



# **Northumbria University**

NEWCASTLE

**“The subject of Government inspection of collieries... used to be thought the panacea of the numerous evils which attended colliery operations” in the nineteenth century.**

**To what extent did the creation of Government Inspectors of Mines and Collieries under the Mines and Collieries Act 1842 provide a panacea for these evils?**

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## **Research Declaration**

I confirm that I have already submitted my Project Synopsis and Ethical Approval Form, which has been signed by my supervisor. I further confirm that this project is entirely my own work and that the research undertaken for the completion of this project was based entirely on secondary material or data already in the public domain (case law, journal articles, published surveys etc). It did not involve people in data collection through empirical research (eg, interviews, questionnaires or observation).

**Signed:** Nathan Mark Maddison

**Dated:** 20 May 2020

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## Preface

Oscar Wilde once wrote that the only thing to do with good advice is to pass it on, as it is never any use to oneself. When I think back to my first year of university, and to the first few weeks in particular, there certainly was a lot of advice handed out. It came from all angles: programme leaders; module leaders; teaching staff; personal tutors; the careers service; and professional panels. I would be lying if I said I can remember it all, but there was one piece of advice that has stuck in my mind throughout the last four years: it is never too early to start thinking about the final year project. As a result, this project has been lingering in the back of my mind, in one form or another, throughout my entire time at university.

From the very beginning I knew that the project would involve a substantial amount of time and work. I also know how tedious it can be writing about a subject that you have little interest in, and so I was determined to find an area that I would find genuinely fascinating to research. With this in mind, there were a number of themes that I could have chosen to write about, but none of them felt quite right. They did interest me but they did not excite me in the way that I had hoped for. As soon as I heard about the Legal History Project, however, I instantly knew that this was the route that I wanted to follow. I also knew exactly what I wanted to write about: nineteenth century coal mines.

Unlike with some interests, I can pinpoint the exact origin of my curiosity in coal mines. It started when I was only nine years old and read Roy Thompson's *How Long did the Ponies Live? The Story of the Colliery at Killingworth and West Moor* for the first time. I have lived in Killingworth all of my life and so, naturally, the book caught my attention. As I read through the book I suddenly found myself confronted with answers to questions that I didn't even know I had. For example, I had never even thought about why there is a fifteen-acre lake in the middle of the town, or why certain roads were laid where they are, or even why buildings have the names that they have. Each time I read the book, which I still do frequently, I pick up on some previously overlooked detail, which leads

in turn to some new connection with the past. I think it's fair to say that my interest in nineteenth century coal mines, and the social history that surrounds them, is more than a mere curiosity.

When it was agreed that my project could be centred on this area the main issue I faced was deciding upon a suitable question. Initially my question was going to be: To what extent was the legislation protecting colliery workers in the nineteenth century satisfactory? It soon became clear that this question was far too wide; it would have been impossible to answer within the permitted word limit. During one of the first visits to the Tyne and Wear Archives I looked through a variety of documents, one of which was the Society for the Prevention of Accidents in Coal Mines collection. Within the collection there are numerous items regarding the dangerous state of the coal mines in the nineteenth century, as well as the various attempts to increase safer working practices. I thought that this would be an interesting area to focus on, and so looked into the ways in which increased safety had been proposed. One proposal was the creation of Government Inspectors who would visit the collieries, which were frequently suggested to be a 'panacea' for the 'numerous evils' associated with coal mining in the nineteenth century. This quote has been included in the final version of my question, which focuses my project on the Government inspectors of mines and collieries, including the legislation underpinning the role.

It must be said that during my initial research into the Government inspectors, there was a surprising lack of readily available information about them. It became clear that the role had not been widely studied in the past, and I was unsure about where my research would ultimately lead. In spite of this uncertainty there was no apprehension or foreboding; I was genuinely enthusiastic about completing the project. After all, as Mary Shelley once penned: 'with how many things are we upon the brink of becoming acquainted, if cowardice or carelessness did not restrain our inquiries'.

## Introduction

### **A Brief History of the Coal Trade • A Summary of Colliery Legislation • An Introduction to Government Inspection**

It has long been recognised that ‘we know little regarding the ancient history’ of the coal trade,<sup>1</sup> and that the earliest ‘attempts at coal mining are enveloped in obscurity’.<sup>2</sup> It has been suggested that coal was ‘employed to some extent by the Roman’ population in Britain,<sup>3</sup> supported by the discovery of ashes of coal fires ‘amongst the mortar of Roman buildings near Newcastle’.<sup>4</sup> The use of coal by the Romans does, however, appear to have been quite restricted.<sup>5</sup> Indeed, some authors suggest that it was not until the middle of the ninth century that there is ‘less doubtful ground’ to support the emergence of the coal trade in Britain.<sup>6</sup> In attempting to determine the beginning of the British coal trade, it cannot be denied that ‘men equally endowed may arrive at conclusions the most diverse’,<sup>7</sup> and so it is sufficient to say that such trade was firmly established, at least in the city of Newcastle upon Tyne, by the end of the thirteenth century. This is the position adopted by Galloway, who relied on the increase in the revenue of Newcastle upon Tyne in this century, during his comprehensive analysis of the history of the British coal trade. When King John handed control of the town to the burgesses in 1213 the annual rent was £100, but by 1281 this had doubled to £200 due to the trading of coal on the River Tyne.<sup>8</sup>

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<sup>1</sup> Robert Lindsay Galloway, *A History of Coal Mining in Great Britain* (Macmillan and Co 1882) 2

<sup>2</sup> Edward Hull, *The Coal Fields of Great Britain: Their History, Structure and Resources with Notices of the Coal Fields of Other Parts of the World* (2<sup>nd</sup> edn, Edward Stanford 1861) 7

<sup>3</sup> Thomas Crosbee Cantrill, *Coal Mining* (Cambridge University Press 1914) 3

<sup>4</sup> Robert John Charleton, *A History of Newcastle on Tyne: From the Earliest Records to its Formation as a City* (Davis Books 1989) 252

<sup>5</sup> See, for example, Cantrill (n3) 3

<sup>6</sup> John Holland, *The History and Description of Fossil Fuel, the Collieries, and Coal Trade of Great Britain* (Whittaker and Co 1835) 309

<sup>7</sup> Gilbert Stone, *The British Coal Industry* (J. M. Dent & Sons Ltd 1919) 1

<sup>8</sup> Robert Lindsay Galloway, *Annals of Coal Mining and the Coal Trade*, vol 1 (David & Charles 1971) 24

At the commencement of the eighteenth century Britain was producing in the region of two-point-six million tons of coal a year,<sup>9</sup> although John Hatcher has suggested that this figure should, in fact, be closer to three million tons a year.<sup>10</sup> Even with the more reserved estimate, Britain's coal industry represented 'five times the rest of world output',<sup>11</sup> establishing 'firm foundations which were to underpin the fuelling of the industrial revolution'.<sup>12</sup> Over the course of the eighteenth century production increased further still, until output was estimated to be ten million tons per year by 1800 and fifteen million tons per year by 1816.<sup>13</sup> This ensured that coal was undoubtedly 'the commanding height of the British economy' during the nineteenth century.<sup>14</sup>

It is remarkable to note that in the five hundred years that elapsed between the close of the thirteenth century and the beginning of the nineteenth century, there was very little legislation relating to the industry. The legislation that was implemented 'did nothing to improve the health and safety of miners';<sup>15</sup> instead, it portrayed the mining population as being of a 'lawless and dangerous character',<sup>16</sup> arguably leading to miners being regarded as 'a class apart' from civilised society.<sup>17</sup> For example, the Act for the Security of Collieries and Mines, and for the Better Regulation of Colliers and Miners 1800<sup>18</sup> suggested that collieries were 'greatly exposed to the depredations of wicked and evil-disposed persons' employed by them,<sup>19</sup> and introduced a number of criminal offences aimed at protecting the interests of the colliery owners. An example of such an offence, which it was claimed 'often happens',<sup>20</sup> was 'colliers and miners, disregarding their agreements, wilfully and obstinately [working] coal ... in a

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<sup>9</sup> Jonathan Clark, *From Restoration to Reform: The British Isles 1660-1832* (Vintage 2014) 59

<sup>10</sup> John Hatcher, *The History of the British Coal Industry: Volume 1: Before 1700: Towards the Age of Coal* (Oxford University Press 1993) 5

<sup>11</sup> Clark (n9) 59

<sup>12</sup> Hatcher (n10) 5

<sup>13</sup> Robert Nelson Boyd, *Coal Mines Inspection: Its History and Results* (W H Allen & Co 1879) 25

<sup>14</sup> P. W. J. Bartrip, 'British Government Inspection, 1832-1875: Some Observations' (1982) 25 *The Historical Journal* 605, 611

<sup>15</sup> Ernest Mason, *Practical Coal Mining*, vol 2 (3<sup>rd</sup> edn, Virtue 1953) 687

<sup>16</sup> Boyd (n13) 20

<sup>17</sup> Mason (n15) 687

<sup>18</sup> Act for the Security of Collieries and Mines, and for the Better Regulation of Colliers and Miners 1800 (40 Geo 3 c 77)

<sup>19</sup> *ibid*, s 1

<sup>20</sup> *ibid*, s 3

different manner' to that stipulated by the colliery owners.<sup>21</sup> Such an offence was punishable by way of a fine not exceeding forty shillings or, if unpaid, a term of imprisonment not exceeding six months. It has been documented that hewers, the men who worked the coalface, were paid an average of three shillings per day at one colliery in 1814.<sup>22</sup> This figure should, however, be approached with caution; while it has been recognised that hewers were often paid more than other colliery workers, it should be noted that they were frequently fined for sending 'light' tubs to the surface, even when this was the result of coal being lost after the tub had left their control.<sup>23</sup> Such fines are not always considered in the literature on collier wages, with the result that it is difficult to make generalisations about colliery pay in the nineteenth century.

Kirby has emphasised the importance of the contemporary setting when engaging in historical analysis. To consider the nineteenth century coal mining industry without reflecting on prevailing views of the time, for example, would be both futile and reprehensible.<sup>24</sup> Likewise, it should be remembered that coal mining was not the only growing industry in nineteenth century Britain. While the coal industry was largely unregulated, the Factory Act 1833 gave extensive protection to the factory workers and conferred wide powers on the inspectors who were appointed under it.<sup>25</sup> These factory inspectors were given extensive authority to make inquiries, to enforce the provisions of the Act, and to make binding rules and orders. As a result of this, Martin considered the Factory Act 1833 to be an innovative and highly effective piece of legislation.<sup>26</sup> In light of this success it may be expected that a similar piece of legislation would have been introduced for the regulation of collieries. This was not the case.

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<sup>21</sup> *ibid*

<sup>22</sup> Roy Thompson, *How Long Did the Ponies Live? The Story of the Colliery at Killingworth and West Moor* (Beacon House 1997) 31

<sup>23</sup> See, for example, Guy Samuel Solomon, 'The Living Standards of Tyneside Coal Miners, 1836-1862' (MSc by Research, University of York 2014)

<sup>24</sup> M W Kirby, *The British Coalmining Industry 1870-1946: A Political and Economic History* (The Macmillan Press Ltd 1977) 3

<sup>25</sup> Factory Act 1833 (3 Wil 4 c 103)

<sup>26</sup> Bernice Martin, 'Leonard Horner: A Portrait of an Inspector of Factories' (1969) 14 3 *International Review of Social History* 412



Campbell and Turner have suggested that the paucity of legislation, legal protection and regulation relating to coal mining during this period should not be regarded as surprising, especially when considering the increasing dominance of the doctrine of laissez-faire in the late eighteenth century.<sup>27</sup><sup>28</sup> Avoiding legitimate responsibilities is one of the central principles of the laissez-faire doctrine, and so it has been summarised by Bass and Avolio as the avoidance or absence of leadership in a particular area.<sup>29</sup> As a result of this doctrine, there was increased insensitivity and intolerance towards the needs of the working classes from the upper and middle classes in society.<sup>30</sup> State intervention was very much 'the exception rather than the rule'<sup>31</sup> and so the statutes of England remained 'a blank as far as the interests of mines and miners are concerned' between 1800 and 1842.<sup>32</sup> Whilst 'laissez-faire cannot be disregarded as a powerful and ubiquitous force both in delaying legislation and in determining the content of that legislation', it must be recognised that it was not the only factor keeping the issue of collieries from the statute books.<sup>33</sup> Smith has suggested that before any legislation is implemented there should be careful search and investigation into the matter, thus allowing legislators to form a suitable conclusion as to the immediate and ultimate steps that should be taken.<sup>34</sup> Indeed, the four-stage model for legislative reform, as propounded by MacDonagh, begins with 'a sudden and sensational exposé of a social

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<sup>27</sup> Gareth Campbell and John D Turner, 'Substitutes for Legal Protection: Corporate Governance and Dividends in Victorian Britain' (2011) 64 *Economic History Review* 571, 574

<sup>28</sup> On the doctrine of laissez-faire in the coal trade see, for example, O P Edmonds and E L Edmonds, 'An Account of the Founding of HM Inspectorate of Mines and the Work of the First Inspector Hugh Seymour Tremenheere' (1963) 20 *British Journal of Industrial Medicine* 210, 211

<sup>29</sup> See, for example, Sut I Wong and Steffen Robert Giessner, 'The Thin Line Between Empowering and Laissez-Faire Leadership: An Expectancy-Match Perspective' (2018) 44 *Journal of Management* 757 and Bernard M Bass and Bruce J Avolio (eds), *Improving Organizational Effectiveness Through Transformational Leadership* (Sage Publications 1994)

<sup>30</sup> See, for example, Kim Lawes, *Paternalism and Politics: The Revival of Paternalism in Early Nineteenth-Century Britain* (Palgrave Macmillan 2000) 33

<sup>31</sup> Philip Harling, 'The Powers of the Victorian State' in Peter Mandler (ed), *Liberty and Authority in Victorian Britain* (Oxford University Press 2006) 26

<sup>32</sup> Boyd (n13) 2

<sup>33</sup> David L Cowen, 'Liberty, Laissez-Faire and Licensure in Nineteenth Century Britain' (1969) 43 *Bulletin of the History of Medicine* 30, 34

<sup>34</sup> Bruce Smith, *Liberty and Liberalism: A Protest Against the Growing Tendency Toward Undue Interference by the State, with Individual Liberty, Private Enterprise, and the Rights of Property* (Cosimo 2006) 196

evil'.<sup>35</sup> Such search and investigation was, however, a problematic task in relation to collieries, due to the 'system of stifling all inquiry'<sup>36</sup> that was 'always pursued by colliery owners', making it difficult for the required evil to be uncovered.<sup>37</sup> Their resistance perpetuated the established view that the coal trade was 'enveloped in obscurity' and ensured that it remained firmly out of the public focus.<sup>38</sup>

Some viewed the opposition to inquiry and legislation, spearheaded by the colliery owners, as 'merely an assertion of proprietorial rights'.<sup>39</sup> This view was not, however, shared by everyone; 'public-spirited humanitarian citizens' began to recognise the dangers associated with collieries, and began to advocate legislative measures as a way of ensuring the safety of those who were employed by them.<sup>40</sup> For example, the Sunderland Society, formed in 1813 following a fatal explosion at Felling Colliery, criticised the lack of inquests following deaths at collieries. One judge echoed this criticism in court in 1814, condemning the 'actual breach of the law in not holding inquests on the colliers who perished by the frequent accidents'.<sup>41</sup> As a result, 'public opinion was aroused'<sup>42</sup> and 'an evil was exposed' as being in need of a remedy.<sup>43</sup> With increasing frequency, the concept of a Government inspector was proposed as this solution. There was, however, no clear consensus on what exactly such an inspector's role should be; while George Stephenson was in favour of inspectors having the 'powers to halt the working of a colliery if necessary',<sup>44</sup> John Buddle 'favoured casual inspection by mining engineers acting in an advisory capacity only'.<sup>45</sup> The idea of a mines inspector, it has been suggested,

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<sup>35</sup> David Brion Davis, *The Problem of Slavery in the Age of Revolution: 1770-1823* (2<sup>nd</sup> edn, Oxford University Press 1999) 361

<sup>36</sup> Boyd (n13) 26

<sup>37</sup> *ibid*

<sup>38</sup> Edward Hull, *The Coal Fields of Great Britain: Their History, Structure and Resources with Notices of the Coal Fields of Other Parts of the World* (2<sup>nd</sup> edn, Edward Stanford 1861) 7

