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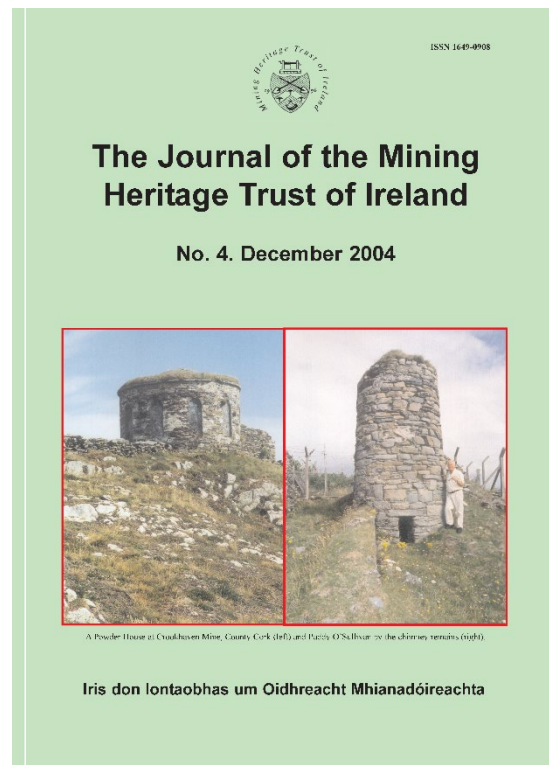
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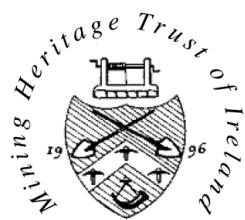
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HIBERNIA, SHAMROCK, ERIN: WILLIAM THOMAS MULVANY AND THE 'IRISH MINES' IN THE RUHR

By Olaf Schmidt-Rutsch

Abstract: This deals first with Irish investment in coal along the Ruhr before Mulvany's arrival. His engineering and administrative experience in Ireland is then considered, as these were the qualities he brought with him to Germany at the age of forty eight. The main focus is on his success in his new career and finally there is his legacy. *Journal of the Mining Heritage Trust of Ireland*, 4, 2004, 3-10.

AN IRISHMAN OF GREAT ENERGY AND RESOURCE

William Thomas Mulvany was born in Sandymount, Dublin, on 11 March 1806. He was the eldest child of Thomas James, a painter, who was involved in the foundation of the Royal Hibernia Academy and was part of Dublin society:

In conversation he surpassed all the men we ever knew. He was forcible, brilliant, witty, imaginative, eloquent. The most polished language flowed from him without preparation or effort.

William Thomas Mulvany's mother, Mary, was the daughter of one Dr. Cyrus Field. He grew up in a good and plain family atmosphere and got a good education. The family was Roman-Catholic but his father held a very liberal opinion regarding the question of faith. In 1829 he wrote to his son:

When drinking from the same Source, looking to the same God and resting upon the same Rock, we may all as Irishmen merge all sectarian designations in the harmonized and glorious name of Bible Christians. Whenever that comes to pass our country will prosper; our people will be happy - the voice of political or religious sectarianism will be heard no more, man will no more continue to hate his neighbour for the love of God! (Mulvany 1907).

Thomas James Mulvany's profession brought him some success, but it did not lead to prosperity. He had to care for five sons and two daughters. The biographies of his sons showed that the attempt to give them a good education was successful.¹ William Thomas intended to study medicine at Trinity College Dublin in 1823 but had to give up this plan because his father was not able to support him financially. After leaving Trinity College, William Thomas Mulvany worked as an apprentice for two architects, Francis Johnston, who designed the General Post Office in Dublin, and John Semple, who was engaged in the building of several Anglican churches. It is more than likely that during the work with Semple and under the influence of Archbishop William Magee, Mulvany converted to the Anglican faith. His conversion happened from conviction, (later the Mulvany family laid the foundation for a still existent Anglican community in Düsseldorf), but it also opened the way into the civil service (O'Dwyer 2000; McParland 1969, Craig 1990).

