The Siabod Hone Quarry, Dolwyddelan.

W.T and A.M. Jones.

October 2014

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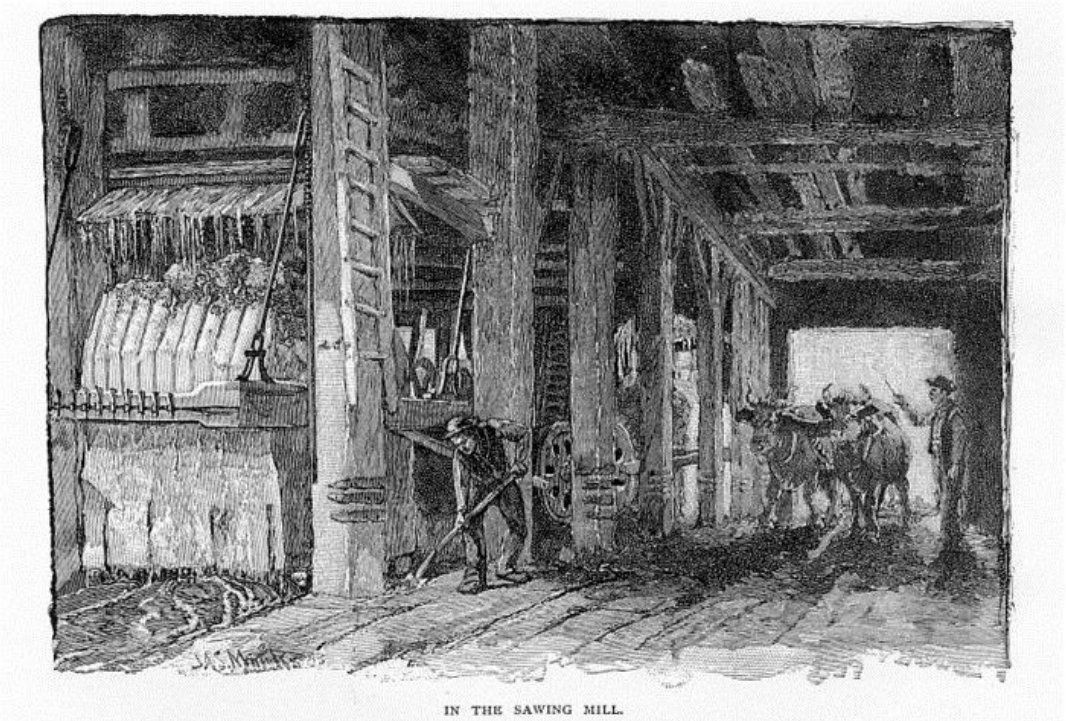
1. INTRODUCTION

The quarry is on Penrhiw land while the mill stands on Bwlch Cynnud land. Situated 275m above sea level, on the southern slopes of Moel Siabod. The grid ref: of the quarry is (SH72255405) and the grid ref; of the mill is (SH 72455425). The Bwlch Cynnud land was planted with conifer trees in the early 1950's by the Forestry Commission. The planting of the trees has been considered to endanger the archaeology of the mill and tramway, this was true regarding the tramway, but the blanket of trees in my opinion sheltered the mill from further damage by the weather. The felling and extraction had been sympathetically carried out around the mill area, with no damage done to the structure, but now it is once again open to the elements, and this was the main reason for acquiring permission to interpret and record the site.

There were three large broad-leafed trees growing inside the mill and because of the damage caused by the roots, and the potential damage of having them felled, it was decided to work around them.

The exercise proved well worth while, in that the only known existing reciprocating sand saw was found still *in situ*. These sand saws were found in most slate quarries from very early on, and the history of stone cutting, probably going back 4500 years. Reciprocating sand saw kerf marks have been found at the pyramids in Cairo.



IN THE SAWING MILL.

This Italian advertising trade card (circa 1900) illustrates the gang saw technology well. The basic swing arm design has not changed since it was first used in the early 1800's.

The sand for the saw and polishing machine was delivered by boat to Trefriw, then up to Capel Curig to the Rhos Quarry and then along a track to Siabod hone quarry **(Map 3).** This track in itself is interesting, because it was there before the hone quarry started. The best sand was flint sand which is extremely hard due to a high percentage of quartz in it.

2. SUMMARY.

The structural remains of the Siabod Hone Quarry consist of a mill, water-wheel pit and some annex buildings built at a later date and attached to the main mill. This report gives a brief chronological history of the Siabod Hone Quarry. An archaeological survey of what remains there and it also contains detailed drawings and photographs.

3. ACKNOWLEDGEMENTS.

I would like to thank Martin Gould (National Resources Wales) for inviting me to participate in the recording and interpreting this unique site, unique, in that it housed the last known slate reciprocating sand saw in existence. My sincere thanks also to the volunteers who worked in hard, sometimes hostile situations (midges), and without any remuneration.
The team were.

Bill Jones.	Site supervisor.	415hrs.
Mary Jones.	Site recorder.	284hrs.
Buddug Pauline.		186hrs.
Avis Reynolds.		156hrs.
John Jones.		150hrs.
Rhys Mwyn.		54hrs.
Andrew Noble.		25hrs.
Robin Cox.		21hrs.
Delwyn Williams.		17hrs.
Jean Cox.		14hrs.