<sup>39</sup> Alan J Heesom, 'The Northern Coal-Owners and the Opposition to the Coal Mines Act of 1842' (1980) 25 *International Review of Social History* 236, 236

<sup>40</sup> Edmonds and Edmonds (n28) 211

<sup>41</sup> Boyd (n13) 241

<sup>42</sup> Alan J Heesom, 'The Coal Mines Act of 1842, Social Reform, and Social Control' (1981) 24 *The Historical Journal* 69, 69

<sup>43</sup> *ibid*

<sup>44</sup> Edmonds and Edmonds (n28) 211

<sup>45</sup> *ibid*

came to be regarded as ‘the panacea of the numerous evils which attended colliery operations’ during the nineteenth century.<sup>46</sup> It may consequently be asked to what extent the mines inspectors actually proved to be a panacea for these evils after the role was created in 1842, with a particular focus on the period between 1842 and 1862.<sup>47</sup>

This project will examine the public interest in mines and collieries, which increased significantly in the early nineteenth century, with a focus on the concept and role of a Government inspector. The legislation appointing Government inspectors of mines and collieries will be explored, together with a critical analysis of the work of the first government inspector, Hugh Seymour Tremenheere. There will be an evaluation of subsequent legislation, with particular emphasis on Inspector Matthias Dunn, Inspector for the Northern District of England, and his contributions to the industry. By focusing on Inspector Matthias Dunn, this project will consider the extent to which the mines and collieries inspectors were a panacea for the ‘evils’ associated with coal mining in the United Kingdom during the nineteenth century. The position in the North East of England will then be considered in a national context with reference to other coal mining districts and inspectors in the United Kingdom

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<sup>46</sup> Matthias Dunn, *How to Prevent Accidents in Collieries: A Practical Treatise Upon the Best Means of Preventing Accidents in Coal Mines, Also, Advice Regarding Proceedings After Explosion* (A and J M Carr 1862) 40

<sup>47</sup> Mines and Collieries Act 1842 (5 & 6 Vict c 99) s (3)

## Chapter One

### **Colliery Accidents • Various Reports and Committees**

#### **• Early Legislation • The First Government Inspector**

MacDonagh's four-stage model for legislative reform, identified in the introduction, required a sudden and catastrophic exposure of a social evil, which, if not acted upon, would have been intolerable to society. The concept of intolerability was central to MacDonagh's model; as nineteenth century 'governments grew ever more responsive to public sentiment, and public sentiment ever more humane', it became necessary to ensure that such intolerable 'evils' were legislated out of existence.<sup>48</sup> An 'evil' is most often deemed as 'something that is very bad and harmful',<sup>49</sup> and, in this project, includes the 'multitude of the most terrifying calamities' that nineteenth century colliers faced.<sup>50</sup> Engels included in this category: the frequent underground explosions; the poor ventilation of mines; and the inadequate conditions the colliers worked in.<sup>51</sup>

On 25 May 1812 two subterranean explosions occurred at Felling Colliery, located in what is now Gateshead but was then part of County Durham, with one explosion in the John Pit and the other in the William Pit. There was a total of one hundred and twenty two men and boys in the mine at the time of the explosions; only thirty of these survived the accident, bringing the total number of deaths to ninety-two. While the exact cause of the explosions remained unknown, Hodgson's account of the accident and rescue made it clear that inadequate ventilation of the mine was a serious issue. The ventilation was so poor that it was not possible to recover the final body until 19 September, nearly four months after the explosions had occurred.<sup>52</sup> This incident at Felling Colliery

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<sup>48</sup> Oliver MacDonagh, 'The Nineteenth-Century Revolution in Government: A Reappraisal' (1958) 11 The Historical Journal 52, 58

<sup>49</sup> 'Meaning of Evil in English' (*Cambridge Dictionary*)

<<https://dictionary.cambridge.org/dictionary/english/evil>> accessed 12 February 2020

<sup>50</sup> Friedrich Engels, *The Condition of the Working Class in England* (Penguin Classics 2009) 253

<sup>51</sup> *ibid*

<sup>52</sup> Reverend John Hodgson, *Felling Colliery 1812: An Account of the Accident* (Picks Publishing 1999)

is an example of one of the 'evils' alluded to by Engels, and represents one of the sudden and catastrophic events needed bring the issue of colliery safety to the attention of the general public.

Hodgson's account of the Felling Colliery disaster is generally regarded as the catalyst for the formation of the Society for Preventing Accidents in Coal Mines.<sup>53</sup> This society, more commonly referred to as the Sunderland Society, was formally instituted on 1 October 1813, and sought to inquire into the causes of colliery explosions with a view of preventing them from reoccurring. The society's first report, published in 1814, acknowledged their extensive communications with those connected to the coal trade, but regretted to report that they were not in possession of sufficient information to make any substantial recommendations at that time.<sup>54</sup> Included in the report was a letter to the society from John Buddle, described as 'a gentleman of great celebrity and intelligence as a viewer of coal-mines', in which he set out the most common causes of colliery accidents that he had encountered in his career.<sup>55</sup> Confirming Hodgson's observations of the Felling Colliery disaster, Buddle stated that the thorough ventilation of a mine was the 'only method... for the prevention of accidents by fire' resulting in explosions,<sup>56</sup> but that the success of this depended upon 'a judicious application' by those responsible for the management of the colliery.<sup>57</sup> Buddle also warned of the dangers associated with the subterranean discovery of unknown abandoned colliery workings, and opined that in the Northern District of England it was accidents other than explosions that occasioned the most casualties.<sup>58</sup> The report clearly highlighted that these so called 'evils' were present in the coal mining industry, and called for further inquiry into possible remedies.<sup>59</sup>

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<sup>53</sup> See, for example, Cantrill (n3) 31

<sup>54</sup> The Society for Preventing Accidents in Coal Mines, 'The First Report of a Society for Preventing Accidents in Coal Mines' (Edward Walker, 1814)

<sup>55</sup> *ibid*, 4

<sup>56</sup> *ibid*, 5

<sup>57</sup> *ibid*, 8

<sup>58</sup> *ibid*, 10; 23

<sup>59</sup> *ibid*, 3

Stone has observed that prior to the Sunderland Society's report the 'Government had no means of judging how matters [relating to coal mining] stood'.<sup>60</sup> Given the want of inquiry into the industry this is a credible observation, and so in this context the lack of legislation appears, to a certain extent, understandable. In response to the publication of the Sunderland Society's report, however, it may be expected that the Government would have initiated some investigatory or legislative action. In spite of the issues identified by the Sunderland Society and John Buddle, it was not until 1835, some twenty-one years after the report was published, that a Select Committee was appointed by the House of Commons to investigate the issue in greater detail.

In June 1835 the House of Commons appointed a Select Committee on Accidents in Mines, which published its report in September 1835. The committee was primarily focused on 'ascertaining and suggesting the means for preventing the recurrence' of fatal accidents, which had started to attract the attention of the public.<sup>61</sup> For example, on 3 May 1815 underground mining at Heaton Main Colliery disturbed the abandoned workings of neighbouring Heaton Banks Colliery, which had become flooded with water. This water broke through into the tunnels of Heaton Main Colliery, trapping seventy-five men and boys, none of whom could be saved.<sup>62</sup> Such a disaster was clearly foreshadowed in the Sunderland Society's report published in the previous year; John Buddle had explicitly warned of the dangers associated with abandoned workings, an obvious reference to the lack of accurate records available. While the 1835 Select Committee regretted with 'apprehension that they [had] in great measure failed in devising adequate remedies', they were able to outline some steps that should have been taken.<sup>63</sup> In particular they advocated: a fit and proper person attending inquests; a better system of ventilating mines; the use of safety lamps underground; and the creation of detailed maps and plans of each colliery's workings.

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<sup>60</sup> Stone (n7) 34

<sup>61</sup> Home Department, *Report from the Select Committee on Accidents in Mines; Together with the Minutes of Evidence, and Index* (C (1<sup>st</sup> series) 603, 1835) 2

<sup>62</sup> For a more detailed account of the accident see, for example, Roy Thompson, *Thunder Underground: Northumberland Mine Disasters 1815-1865* (Landmark Publishing 2004) 64

<sup>63</sup> Select Committee Report (n61) 8

During the course of the 1835 Select Committee's investigations, the concept of an official inspector of mines and collieries was mooted for the first time. When asked whether an official inspector of mines and collieries should be appointed, George Stephenson stated that such an appointment would be beneficial. He suggested that there must have been 'some neglect' by colliery managers at the time,<sup>64</sup> contributing to the frequent accidents, and that the appointment of an official would 'cause managers to be always on the alert'.<sup>65</sup> A closer analysis of the report, however, reveals that the appointment of an inspector was not widely welcomed. With Joseph Pease in the chair, Charles Walker, one of the proprietors of Bradford Colliery, was asked whether he was 'one of the gentlemen... who [had]... expressed an apprehension of interference on the part of Government' in relation to the coal industry.<sup>66</sup> He suggested that such interference would have been 'unnecessary'.<sup>67</sup> When presenting their report the Committee accepted that there were 'advantages which might [have resulted] from' the appointment of an inspector,<sup>68</sup> but that there were 'many serious objections... stated to the proposition'.<sup>69</sup> As a result, the Committee were reluctant to present the concept of an inspector as a remedy for the various evils that attended colliery operations at the time. The apparent opposition by Charles Walker and others supports the previously highlighted argument, initially advanced by Boyd, that the colliery owners systematically stifled all inquiry into the trade.<sup>70</sup> The notion of inspection was not pursued any further, either by the report or by the Government, at that time.

Five years after the Select Committee's report, Lord Ashley addressed the House of Commons 'with feelings somewhat akin to despair' regarding the employment of children in England.<sup>71</sup> Suggesting that the employment of children in collieries, as well as in other industries throughout the United

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<sup>64</sup> *ibid*, 118

<sup>65</sup> *ibid*

<sup>66</sup> *ibid*, 311

<sup>67</sup> *ibid*

<sup>68</sup> *ibid*, 9

<sup>69</sup> *ibid*

<sup>70</sup> Boyd (n13) 26

<sup>71</sup> HC Deb 4 August 1840, vol 55, col 1260

Kingdom, amounted to 'a system of slavery under the sanction of law', Ashley moved for a Royal Commission to investigate the matter in detail.<sup>72</sup> When the Royal Commission's report was published in 1842 it unequivocally highlighted the 'sufferings and degradation' endured by the colliers on a daily basis.<sup>73</sup> Once again, it was suggested that a number of 'evils' were inherent in the coal mining industry. These 'evils', it was submitted, included the previously emphasised issue of poor ventilation, but also included the employment of children underground and the inadequate education of the colliers. The report induced a 'feeling of shame, terror, and indignation' within the House of Commons,<sup>74</sup> with Ashley suggesting that members of Parliament should immediately 'address [themselves] to the evil' uncovered.<sup>75</sup> For the first time, Government inspection of mines and collieries was discussed by the legislature.

### **The Mines and Collieries Act 1842**

In response to the Royal Commission's report, Lord Ashley introduced a Bill into the House of Commons with the aim of prohibiting the employment of women in collieries and restricting the employment of children underground.<sup>76</sup> It cannot be denied that this Bill did address some of the evils that had been highlighted by the various inquiries that had gone before; for example, it sought to prohibit children under the age of thirteen being allowed to work underground. As has already been seen, George Stephenson had suggested in 1835 that neglect contributed to the frequent accidents, and this was confirmed when the Commissioners reported that 'negligence forms an almost invariable element' of the majority of colliery accidents.<sup>77</sup> By removing young children from the collieries it was hoped that they would have been replaced

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<sup>72</sup> *ibid*, col 1269

<sup>73</sup> *The Condition and Treatment of The Children Employed in the Mines and Collieries of The United Kingdom* (William Strange 1842) III

<sup>74</sup> HC Deb 7 June 1842, vol 63, col 1321

<sup>75</sup> *ibid*, col 1320

<sup>76</sup> A Bill to Prohibit the Employment of Women and Girls in Mines and Collieries, to Regulate the Employment of Boys, and Make Provisions for the Safety of Persons Working Therein HC Bill (1842) [298]

<sup>77</sup> Children's Employment Commission, *First Report of the Commissioners: Mines* (C (1<sup>st</sup> Series) 380, 1842) 142



with more competent workers, which would have reduced the frequency of accidents through carelessness. In spite of this the Bill had one central flaw: it did not make provision for Government inspection of mines and collieries. As such, the content of the Bill was arguably unenforceable, as there was no way of monitoring who was employed in each colliery or what their role was. When he introduced the Bill to Parliament, Ashley suggested that inspection was 'altogether impossible; and, indeed, if it were possible, it would not be safe'.<sup>78</sup> This opinion was not, however, shared by everyone; when the Bill was resubmitted to the House of Commons following the debate and committee stages, provision for the appointment of Government inspectors had been made.<sup>79</sup> After receiving Royal Assent on 10 August 1842, the Bill came into force as the Mines and Collieries Act 1842.<sup>80</sup>

Under this new law, an inspector of mines and collieries could be appointed 'if and when... fit'.<sup>81</sup> This occurred on 14 December 1843 when Hugh Seymour Tremenheere was selected as the first Government inspector of mines and collieries with, what Edmonds and Edmonds have described as, a 'rather vague mandate'.<sup>82</sup> This is, indeed, an accurate summary of the position; the legislation under which Tremenheere was appointed gave him the power to enter and examine any mine or colliery so that he could report on whether the provisions of the 1842 Act were being complied with.<sup>83</sup> In addition to this legislative requirement, Tremenheere was also asked in his letter of employment to 'secure to the labourers employed in mines and collieries the benefits guaranteed to them by Parliament and to bring to justice those who by stealth violate the law'.<sup>84</sup>

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<sup>78</sup> Hansard (n74) col 1340

<sup>79</sup> See, for example, in A Bill [As Amended by the Committee] to Prohibit the Employment of Women and Girls in Mines and Collieries, to Regulate the Employment of Boys, and Make Provisions for the Safety of Persons Working Therein HC Bill (1842) [356]

<sup>80</sup> Mines and Collieries Act 1842 (5 & 6 Vict c 99)

<sup>81</sup> *ibid*, s 3

<sup>82</sup> Edmonds and Edmonds (n28) 211

<sup>83</sup> Mines and Collieries Act 1842, s3

<sup>84</sup> Letter from John Henry Thomas Manners-Sutton to Hugh Seymour Tremenheere (14 December 1843)

The result was that Tremenheere 'was on new ground' in relation to Government inspection of mines and collieries;<sup>85</sup> he did not have a predecessor to look to, nor could he look to the Mines and Collieries Act 1842 as a definitive guide to his role. It is well documented that the procession of the Act through Parliament was tumultuous, with there being great disagreement on what exactly an inspector's role would be, and so any reference to the numerous Parliamentary debates would have been fruitless.<sup>86</sup> As has already been seen, the concept of a Government inspector came to be regarded, at least to the general public, as 'the panacea of the numerous evils which attended colliery operations' in the nineteenth century,<sup>87</sup> with a panacea being defined as 'something that will solve all problems'.<sup>88</sup> It must, therefore, be considered to what extent Tremenheere's appointment as a Government inspector actually amounted to a solution for the 'evils' that were commonly associated with coal mining in the nineteenth century.

In order to answer this question Tremenheere's method of inspection must be analysed, and it is in this analysis that the first criticism of Tremenheere may be found. While the Mines and Collieries Act 1842 gave him the power to enter and examine all mines and collieries, which included any 'works, buildings, and machinery', he never descended a mineshaft in order to examine the subterranean workings of a colliery.<sup>89</sup> As a result of this, Wellbourne was critical of Tremenheere's appointment, suggesting that the Government had shown 'little wisdom' when making its choice.<sup>90</sup> Welbourne went on to suggest that Tremenheere's 'single source of information seems to have been the after-dinner conversation' he had with the colliery owners, thus disregarding the interests of the colliers themselves.<sup>91</sup> One would suggest, however, that Welbourne's criticism of Tremenheere is largely without solid foundation and does not withstand scrutiny.