At the end of 1826 Mulvany joined the Ordnance Survey as a civil assistant. but after just a few weeks left to join the Boundary Survey, which was directed by the well-known engineer Richard Griffith. For the next years he worked as a Boundary Surveyor (Andrews 1975; Griffiths 1987). Mulvany qualified himself in this service and started to look for a civil engineering position. In 1831, he had the chance to be employed as a civil engineer with the Shannon commission. The decision to join the Shannon regulation works was the most important in William Thomas Mulvany's career, because he came under the influence of Colonel John Fox Burgoyne and the new system of public works in Ireland (Mulvany 1907).

The regulation of the Shannon was undoubtedly an important task for the new scheme of supporting such industrial and economic development. Nevertheless, this work was carried out by a special commission with John Fox Burgoyne as chairman. Mulvany was engaged in 1836 and employed on the lower Shannon between Lough Derg and the sea. Two years later he was ordered to examine the project of a canal between the Shannon and the Erne. This was very important for the infrastructural schemes in Ireland because it connected the Shannon with the north of Ireland and completed the backbone of the Irish inland waterway system. Mulvany's project was published in 1839. Apart from the fact that the Shannon-Erne-Canal, when realized some years later, became an economic failure, the project was a milestone in Mulvany's career and had an enormous impact on his thinking regarding questions of traffic systems. It continued to have an effect during his time in Germany as well.

Drainage also played an important role in the strategies of the Board of Works. In 1842, Mulvany was appointed commissioner for drainage and fisheries. Now he was responsible for realizing the ambitious arterial drainage scheme. issue of the first few works undertaken under its provisions.

Mulvany himself was interested in carrying out the drainage work on a foundation of experience and theory. However, the time for the drainage scheme ran short when the famine broke out. In November 1845 Mulvany reacted to the failure of the potato-crop, realizing the necessity for relief works. He pointed out that drainage works were suitable for the engagement of over 33,000 workers:

¹ George Francis (1809-1869) became a painter and first director of the National Gallery of Ireland. John Skipton (1813-1870) worked as a well known architect. Richard Field (1811-?) was engaged in the railway business and Thomas John's (1821-1892) career was closely connected with his brother William Thomas. As usual, we know nothing about the life of the two daughters, Eliza Anastasia (born 1807 or 1808) and Mary (1816?-1863).

Works of this class are peculiarly fitted to meet such an emergency as that anticipated, diffusing employment of a simple class, which agricultural labourers can be made easily to perform, through so many parts of the country, bringing it home, in fact, to the very dwellings of the peasantry, and in their results not only preventing, to a great extent, the recurrence of this evils which called for their execution, but tending to alleviate, if not remove, the sickness and fever which in an undrained country is almost certain to follow a scarcity of food, or the use of bad food (Mulvany 1907).

Though the drainage works played no role in Trevelyan's relief schemes, Mulvany ensured a change in the legal procedures to accelerate the start of new works. During the famine years over 20,000 workers were engaged in drainage works, and were not affected by the closing of relief works in 1847. In 1848, Mulvany, who had become Commissioner of Public Works in 1846, drew a positive conclusion regarding the drainage operations:

The extent of land drained forms an absolute addition to the fertile producing of the country. The whole of these lands, before their drainage, not only afforded little employment for man, but, from their flooded state, were injurious to the health of the inhabitants, and the ripening of crops in the adjacent lands (Mulvany 1907).

Nevertheless, after overcoming the famine it became obvious that the drainage scheme touched the basic problem of the Irish land system. During the famine years a large number of drainage works were started. To give some security to the proprietors, who had to finance the works, the modified legislation of 1846 provided a 'second assent', if the costs for drainage works exceeded the sum of £3 per acre. Indeed, in the early 1850's increasing costs relating to drainage works became evident. Eleven of 121 projects exceeded the limit of £3 and needed the proprietors' 'second assent'. This resulted in an investigation by the House of Lords in 1850. The striving for perfection, which was one of the reasons for the increasing costs related to the drainage schemes, brought Mulvany difficulties - not for the last time in his career (Dooe 1987; O'Loan 1960).

The commission of the House of Lords decided to reduce the drainage schemes and fault was found with the lack of control exerted by the Treasury over such schemes. Mulvany was not held responsible for incorrect behaviour in office but it was clear that he was made a scapegoat. After 1852 the drainage works were brought to an end. Mulvany retired on pension in 1854 and headed for the Ruhr shortly afterwards (PP 1843).