Total man/hours = **1322hrs**. at £6.31 per hr = £8341.82

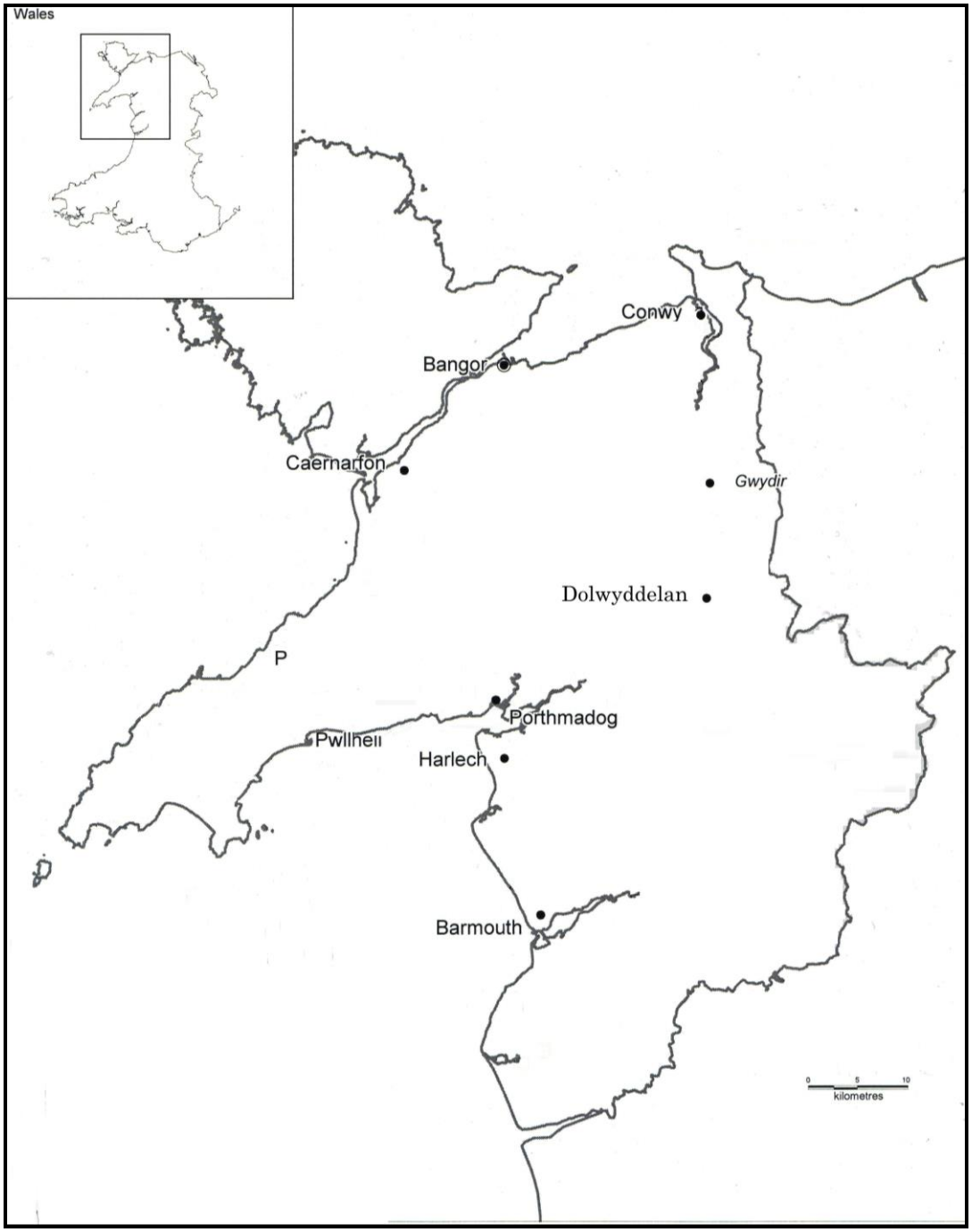
Thanks to Dr I. P. Brooks, Engineering Archaeology Services Ltd, Blaenau Ffestiniog. for his help and advice . Also Hefin Williams, Blaenau Ffestiniog. Steffan ab Owain, Blaenau Ffestiniog. Peredur Hughes National Slate Museum, Llanberis. John Lloyd, Roger Davis, and Gwyn Hughes, Inigo Jones & Co Ltd, Slate works, Groeslon. Dr M J T Lewis, Hull.
Dr Dafydd Gwynn, Penygroes. Elfed P Williams, Blaenau Ffestiniog. Mel Thomas, Blaenau Ffestiniog.

4. LIST OF PHOTOGRAPHS.

the foreground.

Fig 13. Reciprocating sand saw.
Fig 14. The circular metal rim, which remains a mystery.
Fig 15. Excavating the internal water wheel.
Fig 16. Excavated area covered up.
Fig 17. Wooden base for the reciprocating sand saw.
Fig 18. Sacrificial stone, to protect the wooden base.
Fig 19. Removing part of the clapper bridge from the river.
Fig 20. Sanding machine, at Inigo Jones, slateworks.

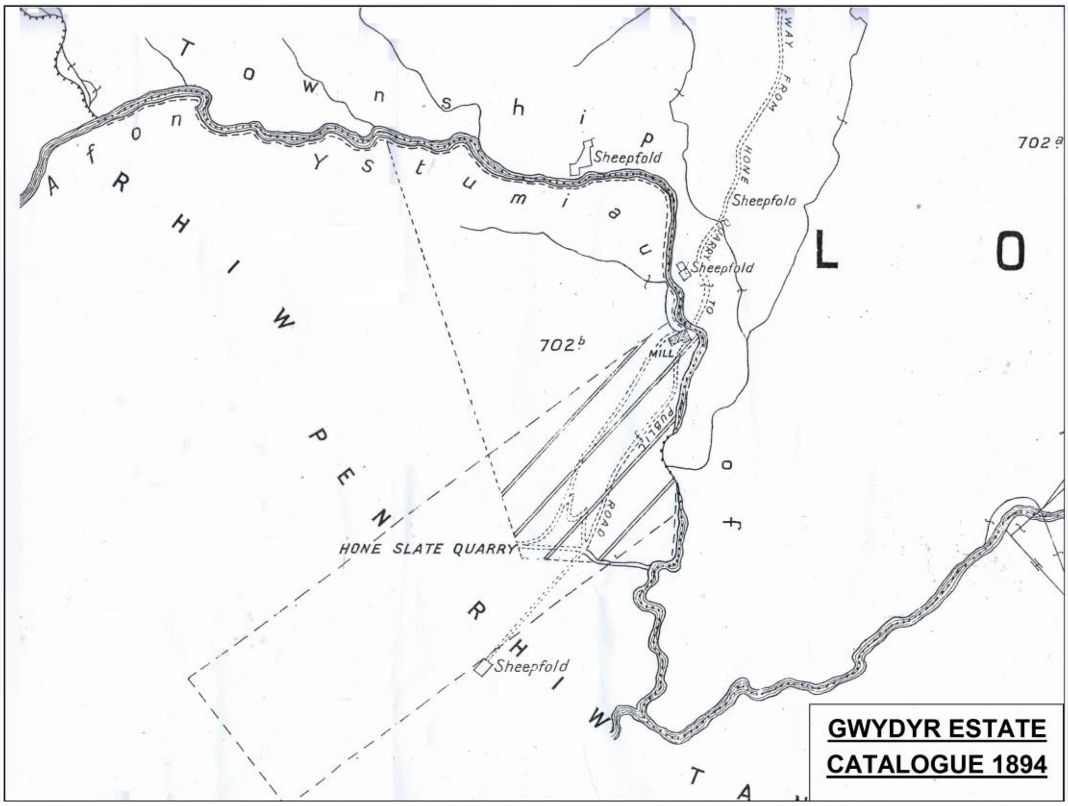
5. LOCATION MAPS.



