried. A brief explanation is given regarding the characteristics of some unspecified coloured marble, but when it comes to black marble, Dodd singles out 'those of Ireland and of Derbyshire.'⁵³⁸ The marble delivered to the London marble yard, 'whether from Italy, from France, from Ireland, or from the northern parts of England' is in the rough state and Dodd then goes on to describe the transformation of the rough blocks into the finished works of marble that were displayed in the factory show-room. A visit to this establishment coincided with work being carried out for Hamilton Palace in Lanarkshire, Scotland. Blocks of black marble were being cut into slabs for the balustrades and landing of the staircase of the palace. These blocks were quarried in Galway.

Hamilton Palace was the seat of the Dukes of Hamilton. Originally built in 1695 the residence was almost entirely rebuilt at the beginning of the 18th century. Further work was carried out by Alexander, 10th Duke of Hamilton (1767-1852), during the 1820s and early 1830s when the house was extensively added to. It was during this period that the duke installed two colossal black marble chimneypieces and a black marble doorway in the Long Gallery of the palace. The source of the black marble is not revealed, but we do know that when further building work was carried out during the 1840s, the black Galway marble staircase manufactured by the London Marble and Stone Works was installed in the palace. A visitor to the palace in 1842 noted that 'The hall and grand staircase were being finished with black marble, of which we saw numerous columns.'⁵³⁹ The columns were all that was visible of the staircase as scaffolding was still in place indicating the installation work was still under way at this time.⁵⁴⁰

⁵³⁸ George Dodd, *Days at the Factories; or The manufacturing industry of Great Britain described, Series I.—London*, London, 1843, p. 235.

⁵³⁹ J. C. Loudon (ed.), *The Gardener's magazine and register of rural & domestic improvement*, Vol. 19, London, 1842, p. 339.

⁵⁴⁰ See the website <http://hamilton.rcahms.gov.uk/longgallery.html> (accessed 29 November 2010). It is revealed here that the 10th Duke 'developed a love - indeed, an unhealthy passion - for Irish black marble, from quarries situated near the city of Galway.' The chimneypieces in the Long Gallery were designed and executed by the architect David Hamilton and were installed in 1830. It is noted here that later orders for major items in black marble were placed with the London Marble & Stone Working Company, which 'was able to obtain top-quality Irish black marble in abundance.' David Hamilton supplied designs to the London company for further Galway marble chimneypieces for the entrance hall and the parts were 'shipped up to Hamilton (via Leith and Port Dundas) between 1840 and 1845, at a total cost of over £9,000.' Dodd notes in his article that smaller sawn slabs of marble were ideally suited for items such as chimneypieces.

The factory yard in London contained large blocks of marble, some of which were in the rough state 'either merely trimmed with the chisel or rudely sawn into thick slabs.'⁵⁴¹ Amongst this marble were blocks of black marble from Ireland, measuring approximately thirteen feet by eleven. To the left of this yard was another yard in which were placed sawn slabs of marble an inch or so in thickness. These slabs were deposited here until required for further processing which was carried out in a building adjacent to this yard.

Dodd gives a detailed description of the sawing process and it differs very little from Colles's method of over a century before. Sand and water, acting as abrasive and lubricant, were directed into the saw cuts on the marble, the saw-frame was then set into reciprocating horizontal motion by means of a steam-engine, as opposed to a water wheel. There were four such machines in operation at this time, all connected by rods to the shaft of the steam-engine. (Fig.7.4) The only real difference with the saws in London and those operating for over a hundred years at Kilkenny was the power supply.

Dodd's article reveals a little information about the Galway marble which gives rise to some questions concerning the working of the marble before it was shipped to London. He noted that many of the blocks of Galway marble were of such a large size that 'the sawing-machines are not able to receive them: for working on such blocks another sawing-frame has been erected out in the open yard, but still in connection with the working power of the steam-engine.'⁵⁴² Dodd witnessed a block of Galway marble, thirteen feet long by ten feet wide, being sawn in this frame. Such a large block of marble necessitating cutting in a specially designed saw frame would indicate that the marble was quarried and then shipped directly to London with little, or no, preliminary sawing being done in Galway. This would lead us to believe that the same technology used for cutting marble in Kilkenny was not present at Galway. We do know that Kilkenny marble was shipped to England in rough blocks earlier in the century, but these were sawn into more manageable sizes at the Marble Works before being exported.

The quality of the Galway marble is described as being 'perfectly spotless, as black as jet, and susceptible of a very high polish' and, with all the marbles imported into the country, is 'among the largest which have ever been brought to England.'⁵⁴³ Whether it was the largest amount of marble, or the largest sized blocks of marble ever

⁵⁴¹ Dodd, *Days at the Factories*, (see note 538), p. 237.

⁵⁴² *Ibid.*, p. 244.

⁵⁴³ *Ibid.*, p. 253.

brought to England is not made clear by Dodd. The marble's fine grain enabled it to take a very fine detail, the balustrades for Hamilton Palace being described as 'about a yard in length, and five or six inches in thickness, and profusely decorated in every part.' The location of the marble quarries in Galway is not revealed by Dodd, but other sources reveal that the two most extensive quarries were situated approximately three miles from Galway city, one quarry due east of the city and the other due north on the eastern shore of Lough Corrib.

In 1820 *The History of the Town and County of the Town of Galway* was published. The author, James Hardiman, notes that the best quarries of black marble were located at Angliham to the north of the city and Merlin Park to the east. The marble produced from both quarries is described as being 'a beautiful jet black colour.'⁵⁴⁴ Blocks of marble weighing four tons and measuring from 18 to 20 feet long and 8 to 10 feet in width were frequently raised, particularly at Angliham. Hardiman states that the proprietor, Mr. Stanley Ireland, had in previous years shipped several cargoes of marble to London, Liverpool, Bristol, Cork and Dublin. He also set up a marble yard in Galway city and employed workmen to manufacture monuments, chimneypieces, tablets, slabs etc, but by the time of writing Hardiman notes that 'at present this trade is rather declining.' The quarry at Merlin Park was opened in 1814 by Mr. Blake who 'exported a few cargoes', but the will to invest in and persevere with the exploitation of the quarry to its full extent appears to have been lacking. Hardiman believed that 'if these quarries were worked with spirit and judgement, they would in a short time...fully reward that attention which they so much deserve.'⁵⁴⁵

Four years later there appears to have been very little progress made in developing these quarries. In Hely Dutton's *A Statistical and Agricultural Survey of the County of Galway*, published by the Royal Dublin Society in 1824, the description given of the marble quarries of Galway would suggest that the development of the marble industry there was in its infancy compared to that of Kilkenny. Dutton supplies us with the location of a third Galway black marble quarry at Oughterard on the west shore of Lough Corrib which, according to Dutton, is 'disfigured by sections of large shells', rendering it of little value compared to the 'beautiful marbles of Angliham and Merlin

⁵⁴⁴ James Hardiman, *The History of the Town and County of the Town of Galway*, Dublin, 1820, f.n., p. 288

⁵⁴⁵ *Ibid.*, f.n., pp. 288-289.

Park, near Galway.’⁵⁴⁶ The ‘fine black’ marbles of both these quarries are ‘highly prized in England and in Dublin, to which they are exported in blocks.’ Chimneypieces made up in Galway from this marble are ‘much superior to Kilkenny marble’, but at this point Dutton notes that ‘until the quarries are worked, and the chimney pieces executed by machinery, they can never meet those of Kilkenny at market, as there, almost every operation is performed by machinery worked by water.’⁵⁴⁷ Dutton’s account would suggest that the quarries were originally worked for the local market, but as demand had increased at this point, the technology was not in place to cope with it. It would have been relatively easy to carry out the quarrying of the marble, load it at the quays in Galway and ship it to Dublin and London without executing any further work on it, the cutting and polishing being carried out at the final destination.

Samuel Lewis, writing in 1837, mentions the same quarries at Angliham and Merlin Park as producers of high quality marble. He also mentions that the black marble quarry at Oughterard, mentioned earlier by Dutton, ‘has been opened within the last few months, and is now worked by the proprietor of the estate, T. B. Martin, Esq.’⁵⁴⁸ Lewis’s opinion of this marble contrast greatly with that of Dutton. Lewis claims that the marble here is of the same quality as that of ‘Menlough and Merlin Park.’ The marble from Angliham and Merlin Park was used to make chimneypieces that were ‘much prized as being wholly free from white marks.’⁵⁴⁹ Lewis’s mention of a quarry of fine black marble located at Menlough, or Menlo, on the banks of the Corrib is somewhat confusing as he has already mentioned Angliham which would indicate he is now describing a different quarry in the same area. It would appear from examining an Ordnance Survey map of the area that this second quarry was opened about a quarter of a mile south of the Angliham, the marble being extracted from an extension of the limestone bed of Angliham one. Lewis notes that this particular quarry has been worked extensively due to its location and its access to water transportation. Most of Lewis’s comments tend to replicate those of Dutton, but he does however suggest that some advancement had been made at the quarries in the intervening years. The marble at Menlough had been worked locally for chimneypieces and by this time, a turning and polishing machine and a patent saw wheel were under construction to work the marble.

⁵⁴⁶ Hely Dutton, *A Statistical and Agricultural Survey of the County of Galway*, Dublin, 1824, p. 32.

⁵⁴⁷ Ibid.

⁵⁴⁸ Lewis, *Topographical Dictionary*, ii, p. 451.

⁵⁴⁹ Ibid, p. 643.

In an amazing revelation, Lewis states that the power to work this machinery was not be supplied by water, this machinery will be ‘set in motion by the treadmill in the county gaol.’⁵⁵⁰ Lewis does not elaborate any further on this topic, therefore, we must assume that the prisoners were to provide a relatively cheap power supply for this machinery. However, as the county gaol was some two miles distant from the quarry, this would suggest that the marble was transported to the gaol and worked on there by the prisoners. A parliamentary report compiled in 1823 recommended that treadmills should be introduced in Irish prisons ‘as a means of hard labour for prisoners.’⁵⁵¹ This report also reveals that in Carlow prison ‘the sawing and manufacturing of marble has been carried on with considerable success, and it is in contemplation to establish the same manufacture at Limerick.’⁵⁵² Whether treadmills were in operation at Carlow, or were to be introduced in Limerick, is not mentioned.

George Wilkinson, writing in 1845, noted that the best quarries for black marble were those ‘close to the town of Galway, near the bank of Lough Corrib.’⁵⁵³ He does not reveal the exact location of the quarries which, presumably, are Angliham and Menlough. The marble was laid down in three beds, ranging from about 9 to 12 inches in thickness. Some of these blocks were 16 feet in length and were exported abroad, one particular bed being referred to as the ‘London bed’ as most of the marble from it was specifically quarried for that city. He also informs us that the marble was exported to America in slab form, these slabs being ‘sawn by water power’ in Galway. This raises the question as to why large blocks of Galway marble required cutting into slabs in London at this time when this operation could have been carried out in Galway, resulting in less waste being transported thus ensuring cheaper shipping costs. Wilkinson’s description of the marble beds is very informative, but why he does not name this particular quarry is perplexing and symptomatic of the problems faced when attempting to locate the source of quality building stone and marble.