THE RUHR IN THE MID-19TH CENTURY

To understand the relevance of the story of Mulvany and the Irish mines it is helpful to take a look at the situation in the Ruhr before the industrial take-off, which had far-reaching consequences for German society. The Ruhr coal field is roughly contained within the River Rhine in the West, the River Ruhr (which gave the whole region its name) in the South and the River Lippe in the North. Since the end of the Napoleonic Wars the area, formerly divided into several independent states, belonged to Prussia, but was still divided into two provinces: Rhineland in the West and Westphalia in the East. When

Thomas C. Banfield visited them in 1846 he found the landscape 'poetically agricultural'. There were just a few indications of the forthcoming industrial take-off, which would change the Ruhr dramatically.

Coal mining was limited to the banks of the River Ruhr. Here, the coal could be found just beneath the ground. The coal was worked in open pits or from small galleries driven into the hill-sides. This form of mining found its natural and geological frontier in the ground-water level. The attempt to reach lower coal seams was connected with an enormous need for capital and pumping power. Both were a major problem for the mine owners. Normally a mine was divided into 128 shares, and these were owned by entrepreneurs and coal merchants, by local farmers and widows.

In the 1830s several circumstances opened the way to deeper mining. Belgium's declaration of independence was connected with the loss of the Walloon coal-fields and caused an increased demand for the coal of Rhineland-Westphalia in the Netherlands. Coal transport on the Ruhr, which was one of Europe's most frequented waterways at this time, facilitated the supply of the new market and motivated several collieries to sink vertical shafts to reach the deep coal seams which were untouched until this time. The first of these collieries emerged on the banks of the Ruhr. It was already known that there were much richer reserves of coal north of the river. The fact that these were covered by a chalk formation caused major problems; financial, technological and administrative. The changing character of the coal from the exposed field in the south to the hidden field in the north was one of the significant features of the Ruhr coalfield and the most important challenge to mining engineers in the mid-nineteenth century (Pound 1952).

The exploitation of the northern coalfields was obstructed by the mining laws of Prussia. Coal mining was a royal privilege and the strict regulation of mining prevented the industrial take-off (Banfield 1846). This basic problem made things more difficult because it impeded investments into new mines in the northern coal fields. The risks of deep shaft mining were too great for most of the local residents and the regulations of the Prussian mining administration made investments of foreign capital widely unattractive. Nevertheless, there was an growing interest in Ruhr coal mining especially in Belgium, and thus the story of the Irish mines begins in Brussels.

MICHAEL CORR AND THE 'HIDDEN FIELD'

The tiny village of Gelsenkirchen was situated near the river Emscher just above the hidden coal-field, but far from the centre of coal mining. Since 1847 it was connected to the Cologne-Minden-railway, the first major railway line between the Rhine and the river Weser. This brought Gelsenkirchen to the attention of foreign capitalists. October 1847 saw the formation of the Anglo-Belgian Company of the Mines of the Rhine (Societe Anglo-Beige des Mines du Rhine), which was interested in the operation of a colliery in Gelsenkirchen. This company was not successful, underestimating technical problems in shaft-sinking and the effects of the German revolution of 1848. The global economic crisis made the enterprise collapse in 1849. As a result a new company was formed, but without British capital.

These events also ended the career of the chairman of the administrative board of the Anglo-Belgian Mining Company, Michael Corr van der Maeren.

Michael Corr was born on 5th February 1802 in Dublin or in Slane, Co. Meath. His parents had to emigrate from Ireland for political reasons shortly after his birth, leaving Michael alone. After the end of the continental blockade and the defeat of Napoleon, Michael was able to join his family which had settled down in Brussels in the meantime.² Here, Michael at first joined the Dutch army and was afterwards involved in the Belgian revolution of 1830. He became a naturalized Belgian and married a Flemish lady, attaching her name to his own. In the following years Michael Corr van der Maeren became an important person in the young Belgian economy. He worked as a merchant and judge at the commercial court in Brussels. As a convinced free-trader and friend of Richard Cobden, Corr was engaged in international economic and industrial relations. Given this background, his involvement in Ruhr mining seemed to be of minor importance. Nevertheless, his first involvement in coal mining in the Ruhr made him aware of the potential, and risks, of further involvement. The failure of the Anglo-Belgian Company handicapped him for some years. At the beginning of the 1850s he started to look for investors in a new mining enterprise in Gelsenkirchen. This resulted in the foundation of *Hibernia* colliery on St. Patrick's Day 1855 (Sevé 1864).