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<sup>85</sup> Edmonds and Edmonds (n28) 213

<sup>86</sup> See, for example, Heesom (n39)

<sup>87</sup> Dunn (n46)

<sup>88</sup> 'Meaning of Panacea in English' (*Cambridge Dictionary*)

<<https://dictionary.cambridge.org/dictionary/english/panacea>> accessed 20 February 2020

<sup>89</sup> Mines and Collieries Act 1842, s3

<sup>90</sup> Edward Welbourne, *The Miners' Unions of Northumberland and Durham* (Cambridge University Press 1923) 102

<sup>91</sup> *ibid*

To begin with, Welbourne suggested that Tremenheere was not a suitable choice for the first Government inspector of mines and collieries, but did not give any reasoning for such an assertion. Tremenheere was, in fact, familiar with Government inspection; in 1839 he had been appointed as the first Government inspector of schools. In this role Tremenheere travelled the country reporting on the educational standards in each part of it, observing the different health standards, and undertaking an analysis of the correlation between occupation and disease out of his own interest in the matter.<sup>92</sup> Most significantly, Tremenheere showed a particular interest in the mining population during his time as inspector of schools. For example, Tremenheere desired to draw the attention of the Committee of Council on Education to the 'lamentable deficiency of the means of elementary' education in the mining districts,<sup>93</sup> suggesting that this was an 'evil' in its own right.<sup>94</sup> As a result, his appointment 'was not so abrupt a transition as appears at first sight'.<sup>95</sup> Indeed, it has been suggested that the method of inspection he had developed as the first schools inspector was easily transferrable to his role as the first mines and collieries inspector. Just as nineteenth century schools were 'scattered in small units over the country and jealously guarded by local management committees', the collieries were similarly distributed with, arguably, even more secretive proprietors.<sup>96</sup> In light of Tremenheere's background in inspection, which is well documented and so should have been easily discoverable by Welbourne, it is difficult to endorse his view that the appointment showed little wisdom on the part of the Government.

In spite of this, one cannot help but wonder on what basis Welbourne made his observations, and whether there is any merit to them at all. As previously highlighted, John Buddle appears to have 'favoured casual inspection by

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<sup>92</sup> For a more comprehensive account of Tremenheere's work prior to his appointment as mines and collieries inspector see, for example, Edmonds and Edmonds (n28) or R K Webb, 'A Whig Inspector' (1955) 27 4 *The Journal of Modern History* 352

<sup>93</sup> Home Department, *Minutes of the Committee of Council on Education, with Appendices: 1840-1841* (C (1<sup>st</sup> Series) 317, 1841) 15

<sup>94</sup> *ibid*, 17

<sup>95</sup> Edmonds and Edmonds (n28) 213

<sup>96</sup> *ibid*

mining engineers acting in an advisory capacity only', rather than the official office of inspector that Tremenheere was appointed to.<sup>97</sup> Tremenheere was not a mining engineer, nor did he have any intimate knowledge of the coal trade; prior to his appointment as schools inspector he had practiced as a barrister. This may be considered an oversight on the part of the Government, as a petition presented to Parliament in 1847 by the colliers demanded that Government inspectors should be appointed from 'men acquainted with colliery work'.<sup>98</sup> Clearly Tremenheere did not fall within this category, and so his appointment may be criticised, to a limited extent, on this basis. Such a criticism does not, however, extend as far as Welbourne's in suggesting that Tremenheere's appointment showed little wisdom by the Government. While it is true that he did not have the experience of working in a colliery, Tremenheere did have the necessary inspecting experience relevant for this role and did show an active interest in the coal mining trade. As a result, his appointment was reasonable in the circumstances.

Welbourne's second criticism, that Tremenheere collected his information from the colliery owners in after dinner conversation, is undoubtedly unfair. When analysing Tremenheere's reports as mines and collieries inspector it is clear that he placed the colliers at the centre of his investigations. For example, in his first report, published in 1844, he clearly explained that he met with the colliers 'at all the works' he visited.<sup>99</sup> Welbourne's argument can also be undermined when examining Tremenheere's 1850 report. Here Tremenheere reported on the 'several just grievances which [produced] irritation and distrust in the minds of' the colliers, which he was able to ascertain through discussions he had with them.<sup>100</sup> Such grievances included the frequent accidents, the lengthy shift work, and the unreliable payment of wages by the colliery owners.<sup>101</sup> These complaints by the colliers can also be included in the

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<sup>97</sup> *ibid* 211

<sup>98</sup> Boyd (n13) 81

<sup>99</sup> Home Department, *Report of the Commissioner Appointed under the Provisions of the Act 5 & 6 Vict c 99 to Inquire into the Operation of that Act, and into the State of the Population in the Mining Districts* (C (1<sup>st</sup> Series) 592, 1844) 15

<sup>100</sup> Home Department, *Report of the Commissioner Appointed under the Provisions of the Act 5 & 6 Vict c 99 to Inquire into the Operation of that Act, and into the State of the Population in the Mining Districts* (C (1<sup>st</sup> Series) 1248, 1850) 17

<sup>101</sup> *ibid*

definition of 'evils' for the purposes of this project, and it is clear that Tremenheere was all too aware of their existence.

Welbourne's criticism of Tremenheere appears to have been drawn from his unique method of inspection; once he had completed his examination Tremenheere would allow the person under scrutiny to read all of his notes, which would go on to form the basis of his annual reports.<sup>102</sup> In his private memoirs Tremenheere recalled that 'at first a large proportion of the employers were very suspicious' of this method,<sup>103</sup> but that 'each and all were anxious to show [him] in [his] subsequent visits that "they were better than they were when [he] first saw them"'.<sup>104</sup> The result of this was that Tremenheere was able to build trusting relationships with those in charge of the collieries, but was also able to highlight areas of improvement without publicly condemning the mining practices. This brought the issues to the attention of the colliery managers who, in Tremenheere's opinion, often endeavoured to remedy them before his next visit. While it cannot be denied that there were public officials who 'had sycophantic reverence' for the nineteenth century coal owners,<sup>105</sup> it would not be just to include Tremenheere in this group. It is true that he relied on his discussions with the colliery owners and managers when preparing his reports, but this was not his only source of information; as his reports show, he gave just as much weight to his discussions with the colliers themselves.

As has been seen, Tremenheere's reports often highlighted the hardships faced by the colliers, ranging from 'the absence of superintendence'<sup>106</sup> to the 'disregard of cleanliness in their persons and houses'.<sup>107</sup> What is missing from these reports, however, is the advancement and implementation of any form of remedy by Tremenheere. While he was able to identify the so called 'evils' he

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<sup>102</sup> Hugh Seymour Tremenheere, 'Memoir Volume IV: Journal' (Unpublished, 1844-1851)

<sup>103</sup> *ibid*, 120

<sup>104</sup> *ibid*, 121

<sup>105</sup> Thompson (n22) 46

<sup>106</sup> Home Department, *Report of the Commissioner Appointed under the Provisions of the Act 5 & 6 Vict c 99 to Inquire into the Operation of that Act, and into the State of the Population in the Mining Districts* (C (1<sup>st</sup> Series) 737, 1846) 46

<sup>107</sup> Home Department, *Report of the Commissioner Appointed under the Provisions of the Act 5 & 6 Vict c 99 to Inquire into the Operation of that Act, and into the State of the Population in the Mining Districts* (C (1<sup>st</sup> Series) 993, 1848) 15

was not able to take any action to resolve the majority of them, and so it would not be suitable to say that Tremenheere was a panacea for the numerous 'evils' that attended colliery operations during the nineteenth century. For example, the issue of poor ventilation was prominent in many of Tremenheere's reports. In 1844 he reported that 'defective ventilation was a common topic of complaint at many of the works' he visited,<sup>108</sup> and by 1850 he was reporting that it was still 'a subject of complaint among the men'.<sup>109</sup> As previously highlighted, John Buddle had unequivocally stated in 1814 that a 'judicious application' of sufficient ventilation was the most important step to be taken in preventing explosions within a coal mine.<sup>110</sup> In light of this statement by Buddle, together with the complaints of the colliers, it may be expected that Tremenheere would have taken steps to secure adequate ventilation across the country. Indeed, he should have been able to do this by recording, reporting and sharing the examples of good ventilation practice that he encountered, where 'every attention was said to be scrupulously paid'.<sup>111</sup> Tremenheere did not do this.

In fact, the only action that Tremenheere ever took in his capacity as Government inspector of mines and collieries was to ensure that convictions were obtained in relation to the employment of women, and the employment of children under the age of ten, in collieries. It is reported that he instructed 'professional gentlemen' to collect evidence to be brought before the magistrates in order to convict those who breached the provisions of the Mines and Collieries Act 1842.<sup>112</sup> As a result, he obtained, amongst others, the dismissal of thirty women from the Rhymney Company's collieries and the dismissal of numerous children under the age of ten from across the country.<sup>113</sup> Certainly the employment of women and children was regarded as an 'evil' associated with coal mining at that time; it was one of the 'subterranean terrors'

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<sup>108</sup> Tremenheere's Report of 1844 (n99) 8

<sup>109</sup> Tremenheere's Report of 1850 (n100) 18

<sup>110</sup> The Society for Preventing Accidents in Coal Mines (n54) 8

<sup>111</sup> Home Department, *Report of the Commissioner Appointed under the Provisions of the Act 5 & 6 Vict c 99 to Inquire into the Operation of that Act, and into the State of the Population in the Mining Districts* (C (1<sup>st</sup> Series) 670, 1845) 33

<sup>112</sup> Home Department, *Report of the Commissioner Appointed under the Provisions of the Act 5 & 6 Vict c 99 to Inquire into the Operation of that Act, and into the State of the Population in the Mining Districts* (C (1<sup>st</sup> Series) 844, 1847) 4

<sup>113</sup> *ibid*, 3-4

that had been brought to the forefront of nineteenth century awareness by the First Report of the Children's Employment Commission in 1842.<sup>114</sup> However this represented just one of the many issues that the colliers were faced with in their employment, and yet Tremenheere was not even able to satisfactorily remedy this particular 'evil'.

To begin with, he accepted that the convictions he secured relating to women and children were without 'any very permanent effect'.<sup>115</sup> It has also been reported that in some cases he 'simply declined' to bring any action against those who continued to breach the provisions of the Mines and Collieries Act 1842.<sup>116</sup> This may appear to be quite a shocking decision on the face of it, especially when considering that as recently as 2012 the courts of the United Kingdom have accepted that risk is 'necessarily inherent and inevitable in underground mining'<sup>117</sup> and that it remains 'unpleasant and dangerous work'.<sup>118</sup> In spite of this Tremenheere's decision should be placed in context; it has already been seen that the convictions he secured did not act as a deterrent and so, to a certain extent, it may be suggested that they were, in fact, useless. The offences often resumed again once the prosecutions had been secured due to the fact that 'the capital invested in exploiting' the mines yielded such high returns for those with a financial interest in the collieries;<sup>119</sup> the ends justified the means in the minds of the owners and managers. As a result, Tremenheere appears to have made his decision not to act on the basis that to do so would be a waste of public time and money.

As his decision allowed a so-called 'evil' to be perpetuated, it is clear that Tremenheere was not able to be the panacea for the 'evils' of the coal trade during the nineteenth century. Yet it is difficult to criticise Tremenheere for this; indeed, in his reports Tremenheere lamented that 'the Legislature had not

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<sup>114</sup> Angela John, *By The Sweat of Their Brow: Women Workers at Victorian Coal Mines* (2<sup>nd</sup> edn, Routledge & Kegan Paul plc 1983) 12

<sup>115</sup> Tremenheere's Report of 1847 (n112) 4

<sup>116</sup> Webb (n92) 358

<sup>117</sup> *Davies & Others v The Secretary of State for Energy and Climate Change (As Successor in Title to the Liabilities of the British Coal Corporation)* [2012] EWCA Civ 1380, [2012] 10 WLUK 750 [5]

<sup>118</sup> *ibid*, [7]

<sup>119</sup> Webb (n92) 358

thought proper'<sup>120</sup> when rushing the Mines and Collieries Act 1842 through Parliament at 'railroad speed'.<sup>121</sup> For this reason, the Mines and Collieries Act 1842 must be examined in further detail when considering whether Tremenheere was ever in the position to have been the panacea called for during the nineteenth century.

### **It Is More Convenient to Prevent the Passage of a Law, than to Declare It Void after It Has Passed**

When Lord Ashley introduced the initial Bill for the Mines and Collieries Act 1842 into the House of Commons, he suggested that it would have obviated 'a large proportion of the mischiefs' that prevailed in the mining industry.<sup>122</sup> In spite of Lord Ashley's confidence on this matter, the passage of the Bill through Parliament was met with great resistance from both Houses. Heesom has suggested that the draftsmanship of the Bill had been poor, especially in relation to Government inspection, and that this was the primary reason for the resistance.<sup>123</sup> This was undeniably the case; the Marquess of Londonderry regarded the Bill as an example of 'clumsy legislation'<sup>124</sup> with others suggesting that the Bill should have been handled much more 'cautiously and temperately'.<sup>125</sup>

In its original form the clause relating to inspection gave the inspectors wide powers to inquire into the state and condition of the mines and collieries, and yet the drafting of the clause made it entirely inoperative.<sup>126</sup> This point is highlighted most effectively when considering the Marquess of Londonderry's criticism of it; he suggested that the clause would have allowed a colliery owner to say to the inspector: 'You may go down the pit, and when you are down, you may remain there'.<sup>127</sup> By this he meant that there would have been no

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<sup>120</sup> Tremenheer's Report of 1847 (n112) 6

<sup>121</sup> John (n114) 12

<sup>122</sup> Hansard (n74) col 1349

<sup>123</sup> Heesom (n39) 260

<sup>124</sup> HL Deb 1 August 1842, vol 65, col 892

<sup>125</sup> Hansard (n74) col 1354

<sup>126</sup> On the original draft of the clause see Mines and Collieries Bill (n79)

<sup>127</sup> Hansard (n124) col 891



obligation on the colliery owners to provide an inspector with access to their mines, nor would there have been any compulsion for the owners to furnish the inspectors with any equipment that they may have needed to do so. As a result, he suggested that the House of Lords should have insisted upon an 'entire omission' of the clause relating to inspection.<sup>128</sup> This suggestion appears to have had some support in the House of Lords, as Lord Wharnccliffe showed concern that inspectors may 'inquire into the management of many things about which they have no business'.<sup>129</sup> Rather than omit the clause entirely, it was amended so that the inspector would instead report on the condition of the miners rather than the condition of the mines.

While the Marquess of Londonderry may be praised for drawing the attention of the House to the unenforceable nature of the clause, it would appear that he was privately attempting to 'thwart its passage';<sup>130</sup> he expressed a desire to 'put an end to' the Bill in his private correspondence.<sup>131</sup> As a colliery owner, with 'manors, collieries, coal mines, and other hereditaments... [situated] in the County of Durham',<sup>132</sup> such behaviour further supports the argument, initially advanced by Boyd, that colliery owners always pursued a system of stifling all inquiry into the coal trade during the nineteenth century.<sup>133</sup> Further, it also highlights the dominance of the doctrine of laissez-faire during the nineteenth century; the Earl of Radnor objected to the entire Bill on the grounds that it would cause great interference with the market of labour in the United Kingdom.<sup>134</sup>

The amendment made to the Bill, although subtle, was not without consequence. It has been seen that the role of the inspector was initially going to be to inquire into, and report on, the condition of the mines and collieries in the United Kingdom. If this had gone unchallenged then Tremenhoe's role

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<sup>128</sup> HL Deb 25 July 1842, vol 65, col 579

<sup>129</sup> *ibid*, col 587

<sup>130</sup> Heesom (n39) 258

<sup>131</sup> Letter from the Marquess of Londonderry to John Buddle (13 July 1842)

<sup>132</sup> An Act to Extend the Power of Granting Leases of Parts of the Estates of the Most Honourable Charles William Vane Marquis of Londonderry, and Frances Anne Vane Marchioness of Londonderry, His Wife 1828 (9 Geo 4 c 43) pt 1

<sup>133</sup> Boyd (n13) 26

<sup>134</sup> HL Deb 14 July 1852, vol 65, col 113

would have been very different; his focus would have been very much on the infrastructure of the collieries, as opposed to the condition of the colliers themselves. As a result, the issues relating to the health and safety of the colliers would have been a priority, rather than the social conditions that Tremenheere found himself reporting on. With just one minor change to the wording of the Bill, the role of the inspector transformed completely. The result of this was that the Mines and Collieries Act 1842 did create the role of a Government inspector of mines and collieries, but that the term ‘inspector’ is misleading in this case.