Map 1.


SIABOD HONE QUARRY MILL
SIABOD HONE QUARRY
Llyn y Foel
Carnedd Moel Siabod
Clogwyn Llwyd
Sarn yr Offeiriad
Beudy Brynbugelyn
Cefn-glas
Afon Ystumiau
Dolwyddelan
Bron-Llewelyn
Bryn-tirion
Castle Dolwyddelan
Tomen Castell
Monument
Minffordd
Pentre-felin
Pentre-bont
Maes-y-Braich
Tan-y-benar
Lloches Angharad
Benar
Clogwyn yr Hicia
Clogwyn Mawr y Ffridd
Pen-y-rhiw
DOLWYDDELAN C
Pont Rufeinig (Roman Bridge Station)
Pont y Coblyn
Gorddinan
Hen-gorddinan
Cancoed
Hafod-Gwenllian
Bertheos
Foel Gynnud
Afon Tanycastell
71
72
73
74
52
53
54

Map 2.


Township of Arhiw Penrhiw
Afon Ystumiau
Sheepfold
Sheepfold
Sheepfold
Sheepfold
WAY FROM HONE QUARRY TO
702 a
702 b
MILL
ROAD
HONE SLATE QUARRY
L O
GWYDYR ESTATE
CATALOGUE 1894

Map 3.

6. SURVEY.

The quarry was variously known as;
CHWAREL HONES.
HONE QUARRY
THE HONE
MOEL SIABOTT QUARRY.
AFON Y FOEL QUARRY.
LLWYN GRAIENIG HONE QUARRY.
PENRHIW QUARRY.

The Siabod Hone Quarry opened in 1845, by a Mr Pike, who in May of that year started a new opening for hone stones. In December of that year he built an engine house (Mill), and the year after the reciprocating sand saw was installed and the first engine was erected, this was a three meter diameter internal waterwheel. Towards the end of 1846 the sawing and polishing of hone stones had started, with an average of five men employed.
The writing was on the wall for the quarry with the mass-production of Silicon carbide powder, also known as carborundum, in 1893 for use as an abrasive.
The quarry carried on sporadically until 1918 when it was abandoned.

The reciprocating sand saw *(Hwrdd)*

There are no slate quarries that have a fireplace in the mill, which I know of. The conditions at Siabod hone quarry was such that a fireplace would have been essential. (**DRG. No. 2**.) The location of the mill and the height above sea level made it a very bleak and cold place to work in, as well as the internal waterwheel, the reciprocating sand saw, and the polisher, all powered by water, this meant that a fire, especially in winter was a necessity.
The ***Natural History*** (Latin: *Naturalis Historia*) is an early encyclopaedia published circa AD 77–79 by Pliny the Elder, in it he gives a portrayal of a reciprocating sand saw mill. In it he states;

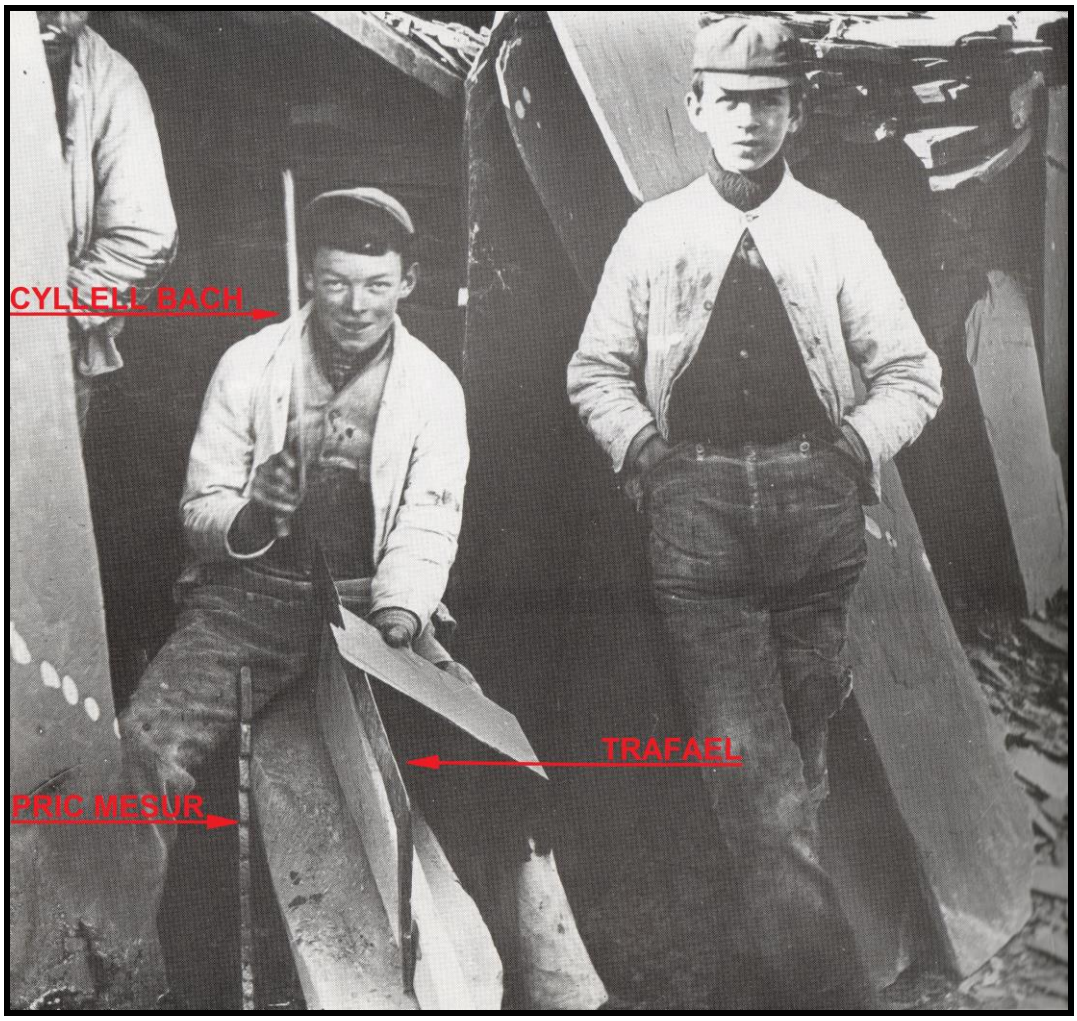
'*The sawing-mill is not a cheerful place. Dampness pervades it, and under the low roof stretch the long, dim vistas, ending in gloom, between the gangs of incessantly swinging saws. The polished, shining engine is shut apart from it, and all is dull and sombre, unrelieved by any touch of colour except as a bar of sunshine slants athwart it from the wide doors, gilding a grimy post or beam, or corner of a dripping, besmirched block of marble, or paving a bit of the earthen floor with gold, or as the red shirt of a workman flashes into the light. The machinery growls and hisses as it gnaws the stone like some monstrous beast in its den over its prey, and hardly another sound is heard apart from the swish of the saws'*

Pliny's observation of a sand saw mill, gives a good idea of conditions that would have prevailed at the Siabod hone quarry.
The reciprocating sand saw is not in fact a saw. All it is, is a metal blade held under tension with no saw teeth, and the sand and water that is fed onto the kerf, it is the sand that cuts, or erodes the stone away.