The story of how the investors for this enterprise were found is uncertain. Local folklore later suggested that it was a veterinary surgeon from Gelsenkirchen who rode across Europe to find money for the exploration of the coal fields of his home-town. Nevertheless, the idea that Corr visited the Dublin Industrial Exhibition in 1853 to find investors is much more plausible. The fact that the Prussian mining administration after 1848 was in a phase of liberalisation, changing from operating coal mines to inspecting them, made things much easier. The first of the new mining laws, dated 1851, strengthened the position of the mine owners and gave them the responsibility for mine management and the employment of miners, important factors for an entrepreneurial adventure in the Westphalian coal-field.³

It is not clear how the group who invested in *Hibernia* colliery was brought together, but it is obvious that neither Corr nor Mulvany had enough money to play a major role in this expensive and risky operation. This role was undertaken by two major Irish Quaker entrepreneurs, James Perry and Joseph Malcomson.

James Perry of Obelisk Park, Blackrock was 'the only genuine proto-tycoon among Irish railwaymen.' He was engaged in the iron business, owned an iron foundry in Ringsend and was interested in coal mining. As one of the directors of the Midland & Great Western Railway he was involved with William Dargan, the central figure in the Dublin Exhibition. It should



Figure 1. Mulvany as a young man. Reproduced from O. Schmidt-Rutsch (2003) *William Thomas Mulvany* (Cologne: Rheinisch-Westfälisches Wirtschaftsarchiv).

have been no problem for Corr to contact him and draw out his plans regarding coal mining in Westphalia. In this context it is interesting that Perry offered Mulvany employment with the Dublin and Drogheda Railway Company in 1836. In the same year he gave Mulvany's brother, the architect John Skipton, his first job for the railway and became a regular contract awarder afterwards. Without doubt James Perry had the necessary expertise to judge Corr's mining project.

Joseph Malcomson from Portlaw, County Waterford became the other financial backer. He also was a large-scale industrialist and was owner of the Portlaw cotton mill as well as the Neptune iron shipyard in Waterford. More than likely Joseph Malcomson invested his and his family's money because he sensed a good and lucrative business opportunity. However, neither Perry nor Malcomson pursued the aim to secure the coal supply for their Irish enterprises, because British coal was cheap and the traffic routes to Ireland short (Hunt 2000 and Irish 2001).

The work in Gelsenkirchen officially started on St. Patrick's Day 1855, and the new coal mine was christened *Hibernia*. One year later the *Hibernia* Mining Company was formed and registered with the mining authority. The 128 shares, stipulated by the mining legislation, were divided as follows (with the profession of the shareholders as they were written down in the partnership contract):

² Michael Corr's younger brother Erin, who became an artist, was born in Brussels in March 1803. That indicates that the parents left Ireland before the outbreak of Emmet's rising. Dooge, writes that Michael's parents left Dublin only two weeks after his birth: p. 33.

³ The process ended with the decree of the 'Allgemeines Berggesetz' in 1865 and was one of the most important preconditions for the development of the Ruhr industry.

Joseph Malcomson, shipowner of Mayfield (near Portlaw)	40 shares
William Malcomson, manufacturer of Portlaw	8 shares
David Malcomson, private individual of Mayfield-Portlaw	8 shares
James Perry sen., man of private means of Obelisk Park, Dublin	24 shares
William James Perry, private individual of Obelisk Park	8 shares
James Perry jun., man of private means of Kingstown	8 shares
Michael Corr van der Maeren	16 shares
William Thomas Mulvany	16 shares

The new company was very much a family business, following the Quaker practice of raising capital. Joseph and William Malcomson were brothers, David was Joseph's son. James Perry was the father of William James Perry and uncle of James Perry junior. Only Corr and Mulvany were unconnected to the families and were not Quakers. William Thomas Mulvany became the representative of the new mining company. According to the laws he had to live in Germany. Shortly after the official formation of Hibernia mine he and his family settled in Düsseldorf. For him it was a new start after a career in the Board of Public Works in Ireland (Mulvany 1907).

