

Report upon the inspection of mines classed under the Metalliferous Mines Regulation Acts in the counties of Anglesey, Brecon, Cardigan, Carnarvon, Denbigh, Flint, Merioneth, Montgomery, Radnor, and Shropshire, and in the Isle of Man, for the year 1886 / by C. le Neve Foster.

Contributors

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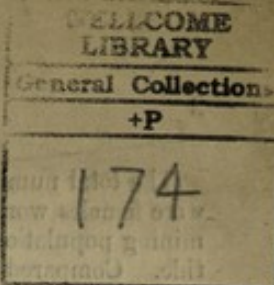
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Dr. C. Le Neve Foster's Report.

REPORT upon the INSPECTION of MINES classed under the METALLIFEROUS MINES REGULATION ACTS in the Counties of ANGLESEY, BRECON, CARDIGAN, CARNARVON, DENBIGH, FLINT, MERIONETH, MONTGOMERY, RADNOR, and SHROPSHIRE, and in the ISLE OF MAN, for the Year 1886.—By C. LE NEVE FOSTER, Esq., B.A., D.Sc., F.G.S.

SIR,

Llandudno, 21st March 1887.

IN compliance with section 20 of the Metalliferous Mines Regulation Act, I have the honour to present you my Annual Report for the year ended 31st December 1886.

I have divided my Report into four chapters, as follows:—

Chapter I.—Summaries of Annual Returns. Persons employed, and minerals produced at mines and openworks.

„ II.—General list of fatal and non-fatal accidents. Summary. Comparison with the previous 11 years. Accidents due to breaches of the Act or of Special Rules. Comparison between Metal mines and Slate mines as regards accidents.

„ III.—Prosecutions: Barmouth, Benallt, Brynffelin, Diphwys Casson, Great Manod, Rushen, Snowdon, and Wrysgan mines. Bugail and Oakeley Upper mines.

„ IV.—General Remarks: Exemptions under the Slate Mines (Gunpowder) Act. Special rules. Abandoned mines. Plans. New mines. Manganese mining in Merionethshire. Ventilation. Barracks for workmen. Prevention of crane accidents. Improper conveyance and thawing of dynamite. Summary of work.

CHAPTER I.—SUMMARIES OF ANNUAL RETURNS. PERSONS EMPLOYED, AND MINERALS PRODUCED AT MINES AND OPENWORKS.

The following table gives a summary of the returns of persons employed in and about the mines in my district:—

PERSONS EMPLOYED IN 1886.													
Situation of Mines.	Underground.				Above Ground.								Total underground and above ground.
	Male Persons.				Ages 10 to 13.		Ages 13 to 18.		Ages above 18.		Total.		
	Ages 12 to 13.	Ages 13 to 16.	Ages above 16.	Total.	Males.	Females.	Males.	Females.	Females.	Males.			
COPPER, LEAD, ZINC, AND OTHER MINES, EXCLUSIVE OF SLATE MINES.													
Anglesey - - - - -	—	—	25	25	—	—	8	2	2	85	97	122	
Breconshire - - - - -	—	—	15	15	—	—	—	—	—	2	2	17	
Cardiganshire - - - - -	—	3	434	437	2	—	114	9	77	177	379	816	
Carnarvonshire - - - - -	—	11	192	203	—	—	45	—	5	79	129	332	
Denbighshire - - - - -	—	—	312	312	—	—	65	—	—	243	308	620	
Flintshire - - - - -	—	3	447	450	1	—	48	—	—	114	163	613	
Merionethshire - - - - -	1	2	209	212	—	—	8	—	—	93	101	313	
Montgomeryshire - - - - -	—	1	94	95	—	—	10	—	—	71	81	176	
Radnorshire - - - - -	—	—	2	2	—	—	—	—	—	—	—	2	
Shropshire - - - - -	—	1	286	287	—	—	16	—	5	145	166	453	
Isle of Man - - - - -	—	8	588	596	2	—	138	—	7	309	456	1,052	
Totals, exclusive of the Slate mines	1	29	2,604	2,634	5	—	452	11	96	1,318	1,882	4,516	
SLATE MINES.													
Carnarvonshire - - - - -	—	—	49	49	—	—	14	—	—	159	173	222	
Denbighshire - - - - -	—	—	7	7	—	—	—	—	—	1	1	8	
Merionethshire - - - - -	—	3	2,199	2,202	—	—	258	—	—	1,929	2,187	4,389	
Montgomeryshire - - - - -	—	—	5	5	—	—	—	—	—	—	—	5	
Totals for the Slate mines	—	3	2,260	2,263	—	—	272	—	—	2,089	2,361	4,624	
Totals for all the mines	1	32	4,864	4,897	5	—	724	11	96	3,407	4,243	9,140	

The total number of persons employed in and about the mines was 9,140, of whom 1,107 were females working above ground. After having had to record a serious decline in the mining population of my district from 1882 to 1885, it is cheering to notice a turn of the tide. Compared with the previous year, there is an increase in 1886 of 347 persons, or 3·9 per cent. This increase is due entirely to more activity in metal mining, for at the underground slate quarries there is a decrease in the total number of hands.

The quantities and values of the mineral dressed and of the undressed mineral sold, treated, or used at mines in my district during the year 1886 were:—

	County.	Statute Tons.	Value at the Mines.	
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BARYTES.

	Denbighshire - - - -	16	£ 13	
	Montgomeryshire - - - -	736	367	
	Shropshire - - - -	3,076	3,518	
		3,828	3,898	

COBALT AND NICKEL ORE.

	Flintshire - - - -	100	£ 526	
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COPPER ORE.

	Anglesey - - - -	8	£ 9	
	Cardiganshire - - - -	62	272	
	Carnarvonshire - - - -	455	1,926	
		525	2,207	

COPPER PRECIPITATE.

	Anglesey - - - -	380	£ 2,481	
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IRON ORE.

	Denbighshire - - - -	13	£ 5	
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IRON PYRITES.

	Anglesey - - - -	211	£ 130	
	Carnarvonshire - - - -	9,792	6,854	
		10,003	6,984	



	County.	Statute Tons.	Value at the Mines.
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LEAD ORE.

			£
Breconshire	- - - -	43	309
Cardiganshire	- - - -	1,744	16,601
Carnarvonshire	- - - -	1,162	10,773
Denbighshire	- - - -	1,512	14,031
Flintshire	- - - -	2,180	20,554
Isle of Man	- - - -	6,257	80,081
Montgomeryshire	- - - -	917	9,202
Shropshire	- - - -	2,592	22,579
		16,407	174,130

LIMESTONE.

			£
Flintshire	- - - -	3,663	269
Shropshire	- - - -	4,955	894
		8,618	1,163

MANGANESE ORE.

			£
Carnarvonshire	- - - -	99	142
Merionethshire	- - - -	11,285	7,955
		11,384	8,097

OCHRE AND UMBER.

			£
Anglesey	- - - -	2,831	5,500

SLATE AND SLABS (DRESSED).

			£
Carnarvonshire	- - - -	4,650	12,448
Denbighshire	- - - -	63	70
Merionethshire	- - - -	135,814	388,514
		140,527	401,032

ZINC ORE.

			£
Anglesey	- - - -	697	1,100
Cardiganshire	- - - -	3,423	9,060
Carnarvonshire	- - - -	209	302
Denbighshire	- - - -	6,700	23,242
Flintshire	- - - -	1,184	3,688
Isle of Man	- - - -	4,795	16,876
Montgomeryshire	- - - -	599	1,030
Shropshire	- - - -	115	352
		17,722	55,650

Total value - - 661,673*l*.

REPORTS OF INSPECTORS OF MINES.

The number of persons employed in my district during the year 1886 at the openworks producing lead ore, ochre, slate, umber, and zinc ore, but exclusive of those producing limestone, paving-stone, road metal, gravel, &c., was as follows:—

County.	Total Number of Persons employed at the Openworks.
Anglesey - - - - -	30
Breconshire - - - - -	4
Cardiganshire - - - - -	18
Carnarvonshire - - - - -	8,481
Denbighshire - - - - -	113
Flintshire - - - - -	37
Isle of Man - - - - -	11
Merionethshire - - - - -	313
Montgomeryshire - - - - -	40
Total - - - - -	9,047

The output of these openworks in 1886 was,—

County.	Statute Tons.	Value at the Openworks.
LEAD ORE.		
Flintshire - - - - -	34	£ 238
OCHRE, ROTTENSTONE, AND UMBER.		
Anglesey and Isle of Man - - - - -	3,631	£ 5,669
SLATE AND SLABS (DRESSED).		
Breconshire - - - - -	89	£ 112
Cardiganshire - - - - -	155	349
Carnarvonshire - - - - -	246, 302	607,045
Denbighshire - - - - -	2,953	4,533
Merionethshire - - - - -	8,220	19,667
Montgomeryshire - - - - -	1,058	2,130
Totals - - - - -	258,777	633,836
ZINC ORE.		
Flintshire - - - - -	195	£ 507
Total value - - - - -	- 640,250 <i>l.</i>	

The output of each individual mine, the per-centage of metal in the ore, and the amount of silver obtainable from the lead ore are given in the "Mineral Statistics of the United Kingdom," published as a separate volume.

CHAPTER II.

LIST OF FATAL AND NON-FATAL ACCIDENTS. SUMMARY. COMPARISON WITH THE PREVIOUS ELEVEN YEARS. ACCIDENTS DUE TO BREACHES OF THE ACT OR OF SPECIAL RULES. COMPARISON OF METAL MINES AND SLATE MINES AS REGARDS ACCIDENTS.

In accordance with my usual practice I give a list of all the accidents, fatal and non-fatal, reported to me during the year. I keep the Slate mines separate, so as to be able more easily to study the dangers of workings of this kind.

LIST of the FATAL ACCIDENTS, and LOSS of LIFE arising therefrom, and of the NON-FATAL ACCIDENTS causing SERIOUS PERSONAL INJURY, or arising from EXPLOSIONS of GAS, POWDER, &c., or of any STEAM BOILER in the COPPER, LEAD, ZINC, and other MINES, exclusive of the SLATE MINES, in DR. C. LE NEVE FOSTER'S District during the Year 1886.

Date.	No. of the Accident.	Name of the Mine.	Persons killed or injured. Names of Persons killed in italics.	Occupation.	Repeated Acc.	Length of Time the Person was prevented by the Effects of the Accident from resuming Work.	Cause of Accident, and Remarks.	No. of Persons killed.	No. of Persons injured.
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FALLS OF GROUND.

1886.									
Jan. 8	1	Morfa du -	John Roberts -	Miner -	50	1 week -	Fall of roof loosened by a blast; he did not think it would fall so soon.	-	1
Feb. 4	7	Frongoch -	George Pickering -	" -	38	11 weeks -	He was taking down loose ground after blasting, when a piece struck his right arm and broke it.	-	1
March 11	16	Lisburne -	John Lewis -	" -	45	2 " -	Fall of loose ground which he was engaged in removing after a blast.	-	1
Nov. 23	67	Foxdale -	Richard Corkill -	" -	3	5 " -	Unexpected fall of side while driving a level. Ear cut.	-	1
Total falls of ground								-	4

IN SHAFTS.

Overwinding.—None.

Ropes and chains breaking.—None.

Whilst ascending or descending by Machinery.

Nov. 10	64	Foxdale -	Philip Cringle -	Shaftman -	25	5½ weeks -	He stepped into a kibble, hoisted by a compressed air-engine, without waiting for a man to lower him; the kibble dropped 17 fathoms.	-	1
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Falling into shaft from Surface.—None.

Things falling from Surface.—None.

Falling from part way down.

Feb. 17	12	Van -	John Gough -	Miner -	20	16 weeks -	While working at the bottom of a winze he was suddenly taken with diarrhoea, and instead of waiting to be drawn up in the kibble, he climbed up by the timber, but fell just as he reached the top. Skull fractured.	-	1
Mar. 24	22	Foxdale -	W. A. Christian -	" -	16	Still unable to work, March 1887.	He went to the shaft without a light, and after getting over the fence fell through a small hole through which the capstan rope had been let down.	-	1
Oct. 7	59	Pantgwyn -	John Jones -	Shaftman -	59	3 weeks -	He was screwing up a flange-bolt when his spanner slipped, and he fell 60 ft. down the shaft into water.	-	1

Things falling from part way down.

Aug. 16	50	Llaim-hir	John Howells -	Miner -	24	6 weeks -	Pall of a stone down the shaft which broke his arm. The kibble was down at the time and the stone must have been lodging somewhere in the shaft.	-	1
Sept. 22	57	Foxdale -	Robert Quayle -	Shaftman -	35	4½ weeks -	Fall of a stone from the kibble he was sending up.	-	1

Miscellaneous in Shafts.—None.

Total in shafts - - - - - 6

REPORTS OF INSPECTORS OF MINES.

List of Accidents—continued.

