

ART. XIX.—*The Chapel Bank Colliery disaster, 1837.*

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UNDERSEA coal has been worked off the Cumberland coast since 1729 when Carlisle Spedding began sinking the Saltom Pit near Whitehaven, but only once has the sea inundated a Cumbrian mine. This was at the Chapel Bank Colliery, Workington, some seven miles north of Whitehaven, and like so many mining tragedies it was one that could have been avoided.

Coal mining at Chapel Bank began about 1770 under the direction of Henry Curwen, lord of the manor of Workington, and throughout its history the colliery was threatened by flooding. A letter from James Spedding, manager of the Whitehaven Collieries, shows that operations had hardly begun when the colliery was drowned; it refers to “the injudicious working of Mr Curwen’s new colliery at Chapel bank on the South side of Workington Harbour. The Sea burst into it on the 22nd Inst. & has drown’d the whole, so that he cannot now keep 1/20 of his friends ships employ’d, without either contracting for Coals from some other Colliery or opening a Colliery of his own upon some new ground”.¹

A week later (1 April 1770) Spedding wrote to Sir James Lowther, “Mr Curwen got to Workington last Friday evening. His learned Stewards are advising him to Erect another Fire Engine upon his Colliery at Chaplebank which they assure him will effectually drain it. They will be mistaken (I shall not hinder them from making the attempt) the Sea ebbs & flows

¹ R.O., Carlisle. Lonsdale MSS. W/Letters — James Spedding to John Robinson, 25 March 1770.

in the pits, the water is very brackish & will make salt in their Boilers. I apprehend the Sea Water communicates with the Colliery through a Sand Dyke which they have wrought too near.''²

Understandably, therefore, Curwen in the following year was willing to lease the colliery for eleven years to John Hodgson, Edward Stanley, John Falcon and John Stead. These partners had no success and in January 1773 surrendered their lease.³ Curwen resumed the colliery and from 1773 until his death in 1778 worked it in partnership with William Hodgson and others. The Workington estates passed to Henry Curwen's daughter Isabella who married her cousin John Christian in 1782, and it was he who was responsible for major developments at Chapel Bank Colliery. He adopted the name of Curwen in 1790, and as John Christian Curwen achieved a national reputation in politics.

By 1816, Curwen had reduced the number of his pits to four — Lady, Union, Isabella and Church — but he did try to sink more at Chapel Bank. Drainage, however, was a major difficulty; the sinking of four pits had to be abandoned because of a large feeder of salt water which the pumps were quite unable to remove.⁴ At this time pumps were kept going most of the day in all the pits in an effort to overcome the perennial problem of flooding. Since Church Pit was approaching exhaustion, pillar robbing was undertaken there to remove the maximum amount of coal before it was abandoned. In March 1821 Church Pit was drowned out by a fall of roof bringing down a feeder of water,⁵ and in the following year Union Pit also ceased; working to the rise in the latter pit a considerable quantity of water was encountered which

² *Ibid.* — James Spedding to Sir James Lowther, 1 April 1770.

³ R.O., Carlisle. Curwen MSS. 4/219.

⁴ Mining Institution, Newcastle upon Tyne. Buddle MSS. i, 27 December 1814.

⁵ *Ibid.*, September 1822.

pumping and the installation of expensive frame dams could not master.

At this time Curwen was in financial trouble. His colliery in 1806 had shown a profit of £13,580;⁶ between 1818 and 1820 the average annual profit was only £1,072.⁷ Further, he was heavily in debt — from 1819 to 1827 he owed over £120,000.⁸ It was essential to increase output and reduce costs. John Buddle, the leading mining engineer of the time, was appointed in 1814 to advise on the management of the Curwen collieries in the hope that his skill could convert them into a prosperous undertaking. In one report (August 1816) he suggested, among other things, thinning the pillars of coal which supported the roof. At Union Pit he found that only 32.7% of the coal was extracted and that 67.3% was left in the pillars, more than enough to support a roof under a cover of 30 fathoms. He recommended that the pillars should be reduced in size and 54 or 55% of the coal should be left in the pillars. This would increase output by 12% and, he believed, give ample security to the colliery.⁹ His advice was followed and by October 1817 the pillars at Union Pit were reduced to 45½% of the coal. Pillar robbing followed at the other pits — by January 1821 the entire output of Church Pit came from the pillars; at Lady Pit most of the coal and at Isabella Pit half of the coal was the result of pillar working.¹⁰

To increase output pillar robbing was the easiest and cheapest way of winning coal, and provided care was taken to ensure that the pillars remained strong enough to bear the weight of the roof there was no danger.