THE VIRGIN SOIL OF WESTPHALIA

In the summer of 1854 forty-eight year old Mulvany visited the Ruhr coalfields for the first time. It was not difficult for him to get information about coal mining. Banfield (1846) wrote about the Prussian mining board of this time:

[...] as sources of information, these boards are invaluable. Every stranger has to blame himself if he embarks in any mining operations in Prussia without knowing what he is doing. At these boards he can see the plans of mines, hear the traditions of the country, and obtain an impartial opinion --

Mulvany (1907) put it another way:

A year before my moving I had made the first visit here in 1854. I was used to overlook every aspect on the prosperity of a country from my official position in Ireland. I was convinced that these provinces have wonderful riches in all relations. I had looked up the geological map at the mining authority and recognized the area where wonderful extensive riches were under the earth. I had seen how incompletely the channels and the means of transport were; and I said of the place: "These people don't understand what they have here".

Mulvany's approach towards his new field of activity was not reckless. He used the summer of 1854 for collecting information about coal mining, not only in Prussia but also in Great Britain. An important question was how the new colliery should be constructed. Compared with the mining industry in Great Britain, coal mining technology in the Ruhr was underdeveloped. There was a need of engineering knowledge and money, but both could only be brought into the area if the mining authorities were willing to support such an enterprise. The signals given to Mulvany were positive and so he started to look for able engineers and technicians to explore the coal fields near

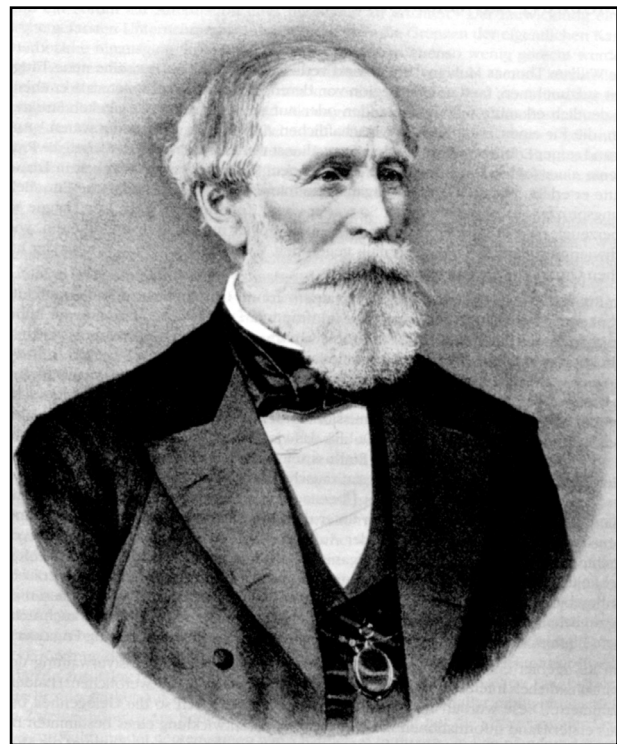


Figure 2. Mulvany in his old age. Reproduced from O. Schmidt-Rutsch (2003) William Thomas Mulvany (Cologne: Rheinisch-Westfälisches Wirtschaftsarchiv).

Gelsenkirchen. Once again Mulvany proved himself to be an organizer of great talent. He engaged William Coulson, a well known contractor for shaft sinking operations from the Durham coal fields in the north of England. Sixty-three year old Coulson represented a type of self-made engineer typical of the industrial revolution:

[...] He was not an engineer in the today's meaning. He has never used the drawing pencil. One stick of chalk in his pocket and the board was enough to show his foremen and workers his intentions, if not proficient but completely understandable. All that he knew, he knew from practice (Der Berggeist 1865).