Date.	No. of the Accident.	Name of the Mine.	Persons killed or injured. Names of Persons killed in <i>italics</i> .	Occupation.	Reported Age.	Length of Time the Person was prevented by the Effects of the Accident from resuming Work.	Cause of Accident, and Remarks.	No. of Persons killed.	No. of Persons injured.
MISCELLANEOUS UNDERGROUND.									
<i>Explosions of Gunpowder, &c.</i>									
886. Feb. 26	15	Moelfre -	Hugh Owen -	Miner -	38	9 weeks -	Explosion from boring out a charge of gun-cotton which had missed fire.	-	-
Apr. 3	27	Steeraway -	Matthew Groncott -	" -	46	3 months -	He used too short a slow match for lighting a squib in firing a shot, and it exploded before he had time to get away. Back struck by stones.	-	1
June 7	41	Great Laxey -	Thomas Kelley -	" -	50	7 months -	He was firing a hole with a straw, in place of fuse, and used too short a slow match. The charge exploded before he had reached a place of safety, and his leg was badly lacerated.	-	1
<i>Suffocation by Gas.—None.</i>									
<i>Irruptions of Water.—None.</i>									
<i>Falling into Water.</i>									
Sept. 13	56	Halkyn -	William Jones -	Blacksmith -	26	- -	Drowned by the upsetting of a boat in a large underground cavern.	1	-
<i>On Inclined Planes.—None.</i>									
<i>By Trams and Tubs.</i>									
Dec. 24	72	Great Laxey -	John Callin -	Fan-blower -	19	5 weeks -	Foot bruised by locomotive in adit level.	-	1
<i>By Machinery underground.—None.</i>									
<i>Sundries Underground.</i>									
April 5	29	Frongoch -	Evan Hughes -	Miner -	46	10 weeks -	Evan Hughes' partner missed striking the drill, and the sledge glanced off the rock, hit his arm and broke it.	-	1
May 13	37	Grogwinlon -	Thomas Elias -	" -	28	Incurable -	He fell down a pass into which he had been tipping stuff. It is not known how he happened to fall into it. Spine fractured.	-	1
" 14	38	Frongoch -	David Lewis -	" -	46	4½ weeks -	Fall of four or five yards in some stopes. Head cut, back bruised.	-	1
June 11	43	Bryn-yr-afr -	Richard Jones -	Trammer -	56	6½ weeks -	A loose stone lying on a stall fell upon him as he was passing underneath it. Two ribs broken.	-	1
								Total miscellaneous underground.	8
ON SURFACE.									
<i>By Machinery on Surface.—None.</i>									
<i>Boilers bursting.—None.</i>									
<i>Miscellaneous on Surface.</i>									
Feb. 26	14	Cae Coch -	Richard Williams -	Labourer -	35	1 week -	A stone detached by frost rolled down a steep bank and struck him.	-	1
March 19	18	Lisbarne -	David Jenkins -	Lead-ore dresser.	15	3 weeks -	While oiling some machinery, not in motion, fell five or six feet, and injured his arm.	-	1
May 18	39	Roman Gravels	Edwin Bennett -	Miner -	49	32 weeks -	He was preparing to cut some timber at the surface, when he slipped and fell, breaking his leg.	-	1
July 10	46	Great Laxey -	Edward Watter-son.	Carter -	41	9 weeks -	A heavy plank fell on his foot. Ankle hurt.	-	1
Nov. 25	66	Diphwys -	David Owen -	Miner -	45	6 weeks -	Fall of a heavy stone upon him while making an open cutting.	-	1
								Total on surface	5
								Gross total for the copper, lead, zinc, and other mines, exclusive of the slate mines.	23

LIST of the FATAL ACCIDENTS, and LOSS of LIFE arising therefrom, and of the NON-FATAL ACCIDENTS causing SERIOUS PERSONAL INJURY, or arising from EXPLOSIONS of GAS, POWDER, &c., or of any STEAM BOILER, in the SLATE MINES in DR. C. LE NEVE FOSTER'S District, during the Year 1885.

Date.	No. of the Accident.	Name of the Mine.	Persons killed or injured. Names of Persons killed in <i>italics</i> .	Occupation.	Reputed Age.	Length of Time the Person was prevented by the Effects of the Accident from resuming Work.	Cause of Accident, and Remarks.	No. of Persons killed.	No. of Persons injured.
<i>Falls of Ground.</i>									
1885. Jan. 11	3	Oakeley Middle	Robert D. Jones	Rockman	40	20 weeks	He went to the working place just after blasting, in spite of his partner's warning; some slate rock loosened by the blast fell and fractured his skull.	-	1
" 14	5	Braichgoch	Thomas Humphreys.	"	27	10 weeks	A piece of slate rock broke off unexpectedly from the face of the bargain and struck his foot.	-	1
Feb. 5	8	Oakeley Upper	William Hughes	Labourer	46	Still unable to work, March 1887.	A large stone fell unexpectedly from the side of a pillar 50 ft. above him and struck his leg.	-	1
Mar. 20	20	"	David Williams	Rockman	40	2 months	A small lump of stone fell unexpectedly from the side of a pillar and struck his leg.	-	1
April 1	23	Maen Offeren	David Jones	"	20	2 weeks	Some rock fell unexpectedly down the face of his bargain and struck his foot.	-	1
" 2	26	"	Richard Roberts	"	36	-	Unexpected fall of rock from the side of a pillar where he had just been blasting.	1	-
" 22	32	Llechwedd	Edward Millward.	"	41	Leg amputated, still at the hospital, March 1887.	He was prizing down a block of slate, but it fell in a way he did not expect, and broke his leg so badly that it had to be amputated.	-	1
May 21	40	Cwmorthin	Robert Lewis	"	32	4 months	} Unexpected fall of roof in a working place 6 ft. high.	-	2
			William Jones	Miner	50	4 weeks		-	
Aug. 20	51	"	John Davies	Rockman	42	5 weeks	Unexpected fall of rock	-	1
Nov. 4	63	Rhosydd	Robert Jones	"	26	-	Unexpected fall of rock from a pillar, the side of the chamber in which he was working. The men thought the place safe as they had sounded it a few days before the accident.	1	-
Dec. 21	71	Aberllefenny	John Morgan	Miner	42	2 weeks	Unexpected fall of a stone from the roof of a chamber.	-	1
Total falls of ground								2	10

IN SHAFTS.—None.

MISCELLANEOUS UNDERGROUND.

Explosions of Gunpowder, &c.

Feb. 11	10	Palmerston	Robert Roberts	Rockman	31	4 weeks	He was using a brass-tipped stemmer to tamp a charge of gunpowder, when it exploded and burnt his face.	-	1
March 12	17	Maen Offeren	John Jones	"	42	Still unable to work, March 1887.	Through inadvertence, got in the way of a blast; leg broken.	-	1
" 29	24	Diphwys Casson	Hugh John Jones	Slate-maker	16	-	Explosion of 28 lbs. of gunpowder. Hugh John Jones was walking along a level carrying two calico bags, each containing 4 lbs. of gunpowder. He was followed by Hugh Samuel Jones carrying two similar bags, and by Robert Lewis carrying three similar bags. Hugh John Jones struck a match to light a candle or a pipe; his powder ignited and set fire to the rest. He died two days afterwards, and the men following him were severely burnt. See Chapter III., Prosecutions.	1	3
			Hugh Samuel Jones.	"	30	18 weeks		-	
			Robert Lewis	Rockman	29	18 weeks		-	
			John Griffith	"	22	20 weeks		-	
April 6	30	Oakeley Upper	Lewis Jones	Miner	35	4 weeks	Lewis Jones was ramming in tamping with a wooden stick upon a charge of gelatine-dynamite and gun-cotton, when they exploded. Friction of the tightly-fitting gun-cotton against the side of the hole may have caused the explosion, or it may have been due to a blow on the cap.	-	2
			Owen Thomas	"	35	5 weeks		-	
Sept. 28	58	"	John Lewis	"	35	-	He was driving a level southwards, and his partner was driving northwards to meet him. The barrier, on the day of the accident, was only 3 or 4 feet across. His partner signalled to him by hammering that he was going to blast, and Lewis replied in the same way. The hole was fired, and broke through the barrier, killing Lewis, who, for some unaccountable reason, had not retired, but had continued going on with his work.	1	-

REPORTS OF INSPECTORS OF MINES.

List of Accidents—continued.

Date.	No. of the Accident.	Name of the Mine.	Persons killed or injured. Names of Persons killed in italics.	Occupation.	Reputed Age.	Length of Time the Person was prevented by the Effects of the Accident from resuming Work.	Cause of Accident, and Remarks.	No. of Persons killed.	No. of Persons injured.
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Suffocation by Gases.—None.

Irruptions of Water.—None.

Falling into Water.—None.

On Inclined Planes.—None.

By Trams and Tubs.

1886.									
March 19	19	Oakeley Upper	Griffith Lloyd	Labourer	20	8½ weeks	He broke his ankle while endeavouring to put back a loaded waggon which had got off the rails.	-	1
April 27	33	Votty & Bowydd	Owen Thomas	"	35	17½ weeks	He was unhooking two full trucks which were still in motion, and had his arm squeezed between them.	-	1
Dec. 17	70	Wrysgan	William Jones	"	23	3 weeks	While pushing a waggon round a corner had his hand crushed between the waggon and the rock.	-	1

By Machinery Underground.

April 3	28	Votty & Bowydd	Owen Evans	Labourer	26	8 weeks	While lowering a block of slate with a crane let the handle slip; it flew round and struck his forehead.	-	1
" 28	34	Diphwys Cawon	Owen H. Roberts	Rockman	27	3 weeks	While lowering a block of slate with a crane let the handle slip; it flew round and struck him a severe blow on the nose.	-	1
Sept. 8	54	Braichgoch	David Davies	Labourer	18	6 days	While lifting a block of slate with a crane let the handle slip; it flew round and struck him on the head.	-	1
Oct. 25	61	Cwmorthin	Griffith Williams	Rockman	52	-	While lowering a block of slate with a crane let the handle slip; it flew round and struck him on the forehead. One end of the block was already resting on the ground.	1	-

Sundries Underground.

Jan. 11	2	Bryneglwyns	Edward Lewis	Rockman	29	5 weeks	A stone slipped down a heap of rubbish and struck his leg.	-	1
" 14	4	Braichgoch	David Edwards	Miner	33	8 days	A stone rolled down a heap of rubbish on to his foot.	-	1
" 19	6	Cwmorthin	Robert Williams	Repairer	67	3 months	These two men and four others were endeavouring to raise an underground bridge slightly, but were not doing their work in the right way. One of the chains broke and the six men fell with the bridge to the next floor, a distance of 36 feet. Williams and Jones received severe cuts and bruises.	-	2
Feb. 9	9	Wrysgan	Robert Parry	Rockman	32	11 weeks	He was dragging a block of slate by means of the crane, and when it got underneath the crane it somehow turned suddenly and struck him on the leg.	-	1
April 29	35	"	Thomas Roberts	"	33	7 weeks	The tip of his crowbar broke as he was prising up a block of slate, and, falling backwards, he cracked the small bone of his leg.	-	1
May 10	36	Oakeley Upper	William Jones	Labourer	40	Still unable to work, March 1887.	He fell down a precipice and broke his leg. The edge of the precipice was fenced, and the man, for some unexplained reason, had climbed over the fence.	-	1
June 23	44	"	William Roberts	"	52	12½ weeks	A loose stone rolled down a heap of rubbish and struck him.	-	1
July 13	47	"	Lewis Jones	Rockman	35	2 weeks	Fell down the forebreast of his chamber while walking across the top of it.	-	1
" 21	48	Cwmorthin	Owen Lewis	Labourer	27	-	While clearing the fall they were struck by a piece of rock which rolled down the slope.	1	1
" 2	49	"	Thomas Roberts	Carter	53	Foot amputated; still unable to work, March 1887.	He was talking to a rockman boring a hole, and through inadvertence fell over the edge of the chamber. Foot amputated.	-	1

List of Accidents—continued.

Date.	No. of the Accident.	Name of the Mine.	Persons killed or injured. Names of Persons killed in <i>italics</i> .	Occupation.	Reported Age.	Length of Time the Person was prevented by the Effects of the Accident from resuming Work.	Cause of Accident, and Remarks.	No. of Persons Killed.	No. of Persons injured.
1886.									
Sept. 3	52	Oakeley Upper	Robert Jones -	Rockman -	40	6 weeks -	Fell down the face of his chamber from the breaking of the hole containing the iron peg to which his chain was fixed.	-	1
" 6	53	Palmerston	Evan Jones -	" -	47	6 weeks -	He was startled by a sled coming along the tunnel, while he was opening his chest, and lifting up his head suddenly struck it against the roof and cut it severely.	-	1
" 11	55	Oakeley Middle	Rowland Roberts	" -	30	Still unable to work, March 1887.	He dislodged some loose rubbish lying on the face of his bargain and fell down it.	-	1
							Total miscellaneous underground	4	27
ON SURFACE.									
By Machinery on Surface.									
June 8	42	Wrysgan	Robert Pritchard.	Quarryman -	20	6 weeks -	He used his foot instead of his hand to turn the reversing wheel of a swing table; the wheel moved suddenly and caught his foot against the frame of the table.	-	1
Nov. 2	62	Llechweidd	Griffith Roberts.	G. Slate-maker -	15	Still unable to work, March 1887.	While making slates with a rotary machine had the top of one of his fingers cut off.	-	1
Boilers bursting.—None.									
Miscellaneous on Surface.									
Feb. 16	11	Wrysgan	David Jones	Tipman -	18	6 weeks -	His father was turning over a block of slate, and, though warned, the son did not keep sufficiently clear. Foot struck and hurt.	-	1
" 20	13	Aberllefenny	Robert Owen	Labourer -	46	4 weeks -	He took a sprag out of the wheel of a wagon, when it moved suddenly and struck him.	-	1
March 24	21	Braichgoch	Edward Evans	Slate-maker -	16	7 months -	He was riding on a truck with a load of rubbish and fell off; the truck went over his arm and broke it.	-	1
" 26	23	Oakeley Upper	John Jones	Carter -	30	17 weeks -	A piece of stone fell from a loaded wagon on to his leg.	-	1
April 13	31	Rhiwbach	Robert Davies	Rockman -	48	Both eyes blinded	A hole 5 ft. deep was charged with a little dynamite and 2 lbs. of gunpowder. The powder appears to have got damp, for it made two reports and a fizzing noise between them. Thinking all was over Davies returned to the hole, when a third explosion took place, injuring his face and eyes.	-	1
June 26	45	Conglog	David Lloyd Roberts.	" -	22	-	He was riding with several other men on a truck containing slabs; seeing a stone on one of the rails he jumped off and ran in front of the truck to kick it off. Unfortunately he slipped and fell, and the truck struck him so violently that he died in the course of a few hours.	1	-
Oct. 8	60	Aberllefenny	Robert Evans	Labourer -	69	1 month	A wagon went off the rails on an incline, and some of the load fell on him.	-	1
Nov. 24	65	Oakeley Upper	John Tudor Roberts.	Quarryman -	69	-	Fell over a natural precipice used as a tip close to his working place. See Chapter III., Prosecutions.	1	-
Dec. 14	68	Wrysgan	David Rowlands	Saw sharpener	74	8 days -	Fell of about 2 yards from a ladder while helping another man to tighten the bolts of a water-wheel.	-	1
" 17	69	"	James Wynne	Rockman -	62	7 days -	Slipped on some ice on an incline and hurt his side by the fall.	-	1
							Total on surface	2	12
							Gross totals for the Slate mines	8	47