It has already been suggested that Tremenheere’s mandate was vague, and this becomes even more obvious when examining his role in further detail.<sup>135</sup> The legislation gave the inspector appointed under it three functions: to visit collieries in order to inquire whether the provisions of the Act were being complied with; to inquire into the condition of the colliers; and to prepare annual reports on the findings. Tremenheere did all of these things, and yet he has been consistently criticised for having ‘nothing to do with the technical management of the mines’, which may have encouraged better safety practices and thus reduced the number of accidents during his tenure as inspector.<sup>136</sup> The operation of the Mines and Collieries Act 1842, however, meant that Tremenheere was ‘in no way to concern himself with the management of mines’, and so criticism of Tremenheere for this is without foundation.<sup>137</sup> As a result, it would be better to regard Tremenheere as a ‘social investigator’ who reported on the social conditions of the mining population in the nineteenth century, rather than as an inspector with the power to make any progressive changes to the coal mining industry.<sup>138</sup>

When considering whether Tremenheere was a panacea for the numerous ‘evils’ that attended the coal mining trade in the nineteenth century, it has been seen that he was not, primarily because he was not able to advance any

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<sup>135</sup> See, for example, Edmonds and Edmonds (n28) 211

<sup>136</sup> Stone (n7) 33

<sup>137</sup> *ibid*, 31

<sup>138</sup> *ibid*, 34

remedies for these 'evils'. It would, however, be wrong to criticise Tremenhoe for this. It is clear, through examining the Mines and Collieries Act 1842, that Tremenhoe was never in a position to be a panacea for these 'evils'; his role simply did not allow for it. As a result, it is the authors of the Mines and Collieries Act 1842, together with those Parliamentary members who weakened its provisions, who should be criticised. The Act had the potential to introduce a panacea for these 'evils' in the form of an inspector, but did not go far enough in ensuring that the inspector had the necessary powers to make a tangible difference to the trade. Quite simply, the legislative intervention that the Act provided was far from satisfactory in the circumstances.

## Chapter Two

### **Colliery Inquests • Further Government Inquiry • Legislative Reform • New Government Inspectors**

Chapter one demonstrated that the first Government inspector of mines and collieries was not a panacea for the numerous evils that attended colliery operations in the nineteenth century. It was also suggested that he should not be condemned for this; the main criticism should be directed towards the authors of the Mines and Collieries Act 1842, which, in spite of bringing ‘some indirect safety provisions to the collieries’,<sup>139</sup> was largely inadequate in the circumstances.<sup>140</sup> Tremenheere both acknowledged and embraced the limitations of the legislation under which he was appointed; in addition to his appreciation that ‘the legislature had not thought proper’ when introducing the legislation,<sup>141</sup> it may be suggested that Tremenheere used his annual reports as a platform for advocating more comprehensive inspection on the part of Government. In his 1847 report, Tremenheere highlighted the fact that colliery explosions and colliery management did not ‘strictly come within the letter of his role.’<sup>142</sup> As a result, Tremenheere encouraged the Government to form a new office of inspection that would focus on the mines and collieries themselves, including the management, ventilation and general safety practices.<sup>143</sup> It is somewhat ironic to note that the form of inspection Tremenheere advocated was, in fact, the form that his own office of inspection would have taken if not for the opposition of colliery owners in Parliament.<sup>144</sup>

### **And They All Paid, They All Paid the Real Price of Coal, It Was Too High**

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<sup>139</sup> Catherine Mills, ‘The Emergence of Statutory Hygiene Precautions in the British Mining Industries, 1890-1914’ (2008) 51 1 *The Historical Journal* 145, 151

<sup>140</sup> See, for example, Kuntala Lahiri-Dutt, ‘The Act That Shaped the Gender of Industrial Mining: Unintended Impacts of the British Mines Act of 1842 on Women’s Status in the Industry’ (2019) *In Press Corrected Proof* *The Extractive Industries and Society*

<sup>141</sup> Tremenheer’s Report of 1847 (n112) 6

<sup>142</sup> *ibid*, 28

<sup>143</sup> *ibid*

<sup>144</sup> See, for example, chapter one regarding the procession of the Mines and Collieries Act 1842 through Parliament

During this time the conduct of the colliery managers and owners continued to amount to 'a far from benign neglect' of safety practices, resulting in further colliery accidents and loss of life.<sup>145</sup> For example, on 3 April 1845 a subterranean explosion at Killingworth Colliery resulted in the death of ten colliers. One of these colliers is reported to have been using a candle, rather than a safety lamp, as a source of light, which is thought to have ignited a quantity of gas.<sup>146</sup> Effective safety lamps had been available for more than thirty years at the time of this particular incident; Clanny had developed a safety lamp in 1812, with both Stephenson and Davy, along with various others, producing variations in 1815.<sup>147</sup> The Select Committee of 1835 had, in fact, suggested that 'no employer of miners can be justified in allowing ... interference with a due protection to the lives of his workpeople'.<sup>148</sup> In order to achieve this, the Select Committee forcefully suggested that the use of safety lamps in place of candles should be 'compelled by the owners'.<sup>149</sup> Unfortunately, there was no way to enforce this suggestion; as has already been seen, the scope of Tremenheere's role was limited, and compelling the colliery owners to observe the Select Committee's recommendations was not within his power. It may be suggested, then, that the occurrence of accidents such as this supported Tremenheere's suggestion that a new office of inspector should have been formed.

The explosion at Killingworth Colliery is also significant when considering the inquest that followed. The coroner, Stephen Reed, was criticised for his 'unseemly haste' in opening the proceedings.<sup>150</sup> It was 4.30pm on Friday 4 April, the day after the explosion, and four of the bodies had still not been located within the mine.<sup>151</sup> It has been noted that Reed refused to hear evidence from mining professionals, which had already been prepared in anticipation of the inquest, and rather dogmatically suggested that there was

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<sup>145</sup> Jane Humphries, 'Protective Legislation, the Capitalist State, and Working Class Men: The Case of the 1842 Mines Regulation Act' (1981) 7 *Feminist Review* 1, 13

<sup>146</sup> Maureen Anderson, *Northumberland & Cumberland Mining Disasters* (Wharnccliffe Books 2009) 68

<sup>147</sup> John Ayrton Paris, *The Life of Sir Humphry Davy* (Samuel Bentley 1831)

<sup>148</sup> Select Committee Report (n61) 4

<sup>149</sup> *ibid*

<sup>150</sup> Thompson (n62) 71

<sup>151</sup> *ibid*

no blame due to the colliery owners.<sup>152</sup> Eventually a verdict of accidental death was recorded. It is clear, however, that the incident could have been prevented and Reed should have had the integrity to speak out on the issue. As a result, it may be suggested that Reed, unlike Tremenheere, did have 'sycophantic reverence' for the nineteenth century coal owners.<sup>153</sup><sup>154</sup> Reed was not the only public official, or more specifically not the only coroner, who can be placed in this category. This conduct can be observed when considering the explosion at Haswell Colliery, County Durham, on 28 September 1844, which killed ninety-five colliers. This incident 'has attracted much more interest from historians than other comparable disasters', primarily because of the inquest rather than the explosion itself.<sup>155</sup>

The coroner, Thomas Christopher Maynard, had acted as an agent of the Marquess of Londonderry during the 1837 General Election, and continued to do so until 1841.<sup>156</sup> The Marquess of Londonderry owned 'considerable mines in Durham' and was arguably the strongest opponent of Government intervention in mines and collieries in Parliament.<sup>157</sup> As a result, Maynard's involvement in the inquest was immediately open to criticism; after all, it is 'of fundamental importance that justice should not only be done, but should manifestly and undoubtedly be seen to be done'.<sup>158</sup> With the benefit of hindsight it may be asked to what extent Maynard acted in the impartial and independent manner expected of coroners in the nineteenth century, which would 'prevent juries from being manipulated into returning' questionable verdicts.<sup>159</sup> Immediately after the explosion, the Northumberland and Durham Miners' Association acknowledged that the inquest would be a prime platform for

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<sup>152</sup> *ibid*, 76

<sup>153</sup> Thompson (n22) 46

<sup>154</sup> For a more detailed analysis of Stephen Reed see, for example, Nathan Maddison, 'Stephen Reed: A Victorian Villain?' (Unpublished, University of Northumbria at Newcastle 2018)

<sup>155</sup> Frank James and Margaret Ray, 'Science in the Pits: Michael Faraday, Charles Lyell and the Home Office Enquiry into the Explosion at Haswell Colliery, County Durham, in 1844' (2008) 15 3 *History and Technology: An International Journal* 213, 213

<sup>156</sup> Letter from Christopher Thomas Maynard to the Marquess of Londonderry (10 August 1841)

<sup>157</sup> Engels (n50) 260

<sup>158</sup> *R v Sussex Justices, ex p McCarthy* [1924] 1 KB 256 (EWHC) 259

<sup>159</sup> Leslie Thomas, Adam Straw, Daniel Machover and Danny Friedman QC, *Inquests: A Practitioner's Guide* (3<sup>rd</sup> edn, Legal Action Group 2014) 16

advancing their cause: that there were 'unsafe conditions within mines and highlighting the need for legislation and Government interference'.<sup>160</sup> In light of this, they intervened with solicitor William Prowting Roberts, who had become 'a terror to the mine owners' through his previous involvement in colliery matters, representing the bereaved families at the inquest.<sup>161</sup>

On the first day of the inquest Roberts applied for an adjournment, insisting that an independent colliery manager should inspect the mine. Maynard refused. Roberts then applied for an adjournment so that Government representatives could attend the inquest. Maynard, again, refused. Roberts persisted in his attempts at gaining an adjournment, emphasising that a further investigation into the incident was necessary, with Maynard finally granting his request at the end of the third day.<sup>162</sup> In light of his repeated refusals, James and Ray have suggested that Maynard's conduct amounted to a 'biased handling of the case'.<sup>163</sup> This is a convincing observation, especially when considering the 1835 Select Committee's recommendation that a fit and proper person should attend inquests relating to colliery deaths on behalf of the Government.<sup>164</sup> Roberts was clearly aware of this recommendation by the Select Committee; he 'petitioned the Prime Minister ... that Government representatives should be sent to the inquest' before the expiration of the adjournment.<sup>165</sup> Roberts's petition was successful and Michael Faraday and Charles Lyell were selected to attend the inquest on behalf of the Government.

Faraday and Lyell, unlike Tremenheere, insisted on inspecting the mine itself, where they discovered 'some laxity in the safety procedures' in place.<sup>166</sup> It has been reported that during the inspection and, 'much to his consternation, Faraday found that he was sitting on a bag of gunpowder while a naked candle was in use'.<sup>167</sup> Following their investigations, Faraday and Lyell concluded 'that

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<sup>160</sup> James and Ray (n155) 218

<sup>161</sup> Engels (n50) 258

<sup>162</sup> For a more detailed account of the inquest see, for example, William Prowting Roberts, *The Haswell Colliery Explosion, 28<sup>th</sup> September 1844* (Newcastle 1844)

<sup>163</sup> James and Ray (n155) 222

<sup>164</sup> Select Committee Report (n61) 5

<sup>165</sup> James and Ray (n155) 219

<sup>166</sup> *ibid*, 221

<sup>167</sup> *ibid*

something was seriously amiss in mining safety' and recognised the importance of further inquiry into the matter.<sup>168</sup> It is clear that Faraday and Lyell were able to draw these conclusions through the subterranean inspection of a single mine, and so Tremenheere's lack of underground inspection can be criticised once more. Indeed, it is possible that if Tremenheere had engaged in underground inspection then he may have been able to highlight the existence of such 'evils' before accidents like these occurred. However, such an argument requires hypothetical thought and does not reflect the reality of the situation, and so is an unreasonable one to make. As was demonstrated in chapter one, Tremenheere's inspecting role was limited by statute and therefore he was never in a position to engage in such activity; as such, caution must be exercised when reflecting on Tremenheere's actions. Once again, the criticism should be directed towards the authors of the Mines and Collieries Act 1842 and the inadequate powers it conferred upon the inspector. The Haswell Colliery explosion further highlighted the need for a new office of inspector, much like the one proposed by Tremenheere in 1847, with greater powers and a much clearer mandate.

Their experience at the Haswell Colliery inquest prompted Faraday and Lyell to publish a report outlining their findings. It may be suggested that the content of the report was in no way surprising; it drew attention to many of the 'evils' already highlighted by previous reports, Select Committees and commissions. For example, it suggested that: ventilation was in need of 'improvement';<sup>169</sup> that safety lamps should be used rather than candles;<sup>170</sup> and that the standard of education in the mining districts should be addressed.<sup>171</sup> In response to the report, the United Committee of the Coal Trade appointed a sub-committee to consider the recommendations made by Faraday and Lyell. Boyd has suggested that the sub-committee's response was 'vague and unsatisfactory'

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<sup>168</sup> *ibid*, 223

<sup>169</sup> Home Department, *Copy of the Report of Messrs. Lyell and Faraday to the Secretary of State for the Home Department, on the Subject of the Explosion at the Haswell Collieries in September Last: - Also, Copy of the Report Addressed to the United Committee of the Coal Trade by the Special Committee Appointed to Take into Consideration the Said Report of Messrs. Lyell and Faraday; and Copy of the Reply to Messrs. Lyell and Faraday Thereto* (C (1<sup>st</sup> series) 232, 1845) 4

<sup>170</sup> *ibid*, 7

<sup>171</sup> *ibid*, 12



and, given the serious nature of the 'evils' highlighted in the report, such an observation was reasonable.<sup>172</sup> The sub-committee disregarded the scientific basis of Faraday and Lyell's report, suggesting that 'practical information which can only be gained by experience' was the most important factor when looking to improve the safety within a mine.<sup>173</sup> For the sub-committee to have overlooked the science behind Faraday and Lyell's report at this time is arguably unexpected and represents a rather inflexible stance; after all, during the nineteenth century 'public enthusiasm for science began to grow',<sup>174</sup> resulting in a 'Victorian fascination with science'.<sup>175</sup> The vague and intransigent nature of the sub-committee's reply, however, did nothing to assuage the growing concerns of the colliers regarding their safety. They proceeded to formulate a petition for further Government inquiry into colliery accidents, which Thomas Duncomb presented to Parliament on 11 March 1845.<sup>176</sup>

### **Doubt Comes in at the Window When Inquiry Is Denied at the Door**

The Government response to the Haswell Colliery disaster and the colliers' petition submitted by Thomas Duncomb was arguably inadequate when considered as a whole. Clearly the so-called 'evils' that had been within the contemplation of the legislature when passing the Mines and Collieries Act 1842 were still present within the mining industry. As a result it should have been apparent to the Government that the office of inspector, as held by Tremenheere, was not the panacea for the numerous evils that attended colliery operations at the time. It may be expected that further decisive action would have been taken in order to address the issue, but this was not the case.

The Government response was to appoint Sir Henry de la Beche and Dr Lyon Playfair to inquire into the causes of explosions in mines. Their report,

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<sup>172</sup> Boyd (n13) 72

<sup>173</sup> Lyell and Faraday's Report (n169) 13

<sup>174</sup> Bernard Lightman, 'Victorian Science and Popular Visual Culture' (2012) 10 1 Early Popular Visual Culture 1, 1

<sup>175</sup> Bernard Lightman, 'Mid-Victorian Science Museums and Exhibitions: 'The Industrial Amusement and Instruction of the People'' (2013) 37 2 Endeavour 82, 82

<sup>176</sup> HC Deb 11 March 1845, vol 78, col 633

presented in 1846, repeated many of the previously identified 'evils' and suggested that they 'might be at least mitigated by the careful and judicious inspection... by competent persons'.<sup>177</sup> Once again, more comprehensive Government inspection, in the form to be advocated by Tremenheere in his 1847 report, was being suggested as a remedy for these 'evils'. In spite of this, the scope of Tremenheere's role was not widened, nor was an alternative office of inspection created. Indeed, the concept of wider Government inspection was 'repeated again and again in the course of further investigations' into colliery safety.<sup>178</sup> Attempts to address the issue of safety were ultimately defeated in Parliament; Thomas Duncomb introduced a Bill, which would have allowed for the appointment of three Government inspectors of mines and collieries, to the House of Commons on 16 June 1847,<sup>179</sup> but was forced to withdraw it shortly afterwards following pressure from the Home Secretary.<sup>180</sup> Any notion of legislative reform stagnated after this point.