Coulson and his workers were the best choice for overcoming the problems of shaft sinking operations in the Ruhr coalfield, because they were familiar with a mode of shaft construction which was not in use in Germany. The main problem was that the coal seams were covered with water-bearing strata of around 100 metres thickness. The usual German method of building the shafts in massive brickwork was dangerous, because sudden water break-throughs were difficult to control and at worst caused the collapse or flooding of the shaft. Coulson's sinkers used the more modern method of lining the shaft with cast iron tubbing segments:

When tubbing is to be put into a shaft, the first thing to be done is to select a suitable stone upon which to lay the wedging or tubbing crib. This bed is carefully levelled and tested with a straight-edge and spirit-level. The wedging crib is sometimes made of segments of oak, but more often of cast iron. [...] A thin sheeting of wood is first laid on the bed, then the segments are fitted together end to end and a sheeting of wood is placed between the joints. The crib is then made secure by driving wedges between it and the shaft side, and also wedging the joints. Great care should be taken in doing this, as it is very important that the centre of the crib, when ready for the tub-

bing, should coincide exactly with the centre of the shaft. When the wedging crib is finished the segments of tubbing are sent down and laid upon it until a circle is completed, then the second circle is formed by laying segments on the top of the first, and so on until the water-bearing strata is passed through; then a crib is laid on the last circle and wedged tight up against the stone above (Peel 1900).

More than twenty-five years later Mulvany described the progress of the works at Hibernia colliery in Gelsenkirchen in short and plain words:

No. 1 shaft was sunk very rapidly, and without any difficulty worthy of note; and the water feeders, amounting to about 120 cub. ft. per minute, were successfully tubbed back. [...] The shaft was sunk to a depth of 696 feet from the surface, into the coal face; and within about eighteen months from commencement of sinking, coalwork was started. Within a short time a production of 600 to 700 tons per day was reached; more than double that of old established collieries in the district (WT & TR Mulvany).

The engagement of English miners in the Ruhr coalfield was one of the reasons for the success of the mine because they brought their knowledge with them and played an important role in technology transfer. Nevertheless, it was only possible because the mine authority allowed Mulvany to do so. At this time the structure of the mining industry in Westphalia was still very traditional, the miners were very proud on their special status, which meant that they had to be engaged and dismissed by the state authorities. The fact that at Hibernia nearly all foremen and engineers were English or Irish illustrated, that both sides, Mulvany and the mining authorities, were interested in setting an example for the whole mining industry. At last, Hibernia looked very much like an English mine with wooden pit-heads and looked very different from the typical German mines of this time with massive brickwork buildings and shaft towers, reminding one of fortress architecture.

Whereas the sinkers left the mine after finishing the shaft operations, most of the engineers and foremen stayed. For them and their families the first workers' houses were built. They looked strange to the natives because of their curved roofs, showing typical similarities with the Malcomson's workers' houses in Portlaw. The first line of houses stood in Gelsenkirchen besides the railway, looking like a line of passenger train waggons. Colloquially this form of workers' housing estates became known as the *D-Zug*, i.e. 'fast train'. Many of the workers stayed in the Ruhr for the rest of their lives. George Laverick, for example, was born in County Durham in 1836 and was engaged as a pumping engineer in 1855. He retired in 1911 and died two years later (Ducker 1859).

After the positive experience with Hibernia mine, the Irish shareholders around Malcomson and Perry purchased a larger coal royalty in Herne, some miles east of Gelsenkirchen. The *Shamrock* mine was established in March 1856, repeated the success of Hibernia and surpassed the coal production of its predecessor shortly after the start of coalmining. A few years afterwards, Shamrock was one of the most productive mines in the Ruhr.

This success was mostly identified with William Thomas Mulvany. In 1858 he was elected member of the executive board of the just formed Association for Mining Interests (*Verein für bergbauliche Interessen im Oberbergamtsbezirk Dortmund*), the sole foreigner in this position. The same year saw major changes in the group of shareholders: Joseph Malcomson and James Perry died. At first, the death of the two main financiers indicated more entrepreneurial freedom for Mulvany, who was still the only one who lived in Germany. Convinced of the high quality of Westphalian coal, in his opinion equal to the British coal, he started a remarkable sales policy for the coal from Hibernia and Shamrock mines, selling it to the Netherlands, London and even Buenos Ayres. At this time costs of transport and production, combined with reservations against German coal, made such efforts economically unviable.