The results of these tables are as follows :—

Cause of Accident.	Copper, Lead, Zinc, and other Mines, exclusive of the Slate Mines.			Slate Mines.			Totals for all the Mines.		
	Number of separate accidents.	Number of persons killed.	Number of persons injured.	Number of separate accidents.	Number of persons killed.	Number of persons injured.	Number of separate accidents.	Number of persons killed.	Number of persons injured.
Explosions of fire-damp - - -	—	—	—	—	—	—	—	—	—
Falls of ground - - -	4	—	4	11	2	10	15	2	14
IN SHAFTS.									
Overwinding - - -	—	—	—	—	—	—	—	—	—
Ropes or chains breaking - -	—	—	—	—	—	—	—	—	—
Whilst ascending or descending by machinery.	1	—	1	—	—	—	1	—	1
Falling into shaft from surface -	—	—	—	—	—	—	—	—	—
Things falling from surface - -	—	—	—	—	—	—	—	—	—
Falling from part way down - -	3	—	3	—	—	—	3	—	3
Things falling from part way down	2	—	2	—	—	—	2	—	2
Miscellaneous in shafts - - -	—	—	—	—	—	—	—	—	—
Total in shafts - - -	6	—	6	—	—	—	6	—	6
MISCELLANEOUS UNDERGROUND.									
Explosions of gunpowder, &c. - -	3	—	3	5	2	7	8	2	10
Suffocation by gases - - -	—	—	—	—	—	—	—	—	—
Irruptions of water - - -	—	—	—	—	—	—	—	—	—
Falling into water - - -	1	1	—	—	—	—	1	1	—
On inclined planes - - -	—	—	—	—	—	—	—	—	—
By trams and tubs - - -	1	—	1	3	—	3	4	—	4
By machinery underground - -	—	—	—	4	1	3	4	1	3
Sundries underground - - -	4	—	4	13	1	14	17	1	18
Total miscellaneous underground -	9	1	8	25	4	27	34	5	35
ON SURFACE.									
By machinery on surface - - -	—	—	—	2	—	2	2	—	2
Boilers bursting - - -	—	—	—	—	—	—	—	—	—
Miscellaneous on surface - - -	5	—	5	10	2	8	15	2	13
Total on surface - - -	5	—	5	12	2	10	17	2	15
Gross total - - -	24	1	23	48	8	47	72	9	70

The total number of accidents reported is one more than in 1885; there is a decrease of 10 in the number of persons killed, and an increase of 12 in the number of persons injured.

The causes of fatal accidents in 1886 may be compared with those of the 11 previous years by the following table :—

GENERAL TABLE OF FATAL ACCIDENTS AND DEATHS AT THE MINES IN DR. C. LE NEVE
FOSTER'S DISTRICT FROM 1875* TO 1886.

	Number of Fatal Accidents.			Number of Deaths resulting therefrom.		
	Totals for the 10 years 1875 to 1884.	1885.	1886.	Totals for the 10 years 1875 to 1884.	1885.	1886.
Falls of ground - - -	42	8	2	46	9	2
<i>In Shafts.</i>						
Overwinding - - -	1	—	—	1	—	—
Ropes and chains breaking -	1	—	—	2	—	—
Whilst ascending or descending by machinery -	2	—	—	2	—	—
Falling into shaft from surface -	2	—	—	2	—	—
Things falling from surface -	—	—	—	—	—	—
Falling from part way down -	19	—	—	19	—	—
Things falling from part way down -	7	1	—	7	1	—
Miscellaneous in shafts -	—	—	—	—	—	—
Total in shafts - - -	32	1	—	33	1	—
<i>Miscellaneous Underground.</i>						
Explosions of gunpowder, &c. -	31	—	2	35	—	2
Suffocation by gases - - -	—	—	—	—	—	—
Irruptions of water - - -	—	1	—	—	3	—
Falling into water - - -	—	—	1	—	—	1
On inclined planes - - -	—	1	—	—	1	—
By trams and tubs - - -	1	—	—	1	—	—
By machinery underground -	3	1	1	4	1	1
Sundries underground - - -	36	1	1	37	1	1
Total miscellaneous - - -	71	4	5	77	6	5
<i>On Surface.</i>						
By machinery on surface - -	13	2	—	13	2	—
Boilers bursting - - -	1	—	—	4	—	—
Miscellaneous on surface - -	19	1	2	21	1	2
Total on surface - - -	33	3	2	38	3	2
Gross total - - -	178	16	9	194	19	9

* In 1873 and 1874 the accidents in slate mines were not included, and for that reason the statistics for those years are not added to the table.

Few of the accidents call for any special remark. At the metal mines proper none were due to infringements of the Act, and the only one which was attended with a fatal result was caused by foolhardiness. A huge underground cavern had been discovered at Halkyn mine, and the agent made use of a small boat to explore it. After he went away a blacksmith, who, I am told, had never been in a boat before, jumped in out of pure curiosity, and when a little way from the shore of the underground pond foolishly stood up in his frail craft, which capsized and he was drowned.

At the slate mines there were as usual numerous accidents from falls of ground, and, as I have already pointed out on more than one occasion, casualties of this kind are inseparable from the method of working adopted. The worst accident arose from an explosion of gunpowder carried in calico bags, which caused the death of a lad and severe injuries to three men. An account of the prosecution consequent upon this breach of the Act is given in the next chapter, which also contains the result of the proceedings taken against the owners and agents of the Oakeley mines with reference to the death of an aged quarryman, killed by falling over a precipice close to his working place.

REPORTS OF INSPECTORS OF MINES.

The following tables are given, as usual, for the purpose of affording a comparison between the dangers of slate mines and those of other mines:—

TABLE showing the DEATH-RATE FROM ACCIDENTS at the MINES in DR. C. LE NEVE FOSTER'S DISTRICT.

Year.	Persons employed.			Number of Deaths from Accidents.			Number of Persons employed for One Death by Accident.	Death-rate from Accidents per 1,000 Persons employed.		
	Under-ground.	Above Ground.	Total.	Under-ground.	Above Ground.	Total.		Under-ground.	Above Ground.	Total.

COPPER, LEAD, ZINC, and other MINES, exclusive of the Slate Mines.

*Averages for the 10 years 1875 to 1884.	4,684	3,002	7,686	8.4	1.2	9.6	800	1.79	0.40	1.24
1885 - -	2,322	1,653	3,975	8	1	9	441	3.44	0.60	2.26
1886 - -	2,634	1,882	4,516	1	—	1	4,516	0.37	—	0.22

SLATE MINES.

*Averages for the 10 years 1875 to 1884.	2,248	2,481	4,729	7.2	2.6	9.8	482	3.20	1.04	2.07
1885 - -	2,404	2,414	4,818	8	2	10	481	3.32	0.82	2.07
1886 - -	2,263	2,361	4,624	6	2	8	578	2.65	0.84	1.73

TOTALS for all the MINES.

*Averages for the 10 years 1875 to 1884.	6,932	5,483	12,415	15.6	3.8	19.4	640	2.25	0.69	1.56
1885 - -	4,726	4,067	8,793	16	3	19	462	3.38	0.73	2.16
1886 - -	4,897	4,243	9,140	7	2	9	1,015	1.42	0.47	0.98

* The details for each of the 10 years will be found in the "Reports of the Inspectors of Mines for the year 1884," p. 206.

These tables show that at the metal mines proper the very low death-rate last year counterbalances the high figure of 1885, and I wish to give agents and men every credit for the fact that only one person was killed, and that he met with his death through his own rashness, in a manner wholly unconnected with the dangers of his calling.

At the slate mines there is a slight improvement compared with 1885.

On the whole, 1886 was an unusually favourable year as regards immunity from accidents in my district.

CHAPTER III.—PROSECUTIONS: BARMOUTH, BENALLT, BRYNFELIN, DIPHWYS CASSON, GREAT MANOD, RUSHEN, SNOWDON, AND WRYSGAN MINES.—BUGAIL AND OAKELEY UPPER MINES.

I received official instructions to take legal proceedings in eight cases last year; the particulars are set forth below:—

Name and Description of Mine.	Name and Description of Offender.	Nature of Offence.	Result of Hearing.	Penalty.	Costs.
Barmouth (Manganese)	John Abraham, owner	Breach of section 28	Conviction	£ s. d. 2 0 0	£ s. d. 2 12 0
" "	" "	Breach of 38 & 39 Vict. c. 39, s. 1.	"	2 0 0	} 4 12 6
Benallt (Manganese)	James Fagan, owner	4 breaches of section 23 (7).	"	1 0 0	
Brynfelin (Copper)	George Banner, person interested in the minerals.	Breach of section 28	"	0 5 0	} 3 15 0
Diphwys Casson (Slate)	Diphwys Casson Slate Co., Limited, owners.	10 breaches of section 13	Summons dismissed	- - -	
" "	Evan Parry Jones, agent	Breach of section 23 (2) b.	Conviction	0 2 6	} No costs allowed.
Great Manod (Lead)	B. Langdale Barrow, owner	" "	"	0 2 6	
" "	John Roberts, agent	" "	"	0 1 0	1 1 0
Rushen (Lead)	W. J. P. Pittar, owner	" "	"	0 1 0	1 1 0
" "	John Barkell, agent	Breach of section 23 (1)	"	2 0 0	0 7 10
Snowdon (Copper)	Dowager Lady Williams	" "	"	1 0 0	0 7 10
" "	Bulkeley, person interested in the minerals.	3 breaches of section 13	"	0 3 0	No costs allowed.
" "	L. D. Bunn, owner	" "	"	6 0 0	4 4 0
Wrysgan (Slate)	Wrysgan Slate Quarry Co., Limited, owners.	Breach of section 23 (2) b.	Summons dismissed.	- - -	- - -
" "	Robert Roberts, agent	" "	Conviction	1 0 0	1 13 1
" "	Wrysgan Slate Quarry Co., Limited, owners.	2 breaches of special rule 55.	Summons dismissed.	- - -	- - -
" "	Robert Roberts, agent	" "	Conviction	5 0 0	0 12 6
Total fines and costs				20 15 0	20 6 9

Barmouth.—Mr. Abraham's neglect consisted in having omitted to send me an annual return and to post up an Abstract of the Act.

Benallt.—Mr. Fagan was carrying on mining work without any regard to the provisions of the law, and I thought it important in this as in the previous case to call the attention of other mine owners in the district to the requirements of the Act by means of a prosecution.

Brynfelin.—On the 14th July last I sent Mr. Banner notice in writing to fence the tops of ten disused mine-shafts which had been reported to the Home Office by the Chief Constable of Carnarvonshire as being dangerous. Finding on the 31st August that there were no signs of any disposition on Mr. Banner's part to comply with my notice, I informed you of his neglect and received your instructions to prosecute him.

At the hearing of the case his solicitor produced evidence to show that he was making preparations to fence the shafts before my report was sent to you, and, although he ought to have fenced the most dangerous shafts several years ago without any notice at all from me, the magistrates refused to convict him. Still, as he had to pay the costs, he did not escape entirely unpunished.

Diphwys Casson.—In spite of the conviction of the managers of two neighbouring mines for similar offences, the agent of Diphwys Casson allowed gunpowder to be carried underground in calico bags, and the consequence of his imprudent breach of the law was a fatal accident, of which I have already given particulars.

When the summons was heard at Penrhyndeudraeth, the solicitor for the defendants contended that, as the Act simply prescribed that gunpowder was to be taken into the mine in "a case or canister," without defining the nature of the case, his clients had not committed any offence; in other words, he argued that a calico bag was a "case" within the meaning of the Act. My advocate pointed out that the word "case" had to be construed with due regard to the purpose for which it was used, and asked that a reasonable and ordinary meaning should be put upon it consistent with the context of the Act. The justices dismissed the summons, but consented to state a case for a superior court.

The appeal was heard last January in the Queen's Bench Division of the High Court of Justice before Lord Coleridge, Lord Chief Justice, and Mr. Justice Grove.

The following report of the judgment is taken from "The Times," 21st January 1887.

Lord Coleridge said he was of opinion that the decision of the magistrates was wrong, and that they ought to have convicted. The question put in the case must be answered in the contrary way to that in which the magistrates had decided it, and they had decided it wrongly. He was clearly of opinion that a linen or cotton bag was not a "case" within the meaning of this Act. The object of the rules and requirements of the Act was to protect human life and to prevent danger of explosion. It was to give effect to true rules of construction to hold that the words "case" or "canister" explained one another, and that "case" meant something in the nature of a canister, something solid and substantial, and fitted to resist ignition from a spark or other accidental cause, because that was the object of the Act, and in so construing the terms of the Act they were construing it according to its object. He was clearly of opinion that the magistrates were wrong in holding that a linen or cotton bag could be within the Act, and that they ought to have convicted and must proceed to convict the defendants.

Mr. Justice Grove entirely concurred. It would never, he said, have occurred to his mind that a "case" meant a bag. If "case" might mean a linen or cotton bag, it might mean a paper bag or a handkerchief—which would be liable to the most imminent danger of explosion from a spark, especially such hard, sharp sparks as emanated from the workings of mines. To construe the words otherwise would be to construe them contrary to the whole object of the Act, and the plain meaning to be derived from the context in which the words were used. There were no words which might not, by taking them out of their context, be made to mean the direct contrary of what was intended. And the whole object of the Act would be defeated and destroyed by that mode of construction. The true question was: What was the sense in which the words were used in this Act? He was clearly of opinion that the word "case" meant in this Act something hard and solid in its nature, which would prevent the danger of ignition by an accidental spark—as a "case or canister" in that sense would, but a cotton bag would not.

The case was therefore sent back to the magistrates to convict. They then imposed fines of 2s. 6d. and refused to allow costs; but as the defendants had to pay the costs of the appeal in London, they were in reality heavily mulcted for the fatal breach of the law.

Great Manod.—On visiting this mine in November 1885 I found a calico bag containing 3 lbs. of gunpowder lying upon a partly burnt candle.

Rushen.—In 1885 the owner of this mine was fined 1*l.* for not providing adequate ventilation. When visiting the mine last year I found men working in some stopes where my candle went out completely when I held it upright. The agent admitted to me that the men had been working for three weeks in this noxious atmosphere.