The catalyst for more comprehensive inquiry came in January 1849 and was, regrettably, yet another colliery explosion. This explosion, which killed seventy-five colliers, occurred at the Darley Main Colliery in South Yorkshire. The mine was subsequently found to be inadequately ventilated.<sup>181</sup> In common with the explosions at Killingworth and Haswell, it is the ensuing inquest that is of particular interest. While the jury returned a verdict of accidental death in this case, they requested that the coroner, Thomas Badger, made it known to the Government that they believed it would be advisable 'that they should appoint a scientific and practical person to ... inspect the collieries'.<sup>182</sup> To the jury there was 'no doubt that the manifest errors and defects of its ventilation would have been strongly pointed out' if there had been an inspector with satisfactory powers operating in the industry.<sup>183</sup> As a result, there was a widespread belief

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<sup>177</sup> Home Department, *Report on the Gases and Explosions in Collieries*, by Sir Henry T. de la Beche and Dr Lyon Playfair (C (1<sup>st</sup> series) 592, 1846) 10

<sup>178</sup> Boyd (n13) 78

<sup>179</sup> HC Deb 16 June 1847, vol 93, col 620

<sup>180</sup> HC Deb 30 June 1847, vol 93, col 1078-1079

<sup>181</sup> See, for example, Frank Machin, *The Yorkshire Miners: A History by Frank Machin*, vol 1 (National Union of Mineworkers 1958) 13

<sup>182</sup> Home Department, *Reports on the Explosion in Darley Main Colliery* (C (1<sup>st</sup> series) 1051, 1849) 2

<sup>183</sup> *ibid*

that the explosion 'would in all probability not have occurred' if such an inspector were in existence.<sup>184</sup> At this point the defects in the existing office of inspector were becoming much more apparent, leading to Lord Carlisle introducing a Bill into the House of Lords in response to the 'appalling number of accidents that had occurred'.<sup>185</sup> Following its progression through Parliament, the Bill came into force as the Coal Mines Inspection Act 1850.<sup>186</sup>

### **A Bill of Essential Consequence**

As with the legislation that had gone before, the Bill was met with resistance in both Houses of Parliament. In the Lords the Earl of Lonsdale voiced his concern that the Bill would 'prove a great annoyance to coal owners',<sup>187</sup> and in the Commons Benjamin Disraeli believed it to be 'a piece of hasty and ill-considered legislation'.<sup>188</sup> In spite of this opposition, which was moderate compared to that of the 1842 legislation, the Act did address some of the issues that had been raised regarding inspection of mines and collieries. It should be noted, however, that this Act did not repeal any part of the Mines and Collieries Act 1842. As a result, there were two offices of mines and collieries inspector in existence simultaneously; there was the 1842 office held by Tremenheere on the one hand, and the newly created 1850 office on the other. It has already been seen that Tremenheere's role should be regarded as more of a 'social investigator' rather than an inspector, and the differences between the two offices should be considered in more detail.<sup>189</sup>

The most significant aspect of the 1850 Act was that it gave the inspectors the power to inquire into the state and condition of the mines and collieries.<sup>190</sup> These inspectors had a much wider scope than Tremenheere ever had under the 1842 Act; while he was limited to inquiring into the social condition of the

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<sup>184</sup> *ibid*

<sup>185</sup> HL Deb 19 July 1850, vol 113, col 3

<sup>186</sup> Coal Mines Inspection Act 1850 (14 Vict c 100)

<sup>187</sup> Hansard (n185), col 4

<sup>188</sup> HC Deb 2 August 1850, vol 113, col 760

<sup>189</sup> See, for example, the discussion of Tremenheere's role in chapter one

<sup>190</sup> Coal Mines Inspection Act 1850, s 1

colliers, the new inspectors were focused on identifying any defects in mines and collieries which were likely to place the colliers in any form of danger.<sup>191</sup> Such a power clearly reflects the recommendations of the previous Select Committees, reports and commissions, as well as the calls of the jury in the Darley Main Colliery inquest. It has already been seen that the limitations of Tremenheere's role meant that he could not be a panacea for the numerous evils that attended colliery operations in the nineteenth century; however, the wider powers conferred on the new inspectors meant that they did have the potential to be such a panacea.

In addition to the clearer focus for the inspectors, the Act also addressed the issue, first highlighted by the Select Committee of 1835, of inquests. Under the Act, coroners were compelled to adjourn an inquest following an accident at a colliery until the Secretary of State had been given notice.<sup>192</sup> This had not been a requirement under the old law, and so represented a shift towards examining the accidents in greater detail with a view to preventing similar incidents in the future. The Act also introduced a penalty enforceable against any colliery owner or agent who refused or neglected to furnish the inspectors with the means necessary to carry out their role; for each offence the owner or agent could be fined between five and ten pounds.<sup>193</sup> Once again, this represented a shift of power; authority had remained with the colliery owners under the 1842 Act, but with the 1850 Act this was reduced with greater influence passing to the inspectors. This further supports the suggestion that the inspectors now had the potential to be the panacea for the numerous evils that attended colliery operations in the nineteenth century.

As identified in chapter one, Tremenheere's appointment as the first Government inspector of mines and collieries was criticised because of his lack of experience in the coal mining industry. Such an oversight was not repeated when the new inspectors were appointed in 1851. Indeed, Boyd observed that

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<sup>191</sup> Home Department, *Copy of Instructions Addressed to Each of the Inspectors of Coal Mines* (J. K. Blackwell, J. Dickinson, M. Dunn, and C. Morton, Esquires), *Appointed Under the Act 13 & 14 Vict. c. 100*. (C (1<sup>st</sup> series) 464, 1851)

<sup>192</sup> Coal Mines Inspection Act 1850, s 5

<sup>193</sup> *ibid*, s 6

colliery owners had feared the appointment of inspectors who were not familiar with the practicalities of coal mining, and who would insist on imposing impossible or expensive measures.<sup>194</sup> Such fears were relieved when the Government appointed Matthias Dunn, Joseph Dickinson, Charles Morton and John Kenyon Blackwell as the first four Government inspectors. All of these men had been connected to the coal trade in one way or another before their appointment, and so represented a suitable choice by the Government. For the purposes of this project, particular emphasis will be placed on Matthias Dunn, the inspector initially responsible for the collieries within Northumberland, Durham, Cumberland and Scotland. It has long been recognised that ‘of all the coal-fields in England ... that of Northumberland and Durham [was] the most important’, and so it may be suggested that Dunn was the inspector with the potential to make the biggest impact on mining safety during the nineteenth century.<sup>195</sup>

### **Unreasonable Haste Is the Direct Road to Error**

It cannot be denied that the 1850 Act recognised the deficiencies in the 1842 Act, and did seek to provide a remedy in the form of more comprehensive Government inspection. However, the Act did not go far enough; it appears satisfactory on the surface, but a more detailed analysis reveals too many inadequacies. For example, the inspectors were appointed to inquire into the state and condition of the mines and collieries with a view to identifying defects giving rise to danger. While this is indeed the role that had been proposed for many years, the inspectors were limited in what action they could take if they discovered such a defect. They were restricted to bringing the defects to the attention of the colliery owner or agent, who may or may not have taken action. If the owner or agent did not take any action, the inspector could make a further report to the Secretary of State. Such a process would have taken a considerable amount of time and, in the meantime, mining operations would have continued as usual. The inspectors were not able bring a halt to work, and

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<sup>194</sup> Boyd (n13) 105

<sup>195</sup> Charles Knight, *The Land We Live In: A Pictorial and Literary Sketch Book of the British Empire*, vol 3 (London) 139

so the colliers were still exposed to the danger in question. As a result, one would argue that the power conferred upon the inspectors were illusory, to a certain extent, as they were restricted in practice. In a similar way that Tremenheere's power was limited to observing and reporting, the new inspecting role was also limited to observing and reporting. The inspectors had no means of enforcing a remedy, which reflected a major inadequacy in the Coal Mines Inspection Act 1850.

The limitations of the inspecting role are also apparent when observing the instructions given to them on their appointment. The Home Office informed the inspectors that they could not enforce any particular mode of ventilation or working within the collieries, nor could they give any advice unless solicited by a colliery owner or agent.<sup>196</sup> Attention must again be drawn to John Buddle's advice, published in 1814, regarding ventilation; he had warned that the adequate ventilation of a colliery was the most significant step in preventing colliery explosions and so should be judiciously attended to at all times.<sup>197</sup> In spite of this, ventilation remained a contentious issue, and there was great disagreement as to the most effective method available.<sup>198</sup> As has already been seen, inadequate ventilation was a significant contributory factor in a number of colliery explosions, such as the previously highlighted explosions at Felling Colliery in 1812 and at Haswell Colliery in 1849. The inspectors should have been given the power to intervene where necessary. Similarly, there were numerous modes of working available, each with their own advantages and disadvantages, and yet the inspectors could not make recommendations to the colliery owners or agents regarding this either.<sup>199</sup> The 'working' of a colliery refers to the method of extracting coal from the ground; evidently the main objective in any colliery was to extract as much coal as possible from the mine, leading to the development of a number of techniques to do this. Colliery owners and managers were often criticised for their choice of working, as they

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<sup>196</sup> Copy of Instructions to Inspectors (n191)

<sup>197</sup> Sunderland Society Report (n54) 5

<sup>198</sup> See, for example, Home Department, *Report on the Ventilation of Mines and Collieries* (C (1<sup>st</sup> series) 1222, 1850); H. W. G. Halbaum, 'Ventilation' in Professor W. S. Boulton, *Practical Coal Mining*, vol 4 (The Gresham Publishing Co 1911)

<sup>199</sup> See, for example, the modes of working discussed in George L. Kerr, *Practical Coal Mining* (4<sup>th</sup> edn, Charles Griffin and Company Limited 1905) 137-174

would often leave insufficient coal in the ground to support the weight of the earth above, frequently leading to the collapse of the mine. Again, such a limitation would suggest that the new office of inspector, while having potential, could not in practice amount to a panacea for even the most obvious of the numerous evils that attended colliery operations in the nineteenth century.

In common with the other three inspectors who were appointed under the 1850 Act, Matthias Dunn was well acquainted with the coal trade. Unlike Tremenhoe, however, Dunn had considerable experience in managing collieries; he had been employed as deputy colliery manager under John Buddle and was subsequently appointed as a colliery manager for the Hetton Coal Company.<sup>200</sup> While Bartrip has questioned the motivation for individuals accepting the post of inspector, highlighting the controversial question of their attitudes towards reform and regulation both before and after appointment, it would not be just to question Dunn's intent.<sup>201</sup> Prior to his appointment as inspector, Dunn showed deep concern for the welfare of the colliers. For example, during the Second Cholera Pandemic of 1826 to 1837 Dunn kept detailed records of how the infection was impacting the lives of his workforce.<sup>202</sup> He had also been vocal on the issue of colliery safety, potentially influenced by his early associations with John Buddle.<sup>203</sup> For instance: he contributed to the 1835 Select Committee into accidents in coal mines;<sup>204</sup> he actively encouraged the development of an effective safety lamp;<sup>205</sup> and, at his own expense, he made available numerous works promoting safe mining practices.<sup>206</sup> As a result, Dunn was impeccably suited for the role of Government inspector, further reinforcing the notion that the new office of inspector had the potential

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<sup>200</sup> Professor Sir Alec Skempton (ed), *Biographical Dictionary of Civil Engineers: Volume 1 – 1500 to 1830* (Thomas Telford Limited 2002) 195

<sup>201</sup> Bartrip (n14) 605

<sup>202</sup> James A. Jaffe, *The Struggle for Market Power: Industrial Relations in the British Coal Industry, 1800-1840* (Cambridge University Press 1991) 182

<sup>203</sup> It has already been seen that Buddle advocated better ventilation practice as a means of preventing accidents in mines, thus creating a safer working environment.

<sup>204</sup> Select Committee Report (n61) 10

<sup>205</sup> Paris (n147) 314

<sup>206</sup> See, for example, Matthias Dunn, *A Treatise on the Working and Winning of Collieries* (Matthias Dunn 1848)

to be the panacea for the numerous 'evils' that attended colliery operations in the nineteenth century.

It is regrettable, however, that the limitations of the role did not allow Dunn's wealth of knowledge to be shared with the collieries under his control. Dunn, along with the other inspectors, was perfectly placed to advocate safer mining practices, and yet the legislation stopped short of providing the platform to do so. The inspecting role reflected the one called for by the various reports and committees over the years; it moved the focus of the inspection away from the social conditions of the colliers towards the issue of safety within the trade. Yet the enforcement powers that should have provided the foundation of the role were missing. In much the same way as the 1842 Act created an inspector whose primary role was on reporting, so too did the 1850 Act. As a result, one must agree with Bartrip's observation that 'it is hard to maintain that the Act took state intervention very much further'.<sup>207</sup> It is true that the new office of Government inspection had the potential to be the panacea for the numerous 'evils' that attended colliery operations in the nineteenth century, but it cannot be denied that the limitations of the role meant that, in practice, it could not provide this panacea.

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<sup>207</sup> P. W. J. Bartrip, 'State Intervention in Mid-Nineteenth Century Britain: Fact or Fiction?' (1983) 23 *Journal of British Studies* 63, 74



## Chapter Three

### **Washington Colliery • Select Committees • Coal Mines Act 1855 • Burradon Colliery • New Hartley Disaster**

By 1851, sixteen years after they had first been proposed, the Government inspectors of mines and collieries did not represent a panacea for the multitude of 'evils' associated with colliery operations. This was not the result of incompetence on the part of the inspectorate; the inspectors were all suitably qualified to hold their positions. It was, in fact, the product of the weak legal basis on which they had been appointed. The focus of the Mines and Collieries Act 1842 had been diverted by the colliery owners in Parliament, resulting in the appointment of a mines and collieries inspector who was in no way to concern himself with the operation of mines and collieries. Similarly the Coal Mines Inspection Act 1850 was undermined in Parliament, although it did prove to be more effective than the 1842 Act. This resulted in inspectors with a clear focus on the safety of mines and collieries, but without the necessary powers of intervention and enforcement. While the 1842 Act continued to operate unaltered, the 1850 Act was subject to criticism from its introduction, leading to further inquiry and reform.

#### **The Inquiry Constantly Is What Will Please, Not What Will Benefit the People. In Such a Government There can be Nothing but Temporary Expedient, Fickleness, and Folly**

The controversies surrounding the ventilation of mines, for example, continued after the appointment of the Government inspectors under the Coal Mines Inspection Act 1850. In his first report, dated 1851, Inspector Dunn highlighted the fact that colliery managers frequently disagreed as to the best mode of ventilation, of which there were many, to be employed in their mines.<sup>208</sup> Indeed, he was critical of the widespread deficiency of adequate ventilation in the

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<sup>208</sup> Home Department, *Reports of Messrs. Dunn, Dickinson, and Morton, Inspectors of Coal Mines, to Her Majesty's Secretary of State* (C (1<sup>st</sup> series) 1422, 1851) 4

Scottish collieries, which he considered to be a great detriment to the health of the colliers.<sup>209</sup> In spite of these concerns, it should be remembered that Dunn was generally prohibited from commenting on the ventilation system in place at a colliery unless his opinion was solicited from the colliery owner or agent.<sup>210</sup> While the inspectors had the power to highlight and report examples of inadequate ventilation to the Secretary of State, they were unable to recommend improvements that would have made adequate ventilation systems more effective. This was one of the central flaws of the role; it did not give the inspectors the authority to share their knowledge with the collieries under their control in order to promote better safety practices. Dunn was not alone in reporting deficiencies in the ventilation of collieries; Inspectors Morton and Dickinson also used their reports in order to stress the issue.<sup>211</sup> Consequently, it was clear that poor ventilation was not unique to the coalfields under Dunn's control; it was a nation wide problem, and so any comment has national, as opposed to merely regional, significance. Attention was most notably drawn to this issue following the explosion at Washington Colliery in 1851, which killed thirty-five colliers.<sup>212</sup>

The explosion at Washington Colliery was not the first to occur at the site; there had been previous fatal explosions attributable to the ventilation system as recently as 1849.<sup>213</sup> The 1851 inquest concluded that this explosion was also the result of an inadequate ventilation system being in place.<sup>214</sup> The jury went further. They suggested that if Dunn had been given the opportunity of inspecting the colliery in order to make recommendations for improving the ventilation system, and had been able to ensure that recommendations for improvement were put in place, then the explosion would not have occurred.<sup>215</sup> Dunn was of the same opinion, but also voiced his concern that colliery owners and managers appeared reluctant to ask for his professional opinion regarding

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<sup>209</sup> *ibid*, 5

<sup>210</sup> Copy of Instructions to Inspectors (n191)

<sup>211</sup> The 1851 Report of Inspectors (n208)

<sup>212</sup> John Flanagan, 'A Gigantic Scheme of Co-Operation': The Miners' and Seamen's United Association in the North-East, 1851-1854' (2009) 74 2 *Labour History Review* 143, 153

<sup>213</sup> Jules Ginswick (ed), *Labour and the Poor in England and Wales 1849-1851*, vol 2 (Frank Cass 1983) 47

<sup>214</sup> The 1851 Report of Inspectors (n208) 15

<sup>215</sup> *ibid*

ventilation.<sup>216</sup> This account from Dunn emphasised the limitations of his role; it showed that the colliery owners and agents were unwilling to engage with the inspectors in order to ensure that enduring 'evils', such as poor ventilation, were addressed. As a result, even the most rudimentary 'evils' were not remedied through the introduction of the inspectors, and so it cannot be said that the new office of inspector was any more of a panacea than the previous office.