Slates.

On surveying the collapsed roof in the mill, it was deduced that the slates were of random widths - lengths diminishing in size closer to the ridge. There is evidence that this was a transition period in the evolution of slates, as some of these slates were of the moss slate variety, held in place by one wooden peg, while the others were of similar shape to the moss slate but held in place by an iron nail with lime torching under the slate instead of moss. **(DRG. No. 1.)** The pegged slates were thicker than the nailed ones. The roof was topped with

Buckley ceramic ridge tiles. All the slates were from local quarries, but none were used from the Siabod quarry itself. Though there was evidence that slates were being produced at the mill, no signs were found of a dressing machine, they were most probably made by a *cyllell bach, trafal a pric mesur*, hand trimming tool, iron edge and a measuring stick. See photograph below.



The quarry was on the Gwydir estate until the big sale at the turn of the 20th century

Grimsthorpe Castle: Gwydir Cash Books 1817-67

Penrhiw

1852 Jan	Joseph Pike Hone Quarry on account rent	22.11.10
do	balance of rent to Nov 1851	27. 8. 2
1853 Jan	Joseph Pike wharfage on 25 tons of sand to 30 Nov 1848	4. 2
1852	Pike & Fourdrinier Hone Quarry 1 yr to 30 Nov	10. 0. 0
1858 Apl – 1867	J.C.Fourdrinier (P. and J.C.F. from ½ yr to Nov 1859) rent	10. 0. 0

Gwydir Mines and Quarries Monthly Returns 1838-1978, Grimsthorpe Castle (except 1867-79, CRO XC38/357)

Hone Quarry or simply The Hone (hones always mentioned; named as Afon y Foel May-Jun 1845, Moel Shabott Jul-Aug 1845, Llwyn Graienig Sep 1845 - 1853, Penrhiw 1858 - end). No make ever given.

SPH = Sawing and polishing hones.

1845	Mr Pike	May-Dec only		
		May, new opening for hones		
		Nov, building engine house		
		Dec, building sheds	2-6	4
1846	do	Mar, erecting engine		
		Apl, erecting machinery		
		May, erecting a machine		
		Sep-Dec, SPH	2-6	5
1847	do	Jan-Mar, Jun-Dec only		
		Jan-Mar, Jun-Nov, SPH	0-12	7
1848	do	Jan, Apl-Jun, Sep-Dec, SPH	5-6	6
1849	do	Jan-Apl, Aug-Dec only		
		Feb-Apl, Aug-Nov, SPH	0-3	1
1850	do	Jan, Apl-Jun only		
		Apl-Jun, SPH	0-3	1
1851	do	Dec only	0-6	0
1852	do	Jan-Nov only, SPH	0-17	11
1853	do	Feb only, SPH	0-2	1
1854-7	not mentioned			
1858	John Cole Fourdrinier	Oct-Dec only	0-7	7
1859	do	Jan-Sep, Nov-Dec only		
		Jan, landslip shut the quarry		
		May, repairing the Bankment of the lake		
		Dec, working occasionally	0-7	5
1860	do	Jan-Nov only		
		Jan, working occasionally		
		May, opening for new deep		
		Nov, very little demand on hones	0-8	5
1861	do	Jan-Mar, May-Jun, Nov-Dec only	0-7	2
1862		Sep, repairing the machinery		
		Dec, opening for another depth	3-6	3
1863	do	Jan-Apl, Jul, opening for another depth	3	3
1864	do	Feb- J.C. & P.Fourdrinier	3	3
1865	J.C. & P.Fourdrinier		3-4	3
1866	do		3-6	4
1867	Thewith Llewelyn & Co	Jan, working occasionally	2-4	3
1868	do	Jan-Jun, Nov only		
		Jul, standing, no water to work		
		the machinery	0-5	2
1869	do	Apl- W.Swansborough		
		standing all year, and to May		
		1875, thereafter not listed	0	0

List of Mines

		no. employed
1897	Moel Siabod Hone Qy Ltd, O.J.Owen agent	2
1901	do	2
1902	do	2
1903-7	suspended	
1908	exors A.B.Salm	4

1909	do	4
1910	A.B.Salmen Ltd, Ebenezer Griffith agent	2
1911	do	5
1912	do	3
1913-19	not seen (never published?	
1920-	suspended	

Grimsthorpe Castle: Gwydir Rentals 1817-69

Llwyngraenig/ Hone Quarry

1845	Mr Pike	£10, new
1846-51	do	£10, none paid
1852	do	£10, £37.8.2 paid, £10 bad debt
1853	do	£10 + £10 arrears
1854	not worked	
1855-8	not mentioned	
1859	J.C. & P.Fourdrinier	£10 + £10 arrears
1860-5	do	£10, paid
1867	Fourdrinier ½ yr to Nov included in Pontcyfyng	
1868	missing	
1869	W.Swansborough	£10

Trefriw Wharf Daybooks 1853-63 (UCNW Bangor 7058), 1863-77 (Grimsthorpe Castle)

Sand imported

John Cole Fourdrinier, Moel Shabot	1858	9 tons,	hone quarry only?
	1859	9 tons,	do
	1860	16 tons,	do
	1862	9 tons,	do
	1863	10 tons,	about half for Foel 4 mill?
	1864	10 tons,	do
	1865	30 tons,	for Foel Cyfyng mill
	1866	10 tons	hone quarry only?
	1867	10 tons	do
Penrhiw Hone Quarry, The with Llewelyn & Co		1867	10

Almost all sand from Conwy or Fords (Llansantffraed), little from Red Wharf

Grimsthorpe Castle: Sale Catalogues of Gwydir land at Dolwyddelen by W.Dew & Son, at Llanrwst 3-5 July 1894

Pen y Rhiw hone quarry not mentioned in particulars, but marked on map as disused.