Snowdon.—On the 20th June 1885 I sent a notice to the agent of the lessor, the Dowager Lady Williams Bulkeley, begging him to fence three pits. Lady Bulkeley's solicitors replied, "We will see that the matter is duly attended to." On the 5th July 1885 I had an interview with Mr. Bunn, the lessee, and he also promised that fences should be erected.

On the 21st April 1886 nothing had been done; however, as soon as legal proceedings were commenced, Lady Bulkeley's agent set men to work in earnest and the pits were speedily fenced. They are all close to one of the most frequented paths up Snowdon, and one of them, a huge chasm, was specially dangerous to tourists.

Wrysgan.—In December 1884 I found gunpowder being taken into the mine in calico bags. I at once gave the company notice in writing to abandon this practice and the secretary promised immediate attention. Finding in November 1885 that the use of the calico bag had not been entirely discontinued, it seemed to me desirable to enforce the law by a prosecution.

In July 1885 I gave the company notice in writing to fence a dangerous underground travelling road in three places; after the lapse of more than four months two of the places were still unfenced.

In addition to these eight prosecutions I may mention two others which related to events that took place in 1886, but which do not appear in my list as the summonses were not heard till this year.

Bugail.—On the 1st October last I met a lad carrying 4 lbs. of gunpowder in a calico bag into the underground workings, and a few weeks afterwards I found that gunpowder was conveyed underground in a canister containing 8 or 9 lbs. In spite of two copies of the Abstract of the Act being posted up on the premises, and of my notices in writing that only 4-lb. canisters should be used, the agent professed ignorance of the

gunpowder regulations. The company and agent were convicted, and each had to pay 3*l.* 3*s.* 11*d.* in fines and costs.

Oakeley Upper.—An elderly quarryman, named John Tudor Roberts, was allowed to make slates within a few feet of a high natural precipice over which rubbish was tipped. In some unexplained manner he fell over and was killed. I reported the matter to you, and pointed out that if there had been a fence the man's life might have been saved; but I expressed some doubt whether there was a sufficiently clear breach of the Special Rules to make a prosecution desirable. The Rules say that, "every dangerous pathway or road in the mine" is to be "securely fenced."

Acting under your instructions I prosecuted the company, managing director, and resident agent. The question before the Bench was simply this: "Is the edge of a high and precipitous 'tip,' where two lines of rails terminate, 'a dangerous pathway or road.'?" The justices dismissed the summons; but as they refused to allow the defendants any costs, and said that I was fully justified in bringing the case before them, I had no reason to be dissatisfied with their decision.

I believe that the prosecution will have a good effect in showing the public that where there is a semblance of an accident having been caused by a breach of an official regulation, the matter will not be allowed to pass unnoticed by the Government.

Mr. James S. Gell of Castletown, Isle of Man, acted as my advocate in the Rushen case, and all the other prosecutions were conducted by Mr. J. P. Cartwright, solicitor, of Chester.

The widows of the three men drowned by an irruption of water at Pantgwyn mine in 1885 have each received 8*l.* 10*s.* from the fines inflicted by the magistrates, and the sum of 14*l.* 10*s.* remains deposited in the Post Office Savings Bank,

CHAPTER IV.—GENERAL REMARKS.

EXEMPTIONS UNDER THE SLATE MINES (GUNPOWDER) ACT. SPECIAL RULES. ABANDONED MINES. PLANS. NEW MINES. MANGANESE MINING IN MERIONETHSHIRE. VENTILATION. BARRACKS FOR WORKMEN. CRANE ACCIDENTS. IMPROPER CONVEYANCE AND THAWING OF DYNAMITE. SUMMARY OF WORK.

In accordance with section 2 (4) of the Slate Mines (Gunpowder) Act, 1882, I have the honour to report that there are now three slate mines holding exemptions from section 23 (2) (a), (b), (c), and (e) of the Metalliferous Mines Regulation Act, 1872, viz., Aberllefenny, Llechwedd, and Oakeley; under this latter name are included the Oakeley Middle and Oakeley Upper of former lists, now amalgamated into one mine. The new code of Special Rules established at the Oakeley mines in 1883 was adopted at Aberllefenny and Llechwedd when the exemptions were granted.

Special Rules are also in force at the following mines:—

Minera. Rules established in 1876. See Report of H.M. Inspectors of Mines for 1876, p. 360.

Tan-y-bwlch. Rules established 9 July 1878. See Report of H.M. Inspectors of Mines for 1878, p. 463.

Braichgoch, Bryneglwys, Bugail, Bwlch-y-Slater, Carlyle, Crown, Cwmorthin, Cymerau, Diphwys Casson, Gaewern, Maengwynedd, Moelferna, New Conglog, Palmerston, Park, Penarth, Ratgoed, Rhiwbach, Rhosydd, Voelgron, Votty and Bowydd, Wrysgan. See Report of H.M. Inspectors of Mines for 1878, p. 460. One rule at Maen Offeren slate mine is slightly different, as will be seen by reference to the same report, p. 462.

Additional Special Rules were established at Bryneglwys in June 1882.

On the 29th January last special rules were established at the Artro, Diphwys, Hafotty, Harlech and Moelfre manganese mines, which belong to the Dyffryn Mining Company.

I have removed from my list the names of the following mines, which have been abandoned:—

Cardiganshire.—Mynydd Gorddu.

Carnarvonshire.—Ellen, Rheuadrwst.

Denbighshire.—Great New Westminster, Llandegla, Plas du and Park.

Flintshire.—Dafarn Dywyll, Dyserth Castle and Gop, Pennant, Queen of the Mountain, Vron.

Merionethshire.—Pioneer, Tyddyngwladis.

Montgomeryshire.—Cwmgwyn, Middletown Hill, Moelfre, North and South Llangynog.

Shropshire.—Crickheath.

Isle of Man.—Kirkmichael.

The plan and section of Mynydd Gorddu mine are at the Home Office, and plans of Pennant and Kirkmichael mines ought to be supplied. The others were all small mines not ordinarily employing 12 persons below ground.

Considering the state of the metal market, my district may be congratulated upon the number of new mines started or of old mines revived in 1886, viz. :—

Cardiganshire.—Bwlchgywn, Cwmbrwyno, Kingside, Llwynteify, Penrhiw and Ystumtuen, Talybont, Temple, Tyllwyd and Gelli-arian.

Carnarvonshire.—Aberllyn, Benallt, Gorlanfarchog, Rhiw.

Denbighshire.—Nant-y-plwm, True Blue, Westminster.

Flintshire.—Hopeful, West Halkin.

Merionethshire.—Artro, Crafnant, Cwm Mynach, Diphwys, Graig ucha, Lletty Walter, Mynydd Llanbedr, Penisarcwm.

Montgomeryshire.—Penclyn.

The most important mining event in my district last year has been the working of a deposit of carbonate and silicate of manganese near Barmouth and Harlech, in Merionethshire. The ore occurs in the form of a bed or seam, interstratified among rocks of Cambrian age, and varying from a few inches to three or four feet in thickness; the average thickness is 12 to 18 inches. The per-centage of metallic manganese varies from 20 to 32, and the ore is sent to Mostyn and Darwen for the manufacture of spiegeleisen and ferromanganese. The quantity of ore produced in 1886 amounted to 11,256 tons, worth 7,897*l.*, and the output for this year will probably be very much greater. It is gratifying to me to record the birth of a new mining industry, and to be able to state that the bed has been traced over a considerable area, and that the existence of large stores of the novel kind of ore has been proved beyond doubt.

Ventilation.—In my last report I dwelt at some length upon the subject of ventilation, and my experience of this year confirms my opinion that it will be impossible for me to secure a thoroughly sufficient air supply in all working places unless the first general rule is made more definite and stringent.

Barracks for workmen.—The reply often made to me when I complain of bad ventilation in a stuffy *rise* or *end* is: "The air here is nothing like so bad as you would find it in the men's bedrooms." I have therefore taken the opportunity of examining some of the barracks, where men whose homes are distant find it convenient to live from the Monday to the Saturday. There are undoubtedly cases of overcrowding, and I thought it my duty to call the attention of Mr. Hugh Rees, medical officer of health for the district, to the barracks at Rhosydd quarry, at the head of an out-of-the-way valley near Festiniog. He agreed with me that it was not right that there should be scarcely 200 cubic feet of space per man in rooms used for sleeping, taking meals, and keeping provisions and coal. I have left the matter in his hands. The men were nearly all sleeping two in a bed, and some of the rooms were dark, with a bad floor and an indifferent roof.

While blaming the Rhosydd Company for the manner in which they have been housing their men, I must not fail to mention an instance of an opposite kind. At some barracks built by Mr. Dunlop for the Oakeley quarries, each man has his own sleeping room, separate from a central refectory; and there is an air of comfort and decency which contrasts favourably with the untidy and dirty appearance of the rooms at Rhosydd. These barracks are more in accordance with my ideas of what is due from an employer to his workmen.

Prevention of Crane Accidents.—My list shows one fatal and three non-fatal accidents with cranes, and in 1885 the number of casualties was greater. As a rule, these accidents happen while *lowering* blocks, when a pawl cannot be used. The man sometimes loosens his hold too soon, thinking that a block which has reached the ground is resting firmly, instead of which the block lurches a little, and a slight movement of the chain, multiplied by the gearing, causes the crane-handle to fly round violently and inflict a severe or fatal blow. In order to prevent these accidents, Mr. Edward Hughes, of Maentwrog, proposes to drive the barrel by a worm, and so prevent any unintentional movement of the crane. Though there is a certain loss of speed, this is compensated by gain in safety and in power, and the invention deserves the attention of quarry owners.

Conveyance and thawing of Dynamite, &c.—I frequently have to complain of dynamite and similar explosives being taken underground without any proper substantial case. A paper box is considered sufficient by many miners; and I have seen dynamite stowed away in a worn-out shoe and in an old teapot. I fear I shall not be able to enforce the use of secure cases until some of the managers have been prosecuted.

Irregular and dangerous methods of thawing dynamite are often resorted to instead of using proper warming pans. Three men were slightly injured at Roman Gravels mine last January from the explosion of some dynamite remaining in a can of water in which they had been heating their cartridges; and a few weeks ago I myself discovered dynamite being heated in a tin over a lighted candle. It is true that in this case the tin containing the cartridges was placed in another full of water; but if either receptacle had leaked—and no one can vouch for the staunchness of an old and battered meat-tin—an explosion would very likely have occurred. Mr. H. S. Lancaster, the manager of the mine, prosecuted the workman under one of his Special Rules, and the man was convicted. As it was the first offence, Mr. Lancaster asked for a mere nominal penalty, and the fine inflicted was only 1s.

This prosecution will do good in the immediate neighbourhood; and the attention of mine agents generally has been called to the danger of irregular methods of thawing dynamite through circulars distributed by Nobel's Explosives Company. On the other hand, I have found statements in the instructions for using dynamite, issued by another company with each package of the explosive, so calculated to mislead agents and men with regard to its freedom from danger that I have pointed them out to Her Majesty's Chief Inspector of Explosives, in the hope that he will be able to prevent their being repeated.

During the year 1886 I travelled 8,807 miles while engaged upon my official duties, viz., 7,450 by rail, 1,157 by road, and 200 by sea. I made 223 visits to mines, of which 114 included underground as well as surface inspection. Most of these visits were made without notice. Official work in London occupied me 33 days.

I have, &c.,

(Signed) C. LE NEVE FOSTER,
H.M. Inspector of Mines.

The Right Hon. Henry Matthews, Q.C., M.P.,
Her Majesty's Principal Secretary of State,
Home Department, Whitehall, London.

LIST of OWNERS, MINES, and AGENTS, under the METALLIFEROUS MINES REGULATION ACT, in
NORTH WALES, Part of SOUTH WALES, SHROPSHIRE, and the ISLE OF MAN.

Owner or Company, and Postal Address.	Name of Mine. <i>Italics denote Mines suspended during the whole of 1886, but not abandoned.</i>	Situation.	Agent.	Persons ordinarily employed during the year 1886.	
				Below Ground.	Above Ground.

ANGLESEY.					
T. Fanning Evans, Almlech - - -	Mona - - -	Amlwch - - -	T. Fanning Evans -	16	74
Ditto - - -	Morfa du - - -	Ditto - - -	Ditto - - -	8	2
Ditto - - -	Parys - - -	Ditto - - -	Ditto - - -	1	21
			Total - - -	25	97

BRECONSHIRE.					
Nant-y-Garw Co., Address C. W. Seccombe, Gunnislake, Tavistock.	Nant-y-Garw -	Llanwrthwl -	Henry Phillips -	15	2