Just as in Derbyshire, the Galway quarries changed hands on various occasions, Merlin Park being just one example. An advertisement in the *Daily News* in London in

⁵⁵⁰ Ibid., p. 647.

⁵⁵¹ House of Commons Parliamentary Papers; Reports of Commissioners, *Prisons of Ireland. Report of inspectors general; 1823: with abstract from appendix of general observations on each prison, in the several districts, &c*, paper 342, London, 1823, p. 28, (<http://parlipapers.chadwyck.co.uk.elib.tcd.ie>), (accessed 14 January 2011).

⁵⁵² Ibid., p. 13.

⁵⁵³ George Wilkinson, ‘On the Marbles of Ireland’, *The Civil Engineer and Architect's Journal*, vol. viii, London, 1845, p. 84.

1852 regarding the sale of encumbered estates in counties Galway and Mayo included the Merlin Park quarries in one of the lots for sale. The newspaper states that ‘when worked by the owner, a considerable quantity of marble was exported to England.’⁵⁵⁴ This would indicate that the quarries were no longer being worked at this stage, at least not to the extent of the previous decades. Similarly, the quarry at Menlough was noted to have produced about 1,000 tons of marble annually ‘which was shipped at the port of Galway, and sold at from £7 to £8 per ton in the markets of London and New York’, but this trade had ceased by 1837.⁵⁵⁵ From these comments it is difficult to ascertain which quarry supplied the marble for Hamilton Palace. In *A Descriptive Guide to the Museum of Practical Geology*, published thirty years later in 1867, it was noted that the quarry at Menlough became costly to work due to the difficulty of getting rid of the influx of water from Lough Corrib.⁵⁵⁶ The close access to water was originally seen as a great advantage for the cost effective transportation of the marble, but over time, this proximity proved costly.

But what of the Kilkenny Marble Works during the first half of the nineteenth century? Was it able to maintain its share of the marketplace as it faced encroaching competition from new quarries? Does Lewis’s comments stating that the plain black Galway marble was held in great esteem due to it being ‘wholly free from white marks’ indicate that Kilkenny marble chimneypieces were no longer in fashion? It is difficult to supply a satisfactory answer to some of these questions. Dutton’s earlier comments regarding the Galway chimneypieces never being able to ‘meet those of Kilkenny’ would indicate that this was the case during the 1820s, but by the 1830s and 40s some of the Galway marble quarries were able to compete with the Kilkenny marble in the market place, as is evident in its use in Hamilton Palace.

The Kilkenny Marble Works had been set up by a very single-minded man in William Colles. The business may be regarded as the epitome of an improving Ireland during the eighteenth century. It was to the forefront of the marble industry in this country and in Britain, the constant attention of the Colles family ensuring that this was the case. One wonders how productive the Galway quarries would have been if the Colles family were involved. William of Abbeyvale went to great lengths to provide

⁵⁵⁴ *Daily News*, London, 1 September, 1852.

⁵⁵⁵ *The Parliamentary Gazetteer of Ireland 1844-45*, 3 vols., Dublin, London and Edinburgh, 1846, vol. ii, p. 764.

⁵⁵⁶ Robert Hunt and F.W. Rudler, *A Descriptive Guide to the Museum of Practical Geology*, 3rd ed., London, 1867, p. 25.

Kilkenny with a canal linking it to the port of Waterford without success, yet he was still able to export large amounts of marble. Imagine what he would have achieved if he had the close access to a natural waterway and a major port that the Galway quarries were blessed with. Unfortunately this was not to be and the Colles family continued to persevere with their marble trade despite the impediment of not having a navigable outlet to the port of Waterford.

In 1795 Richard Colles of Riverview took over the running of the Kilkenny Marble Works from his mother. We have seen how successful Richard was during the early years of his tenure, as described by William Tighe. In his notes on the Colles family now in Chicago, Richard Colles Johnson reveals that the business prospered during the Napoleonic wars as foreign marble did not have access to the British mainland, thereby presenting the Kilkenny Marble Works with the opportunity to increase its share of the British market. It was probably for this reason the Galway quarries increased their output also. The papers in Chicago further state that Richard Colles had ‘a demand for Kilkenny marble at a very lucrative price, and in as great quantities as he could possibly supply.’⁵⁵⁷ However, on cessation of war in 1815, the blockades were lifted and marble from the Continent could enter Britain again in direct competition with Irish marble. The family papers note that much Irish trade was depressed following the failure of the harvest in 1817 which led to famine in many areas. Further problems were highlighted in the stone and marble trade in 1831 when a petition was delivered to parliament in London by the ‘Working Stone and Marble Masons of the City of Dublin and its Vicinity.’ The craftsmen were petitioning for a ‘Repeal of the Legislative Union at present existing between Great Britain and Ireland’ so that they may be ‘saved from the Poverty and Misery which threatens to destroy them.’⁵⁵⁸

There is scant information available to account for the Kilkenny Marble Works during these decades, although when examining the export of Irish marble in Chapter Four we have seen how Kilkenny marble was shipped to Britain and America where it was still regarded as a very desirable commodity. However, a recently discovered piece of information indicates that it was not just the lifting of the blockades after the

⁵⁵⁷ RCJ, Box 8, folder 234, Notes on the family of Colles based on the Manuscripts of John Armstrong Purefoy Colles...and Richard Colles...Edited, with additions by Richard Colles Johnson, 1956, p. 30.

⁵⁵⁸ ‘House of Lords Journal Volume 63: 24 June 1831’, *Journal of the House of Lords: volume 63: 1830-1831*, pp. 742-753, (<http://www.british-history.ac.uk/report.aspx?compid=17061>), (accessed: 06 February 2007).

Napoleonic wars that had an adverse effect on the use of the marble in Britain, it was the cost of working the marble once it had been shipped there. The ‘very lucrative price’ Richard Colles of Riverview received for his marble before 1815 proved somewhat detrimental to the Kilkenny Marble Works a short time later.

It would appear from a letter written by the architect Charles Barry to Viscount Duncannon in 1839, that Kilkenny marble was being considered for use in the construction of the new Houses of Parliament in London. In this correspondence, Barry included a letter from a stone mason named Smith. Smith’s observations make interesting reading which is worth recording in full. Smith was requested by Barry to examine black marble already used for construction work in London and the following is his reply:

Agreeably to your request, I have this day examined the black marble at Old Barge House Wharf, near Blackfriars Bridge (Surrey side). I consider it to be a material precisely similar to Kilkenny marble, which was extensively used for chimney-pieces and other internal works about twenty or twenty-five years since. After the peace when Italian marble was abundantly imported, Kilkenny, being far more expensive to work, gradually became almost an useless commodity in the market. By referring to my books, I find that in the year 1817 the price of labour alone for sawing Portland stone, was 5d. per foot ; at the same time, 1s. 5d. was paid for sawing Kilkenny marble. If it were contemplated to erect a large building with Kilkenny Marble, I have no hesitation whatever in asserting that, at a very moderate calculation, the labour would cost at least three times as much as it would if Portland stone were used.⁵⁵⁹

From this account it is reasonable to believe that Kilkenny marble was not used in the new Houses of Parliament at Westminster. Smith does not elaborate as to why there was such a discrepancy in the cost of sawing Portland stone and Kilkenny marble. We have already noted the reasons for this, the first being that Portland stone is a much softer material than Kilkenny marble, therefore it is easier to cut. The other reason is

⁵⁵⁹ *The Surveyor, Engineer, and Architect*, February, 1840, p. 10, (<http://britishperiodicals.chadwyck.co.uk.elib.tcd.ie/articles/displayItem.do?QueryType=articles&ResultsID=12E00F502AB954F4E&filterSequence=0&ItemNumber=1&journalID=ea05>), (accessed 8 March 2011).

that, due to the duty placed on finished marble pieces being imported from Ireland into Britain during the early nineteenth century, the marble was sent in block form. If Richard Colles was permitted to cut the marble to the required sizes and dress it in Kilkenny without the duty being placed upon it, the final costs could have been dramatically reduced making the marble more competitive. As we shall see, this was one of the many obstacles that faced the Colles family as they endeavoured to transport their produce to the market place.

Richard Colles continued to carry on the family business throughout the early decades of the nineteenth century catering for the home market. The Kilkenny assizes of 1832 indicate that Richard Colles was involved in the repairs carried out on the Kilkenny to Castlecomer road, most likely supplying chippings or gravel for the project.⁵⁶⁰ However, as the decade progressed the manufacture of marble products appears to have carried on as normal, albeit on a lesser scale. In 1834, Henry D. Inglis notes that the mills were still in operation cutting and polishing the marble which 'is used for chimney-pieces all over this part of the country.'⁵⁶¹ It is not clear if Inglis meant that the chimney pieces were being manufactured for the local market i.e. Kilkenny, or if this market extended over a wider area. In 1839, the local trade directory listed Richard Colles as the proprietor of 'marble works and quarries' and the only person involved in the marble trade in the region.⁵⁶² On the Ordnance Survey six-inch map, surveyed in 1839, the marble mill is captioned as 'marble sawing mill'. To the south lies a flour mill depicted with Millmount House positioned to the east and a distillery on the opposite bank of the Nore to the west. Below this flour mill are two large buildings, one also captioned as a flour mill. One of these was probably the paper mill in use around 1800. (Fig.7.5) It would appear from the map that, at this time, only one of these structures was being used to cut and polish the marble, but as we shall see below, most of these structures were converted later on for working the marble.

⁵⁶⁰ *Kilkenny Grand Jury Presentments, General Assizes*, Kilkenny, 1832, p. 99. Trinity College Dublin Library Collection facsimile reproduction of the original book published on CD-ROM in 2007 by Archive CD Books Ireland Ltd.

⁵⁶¹ Henry D. Inglis, *Journey Throughout Ireland during the Spring, Summer and Autumn of 1834*, 4th ed. London, 1836, p. 55.

⁵⁶² T. Shearman, *The new commercial directory, for the cities of Waterford and Kilkenny, and the towns of Clonmel, Carrick-on-Suir, New Ross, and Carlow (& Tramore)*, Kilkenny, 1839, p. 39.

By 1842 around 100 tons of Kilkenny marble was being shipped to England annually and Italian marble was obtained in exchange. At this time one waterwheel was powering the machinery which ‘saws and polishes slabs with the power of forty men.’⁵⁶³ Richard Colles was busily manufacturing chimneypieces of Kilkenny and Italian marble which he ‘frequently inlays with coloured stones, and adorns with sculptures in relief.’⁵⁶⁴ We know for definite that black Kilkenny marble chimneypieces were manufactured by the Colles family and that they also supplied the marble for others to produce them, but how many chimneypieces of Italian marble, as described above, they are responsible for is unknown. This is another reason why the Kilkenny Marble Works continued to lead the way in marble production, especially chimneypieces, throughout its existence. Black marble chimneypieces were produced in Galway, but by the continual use of Italian marble, combined with Irish marble, the Kilkenny Marble Works ensured a diversity of colour and style for the discerning customer in search of fine chimneypieces.