In addition to the explosion at Washington Colliery, there were several other colliery accidents in 1851, resulting in a significant number of deaths. In the seven month period between November 1850 and June 1851 the inspectors recorded five hundred and twenty four colliery related deaths.<sup>217</sup> This figure did not, however, include any of the fatalities that had occurred in Wales and did not cover a twelve month period. In order to address this, the inspectors predicted that there would be a total of one thousand one hundred and fifty colliery related deaths throughout the United Kingdom in the year 1851.<sup>218</sup> Such an estimate caused great alarm in both Houses of Parliament, resulting in members once more considering colliery safety to be a 'pressing emergency'.<sup>219</sup> This led to the appointment of a further Select Committee, to inquire, once again, into the recurrent accidents that occurred at the collieries.<sup>220</sup> Unlike the previous Select Committees, which had frequently attached little weight to the preceding investigations, this Select Committee recognised the 'extensive, important, and apparently so accurate' information that had been prepared to date.<sup>221</sup> With this information in mind, the Select Committee criticised the fact that the beneficial suggestions propounded by the previous Committee's had been given 'so little attention'.<sup>222</sup> They went on to

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<sup>216</sup> *ibid*, 14-15

<sup>217</sup> Home Department, *Reports of Messrs. Dunn, Dickinson, Morton, Lancaster, Wynne, and Mackworth, Inspectors of Coal Mines, to Her Majesty's Secretary of State* (C (1<sup>st</sup> series) 1845, 1854) 8

<sup>218</sup> *ibid*

<sup>219</sup> Home Department, *Report from the Select Committee on Coal Mines; Together with the Proceedings of the Committee, Minutes of Evidence, Appendix and Index* (C (1<sup>st</sup> series) 509, 1852) 2

<sup>220</sup> *ibid*

<sup>221</sup> *ibid*

<sup>222</sup> *ibid*, 3

outline their own recommendations for colliery safety, including proposed reforms of the recently created office of Government inspector.

The first criticism made in relation to inspection was that too few appointments had been made under the Coal Mines Inspection Act 1850. Initially the Government had only appointed four inspectors, though this had been increased to six shortly afterwards. As a result, each inspector was responsible for examining and reporting on roughly four hundred collieries. This was clearly an outrage; it would have been impossible for the inspectors to visit every colliery under their control in the space of one year.<sup>223</sup> In light of this, the content of the inspectors' official reports fell under scrutiny; it is doubtful that the reports returned to Parliament reflected the reality of the situation. The reports represent generalisations made by the inspectors based upon what they had observed over the course of the year. While the reports were useful when specific events, such as the Washington Colliery explosion, were discussed, they could not be relied on as a comprehensive summary of the nineteenth century collieries in the United Kingdom. The fact that the inspectors were responsible for such a large number of collieries can be criticised further. As the inspectors were unable to visit all of the collieries under their control, it cannot be denied that 'evils' would have remained undetected and unresolved. It is not possible that the inspectors appointed under the 1850 Act were any more of a panacea for the numerous 'evils' associated with colliery operations than the inspector who had been appointed under the 1842 Act. There simply were not enough of them to have any substantial effect.

The members of the 1852 Select Committee were also critical of the limited powers conferred on the inspectors under the 1850 Act.<sup>224</sup> They suggested that the inspectors should have been given the power to enforce penalties where they discovered examples of danger, especially when this had led to fatalities.<sup>225</sup> Echoing George Stephenson's suggestion, made during the course of the 1835 Select Committee's investigations, it was also advised that

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<sup>223</sup> *ibid*, 8

<sup>224</sup> *ibid*, 8-9

<sup>225</sup> *ibid*, 9

the inspectors should have been given the power to suspend work at a colliery until an identified danger had been remedied.<sup>226</sup> Such a power would have undoubtedly strengthened the role of the inspectors; they would have been able to ensure that colliers were no longer exposed to the dangers, or 'evils', and would have been able to guarantee that they were resolved before work resumed.

The suggestions made by the Select Committee did not, however, go far enough. They were too reserved, primarily because they considered the inspectors' powers to be a 'delicate matter'.<sup>227</sup> The Committee did not address the fact that the inspectors were unable to give unsolicited advice relating to the ventilation or mode of working. The explosion at Washington Colliery, and Dunn's opinion that the explosion would have been prevented if he had been able to give advice relating to ventilation, could have provided the foundation for further intervention on the part of the inspectors. Unfortunately, the Committee did not recognise this, and so were unable to build a strong enough case in favour of more comprehensive powers for the inspectors. As a result, the Government inspectors in 1852 did not amount to a panacea for the 'evils' associated with colliery operations, especially considering the limited powers that they had at the time. It is clear, however, that they had the potential to be a panacea if they had been given more extensive powers, including, but not limited to, those recommended by the 1852 Select Committee.

When the Select Committee published their report it was met with widespread condemnation. The evidence given by mining experts had been disregarded, especially in relation to ventilation, and so the recommendations were largely ignored.<sup>228</sup> Regrettably, this also applied to the suggested reforms of the inspectorate, with the consequence that the inspectors remained unable to be the panacea for the numerous 'evils' that attended colliery operations at the time.

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<sup>226</sup> For George Stephenson's comment see Select Committee Report (n61) 118; for the 1852 Select Committee's suggestion see Select Committee Report (n219) 9

<sup>227</sup> Select Committee Report (n219) 9

<sup>228</sup> Dale H. Porter, *The Life and Times of Sir Goldsworthy Gurney: Gentleman Scientist and Inventor 1793-1875* (Associated University Presses 1998) 165

## You Cannot Discover New Roads with Old Maps

The Select Committee of 1852 had no impact on the law relating to the coal mining industry. In practice, the inspectors continued to be of limited use in promoting safety within the collieries. Dunn did report in 1855 that there had been an overall decrease in the aggregate number of colliery deaths in his district since the introduction of the inspectors in 1851.<sup>229</sup> However, this fact should be approached with caution; while there was an improvement in Dunn's district, there was no noticeable improvement in the United Kingdom overall. The reports returned by the inspectors showed that, on the whole, the number of accidents and colliery related deaths continued to occur at the same frequency as they had since accurate records began in 1851.<sup>230</sup> Indeed, Dunn did not believe the improvements in his district to have been caused by Government inspection at all; he considered the 'universal feeling of improvement' which had been spreading throughout the industry to be the real catalyst for change.<sup>231</sup> This was a clear reference to the various organisations that had been formed with a view to preventing accidents in mines, such as the Royal School of Mines in 1851 and the North of England Institute of Mining Engineers in 1852.<sup>232</sup> The Home Secretary, Lord Palmerston, who 'was sensitive to public opinion and respected its power', recognised this growing movement, as well as the inadequacies of the 1852 Select Committee, and supported the formation of a further Select Committee.<sup>233</sup>

This Select Committee also focused on colliery accidents, including the most effective means of preventing them, but was much more comprehensive than previous inquiries. Investigations began in 1853 and continued into 1854, with

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<sup>229</sup> Home Department, *Reports of Messrs. Dunn, Dickinson, Morton, Williams, Wynne, and Mackworth, Inspectors of Coal Mines, to Her Majesty's Secretary of State* (C (1<sup>st</sup> series) 1944, 1855)

<sup>230</sup> The 1851 Report of Inspectors (n208); The 1854 Report of Inspectors (n217); The Report of Inspectors 1855 (n229)

<sup>231</sup> The Report of the Inspectors (n229) 4

<sup>232</sup> Henrietta Heald, *William Armstrong: Magician of the North* (2<sup>nd</sup> edn, McNidder and Grace Limited 2011) 154

<sup>233</sup> David Roberts, 'Lord Palmerston at the Home Office' (1958) 21 1 *The Historian* 63, 74

a total of four reports being published.<sup>234</sup> While the Government inspectors had been referred to in preceding investigations, these references were limited and did not examine the role in detail. As a result, the 1853-1854 Select Committee should have been the first critical analysis of the role, which would have allowed the Committee to make recommendations for further improving the efficacy of the inspectors. The Committee did analyse the inspectors and it did suggest reforms to the office. Unfortunately, the reforms did not address the deficiencies of the role, and so were of little consequence to the overall impact of the inspectors on the 'evils' that were closely associated with colliery operations at the time.

For example, the Committee focused on the appointment process, and suggested all future inspectors should have had at least seven years' experience as a colliery manager before their appointment.<sup>235</sup> It has already been discussed that all of the existing inspectors were familiar with the coal trade, and so this suggestion did not address the immediately relevant issues.<sup>236</sup> It focused on the future rather than the present. The Committee also recommended increasing the inspectors' salaries and prohibiting inspectors from carrying out any business other than their inspecting duties.<sup>237</sup> Again, these suggestions were of no relevance to the deficiencies of the role; there was no correlation between an inspector's salary, for example, and the number of deaths in their district. While these recommendations were undoubtedly sensible precautions to ensure that future inspectors were suitable for the role, the Committee largely overlooked the most obvious reforms that would have made a significant difference to the overall effectiveness of the inspectors at the time.

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<sup>234</sup> Home Department, *First Report from the Select Committee on Accidents in Coal Mines; with the Minutes of Evidence Taken Before Them* (C (1<sup>st</sup> series) 169, 1854); Home Department, *Second Report from the Select Committee on Accidents in Coal Mines; with the Minutes of Evidence Taken Before Them* (C (1<sup>st</sup> series) 258, 1854); Home Department, *Third and Fourth Reports from the Select Committee on Accidents in Coal Mines; Together with the Proceedings of the Committee, Minutes of Evidence, and an Index to the Four Reports* (C (1<sup>st</sup> series) 325, 1854)

<sup>235</sup> The Fourth Report of the 1854 Select Committee (n234) 6

<sup>236</sup> See page 37 for example

<sup>237</sup> The Fourth Report of the 1854 Select Committee (n234) 6

There was one recommendation made by the 1853-1854 Select Committee that attracted severe criticism. The Committee suggested that the Government should not have increased the powers of the inspectors.<sup>238</sup> With the benefit of hindsight it is clear that this recommendation was not in the best interest of the colliers at the time. If the Committee had fully appreciated the cause of the Washington Colliery explosion in 1851, as well as considering the comments of Inspector Dunn and the jury at the inquest, then the benefits of increasing the inspectors' powers should have been obvious. More dangers would have been identified, more effective remedies would have been insisted upon, and therefore more accidents would have been prevented. By increasing the powers of the inspectors, in line with the recommendations made by Tremenheere, Dunn and the various inquiries that had gone before, then it is likely that there would have been a noticeable improvement in colliery safety throughout the United Kingdom. As a result, such reforms would have increased the likelihood of the Government inspectors representing a panacea for the numerous 'evils' associated with colliery operations in the nineteenth century.

### **The Manner of Our Legislation Is Indeed Detestable, and the Machinery for Settling That Manner Odious**

The report of the 1853-1854 Select Committee, though comprehensive, was unsatisfactory in relation to Government inspection of mines and collieries. The inspectors were also of this opinion; in their 1854 report they highlighted their own suggestions for reform, which were far more extensive than those proposed by the Select Committee.<sup>239</sup> Dunn in particular was vocal on the issue. To begin with, Dunn gave a detailed account of how accidents of all kinds might have been prevented at collieries, both above and below ground.<sup>240</sup> It was his opinion that the majority of accidents were the result of fatal oversights by those in charge of the colliery, many of which would have been prevented if

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<sup>238</sup> *ibid*

<sup>239</sup> The 1854 Report of Inspectors (n217)

<sup>240</sup> *ibid*, 7-10



the individual in question had been aware of the danger in the first place.<sup>241</sup> Dunn then went on to highlight the correct way in which to light a colliery through the use of safety lamps, and then gave extensive recommendations as to how a colliery should be organised in order to ensure maximum safety.<sup>242</sup>

By including this information in his report, Dunn was able to exploit a loophole in the limitations placed on his role. Rather than giving unsolicited advice during his visits to the collieries, he was making general observations relating to examples of good practice. In spite of this, he acknowledged that the relevant literature regarding colliery safety, such as the Select Committee reports and the reports of the inspectors, were not widely accessed by the colliery managers.<sup>243</sup> As a result, the content of his reports would not have been commonly available, and so would not have been implemented in enough collieries in order to make a noticeable improvement to colliery safety. Once again, this is a key criticism of the inspectors' limited powers and the 1853-1854 Select Committee's recommendation not to increase them. If Dunn had been given more extensive powers of intervention in collieries, then it is likely that he would have been able to ensure that colliery owners and managers understood his advice. As a result, colliery safety would have been improved, and so many of the basic 'evils' that were inherent in the trade would have been addressed. This would have given the inspectors the opportunity to evolve into the panacea for the numerous 'evils' that were associated with coal mining in the nineteenth century.

The 1854 report of the Government inspectors was critical of the Coal Mines Inspection Act 1850, the recommendations of the 1852 and 1853-1854 Select Committees, and the limitations of their role. The advice given by Dunn represented a set of guidelines, which should have been enforceable by each of the inspectors at the collieries under their control. The Government responded to these criticisms by proposing reforms to the role, achieved

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<sup>241</sup> *ibid*, 7

<sup>242</sup> *ibid*, 10-17

<sup>243</sup> *ibid*, 7

through the introduction of a Bill in Parliament.<sup>244</sup> Unlike the previous Bills, which had reluctantly created and then limited the role of the inspectors, this Bill identified and addressed a number of the deficiencies present in the Coal Mines Inspection Act 1850. Mirroring the proposals made by Dunn in his 1854 report, the Bill included a set of rules to be enforced at each colliery.<sup>245</sup> The Bill also instructed the colliery owners to formulate a set of special rules, which would apply to their own collieries, taking into account the unique nature of each mine.<sup>246</sup> The special rules were to be subject to approval by the inspectors, who could refer the rule to an independent mining expert if the colliery owner did not agree with it. This represented an extensive increase in power for the inspectors; they would no longer be restricted in giving advice and they would have a central role in advising how each colliery should operate. As a result of the Bill, the inspectors would have, once again, had the potential to be the panacea for the numerous 'evils' that attended colliery operations in the nineteenth century.