Nevertheless, it made Mulvany widely known in the Ruhr and enhanced the self-confidence of the young coal-industry; though it caused problems with the majority of the other shareholders. Moreover, the development of the Malcomsons' business after Joseph's death initiated the process which was to lead to the dismissal of Mulvany in 1864. The blockade of cotton imports during the American Civil War, the collapse of the Bank of Overend & Guernsey and the withdrawal of capital by family members had an enormous impact on the Malcomsons. Their involvement in Germany became more and more economically important and the dissatisfaction with Mulvany's high-handedness grew. At the same time, the shares of Hibernia mine were increasingly diluted and were used as collateral to underwrite business and family liabilities:

William Malcomson	10 shares
David Malcomson	24 shares
George Pim Malcomson	14 shares
Frederick Malcomson	14 shares
Marcus Goodbody	24 shares
James Perry	4 shares
William James Perry	7 shares
Michael Corr	4 shares
Carl Staes	1 share
Clementine Albertine Fanning	1 share
Helene Henriette Charlotte Marie Couvreur	1 share
William Thomas Mulvany	12 shares
Thomas John Mulvany	2 shares
Henry Macnamara	2 shares
William David Latimer	1 share
Anthony George Robinson	2 shares
Samuel William Perrott sen.	3 shares
Samuel William Perrott jun.	1 share
Sir Cussack P. Roney	1 share

Mulvany was dismissed in July 1864, but held his shares until the mines were sold to a German joint stock company, the *Hibernia & Shamrock Bergwerksgesellschaft*, in May 1873, just a few weeks before the crash of the Vienna stock exchange and the resulting economic crisis. Mulvany used his excellent connections to manage the sale and became president of the new company's supervisory board. He held this, more or less, honorary position until his death (Bueck 1880).

RETIREMENT

At the time of his dismissal Mulvany was still involved in another mine. Eblana colliery was founded in 1860 and was very much an enterprise of the Mulvany family. Mulvany, his brother, his sisters and his son held seventy-seven of the 128 shares. The remaining belonged to Cussack Roney, a Dublin railway entrepreneur, James S. Forbes, who was director of a Dutch railway Company, and Louis Christian Kenig, former business director of *Hibernia* and *Shamrock* mines and the only German. Eblana mine developed only after Mulvany was able to set up the *Prussian Mining and Iron Works Company*, combining Eblana, now renamed Erin, with two more coal mines and a blast furnace at the River Rhine, creating a combination of coal and iron in 1866. The company was backed financially by Anglo-Irish and German capital, including shareholders like Ebenezer Pike of Cork and Henry Bewley of Dublin.

The new company was expected to be another success, but collapsed in 1877. Apart from the crisis the collapse was caused by major technical problems in developing the mines, an underdeveloped railway system, which made the interchange of material and goods between the company's plants difficult, and an overly optimistic economic forecast. Mulvany retired from active entrepreneurship but still played a major role in the Ruhr's industrial pressure group afterwards (Mulvany 1872).

A special event took place in Düsseldorf on St. Patrick's Day 1880. William Thomas Mulvany's 25th anniversary was celebrated by his companions with a formal reception and a solemn dinner. The report of this celebration contained fifty pages and nearly every member of Ruhr business life and several government representatives were there. The Prussian Minister of Public Works and the Chief of the Mining Authority sent congratulatory notices from Berlin. This event signified that William Thomas Mulvany was highly esteemed in the Ruhr area. Friedrich Hammacher, chairman of the Mining Association, put it this way: 'In many questions you were the teaching master, every time the courageous pioneer.'

Mulvany actually played an important role in the process of forming industrial pressure groups. When he settled in Germany he was highly qualified to observe the infrastructure of his new field of activity. Although the economic situation in Germany was far better than in his homeland, he recognised many points which were at variance to the principles he had acquired during his work with the Board of Public Works. Since working in the Shannon-Erne Canal he was convinced that the transport system played an important role for the national economy. Therefore the means of transport had to serve the common interest more than the individual interests of their respective owners. One of his main arguments was that the interests of producers, consumers and transport companies were identical and supported the growth of the national economy. In fact, the expansion of industrialisation was obstructed by the tariff policy of the railway companies. Mulvany prepared himself for the reduction of the tariffs and put his individual stamp on the discussions, which lasted for years. It just came to an end when the Prussian railways were taken over by the state in the late 1870s: *The great mission of railways in all countries, but especially in*

Figure 3. Mulvany in his retirement, possibly in miner's uniform. Reproduced from O. Schmidt-Rutsch (2003) William Thomas Mulvany (Cologne: Rheinisch-Westfälisches Wirtschaftsarchiv).



extensive countries like Germany, is to eliminate the disadvantages of distance, to increase, and almost create traffic, and manufactures, which could neither exist nor pay their promoters before these means of transport existed (Mulvany 1868).