CARDIGANSHIRE.					
C. O. Rogers, 10, Blomfield Street, London, E.C.	<i>Blaen Caelan</i> -	Talybont -	-	-	-
Blaen United Mining Co., Ltd., 4, New Broad Street, London, E.C.	<i>Blaen United</i> -	Llanfihangel, Lower	-	-	-
John Jenkins, Peter Jones, and G. Jones, Bronfloyd Mine, Bow Street, R.S.O., Cardiganshire.	Bronfloyd -	Penrhyncoch -	Peter Jones -	12	-
Edward Bennett, Tavistock Lodge, Harlesden, London, N.W.	Brynarian -	Taliesin -	George J. Gray -	2	-
Evan Reese, Bank Place, Machynlleth -	<i>Bryn Dyfi</i> -	Glandovey -	Evan Reese -	-	-
Bryn-yr-Afr Mine Co., Ltd., 15, Lord Street Liverpool.	Bryn-yr-Afr -	Seven miles from Talybont.	J. Phillips -	23	27
Cardigan United Mines, Ltd., Aberystwith -	Bwlchgwyn and Llwyntelfy.	Ponterwyd -	A. Williams -	4	5
James Mellquham & Co., Aberystwith -	<i>Bwlch United</i> - (including Pen-craigddu and Caenant.)	Goginan, Aberystwith.	William Northey -	-	-
Caelan and Cefngwyn United Mining Co., Ltd., J. Basil Mascfield (sec.), Ledbury, Herefordshire, and Ynysfaig, Dolgelly.	<i>Cefngwyn</i> -	Elerch, near Talybont.	-	-	1
C. O. Rogers, 10, Bloomfield Street, London, E.C.	<i>Court Grange</i> -	Near Aberystwith -	-	-	-
Crown Mining Co., W. J. Lavington, Secretary, Dashwood House, New Broad Street, London, E.C.	<i>Crown</i> -	Ponterwyd -	David Daniel -	3	-
Cardigan United Mines, Ltd., Aberystwith -	Cwmbrwyno -	Cwmbrwyno -	A. H. Jenks -	8	10
W. Sadler, 105, Bow Road, Mile End, London, E.	Cwmerfyn -	Llanbadarn Fawr -	J. H. Roberts -	8	2
Cwmystwyth Co., Ltd., John Taylor and Sons, 6, Queen Street Place, London, E.C.	Cwmystwyth -	Cwmystwyth, near Devil's Bridge.	Jos. B. Rowse -	57	46
Dolelettwr and Llain-hir Copper and Lead Mining Co., Ltd., 92, West Regent Street, Glasgow.	Dolelettwr and Llain-hir.	Taliesin -	J. H. Clint -	12	6
John Taylor and Sons, 6, Queen Street Place, London, E.C.	East Darren -	Goginan, Aberystwith.	Thos. Garland -	24	35
Erglodd United Mines Co., Ltd., in liquidation, Thomas Williams, Liquidator, 40, North Parade, Aberystwith.	<i>Erglodd United</i> -	Talybont -	-	-	-
Cambrian Mining Co., Ltd., Pinner's Hall, Old Broad Street, London, E.C.	Esgairfraith (or Cambrian.)	Talybont -	Henry James -	9	7
Esgair-hir Mining Co., Ltd., Pinner's Hall, Old Broad Street, London, E.C.	Esgair-hir - (work recommenced March 1887.)	Talybont -	Henry James -	-	-
P. Baker, Bute Dock Chambers, Cardiff, and James Mellquham, Aberystwith.	Esgairmwyn and Ddu. (Stopped March 1885.)	Strata Florida -	-	-	-
R. Attenborough, 2, Whitley Grove, Reading	Florida -	Ditto -	R. Crouch -	9	10
John Kitto and Son, Llanidloes -	Frongoch -	Devil's Bridge -	John Kitto and Son.	54	68
Goginan Realization Co., Ltd., John Kitto and Son, Llanidloes.	Goginan -	Seven miles from Aberystwith.	Ditto -	8	13
P. Baker, Bute Dock Chambers, Cardiff -	Great Darren -	Goginan, Aberystwith.	William Jones -	-	-
West Esgair Lle Mining Co., A. E. Wenham, Secretary, 114, Colmore Row, Birmingham.	Great West Van -	Ponterwyd -	A. E. Wenham -	-	-

LIST of OWNERS, MINES, and AGENTS, under the METALLIFEROUS MINES REGULATION ACT, in NORTH WALES, Part of SOUTH WALES, SHROPSHIRE, and the ISLE OF MAN—*cont.*

Owner or Company, and Postal Address.	Name of Mine. <i>Italics denote Mines suspended during the whole of 1886, but not abandoned.</i>	Situation.	Agent.	Persons ordinarily employed during the year 1886.	
				Below Ground.	Above Ground.
CARDIGANSHIRE— <i>cont.</i>					
Grogwinion Consolidated Mining Co., Ltd., John Kitto and Son, Llanidloes.	Grogwinion -	Pontrhydygroes -	John Kitto and Son.	2	4
The Kingside Mining Co., Ltd., 5, Queen Street Place, London, E.C.	Kingside - (Started January 1887.)	Cwmystwyth -	J. B. Rowse -	—	—
John Taylor and Sons, 6, Queen Street Place, London, E.C.	Lisburne -	Yspytty Ystwith, Pontrhydygroes.	Peter Garland -	54	59
Mynach Vale Mining Co., Ltd., 15, Lord Street, Liverpool.	Mynach Vale -	Devil's Bridge -	J. Phillips -	4	1
George Green, The Foundry, Aberystwith, and T. S. G. Kirkpatrick.	Nantyceria -	Ponterwyd -	Richard Jones -	4	—
Grogwinion Consolidated Lead Mine Co., Ltd., John Kitto and Son, Llanidloes.	<i>North Grogwinion</i>	Pontrhydygroes -	John Kitto and Son.	—	—
Penrhiw and Ystumtuen Mines Co., c/o George Green, Foundry Aberystwith.	Penrhiw and Ystumtuen.	Ponterwyd -	Ponterwyd -	4	—
W. Thomas, Mid Wales Villa, Llanidloes -	Plynlimmon -	Ponterwyd -	W. Thomas -	—	4
Powell Mines Co., Ltd., Goginan, Aberystwith.	Powell -	Ditto -	N. Bray -	8	5
J. Kitto, Llanidloes -	Red Rock -	Near Crosswood -	John Kitto -	1	10
Vere Powys, 1, Lincoln's Inn Fields, London, W.C.	Rheidol United -	Cwm Rheidol -	D. Lambert -	10	10
Silver Brook Mining Co., Ltd., F. E. Briggs, Secretary, 22, Royal Exchange, Leeds.	Silver Brook - (Formerly Silver Stream.)	Goginan -	William Jones -	—	—
South Darren Mining Co., Ltd., J. H. Marchison, Secretary, 8, Austin Friars, London, E.C.	South Darren -	Goginan, Aberystwith.	John Mitchell -	30	31
Talybont Silver Lead Mining Co., Talybont Glandovey, R.S.O.	Talybont - (Formerly Allt-y-crib and North Cardigan.)	Talybont -	A. H. Jenks -	30	13
Henry Mallory, 44, High Street, Warwick -	Tanyralit -	Talybont -	J. Davies -	7	—
Cardigan United Mines, Ltd., Aberystwith -	Temple -	Devil's Bridge -	A. H. Jenks -	16	1
Cardigan United Mines, Ltd., Aberystwith -	Tyllwyd and Gelli-reinin.	Cwm Rheidol -	Ditto -	10	—
J. Phillips and N. Bray, Goginan, R.S.O., Cardiganshire.	<i>Tyn-y-Fron</i> -	Cwm Rheidol -	J. Phillips.	—	—
Vaughan Mines Co., Ltd., in liquidation, Charles Hurlbatt, Liquidator, 6, Queen's Street Place, London, E.C.	Vaughan -	Near Goginan, Aberystwith.	T. Garland.	—	—
Wemyss Mines, Limited, Dinas, Aberystwith -	Wemyss -	Cwmnewyddion, near Devil's Bridge.	W. Michell -	6	7
G. Williams, Trefechan Saw Mills, Aberystwith.	West Egnir Lle	Ponterwyd -	A. E. Wenham -	15	3
Ystrad Einion Mining Co., Adam Mason, Horwich, Bolton.	Ystrad Einion -	Glandovey -	Thomas Thompson	3	1
			Totals -	437	379

CARNARVONSHIRE.

W. Jones & Co., Mount Pleasant, Bettws-y-coed.	Aberllyn -	Bettws-y-coed -	W. Jones -	1	—
L. D. Bunn, Dawlish -	<i>Arran and Snowdon</i> (formerly <i>Maudslayi</i> .)	Beddgelert -	—	—	—
Isaac Roberts and Owen Williams, Rhiw, Sarn, Pwllheli.	Benallt -	Rhiw -	Isaac Roberts -	1	1
Thos. Green, Bridge Gate House, Chester -	<i>Braich-yr-oen</i> -	Cwm Llan, Beddgelert.	W. E. Parry -	—	—
R. and T. Cartwright, 10, Bridge Street, Chester.	Bryneisteddof -	Parish of Bettws-y-coed.	T. Cartwright -	3	—
William Veitch, Trefriw, R.S.O. -	Cae Coch -	Trefriw -	W. Veitch -	74	29
Carnarvonshire Great Consols Lead Mining Co., Ltd., 85, Gracechurch Street, London, E.C.	<i>Carnarvon Great Consols.</i>	Llanrwst -	W. H. Borlase.	—	—
Coed Mawr Pool and Fridd Lead Mining Co., Ltd., H. V. Taylor, Secretary, 91, Finsbury Pavement, London, E.C.	<i>Coedmawr Pool and Fridd.</i>	Bettws-y-coed -	William Heard -	—	—
Conway Valley Freehold Copper Mining Co., Ltd., Albion Bank and Discount Co., Ltd., Sheffield Buildings, 89, Victoria Street, Liverpool.	<i>Conway Valley</i> -	Conway -	—	—	—
Cwm Dwyfor Mining Co., Ltd., George J. Gray, Secretary, St. Clement's House, Clement's Lane, London, E.C.	<i>Cwm Dwyfor</i> -	Pennant Valley, near Rhyd ddu.	Geo. J. Gray.	—	—
Owen Evans, Fridd, Llanrwst -	Cyflty -	Llanrwst -	Owen Evans.	2	3
Dauchoch Mining Co., Ltd., Abersoch, near Pwllheli.	<i>Dauchoch</i> -	Abersoch -	Geo. F. Pearson.	—	—

LIST OF OWNERS, MINES, and AGENTS, under the METALLIFEROUS MINES REGULATION ACT, in NORTH WALES, Part of SOUTH WALES, SHROPSHIRE, and the ISLE OF MAN—*cont.*

Owner or Company, and Postal Address.	Name of Mine. <i>Italics denote Mines suspended during the whole of 1886, but not abandoned.</i>	Situation. ★	Agent.	Persons ordinarily employed during the year 1886.	
				Below Ground.	Above Ground.
CARNARVONSHIRE— <i>cont.</i>					
D'Eresby Mountain Lead Mining Co., Ltd., Llanrwst, and Gracechurch Buildings, London, E.C.	D'Eresby Mountain.	Llanrwst -	John Roberts -	26	13
Drws-y-Coed Copper Mining Co., Ltd., Pen-y-groes, R.S.O.	Drws-y-Coed -	Nantlle Vale -	T. S. Allison -	—	2
Executors of Geo. Beckingsale, C. Gregory, 81, Bishopsgate Street Within, London, E.C.	<i>East Wheal George</i>	Llanrwst.	—	—	—
The representatives of the late Alexander Cork King, and the mortgagee Edward Bridges. Address: Messrs. Snowball Smith & Co., 5, Crosshall Street, Liverpool.	<i>Glyn</i> - -	Capel Curig.	—	—	—
Goddard's Mining Co., Ltd., E. Beazley, 6 and 7, Coleman Street, London, E.C.	<i>Goddard's</i> -	Llanrwst.	—	—	—
Thomas Evans, Aberllyn, Bettws-y-coed -	Gorlanfarchog -	Llanrwst -	Thomas Evans -	3	—
Hafna Mining and Smelting Co., Llanrwst -	Hafna and Great D'Eresby.	Llanrwst -	H. Wolff -	—	4
Llangelynin Mining Syndicate, R. T. Ellis, Trefriw, R.S.O.	Llangelynin -	Conway -	R. T. Ellis -	3	—
North D'Eresby Mountain Lead Co., Ltd., E. Beazley, 6 and 7, Coleman Street, London, E.C.	<i>North D'Eresby</i> -	Trefriw.	—	—	—
Pantgwyn Mining Company, Abersoch, Pwllheli.	Pantgwyn -	Abersoch, Pwllheli.	John Craze -	56	52
Laura Jones and James Fagan, Bryncoelyn House, Nantlle Vale, Pen-y-groes, R.S.O.	Rhiw -	Rhiw -	James Fagan -	2	1
Standard Lead Mine, Ltd., Llanrwst -	Standard -	Ditto -	W. H. Borlase -	28	20
J. W. Gwynne Hughes, Tregil, Llandilo -	<i>Symddeddulluan</i> (formerly <i>Carnarvon Copper</i>).	Nantlle Vale -	—	—	1
Tan-y-bwlch and Bwlch-y-toeyn Mining Co., Ltd., Abersoch, near Pwllheli.	Tan-y-bwlch -	Abersoch, near Pwllheli.	Geo. F. Pearson -	4	3
Vale of Conway Lead Mining Co., Ltd., 2, Lancaster Place, London, W.C., and Griffith Williams, Slate Quarries Quay, Carnarvon.	<i>Vale of Conway</i> -	Trewydyr.	—	—	—
Peter Jones, 1, Marine Terrace, Portmadoc -	<i>West Port Nigel</i> -	Aberdaron	—	—	—
Totals - -				203	129

DENBIGHSHIRE.

Mold District Lead Co., Ltd., c/o E. J. Bartlett, 70 and 71, Bishopsgate Street, London, E.C.	<i>Aberduna</i> - -	Mold.	—	—	—
T. A. Craig, 139, St. Vincent Street, Glasgow	<i>Belgrave</i> - -	Erryrys, Llanarmon-in-Yale.	Evan Roberts.	—	—
J. P. Davies, Flint - - - -	<i>Bryn Nant Llech</i>	Llanannan -	Thos. Williams.	—	—
J. A. Ede, Laburnum Villa, Erryrys, Mold -	Brynymwyn -	Llanarmon-in-Yale	J. A. Ede -	2	—
Cefn-y-gist Mining Company, Minera, Wrexham.	<i>Cefn-y-gist</i> -	Minera -	Sampson Michell.	—	—
Peter Jones, Maesysafn, Mold - -	Cornwallis West -	Ruthir -	Peter Jones -	1	—
John and Richard Roberts and others, J. Roberts, Talern, near Lliidiartfanny, Wrexham.	Craig boeth -	Minera -	John Roberts -	4	—
Creigiog Mining Co., Ltd., 10, Coleman Street, London, E.C.	<i>Creigiog</i> (formerly Bodidris).	Llanarmon-in-Yale	H. Hotchkiss.	—	—
Alfred Jones, Crest View, Denbigh - -	Crest View -	Denbigh -	Alfred Jones -	2	—
Dyffryn Aled Copper Mine Co., Llansannan, Abergelle.	(Stopped Nov. 1886.) Dyffryn Aled -	Llansannan -	Richard Douglas -	2	—
W. Evans and others. Address: W. Evans, New Brighton, Wrexham.	(Stopped Aug. 1886.) Eglwyseg -	Llangollen -	W. Evans -	6	—
Lady Ann Silver Lead Mining Co., Ltd., 13, Clegg Street, Oldham, and Wm. Francis, 99, Edge Lane, Liverpool.	(Stopped Oct. 1886.) <i>Lady Ann</i> - -	Near Llanarmon -	William Francis.	—	—
John Morris Foulkes and Edward Evans, Church Street, Coedpoeth, Wrexham.	Llewelyn -	Minera -	J. M. Foulkes -	4	—
Minera Mining Co., Ltd., Minera, near Wrexham.	Minera -	Minera, near Wrexham.	Josiah Ball -	232	277
Minera Mountain Lead Mining Co., Ltd., S. Michell, Minera, Wrexham.	Minera Mountain Mines.	Minera Mountain -	Sampson Michell.	34	27
Minera Consols Co., Ltd., S. P. Gilbert, Devonshire Chambers, Bishopsgate Street, London, E.C.	<i>Minera Consols</i> (includes West Minera).	Minera.	—	—	—
Edwin Wood, Lacey Street, Widnes -	<i>Nant Uchaf</i> -	Abergelle.	—	—	—
Nant-y-plwm Lead Mining Co., c/o R. Douglas Llansannan, Abergelle.	Nant-y-plwm -	Llansannan -	Richard Douglas -	2	—
	(Started Sept. 1886.)				