Unfortunately, as events were to show, care was not always taken and the continuation of pillar robbing

⁶ Curwen MSS.

⁷ Buddle MSS. i, 18 September 1822.

⁸ Curwen MSS.

⁹ Buddle MSS. i, 24 August 1816.

¹⁰ *Ibid.*, 20 October 1817; 9 January 1821.

as the workings approached the sea floor led to catastrophe. On Friday, 8 November 1833, four men were drowned in Isabella Pit. The *Cumberland Pacquet* (12 November 1833) says of this accident:

It appears that the workings in the Isabella Pit have lately been brought to the vicinity of the surface, and that near the spot where the colliers have lately been excavating, there was sixty years ago some old workings, which had been abandoned, as tradition reports, from the sea breaking into them. For some time, as we have been informed, the water was seen to ooze out of the coal as the workmen approached the old pit, but unfortunately those symptoms were not sufficiently attended to, and the consequence was that about 10 o'clock on Friday morning last they had approached so near the old workings south of Lady Pit, that the water broke in upon the men employed in the Moorbank seam. The water rushed with astonishing velocity down to what is called the Low Bottom.

These deaths aroused considerable anger among the workmen. According to a contemporary writer, "The overman of the Isabella Pit has been dismissed at the request of the men who went in a body to Mr Curwen to demand it, but the fault cannot properly rest on the poor man who simply obeyed orders at the same time informing his superiors of the danger."¹¹

This accident was followed by the appointment of Matthias Dunn, the eminent Newcastle mining engineer, as director of the Curwen collieries on a three-year contract from 1 January 1834 at a salary of £200 per annum plus expenses.¹² The actual running of the pits was in the hands of a manager appointed by Dunn, since the latter's function was essentially advisory. The first of these managers was Robert Rankin who proved unsatisfactory and he was succeeded by Ralph Coxon. It is clear that Coxon was under pressure to obtain the maximum output of coal, and in his anxiety to please his employer took unnecessary risks which

¹¹ Lonsdale MSS./Letters — W. Peile to Lord Lonsdale, 18 November 1833.

¹² Curwen MSS. 3/45 — B. Thompson to M. Dunn, 9 April 1836.

endangered the lives of the colliers. Dunn, as consultant engineer, was also not free from blame for the 1837 tragedy despite his later attempts to place the entire responsibility on Coxon's shoulders. Heedless of the warning given by the 1833 accident the working of coal to the rise continued, little attention being paid to the large quantity of water making its way into the colliery. This was well known outside Workington. A letter, dated 12 September 1836, reported, "It appears Mr Curwen's Colliery is under a considerable difficulty from the discharge of Water by working a Rise Barrier of Coal approaching near the Gravel & Surface — and being now above the power of the Pumping Engine — the Low Colliery is at present filling and they have been compelled to take the Horses out in that part. What may be the result is uncertain, if the Feeder is from the Gravel — and the Gravel connected with the Sea & particularly in Spring Tides which covers the land in this Quarter occasionally — it may be serious to the future working of the Colliery. Mr Dunn persevering in working this area of coal with a constant increase of water as they proceeded, has been the surprise of all acquainted with it."¹³

By this time Dunn and Coxon were at loggerheads over the manner in which the colliery should be run. Curwen, however, delighted with the increased output at a time when coal prices were rising, supported Coxon and refused to renew Dunn's contract. He wrote to Dunn (12 January 1837), "I hasten to state in answer to your letter of the 9th that Coxon informed me, the first time I saw him after your last visit, that if you continued to have the management of the collieries, he would not remain under you, he would rather break stones in the road, than do so, after what had passed between you. As I have every reason to be satisfied

¹³ Lonsdale MSS./Letters — J. Peile to Lord Lonsdale, 12 September 1836.

with his management as an Agent I had no alternative but to comply with the terms on which alone he would remain here, and this was the cause of my not renewing your engagement.”¹⁴