On the other hand Mulvany promoted the creation of a German inland water-way system to provide alternative transportation for bulk goods. At first the Mining Association provided the forum for his statements, but the one sided orientation of this institution caused major problems and much criticism. In 1871 Mulvany was heavily involved in the formation of the '*Association for the common economic interests in Rhineland and Westphalia*'. Locally it became known as the '*Association with the long name*'. Mulvany was elected the first chairman and made the association one of the major pressure groups in Germany. He held this position until 1883 when he retired because of increasing deafness. However, Mulvany never managed to master the German language. To take part in discussions he wrote over forty memoranda, some in English, most of them translated into German. These publications covered a wide range of topics, dealt with railway tariffs and custom duties, with coal exports and canals. As the first major miners strike broke out in 1872, Mulvany wrote an extensive memorandum, recollecting his Irish experience: *Some will perhaps question my right to, and criticize my presumption as a stranger in interfering, but on the other hand, I have nothing to do with politics, and treat the question solely as a practical man, with forty-six years experience in the direction of great public works of various kinds affording employment to many thousands of men in all departments of work, ever earnestly seeking to promote the interests of those so employed and their families, and considering it my greatest pleasure, not being a capitalist myself, to promote new works which would afford employment to and raise the position of the working classes (Mulvany 1872).*

Mulvany's statements characterised him as representative of the ideals of economic liberalism. He was convinced that the

progress of business and technology would create a better world. So his ideas regarding the further development of transport were typical and in many ways rather visionary:

Mankind is surprised at the results in wars, at the sudden great influx and reflux of money, and the other rapidly occurring crises in money matters, - the sudden flood of prosperity following the establishment of peace - and last not least the rapid spread of enlarged and sounder views on religion and education, (everywhere outside those walls where men wilfully seclude themselves and shut out the light and experience of the world's progress); but the moving and immediate mechanical causes - Steam and Electricity, Railways, Steam-Ships and the Telegraph - with their daily accumulative results on the whole life and business of man, must be palpably plain to all calm reflecting minds.

The Nations which have not yet obtained the advantage of those mechanical means of all progress cannot longer hold their place with out them; unknown countries, deserts and wilds must be slowly but surely opened up and rendered available for mankind and civilization by importing these invincible conquerors, these, in reality, most suitable though slow means of secure discovery and development; and we cannot doubt that ere long the very heart of Africa which has so long been hidden from civilized man - and which, lying so near Europe and Asia, still shows on the map of the world - a void blank - if not disgraceful to the civilized nations of the world, at least challenging their enterprise and manhood to fulfil the first command of the Creator, will be traversed and made accessible to civilization (Mulvany 1873).

William Thomas Mulvany died on 30 October 1885 in Düsseldorf and was buried at the North Cemetery. His name is still remembered in the Ruhr area, mainly for his mining activities. The establishment of the mines in Gelsenkirchen, Herne and Castrop-Rauxel initiated their industrialization and changed their appearance from little villages to great cities. But in time the mines disappeared. The last one, Erin, closed in 1986. But there are still traces: If you walk to the old Goldschmieding Castle in Castrop-Rauxel, you will find a door with a carved harp and shamrocks. It was used by William Thomas Mulvany and his son Thomas Robert as their residence. Also visible is the old Erin pithead, now a Business Park with its Mulvany Centre. Nevertheless, the only foundation of the Mulvany family, which exists largely unchanged, can be found near his grave in Düsseldorf: an Anglican church.

Thus Mulvany is still remembered in the Ruhr. Many years ago in 1864 one of his colleagues from the Board of Works, Thomas Larcom, jotted down the following words in the margin of an article in Freeman Journal (5th November 1864), reporting the former Commissioner's success and the awarding to him the freedom of Gelsenkirchen:

'I rejoice in seeing the great ability of my friend Mulvany receive though in a foreign country the approbation denied him in his own.'

NOTES

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