LIST of OWNERS, MINES, and AGENTS, under the METALLIFEROUS MINES REGULATION ACTS, in NORTH WALES, Part of SOUTH WALES, SHROPSHIRE, and the ISLE OF MAN—*cont.*

Owner or Company, and Postal Address.	Name of Mine. <i>Italics denote Mines suspended during the whole of 1886, but not abandoned.</i>	Situation.	Agent.	Persons ordinarily employed during the year 1886.	
				Below Ground.	Above Ground.
DENBIGHSHIRE— <i>cont.</i>					
George Dawes, The Hall, Smethwick, Birmingham.	Pant Du and Waen-las.	Parish of Llanferres	Rupert Prince	3	1
Pant Glas Mine Co.; W. Francis, 48, Windsor Road, The Brook, Liverpool, and Erryrys, Mold.	Pant Glas	Llanarmon-in-Yale	William Francis	2	—
E. Wheldon and H. Ll. Jones, Hill Grove, Mold.	Pant-y-gwlanod - (Abandoned in 1886.)	" " "	—	4	2
North Wales Iron Ore Co., W. A. Hills, Anglesey Copper Works, Low Walker, Newcastle-on-Tyne.	Ty'n y Caeau	Abergele	W. A. Hills.	—	—
Thomas Williams, Gegin Old Road, Minera, Wrexham.	True Blue	Minera	Thomas Williams	3	1
Tynyddol Mining Co. Address: R. Douglas, Llansannan, Abergele.	Tynyddol - (Stopped July 1886.)	Llanfairtalhaiarn	R. Douglas	3	—
C. J. Gibbons, Plas Maelor, Wrexham	Union and Boundary.	Minera, near Wrexham.	C. J. Gibbons	2	—
Westminster Mining Co., Llanarmon, near Mold.	Westminster - (Started in 1886.)	Llanarmon	Evan Roberts	6	—
John L. M. Fraser, Rhosddu, Wrexham	Westminster Bog	Llanarmon, Mold	J. L. M. Fraser.	—	—
			Total	312	308

FLINTSHIRE.

Thomas Gee, Denbigh	Bodfari	Bodfari.	—	—	—
Rupert Prince and others, Mold	Bryn-hyfyd	Mold	Rupert Prince	2	—
T. Hughes and partners, 3, Gladstone Buildings, Rhyl.	Clwt-y-Militia	Brynford, Holywell	Robert Evans	4	—
Coitia Mawr Lead Mining Co.; John Lloyd, Antelope Inn, Rhydymwyn, Mold.	Coitia Mawr	Gwernaffield, Mold	John Lloyd.	—	—
Robert Evans, and Thomas Hughes, 1, Vale Road, Rhyl.	Coppa'r Fran	Holywell	G. Harrison	2	—
East Long Rake Lead Mining Co., Ltd., Granite Buildings, 6, Stanley Street, Liverpool.	East Long Rake	Rhes-y-Cae, Halkyn, Holywell.	—	—	—
John Edwards and Co., Wern Gaer, Rhosesmor, near Halkyn.	Ffagnallt	Halkyn	John Edwards	4	—
J. B. Payne, 28, Brazennose Street, Manchester.	Flintshire Lead	Mold	Thomas Miners.	—	—
John Clay, Rhuddlan, near Rhyl	Foel Hiraddug	Cwm, near Rhyl	M. A. Gage	6	—
Fron Hall United Mining Co., Ltd., J. E. Edwards, Town Hall, Chester.	Fron Hall United	Gwernymynydd, Mold.	John Mansbridge	3	—
Rev. D. Jones, Brynford Rectory, Holywell	Gladstone	Brynford, Holywell.	—	—	—
Golden Grove Mine Co., Ltd., Gwaenysgor, Rhyl. W. C. Bew, Venice Chambers, 61, Lord Street, Liverpool.	Golden Grove	Gwaenysgor	—	—	—
Gorsedd and Sinclair United Mines, Ltd., 7, Queen Victoria Street, London, E.C.	Gorsedd and Sinclair.	Gorsedd, near Holywell.	W. T. Harris	14	2
Holywell Lime and Cement Co., Ltd., Holywell.	Grange	Holywell	Robert Peek	6	—
Great Holway Lead Mining Co., Ltd., 10, Coleman Street, London, E.C.	Great Holway	Holway, near Holywell.	W. T. Harris	69	24
Grosvenor Lead Mining Co., Ltd., 9 and 10, Cambridge Chambers, Lord Street, Liverpool.	Grosvenor	Halkyn, near Holywell.	—	—	—
Gwaenysgor Mining Co., Ltd., W. C. Bew, Venice Chambers, 61, Lord Street, Liverpool.	Gwaenysgor	Gwaenysgor	—	—	—
Gwern-y-mynydd Mining Co., Ltd., Mold	Gwern-y-mynydd	Mold	Benjamin Williams	25	11
Halkyn Mining Co., Ltd., Halkyn, Holywell	Halkyn	Holywell	Matthew Francis	68	47
Halkyn District Mines Drainage Co., Halkyn, Holywell.	Halkyn Drainage Works.	Halkyn	F. S. Williams	1	—
Holywell District Lead Co., Ltd., Ethelburga House, Bishopsgate Street, London, E.C.	Holywell District (formerly West Holway).	Holywell	W. T. Harris	10	3
Samuel Davis and others, Bagillt	Hopeful	Holywell	Thomas Pierce	2	—
Hope Mountain Silver Lead Mining Co., Ltd. Address: G. Francis, Greenfields, Rhosddu, Wrexham.	Hope Mountain	Pfrith, near Wrexham.	George Francis.	—	—
Machno Mine Co.; Abel Jones and Co., Brynford, near Holywell.	Machno	Grange Common, Holywell.	Abel Jones	2	—

LIST of OWNERS, MINES, and AGENTS, under the METALLIFEROUS MINES REGULATION ACT, in
NORTH WALES, Part of SOUTH WALES, SHROPSHIRE, and the ISLE OF MAN—*cont.*

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FLINTSHIRE— <i>cont.</i>					
James Goddard and Co., Pant-y-go, Halkyn, Holywell.	Moel-y-erio -	Halkyn -	James Goddard -	3	—
Holywell Lime and Cement Co., Ltd., Holywell.	Nant -	Holywell -	Robert Peek -	4	—
Evan Roberts & Co., Belgrave Mine, Llanarmon, Mold.	<i>New East Pant Du</i> (formerly East Pant Du).	Nerquis -	Evan Roberts.	—	—
Edward and Robert Jones, Holway, Holywell	New Pant-y-Ne -	Holway, Holywell	E. M. Evans -	2	—
North Henblas Mine Co., Ltd., Mortgagees of Messrs. Laces & Co., Union Court, Liverpool.	<i>North Henblas</i> -	Milwr, Holywell -	W. J. Bew.	—	—
North Hendre Lead Mining Co., Ltd., T. J. Powell, Secretary, 14, Newgate Street, Chester.	North Hendre -	Near Mold -	Goodman Ellis -	38	3
John N. Brown, Anglesey House, Handsworth, Birmingham.	North Pant-y-go -	Halkyn -	William Wasley -	7	4
A. Champ and T. Pierce, Pantasaph, Holywell	North Pant-y-Ne -	Holywell -	T. Pierce -	2	—
Pant-y-Buarth and Coed-y-fedw Lead Mines Co., Ltd., Ethelburga House, Bishopsgate Street, London, E.C.	Pant-y-Buarth -	Gwernaffield, near Mold.	Rupert Prince -	5	1
Pant-y-Mwyn Lead Mining Co., Ltd., 41, Ormond Street, Liverpool.	<i>Pant-y-Mwyn</i> -	Near Mold.	—	—	—
John N. Brown, Anglesey House, Handsworth, Birmingham.	Pant-y-Pydw -	Holywell -	Llewelyn Jones -	20	5
Pant-y-Rhes and Pen-y-bryn Mining Co., Ernest A. Craft, Secretary, Halkyn, Holywell.	Pant-y-Rhes and Pen-y-bryn.	Halkyn -	John Lloyd -	2	—
S. Williamson, S. S. Williamson, O. J. Williamson, and others, Parry's Mine, Halkyn, Holywell.	Parry's Mine	Halkyn, Holywell	Jos. Hodgkinson -	2	—
John Phillips and Co., Pen-y-Ball, Holywell -	<i>Pictou</i> -	Pen-y-Ball, Holywell.	—	—	—
Plas-y-n-Rhos Mining Co., J. H. Lewis, Central Buildings, North John Street, Liverpool.	<i>Plas-y-n-Rhos</i> -	Rhosesmor.	—	—	—
Pwll Gwyn Llan Mining Co., E. Astbury, Secretary, Grosvenor Cottage, Northop.	Pwll Gwyn Llan -	Ditto -	Edward Williams -	2	—
Rhosesmor Mining Co., Wakefield and Enoch, Secretaries, 16, Corn Exchange Chambers, Chester.	Rhosesmor -	Halkyn, Holywell	Thomas Parry	46	12
Rhydalun Mining Co., Ltd., in liquidation, J. E. Edwards, liquidator, 29, Eastgate Row North, Chester.	<i>Rhydalun</i> -	Rhydymwyn, near Mold.	Matthew Francis.	—	—
Joseph Edwards, and others, Red Houses, Holywell.	<i>Saithaelwyd</i> -	Holywell.	—	—	—
Cooper and Harding, Sir Edward Mine, Holywell.	Sir Edward -	Holywell -	Joseph Eastice -	2	2
Owen Evans & Co., 14, Dinorwic Street, Carnarvon.	<i>South Pwll Gwyn Llan.</i>	Halkyn -	Owen Evans -	—	—
Speedwell and Grange Lead Mining Co., James Hughes and others, Star Inn, Holywell.	Speedwell and Grange.	Holywell -	James Parry -	2	—
Messrs. Bowers, Ffoulkes, and others, c/o T. J. Powell, 14, Newgate Street, Chester.	Talacre -	Gronant -	Henry Ellis -	70	26
Edward Pierce, Trelogan Hall, Llanasa, Holywell.	Trelogan -	Llanasa -	Edward Pierce -	4	—
Ucha United Mines, Ltd., Gwern-y-mynydd, Mold.	Ucha United -	Gwern-y-mynydd, Mold.	Luther Martin -	2	—
Victor Lead Mining Co., Ltd., Thomas Hughes, Secretary, 9 and 10, Cambridge Chambers, Lord Street, Liverpool.	Victor -	Rhydymwyn, near Mold.	T. Hughes -	4	3
Vron Lead Mining Co., Ltd., c/o Messrs. Lindsay and Co., 84, Basinghall Street, London, E.C.	Vron - (Abandoned 1885)	Hendre, Mold -	-	—	1
Henry Jones, Bryn-y-berthen, Ysceifiog, Holywell.	<i>Wagstaff</i> -	Halkyn -	Henry Jones -	—	—
Westminster Consols, Limited, W. Grant, Secretary, 23, Queen Anne's Gate, Westminster, London, S.W.	<i>Westminster Consols</i>	Holywell -	Cowell Hilden.	—	—
West Halkyn Mining Co., Halkyn, Holywell -	West Halkyn -	Halkyn -	E. L. Owen -	—	12
West Trelogan Mine Co. Address: Robert Evans, 1, Vale Road, Rhyl.	West Trelogan -	Llanasa -	Robert Evans -	12	7
Robert Griffiths & Co., Gwernaffield, Mold -	White Sand -	Gwernaffield, Mold	Robert Griffiths -	3	—
Totals				450	163

LIST OF OWNERS, MINES, and AGENTS, under the METALLIFEROUS MINES REGULATION ACT, in NORTH WALES, Part of SOUTH WALES, SHROPSHIRE, and the ISLE OF MAN—*cont.*