By 1846 Richard ‘Collis’ of Riverview is listed as one of only two persons involved in the marble trade in Kilkenny, the other being John Gready of King St. Kilkenny.⁵⁶⁵ Slater’s *National Commercial Directory of Ireland*, notes that ‘In the neighbourhood are manufactured very beautiful chimney pieces of that species of stone called Kilkenny marble, which is cut and polished by water power.’⁵⁶⁶ The cutting and polishing equipment was described in detail in the Valuation house book for the townland of Highrath, St Martin’s, compiled in September 1845.⁵⁶⁷ The marble mills complex consisted of the actual saw mill, two workshops, a polishing house, a warehouse, and various stores and sheds. The mill was driven by an 8ft diameter waterwheel which had 14 paddles (floats), each 12 inches deep and impacted upon by a

⁵⁶³ Mr. & Mrs. S.C. Hall, *Ireland: Its Scenery, Character, &C*, Vol. II, London, 1842, p. 41.

⁵⁶⁴ *Ibid.*

⁵⁶⁵ Isaac Slater, *National Commercial Directory of Ireland, Leinster & Dublin Sections*, Manchester and London, 1846, p. 56.

⁵⁶⁶ *Ibid.*, p. 52.

⁵⁶⁷ Fred Hamond, ‘An Industrial Heritage Survey Of The Marble Works, Highrath Townland, Co Kilkenny,’ unpublished industrial archaeological report, 2007, p. 5. I am very grateful for this information which was given to me by Fred Hamond PhD, Industrial Archaeologist, who was commissioned by Gittens Murray Architects Ltd, Kilkenny, on behalf of Mr. David Lannen. This site report was compiled as part of a planning application to redevelop part of the site on which the remains of the marble mills now stand. The planning authority, Kilkenny County Council, requested a report by an industrial heritage specialist in order to provide a clearer understanding of the site in order to inform their planning decision. Mr. Hamond examined the valuation books in the National Archives, Dublin, NAI, OL 4.4184, Valuation house book for Highrath townland, St Martin’s Parish, compiled 11 Sept 1845, for this report and kindly passed this information on to me.

3ft head of water. At the time of survey, it was rotating at 18 revolutions per minute, but it could apparently go faster in the winter when there was more water. It drove 23 saws and a polishing machine more or less constantly (for valuation purposes, 12 hours a day for 12 months of the year). Although it had been over a century since the mill had been established, the valuation officer notes that it 'seems to get a great deal to do as there is no mill of this same occupation in the country'. Not surprisingly given its age, the machinery was noted as being 'badly constructed' but was still in good repair.

Richard Colles died on 7 October 1849, aged 75. His eldest son William was a surgeon in Dublin and it was his second son Alexander who eventually took over the family business after the death of his father. Alexander is listed as the Kilkenny agent for the Atlas Fire and Life Assurance Company in *Thom's Directory* in 1852.⁵⁶⁸ In her article on the Kilkenny Marble Works, published in 1949, Mrs. J.C.J. Murphy states that Alexander was also a land agent and wine agent.⁵⁶⁹ She also notes that Alexander took over the running of the marble business in '1852 which had been practically derelict since his father's death.'⁵⁷⁰ He may have formally taken over the business in 1852, but he was involved in it earlier than Murphy suggests.

The Great Exhibition of the Works of Industry of all Nations took place in London from 1 May to 15 October 1851. In the official catalogue printed for this unique occasion the name of Alexander Colles appears in the section on 'Mining and Mineral Products.' Alexander Colles of the 'Marble Works, Kilkenny' exhibited a 'Bust pedestal of Kilkenny marble, from the Black Quarry.'⁵⁷¹ This proves that Alexander had taken control of the Marble Works shortly after his father's death and that the Black Quarry was still in the control of the family. It is possible that his father had intended to have exhibited at the Great Exhibition before his death and it was left to Alexander to ensure the Kilkenny Marble Works was represented in London, which he duly did. For some unexplained reason, Alexander Colles or the Kilkenny Marble Works is not listed in the catalogue for the Dublin Exhibition held two years later in 1853.

On taking over the Kilkenny Marble Works, Alexander embarked on an ambitious programme to reinvigorate and expand the business. From the sources examined, it

⁵⁶⁸ *Thom's Irish Almanac and Official Directory for the Year 1852*, Dublin, p. 10.

⁵⁶⁹ Mrs. J.C.J. Murphy, 'The Kilkenny Marble Works', *Old Kilkenny Review* 1948, No. 2, Kilkenny, 1949, p. 18. Alexander was a wine agent for the wine importer Mark Monsarrat of Dublin. Alexander married Monsarrat's daughter Isabella in 1841.

⁵⁷⁰ *Ibid.*

⁵⁷¹ *Official Catalogue of the Great Exhibition of the works of Industry of all Nations 1851*, London, 1851, p. 20.

would appear that Alexander was possessed with the same inventive and entrepreneurial skill as those of his great-grandfather William of Abbeyvale. He was also involved in local politics and served as Mayor of Kilkenny in 1862 and was re-elected in 1863. In 1853 a paper written by Rev. James Graves was presented to the Literary and Scientific Institution of Kilkenny. The subject matter of this paper was on the geological formations of County Kilkenny and in it was revealed the fact that a slate quarry, the source of 'fine roofing slates' located on the estate of the Marquis of Ormonde, near Carrick-on-Suir was 'worked by our fellow-townsmen, Alexander Colles, Esq.'⁵⁷² Whether this quarry had been worked by the Colles family over a number of years, or had just been acquired by Alexander, is unclear, but it does indicate that the Colles family were in the business of supplying different types of building materials. Alexander's acquisitions were also matched by his improvements carried out at the marble mills. In January 1855 Alexander applied for a patent for an invention for 'Improvements in sawing marble and similar materials.'⁵⁷³ This invention consisted of replacing the long length of chain used to suspend the swinging frame that carries the saws with shorter lengths of chain. While still moving the cutting blades in a horizontal motion this would also cause a chopping effect on the marble, thereby speeding up the cutting process. Alexander was setting about improving and replacing much of the machinery that had been in use during his father's time.

An advertisement printed in the *Freeman's Journal* in 1850, gives some indication of the marble products manufactured by the Kilkenny Marble Works in the mid nineteenth century. An auction held on 18 December, included chimneypieces 'elaborately executed...in Statuary, Bardiglio, Veined, Dove, and Black Marble.'⁵⁷⁴ Presumably, the statuary marble would have been white Carrara marble and the Bardiglio marble would have been quarried in the same area of Italy. This marble commonly shows a dark gray or bluish ground traversed by veins. This description would lead us to believe that it was not solely white Carrara marble, but a variety of marbles that the Colles family imported from Italy. The chimneypieces were available in different sizes and carved in various styles. There were nine large chimneypieces suitable for the main rooms of a residence, six chimneypieces of veined marble for

⁵⁷² Rev. James Graves, 'On the Geology of the County Kilkenny', *The Natural History Review for the Sessions 1853-1854*, Vol. 1, Dublin, 1854, p. 38.

⁵⁷³ *Chronological Index Of Patents Applied For And Patents Granted*, London, 1855, p. 10.

⁵⁷⁴ *Freeman's Journal*, Tues. 17 December, 1850.

bedrooms and six suitable for studies or bedrooms. Along with chimneypieces there were also advertised 'two elegantly designed Kilkenny Marble HALL TABLES; seven Pier Table, and Wash-hand Slabs, in Veined and Black Marble; the entire of which, [was]...a direct consignment from the Kilkenny Marble Works.' A further advertisement in *Freeman's Journal* in 1853 gives notice to architects, builders and cabinet makers of an auction to be held on Ormond Quay. A large number of 'Irish and Italian Marble Chimney Pieces, of the newest designs and highest finish' were to be sold along with marble tables, table tops, wash hand stands etc. 'all manufactured at the Kilkenny Marble Works.'⁵⁷⁵ The Marble Works was still keeping ahead of its competition by being to the forefront of the latest tastes and fashions in chimneypieces and decorative marble ornaments.

In 1859 Alexander appointed an agent in Dublin to sell his marble products. It appears that Colles had a showroom or workshop on Grafton St. in Dublin. A memorial erected to the memories of James Butler Marquis of Ormond and his two sons in St. Mary's Church, Mary St. Dublin, is signed by A. Colles Grafton St. (Fig.7.6) Alexander placed a notice in the newspaper to announce that he had appointed Mr. Maurice Brooks as his agent in Dublin. Brooks had 'purchased my Stock at 48, Grafton-street, and will supply future Orders from his Warehouse in SACKVILLE-PLACE.'⁵⁷⁶ In the summer of 1860 *The Irish Times* printed an advertisement for the 'Kilkenny Marble Depot, 26, Mary-Street, Dublin.'⁵⁷⁷ The public could purchase chimneypieces in 'Irish and Foreign Marble, Manufactured by Water-Power and Patent Machinery.' Two years later the newspaper once again printed an advertisement for the 'The Kilkenny Marble Depot.'⁵⁷⁸ This time the public could purchase their chimneypieces from 'G. Cooper and Co., Agents 53 Westland Row.' It is not clear if Colles had appointed a number of agents in the city, or had chosen to renew his contract with different outlets.

By 1862 the Kilkenny Marble Works was making greater inroads to the British market. After the success of the Great Exhibition in 1851, a further exhibition was held in 1862. The International Exhibition was held between 1 May and 1 November of that year and once again Alexander Colles of the 'Marble Mills, Kilkenny' exhibited a

⁵⁷⁵ *Freeman's Journal*, Tues. 15 February, 1853.

⁵⁷⁶ *Ibid.*, Thurs. 22 September, 1859.

⁵⁷⁷ *Ibid.*, 1 June, 1860.

⁵⁷⁸ *The Irish Times and Daily Advertiser*, 10 July, 1862.

‘Black Kilkenny marble chimney-piece, made by machinery.’⁵⁷⁹ When the exhibition concluded many items were available for purchase at public auctions. That December *The Times* newspaper carried an advertisement for an auction to be held in London of some of the exhibits. Among the items being sold from the ‘French Department’ were ‘100 circular coffee tables, with Kilkenny marble tops.’⁵⁸⁰

The Kilkenny Marble Works continued to provide decorative items for churches and monuments. In February 1865 *The Irish Times* printed an article on the re-opening of St. Patrick’s Cathedral, Dublin. The finished Chapter House was described as ‘one of the most beautiful parts of the building’ containing ‘light elegant shafts, fluted with Kilkenny marble.’⁵⁸¹ In May 1869 *Freeman’s Journal* printed an account of the preparations that were underway in the crypt of Daniel O’Connell’s monument at Glasnevin Cemetery in Dublin. The workmen were ‘busily engaged erecting the beautiful altar tomb, placing upon it the magnificent slab of Kilkenny marble.’⁵⁸² *The Nation* reported that the Kilkenny marble slab was taken from ‘Mr. Colles’s celebrated quarry.’⁵⁸³ Such prestigious works further established the reputation of the Kilkenny Marble Works both at home and abroad.