During a Bill's progression through Parliament, the committee stage, where each clause of the Bill is considered in greater detail, is now regarded as being ritualistic and uneventful.<sup>247</sup> In the nineteenth century, however, this was not always the case, especially in relation to colliery legislation. It has already been seen that the Mines and Collieries Bill 1842 and the Coal Mines Inspection Bill 1850 were subjected to extensive amendments at committee stage before becoming law, and the 1855 Bill was no different. Although minor changes were made to the set of rules to be observed by every colliery, these changes were insignificant and did still reflect the list drafted by Dunn in 1854.<sup>248</sup> Likewise, the colliery owners were still compelled to create a set of special rules relevant to

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<sup>244</sup> A Bill to Amend the Law for the Inspection of Coal Mines in Great Britain HC Bill (1855) [124]

<sup>245</sup> *ibid*, cl 4

<sup>246</sup> *ibid*, cl 5

<sup>247</sup> Marc Geddes, Alexandra Meakin and Louise Thompson, 'Weak Government, Strong Parliament? A Preview of Theresa May's Legislative Challenges' (*The London School of Economics and Political Science: British politics and Policy*, 20 June 2017) <<https://blogs.lse.ac.uk/politicsandpolicy/weak-government-strong-parliament/>> accessed 7 April 2020

<sup>248</sup> A Bill [As Amended in Committee] to Amend the Law for the Inspection of Coal Mines in Great Britain HC Bill (1855) [169] cl 4

their collieries.<sup>249</sup> The most significant change, however, was that these rules did not have to be approved by the inspector, nor could the inspector refer the rules to an independent mining expert. This power was now given to the Secretary of State.<sup>250</sup> Such an amendment can be criticised on the basis that, once again, it limited the function of the inspectorate. The inspectors, who were all experts in coal mining, would have been able to identify when a special rule should have been created, leading to safer colliery operations overall. As a result, 'evils' would have been identified and addressed, thus giving the inspectors the opportunity to evolve into the much called for panacea during the nineteenth century.

The Bill was also amended in the House of Lords, though the changes were minor. It came into force as the Coal Mines Act 1855, repealing and replacing the Coal Mines Inspection Act 1850.<sup>251</sup> Boyd suggested that the 1855 Act was a dramatic improvement on the 1850 Act, and that the legislative protections should be regarded as 'a master's measure'.<sup>252</sup> It is true that the Act introduced stronger protections for the colliers: every colliery had to adhere to a set of general rules; each colliery was subject to unique special rules; and all of the colliers had to be educated on the content of the rules.<sup>253</sup> However, I would disagree with Boyd's suggestion that the Act represented a 'master's measure'. The 1855 Act did not equip the inspectors with strong enough powers. For example: the inspectors were unable to make suggestions in order to improve the safety of a colliery; they were unable to create and enforce special rules; and they could not halt the working at a colliery if a danger was discovered. As a result, the only significant development in the inspectors' role was that they could inform the colliers of the danger they were exposed to. By giving colliers notice of the danger, the colliers could legitimately refuse to resume work until the danger had been remedied. This was not, however, a substantial power; the colliers could still choose to resume work, and so were still subjected to the

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<sup>249</sup> *ibid*, cl 5

<sup>250</sup> *ibid*

<sup>251</sup> A Bill [As Amended by the Lords] to Amend the Law for the Inspection of Coal Mines in Great Britain HC Bill (1855) [285]; Coal Mines Act 1855 (18 & 19 Vict c 108)

<sup>252</sup> Boyd (n13) 132

<sup>253</sup> Coal Mines Act 1855

danger identified. As a result, the inspectors in 1855 were not in a substantially stronger position than they had been when operating under the 1850 Act, and were no closer to being regarded as a panacea for the numerous 'evils' that attended colliery operations at the time.

### **Let's Make It Simple: Government Control Means Uniformity, Regulation, Fees, Inspection, and Yes, Compliance**

When evaluating the inspectors' reports after the introduction of the Coal Mines Act 1855, it is demonstrable that colliery safety did not dramatically improve. It would be naïve to suggest that there should have been an immediately noticeable improvement; a slight delay would have been expected while the collieries adjusted to the development in the law. However, it would have been reasonable to expect to have seen an improvement after, perhaps, five years. This was not the case. Despite the Act, colliery accidents and colliery related deaths continued to occur on a frequent basis. This was the case throughout the United Kingdom, not just in the collieries under Dunn's supervision. It is therefore apparent that the inspectors, although increased in number, did not advance into a panacea for the numerous 'evils' associated with colliery operations after the introduction of the Coal Mines Act 1855.<sup>254</sup>

In 1860, five years after the 1855 Act, a subterranean explosion at Burradon Colliery, located in what was then Northumberland but is now Tyne and Wear, killed seventy-six colliers.<sup>255</sup> The disaster was significant for two reasons. It highlighted the inadequacy of the relief systems in place for the dependants of colliers who were killed during their employment.<sup>256</sup> Secondly, and more importantly, it demonstrated that the Government inspectors of mines and collieries did not have adequate powers under the 1855 Act. Two years previously, in 1858, the colliers had repeatedly raised concerns regarding the

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<sup>254</sup> During the course of 1855 the number of inspectors had increased to 12, as can be seen in Home Department, *Reports of the Inspectors of Coal Mines, to Her Majesty's Secretary of State, to December 1855* (C (1<sup>st</sup> series) 2132, 1856)

<sup>255</sup> John Benson, 'Colliery Disaster Funds, 1860-1897' (1974) 19 *International Review of Social History* 73, 84

<sup>256</sup> John Benson, 'The Compensation of English Coal-Miners and Their Dependants for Industrial Accidents, 1860-1897' (DPhil thesis, University of Leeds 1973) 384

ventilation of the mine with the colliery management.<sup>257</sup> The manager had failed to take any action, and so the colliers had contacted Dunn anonymously and asked him to visit the colliery.<sup>258</sup> Dunn complied with this request, examined the colliery, and made several recommendations for improving the ventilation in the mine.<sup>259</sup> However, it should be remembered that Dunn did not have the power to enforce his recommendations and, as a result, the colliery did not implement them all. Over the course of the next two years the colliery altered and expanded but did not improve the ventilation.<sup>260</sup> As a result, Dunn concluded that the 1860 explosion was the direct result of inadequate ventilation in the mine.<sup>261</sup>

The explosion at Burradon Colliery highlighted the shortfalls of the inspectorate in several ways. For example, one of the main responsibilities of the inspectors was to ensure that colliers were not exposed to danger while working in a mine. Despite this, the ventilation of Burradon Colliery was considered dangerous for many months in 1858 and again in 1860. The issue of ventilation was one of the many 'evils' associated with coal mining at the time, and it is clear that the inspectors were unable to remedy this, even after their powers had been increased under the 1855 Act. Reflecting on the explosion, Dunn conceded that his role was flawed. To begin with, he lamented the fact that the inspectors worked in isolation, without the help of an assistant or office.<sup>262</sup> The inspectors were frequently overworked and could not spend a suitable amount of time inspecting each of the collieries under their control. The inspectors had to rely on the information given to them by the colliery owners and managers, which often had to be taken at face value, even if this was not an accurate reflection of the colliery.<sup>263</sup> This was undoubtedly a major issue; the inspectors did not have the ability to identify all of the 'evils' present in a particular colliery, such as at Burradon, and so could not ensure that they were remedied. It cannot,

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<sup>257</sup> Thompson (n62) 90

<sup>258</sup> Home Department, *Reports of the Inspectors of Coal Mines, to Her Majesty's Secretary of State, for the Year 1860* (C (1<sup>st</sup> series) 2859, 1861) 8

<sup>259</sup> *ibid*

<sup>260</sup> *ibid*, 12

<sup>261</sup> *ibid*, 10

<sup>262</sup> *ibid*, 11-12

<sup>263</sup> *ibid*, 11

therefore, be suggested that the inspectors operating under the 1855 Act were a panacea for the 'evils' associated with nineteenth century coal mining.

In his account of the explosion, Dunn was also critical of the limited powers that the inspectors had. He considered it regrettable that the he, along with the other inspectors, was unable to intervene in the management of a colliery, especially where such an intervention would result in greater safety.<sup>264</sup> As an inspector could only make recommendations, which were unenforceable, colliery owners and managers frequently ignored the advice given to them and were often unwilling to engage with the inspectors.<sup>265</sup> Once again this meant that the inspectors, while having the potential to make a difference to colliery safety, were unable to be a panacea for the 'evils' commonly encountered in the trade. Their powers of intervention and enforcement were not strong enough under the 1855 Act to have a noticeable impact at the time.

The Burradon Colliery explosion should have highlighted the inadequacies in the law. Together with Dunn's report, it should have been clear that the Government inspectors were vital to colliery safety but did not have the necessary powers. The 1855 Act continued to operate unaltered, and the powers of the inspectors were not increased. In 1862, just two years after the explosion at Burradon, there was yet another major colliery disaster. This disaster occurred at the New Hartley Colliery, Seaton Deleval, Northumberland, killing two hundred and four colliers, making it one of England's worst mining disasters.<sup>266</sup> New Hartley Colliery was prone to underground flooding, being located in close proximity to the coast, and a forty-two-ton beam engine, the largest in England, had been installed in order to drain the water.<sup>267</sup> During a shift change the cast iron beam, which was positioned directly above the mineshaft, fractured and collapsed. The beam fell down the mineshaft, destroying the supports that had been attached to the walls, effectively sealing

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<sup>264</sup> *ibid*, 12

<sup>265</sup> *ibid*

<sup>266</sup> Helen Duckham and Baron Duckham, *Great Pit Disasters, Great Britain 1700-Present Day* (Newton Abbot 1973) 95-114

<sup>267</sup> Jamie L. Bronstein, 'The Hartley Colliery Disaster' (2014) 40 *Victorian Review* 9, 9

the mine and trapping the colliers underground.<sup>268</sup> As the ventilation system had also been destroyed the colliers eventually suffocated. There were no survivors.

Following the New Hartley Disaster, public attention was drawn to the dangers of a mine having only one shaft.<sup>269</sup> If the mine at New Hartley had had a second shaft, then the colliers would have been able to use it to escape and the majority of the deaths would have been prevented.<sup>270</sup> The single shaft issue was not new; it had been a controversial practice for many years. Professor Ansted had highlighted the dangers of the single shaft system in 1845;<sup>271</sup> John Kenyon Blackwell, who was appointed as one of the first four Government inspectors in 1851, reported on the dangers of a single shaft in 1850;<sup>272</sup> and the colliers of Durham and Northumberland had directed Parliament's attention to the issue in 1852.<sup>273</sup> In spite of the obvious dangers relating to the single shaft system, Parliament had never issued any guidance on the matter, and so it continued unchallenged.

Following the New Hartley Disaster, Dunn was criticised by the colliers in his district. They suggested that Dunn had shown cowardice in failing to speak out against the single shaft practice prior to the accident.<sup>274</sup> This criticism was not justified. It has already been seen that the 1855 Act did not give the inspectors any power of intervention or enforcement. Dunn could only recommend that collieries operated with multiple shafts but could not compel them to do so. There was no law against a colliery having a single shaft, and so Dunn was not able to ask the Secretary of State to intervene. Clearly, the deaths caused by

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<sup>268</sup> *ibid*

<sup>269</sup> Ronald L. Lewis, *Welsh Americans: A History of Assimilation in the Coalfields* (University of North Carolina Press 2008) 158

<sup>270</sup> The presence of a second shaft would not have saved every collier. When the beam fell down the mineshaft it collided with a cage containing eight colliers. Four of the colliers were thrown from the cage and died from their injuries

<sup>271</sup> David T. Ansted, 'The Methods of Working and Ventilating Coal Mines, Considered with Reference to the Accidents that Occur in Such Mines From the Presence of Noxious Gases' in William Jerdan (ed), *The Literary Gazette and Journal of Belles Lettres, Arts, Sciences, etc. For the Year 1845* (Henry Colburn 1845)

<sup>272</sup> Home Department, *Report on Ventilation of Mines* (C (1<sup>st</sup> series) 1214, 1850) 21

<sup>273</sup> Boyd (n13) 111

<sup>274</sup> Bronstein (n267) 10

the New Hartley Disaster would have been avoided if there had been a second shaft, but criticising the inspector for this was not fair. While the Government inspectors may have been aware of the danger, Parliament was equally well informed. The New Hartley Disaster emphasised the fact that the inspectors operating under the 1855 Act were not a panacea for the numerous 'evils' associated with colliery operations at the time. If they had of been a panacea, events such as this would not have occurred.



## Conclusion

During the nineteenth century there were a multitude of 'evils' associated with colliery operations. These 'evils' were varied and included, for example, poor ventilation of mines, frequent underground explosions, and the limited knowledge that the colliers had of safety practices. When the concept of a Government inspector of mines and collieries was first proposed, the role had the potential to be a panacea for these 'evils'. The aim was to appoint men who could visit collieries, promote safe mining practices, and who could share their knowledge with the colliery managers and owners. Despite the potential, the Government inspectors who operated in the industry between 1842 and 1862 did not represent this panacea for a number of reasons.

To begin with, the first office of Government inspector, created under the Mines and Collieries Act 1842, was far too restricted. During the passage of the Act through Parliament, many of the colliery owning Members succeeded in limiting the role of the inspector. As a result, the only inspector who had been appointed, Hugh Seymour Tremenheere, focused on the social conditions of the mining population, rather than on the colliery operations themselves. This distinction meant that the scope of Tremenheere's investigations was extremely narrow, with many of the 'evils' associated with colliery operations falling outside of his purview. A panacea can be defined as 'something that will solve all problems', and yet Tremenheere allowed a number of 'evils' to be perpetuated in the collieries.<sup>275</sup> While he was aware of collieries that continued to employ women and children under the age of ten underground, he did not take any action, primarily because he did not have suitable powers of intervention and enforcement. This was one of the issues that he had been appointed to address, and, as a result, he cannot be regarded as having solved all of the 'evils' that were present in the collieries.

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<sup>275</sup> Definition of Panacea (n88)

When considering the Mines and Collieries Act 1842 in greater depth, however, Tremenheere cannot be criticised for his failure to amount to a panacea. While it is true that a Government inspector may have had the potential to amount to a panacea for these 'evils', Tremenheere did not satisfy this potential because the Act he was appointed under did not allow him to do so. The limited focus of the Act, and the Members of Parliament responsible for this, should be criticised rather than Tremenheere. If Tremenheere's focus had been on the mines and collieries, and not the social conditions of the colliers, then it is more likely that he could have amounted to a panacea for the numerous 'evils' that were present at the time.

The inspectors appointed under the Coal Mines Inspection Act 1850 also had the potential to be a panacea for the numerous 'evils' associated with nineteenth century colliery operations. Indeed, they had a much clearer focus; unlike Tremenheere, they were appointed to inspect the condition of the mines and collieries, rather than the colliers. This focus, together with their mining experiences, meant that they were perfectly placed to address the many 'evils' in existence. The 1850 Act also failed to equip the inspectors with the necessary powers of intervention and enforcement that would have allowed them to directly address the 'evils' that they uncovered. As a result, the inspectors were unable to improve the overall safety of the collieries, highlighted by the continual occurrence of colliery accidents and colliery related deaths. While the inspectors appointed under the 1850 Act were in a stronger position than the inspector who had been appointed under the 1842 Act, they were still unable to remedy all of the 'evils' associated with colliery operations at the time. This means that the inspectors operating under the 1850 Act cannot be considered as a panacea either.

When the 1850 Act was repealed and replaced with the Coal Mines Act 1855, it should have been clear that the inspectors had been unable to amount to a panacea for the many 'evils' of the mining industry since their introduction in 1842. As a result, it might have been expected that the role would have been extensively reformed in order to give the inspectors the wider powers that they required. Unfortunately, this was not the case. While the role was, indeed,

reformed, the changes were minor. This meant that the inspectors who were operating under the 1855 Act were also limited in their ability to address the many 'evils' associated with nineteenth century colliery operations. Colliery accidents and colliery related deaths continued to occur on a frequent basis, such as the Burradon Colliery explosion and the New Hartley Disaster, and so the inspectors operating under the 1855 Act had clearly been unable to address the relevant 'evils'. Once again, the 1855 Act had been too reserved, resulting in yet another form of inspector who could not amount to a panacea for the numerous 'evils' associated with colliery operations in the nineteenth century.