National Archives, ref ??. Moel Siabod Hone Quarry Co Ltd.
Inc. 1895, cap. £2000. Owen Jones Owen [Newborough Mills] and N.F.Robarts [Cwmorthin Quarry] sold their lease to company.

National Archives, BT31/19508/110034. A.B.Salmen Ltd.

Inc. 7 Jun 1910, cap. £3500 in £1, office Salmen Works, Bow; 1916 Empire Works, Stratford
To carry on business of oilstone, whetstone, grindstone and scythe stone quarriers and importers, formerly carried on by late Albert Berl Salmen as A.B.Salmen and then as A.B.Salmen's Exors, at Salmen St, Bow, then Aldgate.
Agreement 26 Jul 1910 Simon Lazarus, Forest Gate, gent – company; SL recently acquired business of late ABS; to sell goodwill and leaseholds (Aldgate warehouse, and Moel Siabod quarry under lease 29 Sep 1908 for 21 years from date, £30 pa plus royalty, of hone stone, slate etc under parts of Penrhiw and Bwlch Cynnud) and vendor's plant, stock, rails, sleepers, machinery, castings and materials in Moel Siabod quarry.
1910 shareholders Lazarus and **Alexander Bernstein**, Ilford, estate agent and cinema manager.
EGM 4 Dec 1922 resolved to go into voluntary liquidation; new company of same name to take over.
Wound up 14 Jun 1923.

Note of interest.

Alexander Bernstein

- One of the founding fathers of Independent Television.
- Sidney's roots could be traced back to a small Russian village from where the family escaped the oppressions and pogroms of the Tsars.
- Shortly after settling in Ilford, Alexander married a local girl, Jane Lazarus, and together they produced eight children.
- To support the family, Alexander had business interests which were as wide as they were diverse. His chosen profession was in the leather trade, but his diversifications included an interest in a slate quarry in Wales, and a habit of acquiring local properties at auction, not least of which was a run-down estate in Manor Park, just a short distance from his own Ilford home. For this, Alexander had paid a mere £270.00 - a gamble, as he hadn't even had the opportunity to view the properties before purchasing them, but one that was quite fortuitous as the site consisted of around 600 houses.

CHWAREL HONS. HONES QUARRY, DOLWYDDELAN.

1845 – C.1918[1]

BWLCH Y CYNNUD QUARRY HONE DOLWYDDELEN CAERNARFONSHIRE SH743528 References: Gwynedd Archives Service - Caernarfon Archive Office - Sale Catalogues 596 Notes: see also (same location) CHWAREL Y BWLCH (SLATE) DOLWYDDELEN HONE QUARRY HONE DOLWYDDELEN CAERNARFONSHIRE References: Gwynedd Archives Service - Caernarfon Archive Office - XSC/0434 MOEL SIABOD QUARRY HONE DOLWYDDELEN CAERNARFONSHIRE SH722541 Persons, companies and organisations: 1895 Allan, James Hugh, Landlord [Public Record Office - BT 31/6403/45212] 1895 Ayrton, William, Landlord [Public Record Office - BT 31/6403/45212] 1895 Blackburn, P, Landlord [Public Record Office - BT 31/6403/45212] 1895 Jones, J R, Landlord [Public Record Office - BT 31/6403/45212] 1895 Owen, Owen Jones, Tenant [Public Record Office - BT 31/6403/45212] 1895 Radcliffe, F M, Landlord [Public Record

[1] Casglwyd gan Dr M.J.K.Lewis a Steffan ab Owain.

Office - BT 31/6403/45212] 1895 Robarts, Nathaniel Fran[cis?], Tenant [Public Record Office - BT 31/6403/45212] 1895 Robarts, Nathaniel Fran[cis?], Trustee [Public Record Office - BT 31/6403/45212] 1895 Roberts, W J, Landlord [Public Record Office - BT 31/6403/45212] 1895 Wright, C H, Landlord [Public Record Office - BT 31/6403/45212] 1895-1897 Moel Siabod Hone Quarry Ltd, Owner or Operator [Home Office List of Quarries 1895-1900] 1898 Owen, O J & Co, Owner or Operator [Home Office List of Quarries 1895-1900] 1899-1900 Moel Siabod Hone Quarry Ltd, Operator (Limited Company) [Home Office List of Quarries 1895-1900] 1901 Moel Siabod Hone Quarry Ltd, Owner or Operator [Home Office List of Mines 1901-1905] 1901 Owen, Owen J, Mine Agent [Home Office List of Mines 1901-1905] 1902 Salmen, A B, Owner or Operator [Home Office List of Mines 1901-1905] 1903-1905 Owen, Owen J, Owner or Operator [Home Office List of Mines 1901-1905] 1903-1905 Roberts, John, Owner or Operator [Home Office List of Quarries 1903-1905] 1908 Salmen, A B, Owner or Operator [Home Office List of Mines 1908-1909] 1908-1909 Griffith, Ebenezer, Mine Agent [Home Office List of Mines 1908-1909] 1909 Salmen, A B, Executors of, Owner or Operator [Home Office List of Mines 1908-1909] 1910 Salmen, A B Ltd, Operator (Limited Company) [Home Office List of Quarries 1910-1918] 1910-1918 Griffith, E, Agent [Home Office List of Quarries 1910-1918] 1911 Owen, O J, Owner or Operator [Home Office List of Quarries 1910-1918] 1912-1918 Salmen, A B Ltd, Operator (Limited Company) [Home Office List of Quarries 1910-1918] References: Gwynedd Archives Service - Caernarfon Archive Office - Gorddinog No. 141 Gwynedd Archives Service - Caernarfon Archive Office - XD38/No.287 Gwynedd Archives Service - Caernarfon Archive Office - XD38/No.91 Gwynedd Archives Service - Caernarfon Archive Office - XM/623/348 Home Office List of Mines 1901-1905 Home Office List of Mines 1908-1909 Home Office List of Quarries 1895-1900 Home Office List of Quarries 1903-1905 Home Office List of Quarries 1910-1918 Inspector of Mines Reports 1901 p.60 Ordnance Survey six-inch map of Caernarvonshire (2nd Rev.) Sheet No. XXIII NW Public Record Office - BT 31/6403/45212 (Moel Siabod Hone Quarry Ltd) The Mining Journal 1853 p.470* The Mining Journal 1873 p.295 The Mining Journal 1884 p.231 Williams, M C & Lewis, M J T, *Gwydir Slate Quarries* p.9 Notes: also known as PENRHIW QUARRY also known as Llwyn Grainig [2]

DOLWYDDELEN HONE QUARRY HONE DOLWYDDELEN CAERNARFONSHIRE References: Gwynedd Archives Service - Caernarfon Archive Office - XSC/0434

Compiled by Jeremy Wilkinson.