In October 1866 the *Belfast Newsletter* printed a short notice in its general news column. A Danish schooner was at the time taking on a cargo of Kilkenny marble blocks at the quays in Waterford. The article did not specify the destination for the marble, but it did note that ‘a great liking is springing up in some foreign countries for this description of marble’ and this particular ship was the ‘third vessel within twelve months that has taken cargoes of it away.’⁵⁸⁴ The following month *Freeman’s Journal* printed an excerpt from an article published in a recent edition of the *London Building News*. The topic of the article was on Irish marble in general, but the newspaper chose to reprint the information regarding the Kilkenny Marble Works only. The article stated that Alexander Colles ‘carries on the works on an extensive scale, employing not less than from 200 to 300 hands in the manufacture of monuments, mantelpieces, columns,

⁵⁷⁹Information taken from Grace’s Guide, *London Exhibition Catalogue, 1862*, (www.gracesguide.co.uk/wiki/1862_London_Exhibition:_Catalogue:_Class_I.:_Alexander_Colles), (accessed on 10 January 2011).

⁵⁸⁰ *The Times*, Thurs. 18 December, 1862.

⁵⁸¹ *Ibid.*, 25 February, 1865.

⁵⁸² *Freeman’s Journal*, Fri. 14 May, 1869.

⁵⁸³ *The Nation*, 22 May, 1869.

⁵⁸⁴ *Belfast Newsletter*, Tues. 23 October, 1866.

and, in fact, every ornament required in architecture.’⁵⁸⁵ The article continues with a description of the process by which a block of marble is taken from the quarry to the marble mills and is eventually fashioned into a finished article such as a chimneypiece. There is no need to repeat this process here, suffice it to say that this description of the cutting and polishing of the marble is exactly the same as it was when first set up nearly a century and a half earlier by Alexander’s great-grand father, William of Abbeyvale.

The newspaper article regarded the work and enterprise of Alexander very highly indeed. If Ireland had more men like him ‘how much better would she appear among nations than unfortunately is the case at present.’ The newspaper highly commended the ‘energy and enterprise of Mr. Colles’ and also his ‘kindness as an employer, and the beautiful specimens of art which he produces.’ This commentary raises an important point in referring to the ‘kindness’ of Alexander ‘as an employer.’ One gets the impression that all generations of the Colles family associated with the Kilkenny Marble Works were benevolent employers. The family’s constant attention to improvements in developing the marble business was not just concentrated on water power and machinery, it was also concentrated on the workers employed in the quarries and the marble mills. We have seen how the family promoted the linen industry, training people in the process which resulted in the creation of further employment, at least during the period the industry was proving successful. The development of the flour industry created further employment and during the Nore navigation works, a considerable workforce must have been employed. An example of the benefit involved to being employed by the family is evident in an advertisement placed by Alexander Colles in *The Irish Times* in 1875. The position advertised was that of a millwright, a person responsible for installing, maintaining, upgrading and repairing the machinery of a mill. The successful applicant was to be paid £2 a week and was given a house for free.⁵⁸⁶

In the early 1870s many English newspapers carried advertisements for Kilkenny marble chimneypieces, the *Birmingham Daily Post* being just one example. An auction of marble chimneypieces to be held in Birmingham in March 1871 included twenty Italian veined marble chimneypieces and a ‘massive Black Kilkenny marble Chimneypiece.’⁵⁸⁷ The following month the newspaper advertised ‘several very

⁵⁸⁵ *Freeman’s Journal*, Thurs. 29 November, 1866.

⁵⁸⁶ *The Irish Times*, Sat. 26 June, 1875.

⁵⁸⁷ *Birmingham Daily Post*, Sat. 18 March, 1871.

handsome and massive black Kilkenny Marble Chimneypieces' for sale.⁵⁸⁸ Such advertisements and articles printed in the daily papers on both sides of the Irish Sea show that Kilkenny marble was still a very popular choice for decorative features, but, as in the time of William of Abbeyvale, problems were still being encountered in transporting the marble to foreign markets.

We have seen how passionate William Colles of Abbeyvale was in trying to secure a canal for Kilkenny and how his attempts resulted in a dismal failure. Further attempts were made to complete the Nore navigation after his death and, while elaborate plans were drawn up, Kilkenny never got the canal it desperately needed. A petition was made to the House of Lords in 1831 requesting 'That their Lordships will cause a Survey and Estimate to be made of a Line of Road between Kilkenny and the most convenient Seaport, and that a Railway between those Places...may be executed at the Public Expence, subject to such Tolls as shall be reasonable, and yet repay all the Expence of this great and useful Undertaking.'⁵⁸⁹ The railway line between Kilkenny and Dublin was completed in 1847 enabling the produce of the county to be transported more rapidly to the capital. Colles's marble products would continue to be transported by road to Waterford up to 1864 before the rail link was completed and to New Ross up to 1887 before the station there opened. The Kilkenny Marble Works exported its cargoes through the port of Dublin via the railway. The advantage of rail transport was that a greater volume of marble could be transported more rapidly to its destination, but, as we shall now see, the carriage costs involved were problematic for many businesses in this country, especially the marble business.

In a letter written to the *Freeman's Journal* in 1873, Alexander outlined his concerns regarding rail carriage costs in the country. The addressee was Sir John Gray, MP for Kilkenny and the newspaper's proprietor.⁵⁹⁰ This letter is critical of the charges imposed by the railway companies, however it also gives us some insight into which foreign markets the marble was being shipped to. Alexander wished to highlight the 'difficulties under which we in Kilkenny labour whilst endeavouring to develop the

⁵⁸⁸ *Ibid.*, Sat. 22 April, 1871.

⁵⁸⁹ 'House of Lords Journal Volume 63: 19 August 1831', *Journal of the House of Lords: volume 63: 1830-1831*, pp. 929-31, (<http://www.british-history.ac.uk/report.aspx?compid=17100>), (accessed: 06 February 2007).

⁵⁹⁰ See *Freeman's Journal* 16 April, 1875. The newspaper gave an account of Gray's funeral and described a breastplate which was attached to the coffin of the deceased, this breastplate was 'of a unique character, being made of black Kilkenny marble, from the celebrated quarries of Mr. Alexander Colles'

industrial resources of the locality.’⁵⁹¹ He emphasizes the improvements that had occurred in the area, such as the provision of employment and the harnessing of water power to operate the marble mills which were ‘erected at a very heavy cost.’ Due to the high rate involved in rail carriage, all such improvements were ‘rendered useless.’ With cheap water power and relatively low wages Alexander could ‘produce manufactured articles cheaper even than Belgian [sic] can produce them but, owing to the heavy charges for carriage, the Belgians can undersell me in London and elsewhere.’ To stress his point he claims he can

send marble in cases by steamer for exactly the same charge from Liverpool to New York as I pay from Kilkenny to Liverpool. I can send marble from Kilkenny to New York at 15s, per ton cheaper than I can send from Kilkenny to London. I can send marble from Kilkenny to Melbourne 15s, per ton less than I can send from Kilkenny to London.

We do know that Liverpool, London and New York were ports that Kilkenny marble had been shipped to for quite some time, but the revelation that Australia was also a destination for this material is fascinating. Colles goes on to inform Gray (and the reader) that he can have heavy blocks of Italian marble shipped from Liverpool to Kilkenny for 25s per ton, but ‘I cannot, by same route, send Kilkenny marble to Liverpool in heavy blocks for less than 50s. per ton, or double the price.’ Why there is such a discrepancy between the rates of transporting marble from Liverpool to Kilkenny and from Kilkenny to Liverpool is not explained by Colles, surely the cost of transporting marble by rail between Kilkenny and Dublin would have been the same in both directions. The excessive costs would appear to be related more to tax or excise duties rather than rail carriage costs. Whatever the reasons may have been, the high charges involved were detrimental to the trade between Ireland and Britain and also to business within Ireland, as ‘New enterprises will not be established here unless matters are changed.’ Colles patriotically proclaims that ‘This is not justice to Ireland.’ If there were lower rail rates he ‘could put on double the number of hands, and give such increased employment as would benefit this city.’ Whilst it may have been costly for Alexander Colles to transport marble within Ireland, there must still have been a

⁵⁹¹ *Freeman's Journal*, Sat. 11 Jan, 1873.

significant profit to be made, otherwise why persevere with investing so much time and money in the marble business if there was to be no return at the end of the day. The problem of the expensive rail charges appear to have persisted for at least the next fifteen years, as will be examined below.

Alexander Colles died in 1876 and was succeeded by his son Richard who had been assisting with the enterprise since leaving school in 1862, aged 18, and is named in the Valuation revision books from 1876 onwards. In the 1884 edition of the *Kilkenny City and County Guide and Directory* Richard Colles is listed in connection with two locations in Kilkenny. In the general section he is listed as ‘COLLES, RICHARD, marble mills, res. Millmount’⁵⁹² The second location he is listed at is the ‘Marble Mills, Irishtown’ where he is a ‘monumental sculptor.’⁵⁹³ Irishtown is the area of Kilkenny city surrounding St. Canice’s Cathedral and it is not clear from this entry if Richard Colles had a marble mill here or a workshop for the manufacture of monuments. There is also a full entry on the Kilkenny Marble Works which reveals a little more information on the operations of the company at this time.

The marble industry, according to the entry, ‘is about the only extensive industry at Kilkenny that has held its own for a very long period,’⁵⁹⁴ There were five mills in operation at Maddoxtown at this time, all connected by tramways and all driven by water. The original marble mill constructed by William of Abbeyvale was still functioning, but now the flour mills had been adapted to work the marble. The tramways provided an efficient link to move much greater loads of heavy marble from one mill to another. The mills were capable of cutting ‘between three and four thousand superficial feet per week’ and employed an average of one hundred workers. It was noted also that ‘During the lifetime of the late proprietor [Alexander], and since the present proprietor came into active management, the works have been considerably extended, much new machinery has been added, and many new sources of supply opened.’ The process of improvement and progress continued, the Colles family were constantly reinvesting in improvements to the business. The main source of the famous ‘black fossil marble’ was still the Black Quarry. Pure black marble was sourced from a quarry near Gowran, this most likely being at Butlersgrove, lying about fifteen miles

⁵⁹² George Henry Bassett, *Kilkenny City and County Guide and Directory*, Dublin, 1884, p. 89.

⁵⁹³ *Ibid.*, p. 136.