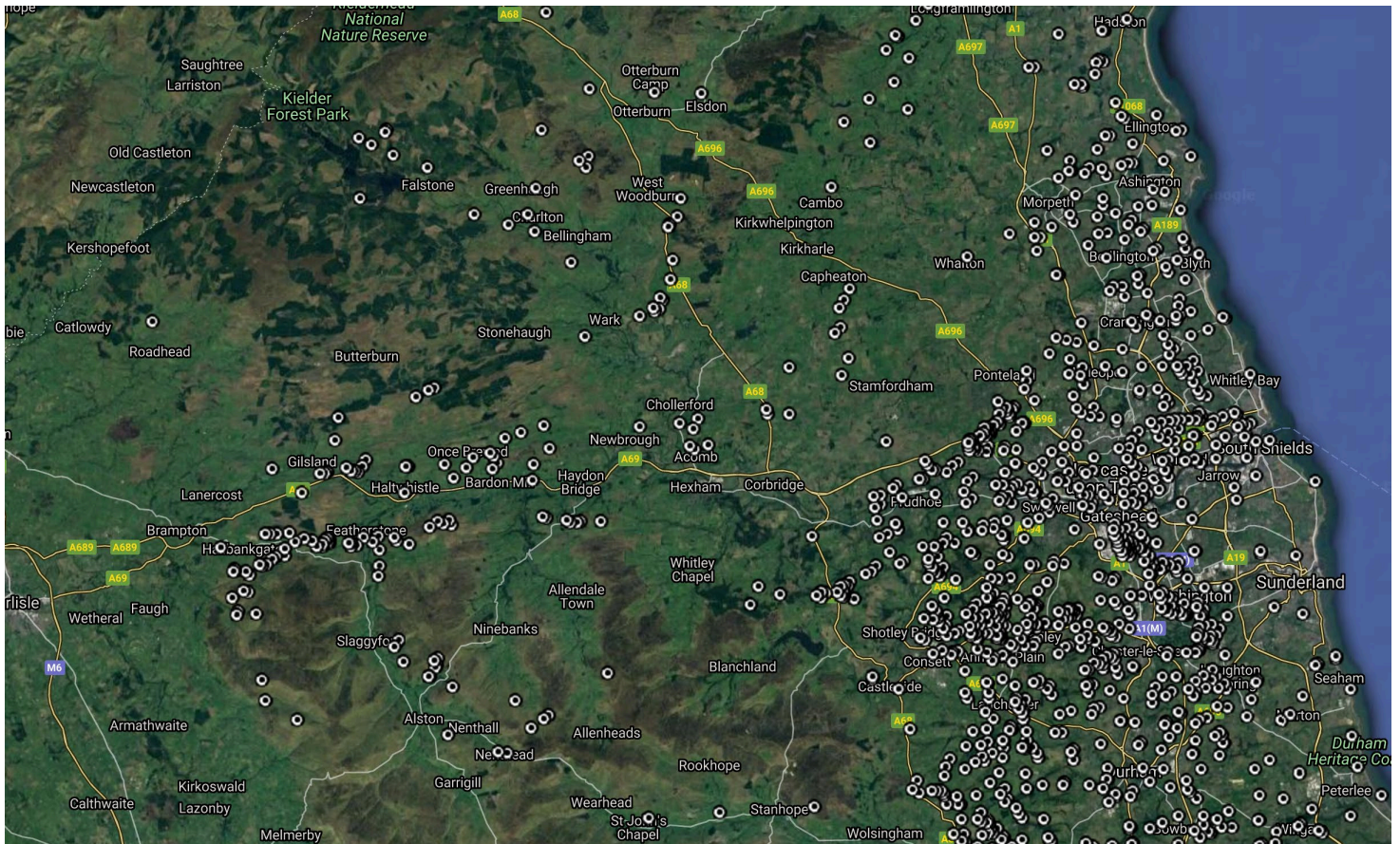
While it is true that the various inspectors who were operating between 1842 and 1862 made their own contributions to colliery safety, it would not be correct to define them as a panacea for the numerous 'evils' that attended colliery operations at the time. Colliery accidents and colliery related deaths continued to occur, and so the introduction of the inspectors did not solve all the relevant problems.<sup>276</sup> Neither would it be correct to criticise them for this. The inspectors had the potential to amount to a panacea for the 'evils' identified, but they would have required much more extensive powers of inspection, intervention and enforcement. The Acts of Parliament introduced in 1842, 1850 and 1855 were too reserved and they did not provide adequate powers for the inspectors. As a result, the Government inspectors were vital in identifying the many 'evils' associated with colliery operations in the nineteenth century, but were unable to amount to the panacea that would have definitively remedied them.

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<sup>276</sup> *ibid*

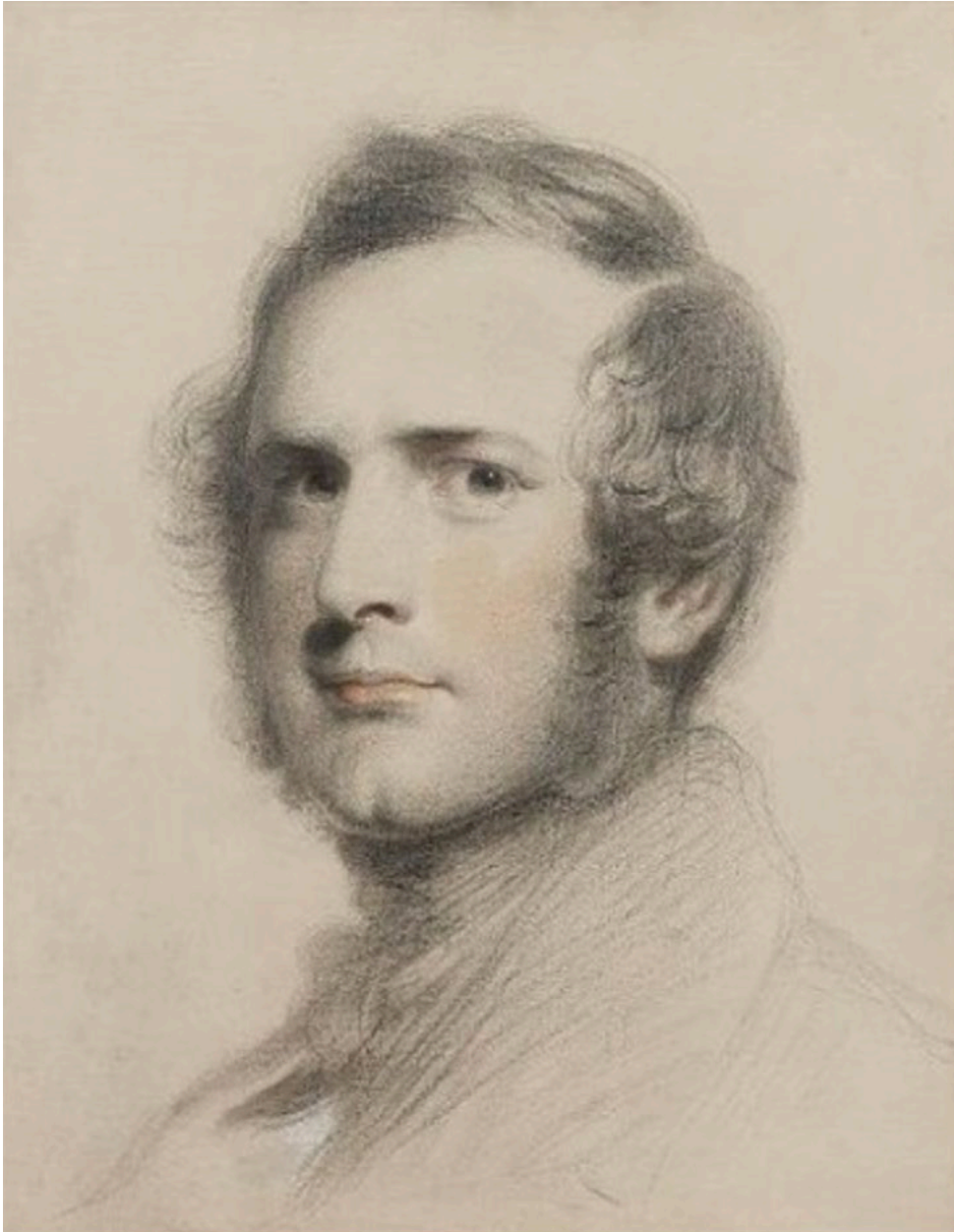
## Appendix

The image below was created to show the approximate location of the collieries that have existed in the North East of England. Its scope is not, however, confined to the nineteenth century; it includes the locations of all collieries that are known to have been operational in the area. The map shows just one portion of the area that Inspector Matthias Dunn was responsible for inspecting.



'Coal Mines – England' (*Northern Mine Research Society*) <<https://www.nmrs.org.uk/mines-map/coal-mining-in-the-british-isles/collieries-of-the-british-isles/coal-mines-england/>>  
accessed 27 April 2020

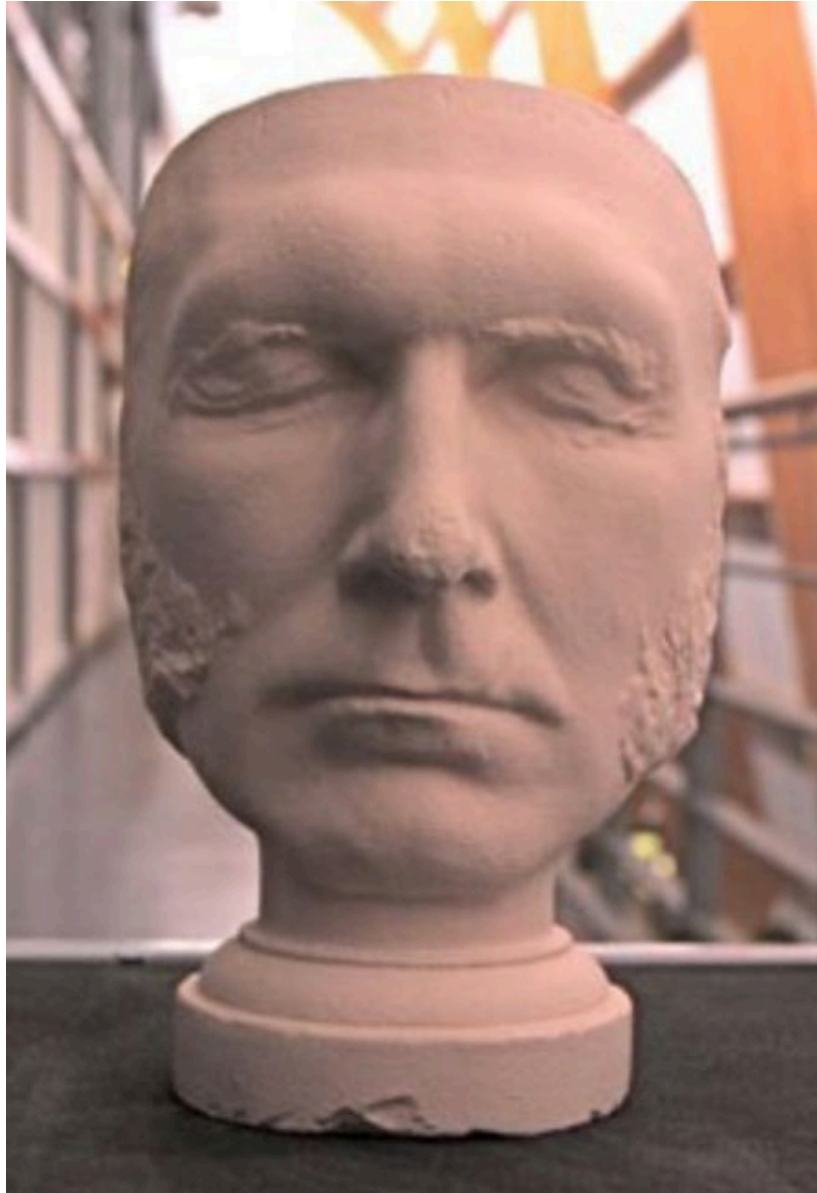
The image below is a portrait of Hugh Seymour Tremenheere, the first Government inspector of mines and collieries.



'Portrait of Hugh Seymour Tremenheere' (*Artnet*) <<http://www.artnet.com/artists/george-richmond/portrait-of-hugh-seymour-tremenheere-66dR7C5sPeSkgS8HW1jWIA2>> accessed 27 April 2020

The image below shows the death mask of Matthias Dunn. Dunn was appointed as one of the first Government Inspectors of mines and collieries under the Coal Mines Inspection Act 1850.





'The Masks' (*The Rise and Fall of Phrenology in Edinburgh*)  
<[https://www.phrenology.mvm.ed.ac.uk/Death\\_Masks.html#43](https://www.phrenology.mvm.ed.ac.uk/Death_Masks.html#43)> accessed 27 April 2020

## **Afterword**

From the very beginning I knew that coal mining could prove to be a controversial area to write about. Reflecting on the 1984-1985 miners' strike, Margaret Thatcher stated that the historical development of the coal industry had made it 'an industry where reason simply did not apply', going on to suggest that any discussion of the area would inevitably be political. My first instinct was to avoid any political discussion, though I soon realised that this would be impossible and, potentially, unwise. The laissez-faire doctrine, a political as well as economic principle, has featured in my introduction, and I have also included the work of Friedrich Engels, the German communist.

Another author suggested that coal mining is never a good area to write about, as it is usually only ever approached by people who are colliers themselves, who are related to colliers, or who live in mining communities. For this reason, it has been suggested that their judgement will always be clouded by emotion, reducing the overall value of their work. I have already highlighted my associations with a mining community, and must also acknowledge being related to colliers across the country, including at the New Hartley Colliery. In spite of this, I believe I have been able to approach this project in an objective and fair way, without my judgement being influenced by strong emotion. I would, therefore, disagree with that particular author's assessment.

I noted my enthusiasm and excitement about this project in my preface, and I can genuinely say that these feelings have stayed with me throughout my research. This project has not felt like traditional work, where it can be difficult

to focus and requires a certain amount of will power to complete. Without a doubt, it has been the most enjoyable piece of work that I have ever completed. Combined with the archive sessions and the presentations at the Christmas conference, it has been a remarkable experience. There have, of course, been a number of challenges along the way, some of which have been easier to overcome than others.

The first challenge was locating and accessing relevant sources. Due to the age of the sources they were frequently difficult to access in an online format, and so I was regularly searching for the same source in a number of different websites and databases. For example, it was surprisingly difficult to access some of the legislation from the end of the eighteenth and beginning of the nineteenth century; while it was possible to find the title, the full text was often elusive. There were some sources that were available online, but were of such poor quality that it was impossible to read them, or which had pages missing and torn. Likewise, some of the sources had obscure names or had been uploaded with misspelled words in the title. While frustrating at the time, this did have its advantages; it made me open and read through sources which I didn't necessarily consider important, some of which I did go on to use in my work.

In my project I have highlighted the fact that there were two offices of Government inspector that operated simultaneously. One held by Tremenheere and the other held by Dunn and his colleagues. This was something that I did not initially realise; when reading the sources it is not immediately clear that there were two different inspecting roles. Sources frequently refer to 'the



inspector', without naming which inspector it is referencing. In fact, I am not even sure that the existence of the two offices is widely known; many authors appear to assume that all of the Government inspectors had the same responsibility. As I have shown, this was not the case. Inevitably this led to some confusion early on in the project, requiring a significant amount of time to work out, exactly, which individual the source relates to. In my project I did focus on Tremenheere and Dunn, but it should be noted that the other inspectors all appear to be interesting characters in their own right. They do not appear to be well researched and it would be a shame for their contributions to colliery safety to go unrecognised.

Before I started writing I did create an essay plan, setting out what I would cover in each chapter. As I began writing, however, this plan was forced to evolve. I have written a significant amount on the build up to the Mines and Collieries Act 1842, something I had not originally intended to do, but which I believe is necessary to fully understand *why* the legislation was introduced. Similarly, I have discussed the passage of the Acts through Parliament in more detail than I had planned, although I also believe that this was necessary. As a result, there were parts of my original plan that I was unable to include in the final version of the project. I would have liked, for example, to compare the mines inspectors to the factory inspectors who were operating at the same time; the factory inspectors had much wider powers and were, therefore, in a much better position to make a tangible difference to the factory employees. The work of Matthias Dunn is also an area that I would have like to have expanded upon, as he was the most vocal inspector in relation to improving colliery safety.

Inquiries into the development of the inspectors' role after 1862 would have been equally fascinating. Perhaps these themes will form the basis of further work in the future.

The most significant challenge has undoubtedly been completing this project during the COVID-19 Pandemic. There were items in the Tyne and Wear Archive that I would have liked to have accessed again before completing my work, and others which I didn't get the chance of requesting. There were books in the Lit & Phil that I had found at the beginning of my project, which I had planned on returning to towards the end of my project. There were books in the university library that were not available online. It would have been nice to access all of these materials as I was concluding this project, though I can't help but feel relieved that I didn't. It is more than likely that I would have found more areas to write about, and so would have been forced to dilute the work that I had already completed. If I ever expand on this work in the future, then I am sure these will be amongst the first places I look.

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