Newspaper cutting.
Baner ac Amserau Cymru (Denbigh, Wales), Saturday, December 21, 1895;

[2] The Mines and Quarries of North Wales data, downloaded files and search results done by Jeremy Wilkinson 2004.

Addysg.

YSGOLION CANOLRADDOL SIR FEIRIONYDD.

CYNNALIWYD cyfarfod arbenig o Lywiawdwyr Addysg Ganolraddol sir Feirionydd yn Nolgellau, ddydd Sadwrn diweddaf, o dan lywyddiaeth Dr. Edward Jones, Dolgellau, pryd yr oedd yr aelodau canlynol yn bresennol:—Mr. C. H. Wynn, Rug; y Proffeswr Ellis Edwards, Bala; y Proffeswr W. Rhys-Roberts, Bangor; Dr. Hughes, Bala; y Mri. E. Griffith, Dolgellau; Haydn Jones, Tywyn; a'r clerc, Mr. R. Jones-Griffith.

Darllenwyd llythyrau oddi wrth Mrs. Rowlands, Tywyn; Mrs. Burton, Bala; a Mr. Andreas Roberts, Ffestiniog, yn ymddiheuro o herwydd eu habsennoldeb.

Cyflwynodd yr Anrhydeddus C. H. Wynn adroddiad y pwyllgor a bennodwyd i ystyried y ceisiadau am y swydd o brif athraw yn ysgol Dolgellau. Ymddangosai chwech o foneddwyr ger bron y pwyllgor, a chymmeradwyent hwy fod Mr. Arthur Clendon, o Ysgol Rammadegol Honiton, yn cael ei bennodi i'r swydd.

Ar ol cael ymddiddan â Mr. Clendon, pennodwyd ef yn unfrydol i'r swydd ar gynnygiad Dr. Edward Jones, yn cael ei eilio gan Mr. Haydn Jones.

Bu cais oddi wrth Lywiawdwyr Lleol Ysgol yr Abermaw, am i'r rhodd at adeiladu gael ei thalu, dan ystyriaeth; a phenderfynwyd fod y swm (396*p*. 15*s*. 6*c*.) yn cael ei dalu, dan yr ammod fod y 'teitl' yn cael ei ystyried yn foddhaol i gynghorwr cyfreithiol y Corph Llywodraethol.

Cyflwynodd y clerc ragor o ohebiaethau oddi wrth Ddirprwywyr yr Elusenau ac Adran Gwyddor a Chelf o berthynas i'r cynnygiad o godi ysgol wyddor ynglŷn âg ysgol y sir, Tywyn.

Wedi peth trafodaeth, cynnygiodd Mr. Haydn Jones:—

'Fod y clerc yn cael ei gyfarwyddo i ymohebu âg Adran Gwyddor a Chelf i ymholi a fyddai i weithred ymddiriedaeth, yn corphori banau *a*, *b*, *c*, *d*, adran 17, taflen 555, wedi ei thynu allan rhwng Corph Llywodraethol y sir â hwy eu hunain, foddloni eu telerau o berthynas i daliad rhodd adeiladu tuag at yr ysgol wyddor gynnygiedig.'

Eiliwyd y penderfyniad gan y cadeirydd, a phasiwyd ef.

Cyflwynodd y clerc benderfyniad, a dderbyniodd efe oddi wrth Gymdeithas yr Athrawon, yn annog y Corph Llywodraethol i wneyd darpariaeth drwy bennodiad athrawon allanol ar gyfer hyfforddiant mewn cerddoriaeth yn yr ysgolion canolraddol.

Ar gynnygiad y Proffeswr Ellis Edwards, yn cael ei eilio gan Mr. E. Griffith, penderfynwyd ymofyn â phob corph llywodraethol o berthynas i'r hyn a wnaed ganddynt yn y cyfeiriad hwnw, yr adroddiad i gael ei ddwyn i sylw y cyfarfod nesaf o'r Llywiawdwyr Sirol.

Hysbysodd Dr. Hughes fod Corph Llywiawdwyr Lleol y Bala wedi penderfynu cychwyn ysgol i enethod, i'w chynnal ar hyn o bryd mewn adeiladau neillduol dros amser; ac ar ran y Llywiawdwyr Lleol, efe a ofynai i'r Llywiawdwyr Sirol bennodi pwyllgor i ymweled â'r Bala i archwilio'r adeiladau oedd ganddynt mewn golwg.

Cyttunwyd i ganiatau y cais; a phennodwyd y cadeirydd, a Mr. J. Adams, Abermaw, i ymweled â'r lle; y clerc, yn y cyfamser i hysbysu Dirprwywyr yr Elusenau am y ffaith, a gofyn eu cymmeradwyaeth i'r cyfryw.

CYMMOEDD, CEREDIGION.

Y Tywydd.—Y mae y tywydd y gauaf hwn yn anarferol o arw, ar y cyfan, er nad ydym wedi cael ond ychydig o rew ac eira, ag eithrio eira mawr cynnar mis Hydref; ond y mae y tywydd yn wlawog, oer, a gwyntog ryfeddol. Y mae hi beunydd yn wyntog a gwlawog. Ond rhaid i ni gofio mai y gauaf ydyw hi, ac mai lleuad dydd Sadwrn ydyw y ddiweddaf a gawsom. Clywsom yr hen bobl yn dyweyd, a hwy sydd yn gwybod, tra mai tybio y mae yr ieuangc—clywsom hwy yn dyweyd lawer tro fod un lleuad yn newid ar ddydd Sadwrn yn ddigon am bob saith mlynedd; hyny ydyw, un lleuad ddydd Sadwrn yn ddigon yn mhob oes, gan mai tywydd gerwin a geir gan leuad dydd Sadwrn. Dïau y buasai hin sych, rewllyd, ysgafn, yn ddymunol.

PENYGARN.

Cystadleuol.—Bu eisteddfod yn ganu i gyd, ag eithrio un adroddiad, yn Ysgoldy y Bwrdd yn Mhenygarn, nos Fercher, Rhagfyr 11eg. Y prif ddarn corawl ydoedd 'Y Blodeuyn Olaf;' ac ymgeisiai dau gwmni arno; sef, cwmni Penygarn, o dan arweiniad Mr. D. J. Morgan, Caer Villa, a chwmni o Llanfihangel, o dan arweiniad Mr. Inigo Jones, Dolau; a'r olaf a enwyd a ennillodd y wobr. Y beirniad ydoedd Mr. Herbert, o Lledrod, a chafwyd cyfarfod boddhaus.