⁵⁹⁴ *Ibid.*, p. 67.

east of Kilkenny and part of the same limestone beds as the Black Quarry. This quarry is discussed below in regards to it being worked by Richard Colles.

By this time the Kilkenny Marble Works had expanded greatly, as it was now supplying red and gray marble from Cork, green marble from Connemara marble while still importing marble from Italy. The quarries in Cork and Connemara were now in the occupation of the Kilkenny Marble Works along with other limestone quarries in Kilkenny, as it is stated that 'For monumental and other purposes, the gray limestone of the county Kilkenny is extensively used.' The range of products manufactured by the company were, the ubiquitous chimneypieces, 'Fenders, Columns, Tiles, Mouldings for Door-ways, Dados, Wall-linings, Memorial Tablets, and general Monumental Sculpture.' The problem of transportation was commented upon by lamenting the lack of a canal link with New Ross, although, as noted above, a rail link would be in place three years later. The transportation of marble overland to New Ross may have been problematic, but it was recognised that it was 'sufficient to enable Mr. Colles to find profitable outlet for his manufactures in every county in Ireland, and in England, Scotland, Wales, Belgium, the United States, Canada, and Australia.' The cost of rail carriage was a constant problem for the Kilkenny Marble Works and Richard, like his father, was a vociferous campaigner to have it reduced.

A letter written by Richard to the *Freeman's Journal* in 1881 outlined his grievances regarding the railway companies. He called for attention to be given to the 'disadvantages under which manufacturers in the Southern Counties are placed by the excessive freights charged on their goods in transit by rail to Dublin.'⁵⁹⁵ He singled out The Great Southern and Western Railway as the cause of this dilemma. He stated that he had partially boycotted the company by 'sending and getting my goods to and from Dublin via Maryborough', but as the rates were the same, he saves nothing by going this route. This was not the way 'to develop Irish industry.' The railway companies should realize from their decreasing dividends 'that they are making a mistake as regards their own interest also.' *The Irish Times* was in agreement with such sentiments in 1882 stating that 'This is an anomaly that would certainly bear rectification in the interest of our home industries.'⁵⁹⁶ Richard, while highlighting the problems he himself faced, was also championing the cause of similar businesses at a national level. It is obvious from a parliamentary report published by the Royal Commission on Irish Public Works six

⁵⁹⁵ *Freeman's Journal*, Fri. 30 September, 1881.

⁵⁹⁶ *The Irish Times*, 15 February, 1882.

years later that the railway companies continued with their charges undeterred by Colles's comments. In 1888 this commission published a report which it presented to both Houses of Parliament in London.⁵⁹⁷ This report included an interview with Mr. P.M. Egan, Mayor of Kilkenny, on the excessive costs incurred by various manufacturers in Kilkenny city for transporting their goods by rail. The report also reveals much about how the Kilkenny Marble Works operated at the time.

One of the cases Egan brought before the commission regarded the cost of transporting Kilkenny marble. He revealed to the commissioners that the cost of shipping polished marble to London from Kilkenny was 30s a ton, whereas to ship the same cargo from Belgium to London cost only 10s a ton, this information being provided to him by 'the proprietor of the Kilkenny Marble Works...Mr. Colles.' The Belgian quarries were still underselling Richard Colles in the same manner they did his father fifteen years earlier. Egan told the commission that the marble was shipped to London 'Generally by Waterford, or by train to Dublin' and in a follow up answer he confirmed that the marble was transported to Waterford from Kilkenny by train. Questioned on the location of the Belgian quarries and the mode of conveyance from these quarries to London, Egan replied that he was not sure but 'Mr. Collis [sic] has gone into this question because these are old established works, and it interests him.'⁵⁹⁸ Richard Colles was obviously keeping a very close eye on his Continental competitors. It cost the Kilkenny Marble Works 23s 6d to send a ton of polished marble to Dublin, yet it could be brought in from Belgium to Dublin at 20s a ton. This, according to Egan, highlights the 'incubus on the local manufacturer compared with the foreign manufacturer which is put by the local railways.' When asked by the chairman if the railway companies realized they were losing freight from Kilkenny to Dublin and Waterford by the cheaper rates charged by shipping companies, Egan replied that 'Mr. Collis has been in frequent agitation with the railway companies on this question.' Egan also revealed that the cost of taking rough stone from Kilkenny to Waterford was 5s 3d per ton and also informed the committee that to transport polished marble from Kilkenny to Glasgow cost 25s a ton, but the 'Clyde Company will take it from Belgium to Glasgow for 24s.' Egan continued his report on the problems facing the local timber,

⁵⁹⁷ *Second Report of the Royal Commission on Irish Public Works [C. 5264]*, London, 1888, p. 439, (<http://parlipapers.chadwyck.co.uk.elib.tcd.ie>), (accessed 16 November 2009).

⁵⁹⁸ *Ibid.*, p. 440.

brewing and coal trades, stating all the manufacturers of Kilkenny were ‘handicapped’ by the charges imposed on them by the railway companies.

It is evident from Egan’s report that the cost of transporting marble had reduced significantly since the early 1870s. It cost Alexander Colles 50s per ton to send marble from Kilkenny to Liverpool in 1873, whereas now, fifteen years later, Richard could ship marble from Kilkenny to London at a cost of 30s per ton and to Glasgow at 25s per ton. Although the costs may have decreased over this period, the disadvantages were still there for Irish produce trying to gain access to the British market place.

Even though the cost of transporting the marble may have been excessive, the Kilkenny Marble Works continued to supply marble for a great variety of projects. *The Irish Times* informed its readers that the proprietor of the Kilkenny Marble Mills not only turns out ‘magnificent and artistic work, with a perfect and durable polish, and at prices which compare favourably with the inferior products of other countries,’ but that Richard Colles continues to ‘worthily sustain our ancient fame in this splendid native industry.’⁵⁹⁹ This is due recognition of the contribution made by the Colles family to the marble industry in Ireland and the strengthening of the industry’s reputation abroad.

Ecclesiastical commissions continued to be a great source of income for the Kilkenny Marble Works, many of which were executed in England. St. Mary’s parish church in Carlisle, erected in 1868-9, had Kilkenny marble piers placed in the nave.⁶⁰⁰ The Archbishop of York preached his sermon from a pulpit carved from Caen stone and Kilkenny marble at the re-opening of the church in Amotherby in Yorkshire in 1871.⁶⁰¹ The village church at Hilgay in Norfolk contained a font supported by ‘shafts of Kilkenny marble.’⁶⁰² Small parish churches were not the only ecclesiastical commissions carried out by the company, one major contract carried out by the Kilkenny Marble Works being for the replacement of the shafts of blue lias (layers of limestone alternating with shale) on the west front of Wells Cathedral in Somerset during restoration work carried out there beginning in 1870. The perishable nature of this local stone rendered it unsafe to be used in the proposed restoration work carried out on the west front during the latter part of the nineteenth century. To solve this problem it was decided ‘after much consultation...to use Kilkenny marble instead,’ as

⁵⁹⁹ *The Irish Times*, 15 February, 1882.

⁶⁰⁰ *Kelly’s Directory of Cumberland*, London, 1910, p. 68.

⁶⁰¹ *Trewman’s Exeter Flying Post or Plymouth and Cornish Advertiser*, Weds. 22 November, 1871.

⁶⁰² William White (ed.), *History, Gazetteer and Directory of Norfolk*, Sheffield, 1883, p. 319.

its colour ‘resembles blue lias closely, and of its durability no doubt can be entertained, as all the buildings in which it has been employed afford ample evidence of its excellent qualities.’⁶⁰³ (Fig.7.7) An article printed in *The British Architect* in May 1874, noted that the restoration to the exterior of the cathedral was ‘almost completed’ and the Kilkenny marble columns replacing the crumbling blue lias ‘adds extremely to its beauty.’⁶⁰⁴ The article also notes that the combined lengths of the replacement columns ‘cannot be less than 5,000ft.’

Further newspaper articles and advertisements reveal the variety and distribution of marble products manufactured at Kilkenny. The *Glasgow Herald* printed an advertisement for an auction to be held 2 May 1888 of articles of furniture from the steamship the *Great Eastern*. Among the items for sale were two ‘Handsome Walnut Cabinets with Kilkenny Marble Tops.’⁶⁰⁵ *The Irish Times* printed a letter from Richard Colles regarding a mistake in one of its articles concerning the Irish Village at the Chicago World Fair in 1893. Colles informed the editor that ‘The “beautiful Celtic cross” mentioned [in the article] is exhibited by us, not by the person named.’⁶⁰⁶ In 1898 the *Belfast Newsletter* printed an account of the restoration work carried out on the parish church at Hillsborough, Co. Down. A ‘huge slab of Kilkenny marble’ was placed in front of the communion rails and inside the rails was ‘paved in Mosaic work, under the superintendence of Mr. Colles, of the Kilkenny Marble Works.’⁶⁰⁷ This whole work was being put in place as a memorial to the 4th Marquis of Downshire, Lord Arthur Hill and Richard was taking full control of the project. It does appear that the Colles family were very ‘hands on’ in their work. It is likely that Richard adopted the same approach in similar work carried out in St. Canice’s Cathedral that same year. In December 1898 a special service was held in the cathedral for the dedication of the new work carried out under the direction of Richard Langrishe. All the marble work was completed by ‘Mr. Richard Colles, J.P.’⁶⁰⁸ The different coloured marble paving represents the four provinces, the Connemara green marble representing Connaught, the Kilkenny black marble for Leinster, the Cork grey marble for Munster and the Tyrone red marble representing Ulster. (Fig.7.8) We do not know if the Colles family worked any quarries

⁶⁰³ *The Architect: a weekly illustrated journal of Art, Civil Engineering, and Building*, vol. iv, London, 1870, p. 302.

⁶⁰⁴ *The British Architect*, 29 May, 1874, p. 349.

⁶⁰⁵ *Glasgow Herald*, 2 May, 1888.

⁶⁰⁶ *The Irish Times*, 24 May, 1893.

⁶⁰⁷ *Belfast Newsletter*, 17 June, 1898.

⁶⁰⁸ *The Irish Times*, 20 December, 1898.

in Ulster as there is no mention of this in any sources examined, but it would have been an easy task for Richard to order the marble from the north and work it to the required design at the marble mills.

The Kilkenny Marble Works supplied finished marble pieces to the very south of the country also. A letter written by Richard to *The Irish Times* in 1906 regarding the unveiling of a memorial to the Royal Munster Fusiliers in Killarney states that the Celtic cross ‘was made of best Kilkenny limestone.’⁶⁰⁹ The newspaper had erroneously printed ‘Killarney limestone’ instead of ‘Kilkenny limestone’. Richard was very protective of the reputation of the business, keeping a very close eye on the printed media whilst at the same time taking the opportunity to subtly advertise his marble products. However there were some newspaper reports that remind us of the dangers associated with quarrying and similar industries. The *Weekly Irish Times* printed an account of a fatal accident that occurred in August 1910. Patrick Byrne, a 16 year old boy, ‘in the employment of Mr. Richard Colles, J.P., Millmount, County Kilkenny,’ died after falling from a wagon that was being pulled by a traction engine, the wagon crushing the unfortunate youth.⁶¹⁰ The traction engine was purchased in 1907 as part of the continual modernization at the marble mills. Used to haul marble blocks from Kilkenny railway station and the local quarries to the marble mills, the benefit of this machine to the business came at great cost on this occasion.