Owner or Company, and Postal Address.	Name of Mine.		Situation.	Agent.	Persons ordinarily employed during the year 1886.			
	<i>Italics denote Mines suspended during the whole of 1886, but not abandoned.</i>				Below Ground.	Above Ground.		
MERIONETHSHIRE.								
Dyffryn Mining Co., Llanbedr, R.S.O.	-	Artro	-	Llanbedr	-	H. S. Lancaster	24	9
John Abraham, Northfield, Birmingham	-	Barmouth	-	Barmouth	-	John Abraham	—	4
British Silver Lead Mining Co., Ltd, J. L. M. Fraser, St. James Terrace, Rhosddu, Wrexham.	-	<i>British Silver Lead Mine.</i>	-	Blaenau Festiniog	-	J. L. M. Fraser.	—	—
Clogau Mining Company, Ltd., Bont-ddu, Dolgelly.	-	<i>Clogau</i>	-	Near Bont-ddu, Dolgelly.	-	W. A. De la Beche, Ramsay.	—	—
Merionethshire Mining Co., Llanbedr, R.S.O.	-	Crafnant	-	Llanbedr	-	Edward Stables	7	2
Henry Maudslay, c/o Messrs. Barnard & Co., 47, Lincoln's Inn Fields, London, W.C.	-	<i>Crib ddu</i>	-	Beddgelert.	-	—	—	—
Merionethshire Mining Co., Llanbedr, R.S.O.	-	Cwm Mynach	-	2 miles N. of Penmaenpool.	-	Edward Stables	36	9
Dyffryn Mining Co., Llanbedr, R.S.O.	-	Diphwys	-	Near Diphwys Mountain.	-	H. S. Lancaster	5	17
New Glasdir Mining Co., Ltd., c/o R. Smith, 4, New Broad Street, London, E.C.	-	<i>Glasdir</i>	-	Llanfachreth, near Dolgelly.	-	-	—	—
Merionethshire Mining Co., Llanbedr, R.S.O.	-	Graigucha	-	4 miles E. of Llanbedr.	-	Edward Stables	—	5
B. L. Barrow, Sydnope Hall, Matlock, Derbyshire.	-	Great Manod	-	Manod Mawr, Festiniog.	-	B. L. Barrow	2	—
Mawddach Gold Mining Co., Ltd. (in liquidation), 19, Birchlin Lane, London, E.C.	-	Gwynfynydd	-	Gwynfynydd	-	J. N. Longden	4	—
Dyffryn Mining Co., Llanbedr, R.S.O.	-	Hafotty	-	Barmouth	-	H. S. Lancaster	35	4
John Williams, Madryn, Pwllheli	-	<i>Hafod-y-Spytty</i>	-	Festiniog	-	-	—	—
Dyffryn Mining Co., Llanbedr, Merioneth	-	Harlech	-	Harlech	-	H. S. Lancaster.	28	7
Merionethshire Mining Co., Llanbedr, R.S.O.	-	Lletty Walter	-	Llanbedr	-	Edward Stables	27	6
Dyffryn Mining Co., Llanbedr, Merioneth	-	Moelfre	-	Dyffryn	-	H. S. Lancaster	21	3
Merionethshire Mining Co., Llanbedr, R.S.O.	-	Mynydd Llanbedr	-	3 miles E. of Llanbedr.	-	Edward Stables	11	5
H. Hands, 32, Wimpole Street, London, W.	-	Mynydd Nodol	-	Bala	-	Edward Halse	12	23
Merionethshire Mining Co., Llanbedr, R.S.O.	-	Penisarcwm	-	2 miles E.S.E. of Llanbedr.	-	Edward Stables	—	6
Henry Maudslay, c/o Messrs. Barnard & Co., 47, Lincoln's Inn Fields, London, W.C.	-	<i>Sygun</i>	-	Beddgelert	-	Charles Kneebone	—	1
Totals							212	101

MONTGOMERYSHIRE.

F. C. Hills & Co., Deptford, London, S.E.	<i>Berwyn Phosphorite</i>	Near Llangynog.	—	—	—
Caelan, Cefn Gwyn, and Potosi United Mining Co., Limited, Ynysfaig House, via Dolgelly, and J. B. Masfield, Secretary, Ledbury, Herefordshire.	Caelan	Pennant, Llanbrynmair.	John Hughes	4	—
J. Hughes Jones and Griffith W. Griffiths, Machynlleth.	<i>Cwmbyr</i>	Penegoes, Machynlleth.	G. W. Griffiths	—	—
Cwmorog Silver Lead Mining Co., Ltd., 114, Colmore Street, Birmingham.	<i>Cwmorog</i>	Llangynog	A. E. Wenham.	—	—
Frederick Last and Sons, Albert Buildings, 49, Queen Victoria Street, London, E.C.	<i>Cyfartha</i>	Penegoes	Frank Kitto	—	—
Blaentwymyn Mining Syndicate, Ltd., 20, Moorgate Street, London, E.C.	Dyiffe	Llanbrynmair	Evan Evans	2	4
John Kitto and others, Llanidloes	<i>Geifron and Gwestyn.</i>	Near Llanidloes	J. Kitto.	—	—
W. Lefaux and Co., Llanidloes	<i>Glanweden</i>	Ditto	W. J. Lefaux.	—	—
Sir John Conroy, Bart., Keble College, Oxford.	Llanerchyrour	Llanbrynmair	Thomas Owen.	2	—
Cliff Dale Barytes Co., Pontesbury, Salop	Middletown Hill	Middletown	W. Boustred	3	1
W. Lefaux and Co., Llanidloes	Nantiago	Plynlimmon Mountain.	W. Lefaux	4	—
New Llangynog Lead Mining Co., Ltd. (in liquidation), Engineer's Office, Ruabon.	<i>New Llangynog</i>	Llangynog, near Oswestry.	Henry Dennis.	—	—
Penclyn Mining Co., 14, Newgate Street, Chester.	Penclyn	Llanidloes	Leigh Howell	5	1
Snowbrook Silver Lead Mining Co., Ltd., F. E. Briggs, Secretary, 23, Royal Exchange Chambers, Leeds.	<i>Snowbrook</i>	Parish of Llangurig	R. B. Edwards.	—	—
Sir John Conroy, Bart., Keble College, Oxford	Ty issa (formerly Cae Conroy).	Llanbrynmair	Thomas Owen	2	—
Van Mining Co., Limited, 95, Dashwood House, New Broad Street, London, E.C., and Llanidloes.	Van	Llanidloes	W. H. Williams	69	73
New Van Consols and Glyn Mining Co., Limited. Address: James Cooper, 3, Coleman Street Buildings, London, E.C.	Van Consols and Glyn.	Bryntail, Llanidloes	—	—	2

LIST of OWNERS, MINES, and AGENTS, under the METALLIFEROUS MINES REGULATION ACT, in NORTH WALES, Part of SOUTH WALES, SHROPSHIRE, and the ISLE OF MAN—*cont.*

Owner or Company, and Postal Address.	Name of Mine. <i>Italics denote Mines suspended during the whole of 1886, but not abandoned.</i>	Situation.	Agent.	Persons ordinarily employed during the year 1886.	
				Below Ground.	Above Ground.

MONTGOMERYSHIRE— <i>cont.</i>					
Cliff Dale Barytes Co., Pontesbury, Salop	Weston	Chirbury	W. R. Croft	4	—
West Wye Valley Mining Co., Ltd., Llanidloes.	West Wye Valley	Pantmawr	J. Kitto and Son.	—	—
Wye Mining Co., Ltd., Llanidloes	Wye (formerly Wye Valley).	Llangurig	J. Kitto and Son.	—	—
			Totals	95	81

RADNORSHIRE.					
Thomas Meredith, Dryscot, Rhayader, Radnorshire.	Dryscot	St. Harmon	Thomas Meredith	2	—

SHROPSHIRE.					
Tankerville Great Consols Co., Ltd., Minsterley, and 8, Austin Friars, London, E.C.	<i>Bog Mine</i>	Minsterley	Arthur Waters and Son.	—	—
Bulthy Mine Lead and Barytes Works Co., Middletown, Welsbpool.	Bulthy	Middletown	Edgar O. Ferguson	4	11
R. and C. Gill, 13, Rumford Street, Liverpool	Crickheath (Abandoned June 1886.)	Pant	Joseph Henderson	6	3
East Roman Gravels Mining Company, Ltd., in liquidation, Wm. Edwards, Liquidator, Griffin Works, Wolverhampton.	East Roman Gravels	Worthen	Arthur Waters and Son.	5	1
W. Boustred and G. Young, Pontesbury, Salop.	East Wotherton	Near Chirbury	Wm. Boustred	10	1
North Tankerville Mining Co., James Yelland, Pontesbury.	North Tankerville	Worthen	James Yelland	3	3
Tankerville Great Consols Co., Ltd., Minsterley, and 8, Austin Friars, London, E.C.	<i>Pennerley</i>	Minsterley	Arthur Waters and Son.	—	—
S. M. Ridge, South Roman Gravels Mine, Minsterley.	Perkins Beach	Worthen	S. M. Ridge	5	1
Roman Gravels Mining Co., Ltd., 30, Finsbury Circus, London, E.C.	Roman Gravels	Minsterley	Arthur Waters and Son.	124	58
James Yelland and William Boustred, Pontesbury.	<i>Roman Gravels Boundary.</i>	Ditto	—	—	—
Snailbeach Lead Mining Co., Ltd., Minsterley, Shrewsbury.	Snailbeach	Minsterley	Henry Dennis	89	61
South Roman Gravels Mining Co., Ltd., 22, Royal Exchange, Leeds.	South Roman Gravels (including Ladywell.)	Ditto	S. M. Ridge	13	1
Steeraway Lime Co., Wellington	Steeraway	Wellington	John O. Owen	16	4
Tankerville Great Consols Co., Ltd., Minsterley, Salop, and 8, Austin Friars, London, E.C.	<i>Tankerville</i>	Worthen	Arthur Waters and Son.	—	—
Wotherton Barytes and Lead Mining Co., Limited, 71, Tower Buildings, Liverpool.	Wotherton	Chirbury	Wm. Vincent	12	22
			Totals	287	166

ISLE OF MAN.					
Bell Abbey and Falcon Cliff Mines Co., Ltd., W. C. Bew, Sec., Venice Chambers, 61, Lord Street, Liverpool.	<i>Bell Abbey and Falcon Cliff.</i>	Rushen.	—	—	—
Central Foxdale Silver Lead Mining Co., Ltd., Thomas Hughes, Secretary, 10, Cambridge Chambers, Lord Street, Liverpool.	Central Foxdale	Marown	John Gendle	58	33
Isle of Man Mining Co., Ltd., Foxdale, near Douglas.	Foxdale	Foxdale	Wm. Kitto	233	193
John Beckwith, 9, Liver Chambers, Liverpool.	Garth	Marown	W. H. Kitto	2	—
Ditto	<i>Glen Darragh</i>	Marown.	—	—	—
Great Laxey Mining Co., Ltd., Laxey	Great Laxey	Laxey Glen	F. Reddcliffe	275	205
Derbyhaven Trial Co. (in liquidation), W. Todhunter, Douglas.	<i>Langness</i>	Castletown.	—	—	—
North Laxey Mining Co., Ltd., 26, Athol Street, Douglas.	<i>North Laxey</i>	Maughold	—	—	—
W. J. Pittar & Co. Rushen Mine, Colby	Rushen	Colby	R. Barkell	8	5
Snafell Mining Co., Ltd., W. E. Young, Secretary, Athol Street, Douglas.	Snafell	Lonan	J. Kewley	20	20
			Totals	596	456

LIST of OWNERS, MINES, and AGENTS, under the METALLIFEROUS MINES REGULATION ACT, in NORTH WALES, Part of SOUTH WALES, SHROPSHIRE, and the ISLE OF MAN—*cont.*

Owner or Company, and Postal Address.	Name of Mine. <i>Italics denote Mines suspended during the whole of 1886, but not abandoned.</i>	Situation.	Agent.	Persons ordinarily employed during the year 1886.	
				Below Ground.	Above Ground.
SLATE MINES.					
CARNARVONSHIRE.					
Bugail Slate Co., Ltd., Portmadoc	Bugail	Parish of Penmachno.	Owen Williams	18	35
O. C. Hughes, Trefriw, R.S.O.	Clogwyn	Trefriw	O. C. Hughes	5	5
Prince Llewelyn Slate Co., 36, Chapel Street, Liverpool.	Prince Llewelyn	Dolwyddelen	Daniel Williams	4	5
Prince of Wales Slate Co., Ltd., St. Clement's House, Clement's Lane, London, E.C.	Prince of Wales	Rhyd-ddu	Geo. J. Gray	5	8
Festiniog Slate Co., Ltd., Deganway, Conway.	Rhiwbach (Old and New).	Rhiwbach, Penmachno.	Jas. G. Tuxford	17	120
			Totals	49	173
DENBIGHSHIRE.					
Thomas Ford, Hallfield, Alfreton	Craig-yr-oryn	Glyn Ceiriog, Llangollen.	T. L. Phillips	1	1
Maengwynedd Slate and Slab Co., Llanrhaidr, Oswestry.	Maengwynedd	Llanrhaidr	Wm. Thos. Owen	2	—
Pantglas Slate and Slab Quarry Co., Ltd., Llangollen.	Pantglas Middle-vein.	Eglwyseg Llangollen.	F. E. Rooper	4	—
				7	1
MERIONETHSHIRE.					
Abercorris Slate and Slab Co., Ltd., Corris, Machynlleth.	Abercorris	Corris	J. W. Orchard	16	21
R. D. Pryce, Cyfronydd, near Welshpool	Aberllefenny	Aberllefenny, near Corris.	David Jones	72	68
John Jones, Tyisafyrhos, Groeslon, R.S.O., Carnarvon.	Braich Ddu	Maentwrog and Trawsfynydd.	—	—	—
Braichgoch Slate Quarry Co., Ltd., Corris, R.S.O.	Braichgoch (including Gaeuwn).	Corris	Edwd. Williams	135	122
W. McConnel, Towyn, R.S.O.	Bryneglwys and Cantrybedd.	Llanfihangel-y-Pennant.	Meyrick Roberts	144	131
Bwlch-y-Slater Slate Quarry Co., 36, Eastgate Street, Chester.	Bwlch-y-Slater	Festiniog	F. F. Brown	22	19
Carlyle Slate and Slab Co., Ltd., Dinas Mawddwy.	Carlyle	Dinas Mawddwy	W. H. Bullock	15	11
New Conglog Slate and Slab Co., Ltd., 20, Princess Square, Plymouth.	Conglog	Tan-y-grisiau, Blaenau Festiniog.	John K. Rowe	6	5
Samuel Pope—Address: Thomas Williams, Bryn Croesor, Penrhyn-deudraeth.	Croesor	Cwm Croesor, Parish of Llanfrothen.	Thos. Williams	—	—
Wm. Boggett, 97, Cheyne Walk, Chelsea	Crown	Penrhyn-gwyn, Dolgelly.	—	3	2
Cwmorthin Slate Co., Ltd., Tan-y-grisiau, Blaenau Festiniog.	Cwmorthin	Tan-y-grisiau, Festiniog.	Andreas Roberts	223	205
Lewis H. Evans, 33, Walbrook, London, E.C.	Cyfanedd	Arthog	L. H. Evans	8	—
H. N. Hughes, Harvey Buildings, 24, James Street, Liverpool.	Cymerau	Corris	Evan Griffith	18	9
Diphwys Casson Slate Co., Ltd., Blaenau Festiniog.	Diphwys Casson	Blaenau Festiniog	E. P. Jones	67	151
Fronboeth and Pantmawr Slate and Slab Quarry Co., Ltd., Eifion House, Portmadoc.	Fronboeth and Pantmawr.	Moelwyn	D. J. Davis	18	4
G. A. Walker and Co., Henddol Quarry, Ynysfaig, via Dolgelly.	Henddol	Dolgelly	W. C. Logan	23	19
John W. Greaves and Sons, Blaenau Festiniog.	Llechwedd	Blaenau Festiniog	Evan Thomas	178	230
Maen Offeren Slate Quarry Co., Ltd., 4, East India Avenue, London, E.C.	Maen Offeren	Ditto	William Owen	158	140
Moelferna and Dee Side Slate and Slab Co., Limited, Glyndyfrdwy, Llangollen.	Moelferna	Glyndyfrdwy	Richard Roberts	21	25
Robert Evans, 28, Bridge Street, Birkenhead	Moelwyn	Tan-y-grisiau, Festiniog.	—	—	—
The Oakeley Slate Quarries Co., Ltd., 3, Old Palace Yard, Westminster Abbey, London, S.W.	Oakeley Middle Quarry.	Blaenau Festiniog	A. M. Dunlop	163	139
Ditto	Oakeley Upper Quarry.	Ditto	Ditto	186	197
Welsh Slate Co., J. R. Reguelli, Secretary, 8, Adelphi Terrace, London, W.C.	Palmerston	Ditto	Robert Owen	308	362
James Staveley, c/o Geo. Curwen, Fentonville, Ashton-on-Ribble, Preston.	Park	Llanfrothen	Wm. Kellow	4	13

REPORTS OF INSPECTORS OF MINES.