PONTERWYD.

Cyfarfod Sefydlu.—Dydd Iau, Rhagfyr 12fed, cynnaliodd y Methodistiaid, a'r canghenau, yn Ponterwyd, eu cyfarfod i sefydlu bugail yn eu plith, yr hyn na fu ganddynt er's blynyddoedd lawer, yr hyn sydd yn anfantais fawr i eglwysi. Y mae dwy o'r eglwysi y bydd Mr. Jones yn fugail iddynt mewn lleoedd mynyddig iawn, gan fod y ddwy yn sefyll wrth droed Plumlumon—un ar y wyneb orllewinol iddo, a'r llall ar yr ochr dde-orllewinol iddo. Eiddunwn lwyddiant Mr. Jones yn fawr yn ei gylch newydd, a boed ei arosiad yma yn hir, ac yn foddhaus gan deulu Seion yn y lle, a chan y teulu arall.

GOHEBYDD.

LLANRWST A'R CYLCHOEDD.

Cyngherdd yn Neuadd Gynnull Dolyddelen, nos Sadwrn, Rhagfyr 14eg. Cadeirydd, Gwilym Alltwen. Arweinydd, Mr. R. J. Davies (*Barlwydon*). Cafwyd gwasanaeth y cantoresau a'r cantorion canlynol:—Mrs. E. D. Lloyd, Bethesda; Miss H. W. Williams, Llan, Ffestiniog; a'r Mri. Gordon Williams, Bethesda; Morris Thomas, Blaenau Ffestiniog; ynghyd â seindorf brês Elen, a pharti o feibion o Dolyddelen; ac adroddwyd darnau difyrus gan Mr. D. Williams, Rhiwgri; a chyfeiliwyd gan Mr. E. D. Lloyd, Bethesda. Cynnulliad tra lliosog, ac elw helaeth i ddi-ddyledu capel yr Annibynwyr yn Mlaenau Dolyddelen.

Gweithfeydd y cylch yn myned yn mlaen gyda mwy o yni nag arfer. Y mae amryw o fân weithfeydd wedi ail gychwyn yn ddiweddar, fel y sylwyd. Y mae Mr. Owen J. Owen, Llythyrdy, Rhiw, Blaenau Ffestiniog, wedi ail gychwyn chwarel *hones*, neu geryg hogi, sydd ar odreu Moel Siabod, Dolyddelen. Bu yr anturiaeth hono yn cael ei gweithio gyda mesur o lwyddiant rai degau o flynyddoedd yn ol. Gwnaed adeilad o gryn faintioli, a dygwyd yno beiriannau i weithio y ceryg hogi. Yr wyf yn meddwl y bu un o'r enw Dafydd Dafis yn ei harolygu—un a wnaeth lawer mewn cysylltiad â chwareli yn ei oes, ac a fu, i fesur, yn llwyddiannus. Gwnaed yno rai miloedd o geryg hogi. Gadawodd y cwmni hi i sefyll, a gadawyd yr olwyn ddwfr, a'r holl beiriannau, yno. Yr oedd rhywbeth yn ammodau cyttundeb etifeddiaeth Gwydir yn rhwymo pob cwmni i beidio cludo olwynion dwfr, na pheiriannau, oddi ar yr etifeddiaeth, a bu raid eu gadael yno. Yr oedd yno bentwr mawr, hefyd, o geryg hogi wedi eu gweithio, ond a adawyd yno am nad allai y cwmni ganfod y buasai ad-daliad i'w gael am y draul o'u cludo ymaith. Byddai un, o'r enw Sion y Cŵn, yn galw heibio, yn ei grwydriadau ar hyd y wlad, ac yn cymmeryd ymaith gydaid ar ei gefn, ac yn gwneyd cryn lawer o fasnach ynddynt mewn gwahanol ranau o'r wlad. Cludodd ef, ac eraill, y pentwr oll ymaith, fel nad oedd, yn mhen rhai blynyddoedd, gymaint ag un yn aros. Nis gwn i neb wneyd elw o'r anturiaeth ond Sion Cŵn yn unig. Byddai ef yn ymffrostio y byddai yn cael, yn lled fynych, o dair i chwe cheiniog am gareg hogi, mewn rhyw fanau o'r wlad lle yr arferai ef grwydro. Lle anghyfleus ydyw y chwarel, a lle corsiog a lled anhawdd myned yno gyda throliau i gludo defnyddiau at wneyd adeilad, a pheiriannau at weithio y ceryg hogi. Ffordd glongciog ydyw, i fyny amryw o riwiau serth, ac mewn pellder o agos i ddwy filldir, neu chwaneg, o'r brif ffordd yn Nolyddelen. Y mae yno, modd bynag, gareg hogi ragorol; a chredir, os gellir cael digon o fasnach, y bydd i'r anturiaeth droi allan yn dra llwyddiannus. Cafodd Mr. Owen, yn ddiweddar, lythyr o Madrid yn holi yn eu cylch, ac yn hysbysu, os ceid allan y byddai y gareg hogi yn un o wasanaeth, y byddai yn y fan hono yn unig alw am rai cannoedd o dynelli o honynt. Bydd y gwaith yn fuan ar lawn dro, gan fod yr hen adeilad wedi ei adgyweirio, olwyn ddwfr newydd o faintioli mawr wedi ei sicrhau, a pheiriannau o'r fath oreu at weithio y ceryg hogi. Disgwyliwn yn fawr am lwyddiant.

Gwaith newydd arall wedi ei ail gychwyn tu ol i'r hen Chwarel Ddu, ar dir Bryntirion. Y mae y tyddyn hwn, a'r hen gastell, yn meddiant Mr. Robert Williams ar ol yr arwerthiant diweddar. Bu yr hen Chwarel Ddu yn dra llwyddiannus rai blynyddoedd yn ol. Y mae yr hen chwarel sydd tu ol i'r un o dan sylw wedi cael ei hail gychwyn gan nifer o weithwyr yn y lle. Y mae hyny yn cael ei wneyd am fod y fath werthiant rhwydd ar y llechi. Y mae amryw o chwareli eraill wedi eu hail gychwyn, ac amryw o anturiaethau eraill nad ydyw etto yn hysbys pa fath ryw anturiaethau ydynt. Y mae chwarel Penllyn, neu Dy'nybryn, wedi sefyll. Chwarel y Pompren, y mae hithau ar dro. Dyma lle y mae y llechi 'mwyaf goddefgar' yn yr ardal. Drwg mawr llechi y rhan yma o'r wlad ydyw 'pleru,' fel y dywedir; ond y mae y rhai hyn yn wahanol. Credir y try allan yn dra llwyddiannus. Gweithir y chwarel hon gan Mr. T. Gee a'i Gyf.