This sombre notice does reveal to us the location of the accident. It occurred at Threecastles, approximately six miles north west of Kilkenny city. There is a large limestone quarry located here which is still worked today and this is the first mention of the Colles family being associated with it. This is probably one of the quarries acquired during the expansion of the business during the latter half of the nineteenth century and would indicate that Richard Colles had acquired most, if not all, of the best limestone quarries operating in Kilkenny. At the end of the nineteenth century Colles was to radically change the marble business in Kilkenny, this included the renaming of the Kilkenny Marble Works.

Many sources examined for this thesis indicate that the Kilkenny Marble Works ceased as a company when Richard Colles sold the business and moved first to Dublin and then to England sometime after 1921. These sources are very vague in their accounts of when exactly the Kilkenny Marble Works became the Irish Marble

⁶⁰⁹ Ibid, 1 October, 1906.

⁶¹⁰ *Weekly Irish Times*, 27 August, 1910.

Company, but recently examined newspaper articles suggest that the Irish Marble Company was set up in 1917 with Richard Colles at the helm. The *Irish Independent* announced in April of that year that ‘For the purposes of developing the marble quarries at Kilkenny, Midleton, Castleisland and Connemara, the Irish Marble Co...has been formed.’⁶¹¹ From this we see that quarries in Castleisland, Co. Kerry, were being worked by Colles. The article also stated that the company had taken over the Milverton limestone quarry at Skerries, Co. Dublin. Why this new company was formed is not revealed, but according to this report, the capital required for its setting up was £30,000, half of which had been raised in England. However, other documentation reveals that the Irish Marble Co. had been in existence for at least the previous twenty five years. A notice printed in *The British Architect* in March 1892 announced the following;

The business of quarrying Irish marbles and manufacturing Irish and other marbles and stone, hitherto carried on by Mr. Richard Coles, [sic] at Kilkenny Marble Mills, will in future be carried on at same address as a company, under the style and title of The Irish Marble Company, the management being retained in Mr. Cole’s hands.⁶¹²

It is very likely that the name change was due to the fact that the business now encompassed quarries from all over the country, rather than just those of Kilkenny. It also portrays the company as a national, rather than a local business. It would appear also that there was an increased injection of capital in order to expand the business as subsequent advertisements indicate. One particular advertisement for the Irish Marble Company appeared in the *Journal of the Society of Architects* in 1897. It announced that Richard Colles ‘Proprietor of the Celebrated Quarries of Victoria Red, Sunset [Cork marble], Connemara Green, Black Fossil or Kilkenny, Dove, Dark Grey, &c’ could supply architects, contractors and the trade with a variety of marbles from ‘The oldest Marble Works in the United Kingdom, Established A.D. 1730.’ This advertisement revealed that ‘Powerful new Machinery for Sawing, Moulding, Turning and Polishing’ had been installed to cater for marble work of every description.⁶¹³ Similar advertisements continued to appear up to 1912 at least.

⁶¹¹ *Irish Independent*, 13 April, 1917.

⁶¹² *The British Architect*, 11 March, 1892, p. 204.

⁶¹³ *Journal of the Society of Architects*, Jan. 1897, p. 60.

Returning to the article printed in the *Irish Independent* in April 1917, it would appear that Richard Colles sought capital in order to expand the business in England, the paper announcing that ‘Large contracts had been secured’ there. It is worth noting also that all the quarries, with the exception of those in Kilkenny, were located within easy reach of the coast, enabling the marble to be shipped to Britain. But it was not only in England that the company had contracts. Acquiring the quarry at Skerries was part of the plan to supply ‘large quantities of marble [which] will be used in the re-building of Dublin,’ after the destruction inflicted on the city the previous year 1916. The Irish Marble Co. Ltd. remained based in Kilkenny where the various marbles from the quarries in Cork, Kerry and Connemara were transported by train and made up into the various marble items at the marble mills. The *Irish Manufacturer’s Directory and Year Book, 1919* listed ‘Colles, R., The Irish Marble Co., Kilkenny’ as the main manufacturer of chimneypieces in the area.⁶¹⁴

In July 1921 *The Irish Times* published an article ‘The Magnificent Marbles of Ireland.’⁶¹⁵ The article focused on Kilkenny marble stating that ‘the marble sawing mills bear the distinction of being the first which were established in Great Britain in which any other than hand power was employed.’ The principal source of Kilkenny marble was still the Black Quarry, but a pure black marble was found ‘in a quarry about five miles distant’. This must have been at Butlersgrove. The article goes on to state that ‘An ancestor of Mr. Richard Colles set up saws worked by water power in the year 1730, and from then until the present time the mill has been constantly at work.’ This would indicate that Richard was still running the company at this time. The Irish Marble Co. Ltd. was doing business ‘on an extensive scale’ and the article listed a great number of contracts carried out in Ireland and Britain. The works carried out in England were likely to have been the large contracts mentioned in the *Irish Independent* article in 1917. (Appendix C).

In September 1921 the *Freeman’s Journal* printed a short article titled the ‘Beauty of “Bird’s Eye” Marble’ from the Black Quarry in Kilkenny.⁶¹⁶ This name was given to the marble as the fossilization resembles birds’ eyes. The article compares the marble of the Black Quarry with that quarried at Threecastles six miles away. The Threecastles marble contains very minute fossils giving the marble a ‘speckled grayish appearance.’

⁶¹⁴ Kevin J. Kenny, *Irish Manufacturer’s Directory and Year Book, 1919*, Dublin, 1919, p. 218.

⁶¹⁵ *The Irish Times*, 6 July, 1921.

⁶¹⁶ *Freeman’s Journal*, 17 September, 1921.

These marbles along with many Irish marbles were dealt with in an ‘interesting little booklet about to be issued by the Irish Marble Co. Ltd. of Kilkenny.’ This booklet contains much information on the recent history of the company, but, unfortunately, it does not reveal anything on the founding of the Kilkenny Marble Works, or the then current directors of the company. It does however reveal that the head office was still at the ‘Marble Mills, Kilkenny’ with an office at 3 College Green, Dublin and one at 20 St. Mary Axe, London.⁶¹⁷ No date is printed on this booklet, but as the newspaper article reveals, it would have been shortly after September 1921. This may be the reason why it was thought that the Irish Marble Co. was founded about this time. The booklet states that the company works ‘the largest marble quarries in the United Kingdom’ which was no idle boast considering all the quarries in its possession. It also informs the reader that it won prizes at the Dublin Exhibition of 1872 and again in 1882 and 1885, at the Cork Exhibition of 1885 and in Liverpool in 1886. It also informed potential customers that ‘Owing to the immense quantities of marble that will...be required in connection with the rebuilding of Dublin, Cork, and other destroyed towns in Ireland, all early requirements should be notified to the Manager, to ensure prompt delivery.’

Some of the modern improvements carried out during this period were the installation of electric dynamos which were still powered by water. The saws worked up to midnight and resumed again after six hours, winter and summer, the water power never diminishing. (Fig.7.9) Plans were afoot to extend the machinery which would result in greater productivity. The booklet proudly proclaimed that

No other firm can compete with us, as our facilities are practically unique. We have the material at our command, nearly two centuries of experience in the different branches of working stone, and natural power for our machinery.

This machinery consisted of powerful saws, rubbing and polishing machinery, turning and polishing lathes which were capable of supplying unlimited quantities of marble expeditiously. Such statements hark back to those of William Colles of Abbeyvale when he set out in this trade almost two hundred years earlier.

A week after printing the article on ‘Bird’s Eye’ marble, the *Freeman’s Journal* printed a short notice on the shipment of Irish marble to America. One hundred tons of

⁶¹⁷ NLI, 3B 1968, *Irish Marble Co. Ltd.*, Kilkenny, 1921?

marble were loaded at Recess station in Co. Galway for onward shipment to San Francisco. The marble was from the 'Connemara Quarries of the Irish Marble Company (Kilkenny).'⁶¹⁸ The newspaper saw this shipment as a 'fitting tribute not only to the enterprise of this Irish company but to the quality of the marble it produces.' Expressing its concerns over the reluctance in using the marble in this country, the article suggests that the marble should be used to a 'much greater extent by Irish firms, banks, public bodies and churches.'

In the aftermath of the national upheavals of the early 1920s, the former Kilkenny Marble Works was ideally positioned to play a leading role in the rebuilding of the country. The Irish Marble Company had adopted an aggressive advertising and marketing campaign and invested in new quarries, equipment and technology. But, this was the very first time such measures were taken without the involvement of the Colles family. It is believed that Richard Colles sold the mills sometime around 1921. He would have then been 77 at this time, well past retirement age (he died in 1928). The company seems to have had a number of profitable years following Richard's departure, but the enterprise seems to have then taken a downward turn a short time later, doubtless because of the economic depression brought about by the political situation. In his report,⁶¹⁹ Fred Hamond notes that the top mill (the original marble mill) ceased work around 1925 as it is described thereafter in the valuations as a 'workshop.' The bottom mill is noted as in 'ruins' at this time also. In 1931 the 'Millmount Marble Works' were still producing items 'though trade is not as good as it used to be.'⁶²⁰ It is not known why the newspaper referred to the marble mills as 'Millmount': it is possible that it was due to the fact that the marble saw at the middle site, opposite Millmount House, continued in use and it is not until 1936 that it is recorded in the valuation book as 'vacant'.⁶²¹

By the 1930s the quarries were also in decline. A group of 'experts' visiting the Kilkenny quarries in 1930 reported that 'With the introduction of modern machinery' the Black Quarry could supply great amounts of high quality marble for the domestic and foreign markets.⁶²² This group also visited the quarry at Butlersgrove which 'has not been properly worked for the last ten years, with the exception of one corner...operated

⁶¹⁸ *Freeman's Journal*, 22 September, 1921.

⁶¹⁹ See note 38.

⁶²⁰ *The Irish Times*, 6 January, 1931.

⁶²¹ Hamond, 'An Industrial Heritage Survey Of The Marble Works, (see n. 567), p. 8.

⁶²² *Leitrim Observer*, 5 July, 1930.

by a Waterford builder...for ordinary building purposes.’ This must have been the only time in two hundred years that the marble quarries were not being worked to their full potential and the marble industry in Kilkenny lacked the most modern equipment and technology necessary to produce high quality marble products.