LIST of OWNERS, MINES, and AGENTS, under the METALLIFEROUS MINES REGULATION ACT, in NORTH WALES, Part of SOUTH WALES, SHROPSHIRE, and the ISLE of MAN—*cont.*

Owner or Company, and Postal Address.	Name of Mine. <i>Italics denote Mines suspended during the whole of 1886, but not abandoned.</i>	Situation.	Agent.	Persons ordinarily employed during the year 1886.	
				Below Ground.	Above Ground.
MERIONETHSHIRE— <i>cont.</i>					
The Representatives of the late J. Parry Jones and E. H. Phillips, Denbigh & Corwen.	Penarth - -	Corwen - -	T. S. Phillips -	9	18
H. N. Hughes, Harvey Buildings, 24, James Street, Liverpool.	Ratgoed - -	Corris - -	Evan Griffith -	8	6
New Rhosydd Slate and Slab Co., Ltd., Tan-y-grisiau.	Rhosydd - -	Tan-y-grisiau, Festiniog.	W. W. Morris -	101	97
Voelgron Slate Quarry Co., : Address O. R. Owen, Bowydd Buildings, Blaenau Festiniog.	Voelgron - -	East of Festiniog -	O. R. Owen -	—	—
Votty and Bowydd Slate Quarries Co., Ltd., Blaenau Festiniog.	Votty and Bowydd	Blaenau Festiniog	J. Lloyd Jones -	243	147
Wrysgan Slate Quarry Co., Ltd., John Jones, Secretary, Portmadoc, R.S.O.	Wrysgan - -	Tan-y-grisiau, Festiniog.	Robert Roberts -	53	46
			Totals -	2,202	2,187

MONTGOMERYSHIRE.

Rhiwarth Slate and Slab Co., Owen Roberts, Secretary, Llangynog, Oswestry.	Rhiwarth - -	Llangynog - -	O. Roberts -	5	—
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LIST of OWNERS and OPENWORKS in Parts of NORTH and SOUTH WALES, and in the ISLE of MAN.

Owner or Company, and Postal Address.	Name of Openwork. Name of suspended Openworks in <i>Italics.</i>	Situation.	Agent.	Persons ordinarily employed during the Year 1886.
ANGLESEY.				
Amlwch Gas and Chemical Co., T. F. Evans, Amlwch.	Amlwch Chemical Works.	Amlwch - -	T. F. Evans -	30
BRECONSHIRE.				
R. Lewis Lloyd, Cwm Elan, Rhayader, and United University Club, Pall Mall, London.	Dalrhiw - -	Rhayader - -	- - - -	4
CARDIGANSHIRE.				
Cardigan Slate Quarries, Ltd., 107, Cannon Street, London, E.C.	Cardigan - -	Glandovey - -	- - - -	18
CARNARVONSHIRE.				
Alexandra Slate Co., Ltd., Carnarvon - -	Alexandra - -	Moel Tryfan -	John Menzies -	*
Bangor and Carnarvon Welsh Slate Co., Morgan Richards, Bangor.	Bangor and Carnarvon, & West Dorothea.	Nantlle - -	Morgan Richards -	*
John Pearson, Braich Slate and Coedmadog Co., Carnarvon.	Braich - -	Moel Tryfan -	W. B. Jeffrey -	*
G. W. Cooke, Bryn Quarry, Bangor - -	<i>Brynhaed-y-Wern</i> - -	Llanllechid -	G. W. Cooke. -	—
Bryn Mawr Slate Co., Llanberis - -	<i>Bryn Mawr</i> - -	Llanberis - -	Thomas Collier. -	—
Sir Llewelyn Turner, Parkia, Carnarvon -	Brynyfferan - -	Moel Tryfan -	- - - -	*
William Dew, Brynbras Castle, Carnarvon -	Bwlch-y-ddeilor -	Rhyd-ddu - -	- - - -	4
John Jones, Wine Merchant, Carnarvon -	<i>Caergors</i> - -	Beddgelert. -	- - - -	—
J. T. Campbell, 17, Warwick Street, Regent Street, London, W.	<i>Caermeinciau</i> -	Llanberis - -	W. B. Jeffrey. -	—
Capel Curig Slate Co., Ltd., 14, Brown St., Manchester.	Capel Curig - -	Capel Curig -	D. W. Evans -	48
Llanberis Slate Co., Ltd., Carnarvon - -	Cefn Du - -	Llanberis - -	John Menzies -	*
Cŵgwyn Slate Co., Carnarvon - -	Cŵgwyn - -	Nantlle - -	W. H. Carter -	287

LIST of OWNERS, and OPENWORKS in Parts of NORTH and SOUTH WALES, and in the ISLE of MAN—*cont.*

Owner or Company, and Postal Address.	Name of Openwork. Names of suspended Openworks in <i>Italics.</i>	Situation.	Agent.	Persons ordinarily employed during the Year 1886.
CARNARVONSHIRE—<i>cont.</i>				
John Armor Hughes, solicitor, Porthyrur, Carnarvon.	<i>Clogwyn-y-Gwin</i> -	Rhyd-ddu, Carnarvon.	—	—
John Pearson, Braich and Coed Madog Slate Co., Carnarvon.	Coed Madog -	Nantlle -	W. B. Jeffrey -	*
G. and J. Hughes, Cennant, Llanrug -	Cook and Ddol -	Llanberis -	—	28
G. W. Duff Assheton Smith, Dinorwic Quarries, Llanberis.	Dinorwic -	Ditto -	W. W. Vivian -	*
Dorothea Slate Quarry Co., Nantlle, Pen-y-groes, R.S.O.	Dorothea -	Nantlle -	O. T. Owen -	*
Foel Clynog Slate Quarries, Ltd., Pen-y-groes R.S.O., Carnarvonshire, and W. Hooper, Secretary, 2, Bank Buildings, Princes St., London, E.C.	Foel Clynog -	Pen-y-groes -	W. Hooper -	3
Victoria Slate Quarry Co., Ltd., 13, Clegg Street, Oldham.	<i>Gallt-y-fedw</i> - (Stopped May 1885.)	Nantlle.	—	—
John Findlay and others, 24, Grant Street, Glasgow.	<i>Gallt-y-llan</i> -	Llanberis -	Thomas White.	—
Glanrafon Slate Quarry Co., Quay, Carnarvon -	Glanrafon -	Rhyd-ddu -	Edward H. Owen (acting partner).	140
Glynrhonwy Slate Quarry Co., Ltd., Carnarvon -	Glynrhonwy -	Llanberis -	G. C. Broadway -	183
John Horne, Gwernor, Talysarn, Pen-y-groes, R.S.O.	Gwernor -	Nantlle -	—	4
Bettws-y-coed Slab, Slate, and Cistern Quarry Co., Ltd.	Hafodlas -	Bettws-y-coed -	—	15
Wilson & Co., Waenfawr, Carnarvon -	Hafod-y-wern -	Waen Fawr -	—	*
William Jones, Parkia, Carnarvon -	Llwyd-coed -	Llanllyfni -	W. Jones -	4
North Wales Quarrymen's Union Co., 7 Market Co., Carnarvon.	Llyn-y-gader -	Rhyd-ddu -	Rowland Morris -	*
Moel Tryfan Slate and Slab Quarry Co., Ltd., Carnarvon.	Moel Tryfan -	Moel Tryfan -	—	120
John Leigh & Co., 30, Brown Street, Manchester	<i>Nantlle Vale</i> (formerly Tymawr East).	Nantlle.	—	—
New Vronheulog Slate Co., Ltd., Llanllyfni, Pen-y-groes, R.S.O.	New Vronheulog -	Ditto -	—	*
John Williams, 3, Cable Street, Liverpool -	Pantdreiniog -	Bethesda -	Thomas P. Owen -	1
J. G. Cooper, 63, Church Street, Manchester -	Penllyn -	Dolwyddelen -	W. Owen -	30
Penmachno Slate Co., Ltd., 10, South John Street, Liverpool.	Penmachno -	Penmachno -	Alfred Carter -	*
Lord Penrhyn. Address: E. A. Young, Port Penrhyn, Bangor.	Penrhyn -	Bethesda -	E. A. Young -	*
Pen-y-Bryn Slate Co., Ltd., Carnarvon -	Pen-y-Bryn -	Nantlle -	S. W. Davids -	210
Penyrsedd Slate Quarry Co., Ltd., Nantlle -	Penyrsedd -	Ditto -	—	300
Plas-y-nant Slate Quarry Co., Ltd., Bettws Garmon, Carnarvon.	<i>Plas-y-nant</i> -	Bettws Garmon -	David J. Jones.	—
South Dorothea Slate Quarry Co., Quay, Carnarvon.	South Dorothea -	Nantlle -	Griffith Williams -	61
John Robinson, Talysarn Slate Quarries, Nantlle Vale, Carnarvon.	Talysarn and West Tymawr.	Ditto -	John Robinson -	*
Upper Glynrhonwy Slate Co. Address: T. Adams, 16, Cambridge Street, Birmingham.	Upper Glynrhonwy	Llanberis -	T. Adams -	109
Bangor and Carnarvon Welsh Slate Co., Bangor -	Vale -	Nantlle -	Morgan Richards -	*
Vron and Old Braich Welsh Slate Quarries Co., Limited, Carnarvon.	Vron -	Do.	—	96
* Numbers given confidentially				6,838
Total				8,481

DENBIGHSHIRE.

George and F. E. Rooper, Llangollen -	Cambrian -	Glynceiriog -	—	*
Llangollen Slab and Slate Co., Ltd., Llangollen -	Clogie and Foel Faen.	Llangollen -	John Taylor and Sons.	*
Robert Williams, Minera Limestone Quarry, Wrexham.	Minera (calamine pits).	Minera -	R. Williams -	—
Pantglas Slate and Slab Quarry Co., Ltd., Llangollen.	Pantglas -	Eglwyseg, Llangollen.	Price Evans -	18
Ditto -	Wynne -	Glynceiriog, Llangollen.	Price Evans -	27
* Numbers given confidentially				68
Total				113

REPORTS OF INSPECTORS OF MINES.

LIST of OWNERS, and OPENWORKS in Parts of NORTH and SOUTH WALES, and in the ISLE of MAN—cont.

Owner or Company, and Postal Address.	Name of Openwork.		Agent.	Persons ordinarily employed during the Year 1886.
	Names of suspended Openworks in <i>Italics</i> .	Situation.		

FLINTSHIRE.

Talargoch Mining Co., Rhyl (dressing old mine-heaps).	Talargoch	Rhyl	John Lean	37
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MERIONETHSHIRE.

Abercwmiddaw Slate Quarry Co., Ltd., Corris, R.S.O.	Abercwmiddaw	Corris		
John Lang, 7, Crown Gardens, Downhill, Glasgow.	Cefn Cam	Parish of Llan- eltyd.		5
Thomas Miller Whittaker, Eltham Road, London, S.E.	Craig ddu	Blaenau Festiniog	Richard Bowton	130
John Jenkins, Snowdon House, Aberystwith	Cwmebol	Pennal, Machynlleth		15
Robert Williams, 17, Clarke Terrace, Carnarvon	<i>Cwm Teigl</i>	Festiniog		
Moelferna and Dee Side Slate and Slab Co., Ltd., Glyndyfrdwy, Llangollen.	Dee Side	Glyndyfrdwy	Richard Roberts	*
Owen & Mallory, Gartheiniog Slate and Slab Quarry, Aberangell, Cemmaes, R.S.O.	Gartheiniog	Aberangell		16
G. A. Walker & Co., Ynysfaig, via Dolgelly	Goleuwern	Barmouth Junction	W. C. Logan	20
Hendreddu Slate and Slab Co., 2, New Street, Bishopsgate Street Without, London, E.	Hendreddu	Aberangell		33
W. T. Milner, Creek Bridge Wharf, Greenwich, London, S.E.	Llanderfel	Corwen		3
Manod Slate Quarry Co. Address: O. J. Owen, Blaenau Festiniog.	Manod	Blaenau Festiniog		*
George Holcroft, Llanderfel, Corwen	Queen's	Llanderfel		*
T. B. Davies, Plascoch Hotel, Bala	<i>Tyddynllwarch</i>	Llanuwchllyn		
* Numbers given confidentially				91
Total				313

MONTGOMERYSHIRE.

J. Lloyd Jones and Son, Pantperthog, Machynlleth	Llwyngwern	Corris		*
J. Williams, Rhiwgwreiddyn Quarry, Ceinws, R.S.O.	Rhiwgwreiddyn	Do.	J. Williams	*
West Llangynog Quarry Co., Llangynog, Oswestry	West Llangynog	Llangynog		*
* Numbers given confidentially				40
Total				40

ISLE OF MAN.

G. Torrance & Co., Douglas, Isle of Man	Ballasalla Works.	Umtar	Ballasalla	G. Torrance	11
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