Coxon, anxious to get out as much coal as possible, not only persisted in working the coal to the rise but also began to cut into the pillars of coal supporting the roof. This was followed by falls of roof and incursions of sea water. Experienced miners, conscious of the danger frequently warned Coxon of possible disaster, and one under-agent at the colliery wrote to Dunn, “Unless some interference can be made, a very few days or weeks will most assuredly bring down the waters of the sea; and this opinion is now so generally expressed that men are leaving the colliery every day.”¹⁵

John Peile, manager of the Whitehaven Collieries, whose great skill and long experience of mining entitled him to speak with authority, wrote to his employer, Lord Lonsdale (27 February 1837) describing the situation at Workington, “The true picture of Mr C’s Colliery may be drawn in a few words, three large pumping engines for a small colliery not exceeding 100 Wags. per day. The present area of rise coal of small extent and common prudence should have dictated, that if wrought at all, should have been kept distinct from the old colliery. The deep and dip part of the old is now filled with water, and is represented as being cut off seaward by dykes that have not been explored over and now rendered a difficult undertaking by the quantity of water constantly upon them. It is also represented that to keep the work going they have resorted to skirting or pilfering the sides of the Pillars & by thus weakening the support (without Barriers of Coal being left as our practice) a Creep or Set of

¹⁴ Curwen MSS. 3/45 — H. Curwen to M. Dunn, 12 January 1837.

¹⁵ M. Dunn, *The Winning and Working of Collieries* 230-232.

the superincumbent Strata is almost certain over the interior Colliery. Indeed they appear to be drawing to a standstill and unless they can win a dip Colliery westward unconnected with the old one, the duration of the present is vague and uncertain. The working of Mr Curwen's Colliery for a length of time has been to seize the present benefit without providing for a permanency & thus he is brought into his present difficulties, and the maintenance of the price of Coals to him more requisite than to any other on the Coast."¹⁶

At this time the principal workings at Lady Pit extended 1,500 yards under the sea, and the Camper-down band, where most of the men were working, sloped towards the surface at the rate of one in three until the workings were only 15 fathoms below the sea floor, only four fathoms of which were freestone and the rest loose sand and gravel. Disregarding the warnings frequently given to him, Coxon carried on stripping the pillars. On Friday night, 28 July 1837, the sea broke through the roof of Lady Pit, and in ninety minutes Lady, Isabella and Union Pits, which were inter-connected, were flooded. This caused the deaths of 27 people and 28 horses and the loss of the colliery; but for the fact that it was the time for changing shifts the death roll would have been much higher. As it happened there were only 57 men and boys in the mine at the time of the disaster and 30 of these escaped by making their way to the "bearmouth" or day hole.¹⁷

Coxon was immediately dismissed and on the day following the accident received a letter from Benjamin Thompson, Curwen's chief agent, ordering him to hand over at once, "all the Maps & Plans of the Colliery, Books, Papers relating to the old and present Workings,

¹⁶ Lonsdale MSS./Letters — J. Peile to Lord Lonsdale, 27 February 1837.

¹⁷ *Cumberland Pacquet*, 1 August 1837.

Theodolites & other instruments belonging to Mr Curwen & all books, papers, documents or other Property now in your possession together with the keys of the Yard, Shops &c.’’¹⁸ Apart from this nothing happened to Coxon; he was very fortunate to escape being lynched by the infuriated people of Workington.

This was a totally unnecessary and avoidable calamity. Throughout its history the Chapel Bank Colliery was under threat from the sea and the utmost care should have been taken at all times in working it. The 1833 accident afforded ample warning of the danger, but this was disregarded and with criminal folly a most hazardous mode of working the colliery was pursued. The final tragedy was all the more deplorable since before it occurred it was a widely known probability and wiser men than Coxon had repeatedly cautioned him. Were the men themselves wholly blameless? Many had had long experience in the pits and were well aware of the risks they were running. Some were prudent enough to leave the colliery before it was too late, but the rest remained, perhaps because they had become inured to the perils of mining or because a job was a matter of life as well as death. Further, as was made public in 1842, higher wages had been paid to encourage the men to continue working in the colliery.¹⁹

¹⁸ Curwen MSS. 3/45.

¹⁹ *Children's Employment Commission, 1842, 1st Report*, Appendix, pt. 1, 310 — evidence of the Rev. Henry Curwen.