The *Times Pictorial* printed an article on James Kealy in 1944. Kealy was from Maddoxtown and for forty seven years he worked as a marble polisher at the marble mills. According to Kealy, the Kilkenny quarries being worked during his years as a polisher were the Black Quarry, Butlersgrove and Threecastles, the last of these quarries closing down in 1933.⁶²³ At the height of production during Kealy’s time there the marble industry in Kilkenny was shipping its wares ‘all over the world.’ The marble tradition that bestowed the title ‘Marble City’ on Kilkenny had come to a rapid end. The marble heritage of Kilkenny, overseen by the Colles family for almost two hundred years, died out within ten years of the family’s departure from the area. The world was rapidly changing with recession and war leaving its mark on every trade. In the wake of such events there is always a rebuilding process, but such processes now required a swifter response, industries had to quickly adapt or get left behind, the stone and marble industry in Kilkenny was among those that were left behind. Widespread use of concrete was a major factor in sounding the death knell for the stone industry. Construction work could be carried out at a far greater pace with concrete. It was less labour intensive, less expensive and involved less preparation than stone and its versatility ensured it could replace stone in every aspect of building. Did Richard Colles foresee the demise of the marble industry in Kilkenny and decide to sever the family’s ties with the trade and Kilkenny? Would the Colles family have succeeded in adapting the trade to the demands placed upon it by a rapidly changing world? Would the Kilkenny marble business have maintained its position as a market leader in the face of competition from the concrete industry? It is very unlikely that any member of the Colles family could have staved off the inevitable demise of the marble industry in Kilkenny, but we can be assured that they would have faced up to such challenges in their endeavour to preserve the marble heritage of Kilkenny that they had nurtured for so many generations.

⁶²³ *Times Pictorial*, 2 September, 1944.

Conclusion.

There is no doubt that Alderman William Colles of Abbeyvale revolutionised the marble industry in Ireland during the eighteenth century. His letter to the Dublin Society in February 1731/2 outlined his intentions to supply a greater volume of marble at a cheaper price than had ever been achieved in the past. Surely he must have felt that he exceeded even his own expectations with the success of this venture. Undoubtedly, the city of Kilkenny was blessed with the marble of the Black Quarry and the power of the Nore, but William Colles the inventor saw the great potential of combining these natural gifts to lift the marble industry out of its medieval past and into the Age of Enlightenment. William Colles the entrepreneur saw the financial benefits that could accrue from this combination and the advantages it would bring to the Kilkenny area and beyond. We have seen how he set out at the very start of this enterprise to impress upon the members of the Dublin Society the great improvements he was bringing to the industry. There is also no doubt that the description of the Kilkenny Marble Works in the papers of the Physico-Historical Society is one of the most important accounts of any of the improvement schemes carried out in this country in the eighteenth century.

William Colles not only revolutionised the sawing and polishing of marble, he also revolutionised the marketing of marble products. Today we are familiar with terms such as ‘market research, advertising campaigns, product placement, quality control and targeting strategies’, to name just a few, but was William Colles not doing all these things during the eighteenth century? We have seen how English agents were sent over in the seventeenth century to scour the country for the best marble quarries available, claiming that Ireland would benefit as much as England from this enterprise; Colles was instrumental in changing this. He took the marble trade out of the control of an elite few and brought his own marble products to a wider range of discerning customers, catering for all tastes and purses, creating much employment in the process. Native marble was now being exploited by an Irish entrepreneur to produce locally made items for an Irish clientele.

William of Abbeyvale was proactive in promoting his inventions and products as part of what Toby Barnard described as the frequently seen ‘mission to spread beliefs and practices’, as noted in the introduction to this thesis. Colles’s letter to Thomas Paty in Bristol shows that he was not reliant on agents to make business contacts, preferring

to take the personal approach in building up a network of contacts with whom he could relate to on a commercial and individual basis. His success in this approach made Kilkenny marble a trademark for quality and excellence, used by prominent architects, sculptors and masons on both sides of the Atlantic Ocean. The Kilkenny Marble Works was seen as the standard which all other marble industries should be encouraged to attain. From Scotland to Vermont it was regarded as the best example by which the marble industry could and should be developed.

William Colles may have spearheaded the *revolution* of the marble trade with his water powered technology, but the momentum of this initial revolution had to be maintained if the business was to succeed. It was the constant *evolution* of the industry by successive generations of the Colles family that ensured the Kilkenny Marble Works remained to the forefront of the marble industry for almost two centuries. It is testament to the character of the Colles family that each generation saw fit to reinvigorate the marble mills with the latest advancements in technology, much of it their own. Perseverance and commitment to constant improvement was the philosophy of the Colles family.

Public works and private commissions were equally catered for by the Colles family and they were very adept at carrying out both. William Colles proved his dependability in completing the commissions for both barracks in Kilkenny on time and within budget. However, if there is one blot on his copybook, it is his involvement in the failure to complete the canal from Kilkenny city to Inistioge. His major failing in this was his insistence to begin the canal at Kilkenny city. But Colles cannot be held solely responsible for this failure, his tireless campaigning and canvassing was fundamental in getting the project underway in the first place. Delays due to natural events cannot be placed at Colles's door and, as noted, similar schemes involving the same engineers in other parts of the country proved expensive with limited success. The diversion of funds and resources for bridge rebuilding after the flooding of the Nore was beyond his control. A number of further attempts to complete the navigation never made it beyond the planning and design stage. This should, in some way, help to exonerate the character of William Colles in relation to the failed attempt to render the Nore navigable.

Even with the advent of the railway the problems associated with transporting the marble continued, but while Alexander Colles and his son Richard protested at the cost of rail carriage, they were never inclined to turn away from the business, be it from a sense

of duty, or an inborn tenacity. Both men succeeded in returning the Kilkenny Marble Works to a viable commercial enterprise after the lean years of the early nineteenth century when, it appears, the cost of working the marble had priced it out of the English market at least. By the latter half of the century the improvement and expansion programmes introduced by Alexander and continued by Richard, saw the Kilkenny Marble Works and later, the Irish Marble Co., supplying marble to all corners of the globe. The new company, busily promoting itself in Britain at the turn of the century, was ready to assist in rebuilding Ireland after the destruction that befell the country in 1916 and again in the 1920s. It is ironic to think that after they were used to provide the materials for the nation's reconstruction and rebirth, the Kilkenny marble mills were, in a very short space of time, left to crumble and decay. The quarries that once supplied these mills with an endless supply of marble were abandoned, left overgrown and flooded. Nature, under the watchful eye and guiding hand of the Colles family, provided the marble and the power of the Nore for the benefit of the family and Kilkenny; it had now taken it all back.

The knowledge and craftsmanship that accompanied the marble mills and the quarries almost disappeared too. The traditional skills of the stonecutters and masons were restricted to the carving and lettering of headstones and monuments. However, by the mid to latter half of the twentieth century, new technology brought about a renaissance in the stone industry in this country. The introduction of commercially viable diamond based cutting equipment revolutionized the industry. In the tradition of the Colles family, Kilkenny embraced this technology more than any other area in the country. By the 1990s five quarries in the area were producing 35,000 cubic metres of limestone per year.⁶²⁴ These five quarries are Holdensrath, Paulstown/Kellymount and Old Leighlin, a short distance away on the Carlow side of the Kilkenny/Carlow border. The other two quarries in operation are more familiar to us due to their association with the Colles family, these are Threecastles and Butlersgrove.

In December 2008 I paid a visit to the Butlersgrove quarry. This quarry had been worked by the Colles family and the Irish Marble Co. in the past and it was one of the three Kilkenny quarries that had closed by 1933, as noted in the previous chapter. Between the closure and the early 1970s there was only sporadic quarrying for local purposes carried out here. In 1972 a local man Jim Harding reopened the quarry in the belief that there were beds of quality marble there. The underlying limestone beds

⁶²⁴ *Irish Blue Limestone: properties and applications*, catalogue of the Architectural & Monumental Stone Association, Dublin, 1995, p. 13.

belong to the same limestone formation as the Black Quarry and Harding was sure there were marble beds in Butlersgrove that were exactly the same as those worked at the Black Quarry in the past. Harding rented the quarry for the next six years, eventually buying it in the 1980s. He spent these years ‘pursuing Kilkenny Marble.’⁶²⁵ Unfortunately the marble proved elusive and Harding passed away without ever finding it. The quarry remained in the family as Jim Harding Jnr. continued to work the limestone beds. The stone was used for building stone walls and also for aggregate for the construction industry during the ‘Celtic Tiger’ years. By this time the quarry had widened and deepened and a new corner had been opened, exposing an area that had never been quarried before. In May 2007, as some blocks were being moved from this area, one block slid down and hit two other stones and it ‘rang like a bell’.⁶²⁶ Harding knew instinctively that this was the layer of Kilkenny marble. Needless to say, this stone was not used for walling and aggregate, it was reserved for the manufacture of fine Kilkenny marble chimneypieces. Harding has seventy different styles of chimneypieces in his showroom in nearby Gowran. He uses Italian marble, Portuguese marble, sandstone and slate in his designs, combining native and foreign marbles in the tradition of the Kilkenny Marble Works. The blocks of marble are brought to the cutting sheds attached to the showrooms and go through the whole process of cutting, polishing, and moulding. Eventually, all the pieces are assembled, sanded and polished to a shiny finish and the complete chimneypieces are then placed in the showrooms for sale.

In observing this process first hand, it was easy to understand the amazement experienced by visitors to the Kilkenny Marble Works in the eighteenth century. Apart from the modern power sources of electricity and compressed air and the use of industrial diamonds and circular saws for cutting the marble, little has changed. The basic process involved in creating a chimneypiece from start to finish is exactly the same as it was almost three centuries ago at the Kilkenny Marble Works on the banks of the Nore at Maddoxtown.

⁶²⁵ *Kilkenny People*, 19 November 2008.

⁶²⁶ In conversation with Jim Harding, 5 December, 2008.

Appendices

Appendix A.

Memorials of Deeds and Leases relating to the Black Quarry.

1. Minchin to Sheehan, registered 18th July 1748, 131/281/89052.

Memorial of Lease dated 4th July 1748 where Humphrey Minchin of Inchmore, Kilkenny, Esq did demise and set unto David Sheehan, Dublin, Stonecutter, all that and those said Humphrey's part of the Black Quarry and 1 acre 22 pch of land more or less being the parcell of Land called part of the Old and New Black Quarry and also parcel of Land commonly called the Ash Park containing c.13 acres 3 rood plantation measure more or less in as ample a manner as said David then held the same situate in Parish of St. Patrick's, Kilkenny, with liberty for said David his heirs and assigns to digg search for and carry away all marble and other stones as should be found in said premises...to hold from 25th March last for 31 years...yearly rent of £10 payable half yearly.

2. Minchin to Ensor, registered 18th July 1748, 131/281/89053.

Lease dated 5th July 1748 whereby Humphrey Minchin, Inchmore, Kilkenny, Esq. did demise and set unto John Ensor, City of Dublin, Gent all that and those of said Humphrey's part of the Black Quarry and 1 acre 22p of land more or less being the parcell of Land called part of the Old and New Black Quarry then in the possession of David Sheehan, Stonecutter and also all that parcell of Land commonly called the Ash Park containing by est. 13 acres and 3 roods plantation measure more or less in ample manner as said David then held the same situate in the parish of St. Patrick's...with Liberty for said John his heirs and assigns to digg search for and carry away all the marble and other stones as should be found in said premises with the appurtenances except as therein is expected to hold from 25th March 1779 for 68 years at yearly rent of £10 ster. payable half yearly above taxes.

3. Jacob to Colles, registered the 27th May 1752 at 12 o'clock at noon, 153/416/103355.

A memorial of an Indented Deed of Lease bearing date the fifteenth Day of November one thousand Seven hundred and Fifty one made between John Jacob of the City of

Waterford, Gent of the one part and Wm Colles of the City of Kilkenny Alderman of the other part whereby the said John Jacob in Consideration of the Rents and Covenants therein mentd. and reserved hath Demised granted Lett and to Farm Lett unto said Wm Colles all that and those the parts of the Black Quarry formerly belonging to Richd. Jacob late of said City of Kilkenny Gent Decd. and now in occupation of said Wm Colles and David Sheehan of the City of Dublin Stone Cutter and one acre and twenty two perches of Land be the same more or less and where of the said Quarry consists and wch adjoins there to being the parcel of Land Called part of the old and new Black Quarry and also all that parcel of Land Commonly called the Ash Park containing an Estimation thirteen acres three rood Plantation measure be the same more or less in as full and ample a manner as John Quigly formerly held and enjoyed the same as sd. Wm Colles now holds and enjoys the same all which Land and premises are situate lying and being in the Parish of St. Patricks in the County of the City of Kilkenny together with Liberty to him the said Wm Colles his heirs Exrd. admrs. and assigns to Dig Search for Raise Land use Carry away and Dispose of to his and their sole and proper use all such Mines Minerals Marble and other Stones as are or shall be found in and upon the said Demised Premises and every part there of with all and Singular the Rights members Priviledges [sic] and appurtence to the said Quarry and Lands and every part of them Respectively belonging or in any wise appertaining to have and to hold all and singular the premises with the appurtences unto the said Wm Colles his heirs and assignes from the twenty fifth day of March next ensuing the Date of said Deed above mentd. for and during the natural lives of Christopher James nephew to said Wm Colles and of Barry Colles and Wm Colles first and second Sons of said Wm Colles and the Survivors and Survivor of them for and During the natural Life and Lives of such other persons and persons by virtue of the said Deed shall from time to time Successively and foe ever be added During the said Demise persunt [sic] to the Covenant of Renewal in said Deed contained at the yearly rent of Fifteen pounds Ster During the first thirty one years of said Demise and for ever after During said term at the yearly Rent of Eighteen pounds Ster in which said Deed are sevl. Covenants as by the same may appear and said Deed is perfected by the Partys thereto and witnessed by Philip Murray and Robt Blacke both of the City of Kilkenny Gent and this Memr is also signed and sealed by the said Wm Colles in presence of the said Robt Blacke and of Christopher James of the said City of Kilkenny Gent.

4. Sheehan to Colles, registered 6th Nov. 1778, 318/337/217483.

Memorial Articles of Agreement made 5th July 1778 between Wm Sheehan, Dublin, Gent. and Wm Colles, Millmount, Kilkenny, Gent of the other part reciting that by Lease dated 16th Nov. 1751 Wm Colles then of City of Kilkenny Aldm. father of above named Wm Colles had demised to David Sheehan, then of Dublin, Stonecutter father of said Wm Sheehan, the one half of undivided moiety of the part of the Black Quarry belonging to Rich. Jacob, late of City of Kilkenny, Gent, Decd. 1 acre and 22 perches of Land be the same more or less whereof said Quarry consists and which adjoins thereto being the parcell of Land called the Old and New Black Quarry and also the parcel of Land called the Ash Park containing est. 13a 3rds...and that by another lease dated 6th Oct. 1753 the said Wm Colles demised to Geo. Barton then of Higginstown, Kilkenny, Gent in trust for said David Sheehan.

Appendix B.

National Library of Ireland, De Vesci Papers MS 38,910.

Agreem^t. Between Lord Knapton & William Colles for the StoneCutting Work for sd. Lord Knaptons house ye 4 Augt. 1772

Articles of Agreement Entered Into Concluded & agreed Upon the fourth Day of August One thousand Seven Hundred & Seventy two between W^m. Colles of the County of Kilkenny of the One part & the Right Honble Lord Knapton of Abbeyleix In the Queens County of the Other part for the Stone Cutting of a House for the s^d. Lord Knapton.

First that the s^d. Willm. Colles Shall find StoneCutters & Shall Execute In a Workmanlike Manner all & Every part of the Stonecutting Work of s^d. House & shall sett all the Work by him Cut without further Charge to s^d. Lord Knapton Except the following Rates Viz.....

For Every foot In Length and Every foot in Breath [sic] of all plain Work the Sum of One Shilling & two pence Sterling & for Every foot In lenth [sic] by one foot in Breath of all Moulded Work the Sum of one Shilling & ten pence Sterling all the plain & Moulded Work to be Measured that Can be seen when Sett & Every Stone that Shall have any Moulding Cut thereon Shall be Measured in like Manner And that it may not happen that an Intire Stone or Stones Shall be all Moulded yet any part thereof being Moulded Shall Entitle the s^d. W^m. Colles to the Sum of one Shilling & Ten pence for Every Superficial foot that shall be Containd In such Stone or Stones as if the Same was Moulded quite through the Whole to have Neat Strait Joints & to be Close sett & the Geometrical Steps Shall be Measured at Each Side & Edges at the Rate of One Shilling & two pence p foot Supfecial.

2^{dly} That the s^d. Lord Knapton shall not give the W^m. Colles [sic] any Unesesary Delay for Want of Stones or other Conveniencys but the sd. Ld Knapton shall procure them at his own Expencc of Quarrying Raising & Loading & Drawing the Stones from the Quarry to the sd Intended House & that s^d. L^d. Knapton Shall be at the further Expencc of Scaffolding & Labourers to raise such Cutt Stones on the Walls In a Convenient Manner for the s^d W^m Colles to sett & Shall Supply the s^d Colles With Mortar & other Conveniencys for Setting the same

4^{thly} [sic] That the s^d. L^d. Knapton shall Cause to be paid to the s^d. Will^m. Colles or his Order Such Sum of Money as the s^d. W^m. Colles Shall have Occasion for to Subsist his Men by the Week & that s^d. Colles Shall give his Accountable Acc^s.for Such Sums as he shall Receive from time to time & if the Money Shall be Detaind so that the s^d. Colles Cannot Receive in 6 Days after Demanded then & In such Cause the s^d. W^m. Colles Shall have Liberty to Withdraw his men from Work & Shall not be Accountable

for any Delay—But if the sd. Lord Knapton Shall on his part keep & fulfil all Every part of the fore going Articles then the sd. Wm. Colles Shall be Accountable for any Delay given to s^d. Work by him.

5^{thly}. It is agreed that the s^d. Lord Knapton shall not be permitted to Alter the Cornice Mould from a plain Tuscan Cornice to any other Mould without first agreeing wth. s^d. Colles for the Rate thereof if a Better Mould a Larger & if a Worse Mould a Smaller price

6^{thly}. That the Work when Erected (or Sooner if the parties requires?) shall be Measured According to the foregoing Articles by a Person skild In Mensuration In the presence of Lord Knapton and W^m. Colles or persons appointed by them and if Lord Knapton or W^m. Colles Shall fault the Measurem^t. of s^d. Person then they Shall Chuse anor. person & if the two Measuremts. Agree It Shall finally Determine the Measurem^t. but if the [sic] do not agree then a third person is to be Chose & if any two agreeing Shall finally Determine the Measurem^t.

And Lastly if it Shall Appear that the s^d. W^m. Colles Shall have rec^d. More Money than his Work Shall amount to at the Above Rates then the s^d. W^m. Colles shall refund what ever Sum he shall appear to be overp^d. & if the s^d. W^m. Colles's Work Shall Come to More Money than What he has actually Rec^d. then the s^d. L^d. Knapton shall pay or Cause to be paid to the s^d. W^m. Colles Whatever sum that Shall appear to be due In the Space of three Months after Such Settlem^t and to the true performance of this last Article the Before namd Lord Knapton & W^m. Colles do bind themselves Heirs & Assigns Respectively In the ? Sum of Five Hundred pounds Sterling to be Recoverd by Action of Debt or Other wise In Witness Whereof the s^d. Parties have hereunto Affix'd their Hands & Seals—And It is further Agreed between the before s^d. Lord Knapton & William Colles that the said Colles Shall Work an Astrigall on the Upper Edge of Each of the Geometricall Steps w^{ch} Shall be Esteem'd as plain Work only & paid for at ye rate of One Shilling & two pence Sterling p foot Supfecial

Signed Seald & Deliverd In the presence of
Nich^s. Brock?

Knapton
Will^m. Colles 28

Appendix C.

List of buildings printed in the catalogue of The Irish Marble Co. Ltd. c.1921. National Library of Ireland, 3B 1968.

Kilkenny marbles have been used in the following edifices : — Wells Cathedral; Sheffield Municipal Buildings; St. Anselm's Church, Mayfair, London; Mappin Art Gallery, Sheffield; Glasgow Exchange; Public Baths, Alloa; Science and Art Museum, Dublin; Lord Iveagh's Mansion, Stephen's Green, Dublin; St. Finbar's Cathedral, Cork; Queenstown Cathedral; New Church, Sledmere, Yorks for Sir Tatton Sykes, Bart.; Kilkenny Castle, for the Marquis of Ormonde; Loftus Hall, for the Marquis of Ely; Waterford Cathedral; Worcester Cathedral; St. Canice's Cathedral, Kilkenny; Augustine Church, Dublin; Wavertree Church, Liverpool; Doneraile Church, Co. Cork; "Glangwna," Carnarvon, for John E. Greaves, Esq.; South Hill Park, Bracknell, for Sir Arthur Haytor, Bart., M.P.; St. Mary's Church, Woolwich; St. Luke's Church, Cork; Jury's Hotel, Dublin; North Wall Hotel, Dublin; L. and N.W. Railway Company; Munster and Leinster Bank, Cork; Munster and Leinster Bank, Waterford; Ulster Bank, Dublin; a memorial cross for the late Prince Maurice of Battenburg, order from the Royal Family to be erected at Ypres. The Company's customers also include the leading monumental masons and marble merchants of the United Kingdom.

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Edinburgh University Library

Robert Jameson Papers

London

National Archives Kew

CUST3, CUST14, CUST15, CUST16

Oxford

Bodleian Library

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