Y mae y ffermydd a aethant yn ddi-denantiaid trwy yr arwerthiant diweddar wedi eu cymmeryd; sef, Coetmor, Nhadog Uchaf, ac eraill. Daeth yma rai canrifoedd o ddefaid mawr, fel y dywedir, boreu ddydd Gwener. Galwodd gwraig y bugail gyda ni yn lled foreu ar y dydd i ofyn am rhyw fân nwyddau i ddiwallu y gofynion beunyddiol, a hysbysu ei bod yn anwydog, ac yno er chwech o'r gloch yn y boreu, yn llywio, ac wedi lluddedu yn fawr—yn teimlo yn hynod o ddihoenllyd. Dygwyd y defaid mewn tryciau. Ysgotyn ydyw yr un sydd wedi cymmeryd y tyddyn.

Ysbeilio yr ardaloedd cylchynol ydyw arwyddair trigolion Llanrwst. Ar y wlad yn gyfangwbl y mae yr ychydig drigolion sydd yn y dref yn pwyso, ac oddi wrth y wlad y maent yn disgwyl ac yn dyheu am bob help; oni bae am y wlad, fe fyddai yn derfyn arnynt. Aml y ceir hwy yn cynllunio rhyw ddygynnull newydd yn gwbl i hel pobl i'r dref. Anaml y mae y dref heb rhyw abwyd i hel pobl i'r fagl.

Arwest farddonol Glan Geirionydd sydd etto yn dal ei thir. Bydd dygynnull o'r pwyllgor yn fuan i drefnu gogyfer â'r dyfodol, ac i wastadhau y ddiweddaf.—*Ellis o'r Nant.*

FFESTINIOG.

LLYS YR YNADON.

DYDD Iau diweddaf, cynnaliwyd llys ynadon dosbarth Ffestiniog, pryd yr oedd yn bresennol ar y faingc Dr. Roberts (cadeirydd), a'r Mri. E. P. Jones, G. H. Ellis, D. G. Williams, a D. R. D. Evans.

Robert Jones, Lord street, a gyhuddwyd gan undeb tlodion Ffestiniog fod ei fab (Richard Jones) yn derbyn cymmhorth plwyfol tra yr ydoedd ef yn alluog i'w gadw.

William Thomas a dystiai fod ei fab yn derbyn 7*s*. 7*c*. yn yr wythnos yn Ngwallgofdy Dinbych; ac y mae wedi derbyn y swm hwn er mis Medi diweddaf. Oed y mab ydyw 23ain.

Dywedai Robert Jones nad oedd am dalu dim at ei gadw tra yr oedd yn alluog i gadw ei hun, o herwydd mewn amddiffyniad yr oedd wedi gwneyd yr hyn a wnaeth ei fab.

Pasiodd y faingc fod iddo dalu tri swllt a chwe cheiniog yn yr wythnos.

Dywedodd Jones na thalai byth tra yr oedd y llangc yn alluog i gadw ei hun.

Tadogiad.—Miss Kate Jones, Glandon, Rhiwbryfdir, Ffestiniog, a gyhuddai Joseph E. Jones, Maesygroes, Maenan, Llanrwst, o fod yn dad i'w phlentyn. Ymddangosodd Mr. J. E. Humphreys, cyfreithiwr, Llanrwst, dros y ferch, a Mr. David Jones, Llanrwst a Ffestiniog, dros y mab.

Holwyd y ferch, Joseph E. Jones, a John Calfin Jones, Llanrwst.

Taflwyd yr achos allan, o herwydd dim tystiolaethau clir; ond bydd gan y ferch hawl i ddwyn yr achos hwn yn mlaen etto.

Tadogiad etto.—Cyhuddai Jane Lloyd, Penrhyndeudraeth, Richard Owen Jones, Bryngwyn House, o fod yn dad i'w phlentyn anghyfreithlawn. Pasiodd y faingc iddo dalu y swm o 1*s*. 6*c*. yn yr wythnos at ei fagu, a'r costau arferol.

Meddw ac afreolus.—Robert Griffiths, Picton Terrace, a gyhuddid o fod yn feddw nos Sadwrn, Tachwedd 16eg, gan yr heddgeidwad Morgan Jones. Dirwywyd ef i 12*s*. 6*c*., trwy y costau.

Curo y forwyn.—Catherine Anne Jones, 3, Trimar Terrace, Blaenau Ffestiniog, a gyhuddai ei meistres, Mrs. Anne Jones, Hafod Ysbytty, o'i churo ar y dydd cyntaf o'r mis hwn.

Ymddangosodd Mr. R. O. Jones, Blaenau Ffestiniog, dros y ferch, a Mr. David Jones, Llanrwst, dros y feistres.

Dywedai yr achwynyddes ei bod yn forwyn yn Hafod Ysbytty. Bu yno am flwyddyn; ac yr oedd wedi ei chyflogi am flwyddyn arall. Curwyd hi yn ei chefn â'r procer, gan afael yn ei breichiau. Rhedodd allan, a daeth ei meistres ar ei hol. Rhedodd hithau i'r mynydd. Yna, aeth adref, a galwyd am yr heddgeidwad a Dr. Evans ati gan ei mam.

Holwyd a chafwyd tystiolaethau gan fam yr eneth, y Rhingyll Owen, a Dr. Evans, yr hwn a ddywedai fod arwyddion ar ei chefn a'i breichiau, a chan Robert Jones a Joseph Ephraim. Rhwymwyd hwy i gadw yr heddwch yn y swm o 10*p*. am flwyddyn, a phob ochr i dalu y costau.

Lluchio tân ar yr heol.—David Lloyd Griffiths, Penygelli Terrace, a gyhuddwyd o luchio tân ar yr heol gan yr heddgeidwad Humphreys. Rhoddwyd rhybudd iddo gan y faingc, a thalu 15*s*. 6*c*.

Meddw ar yr heol.—Samuel Jones, Dolgaregddu, a gyhuddwyd gan yr heddgeidwad Humphreys o fod yn feddw ar yr heol. Bu raid iddo dalu ugain swllt a chwe cheiniog.

Ymosodiad.—Richard Evans, Tŷ Llwyd, Trawsfynydd, a gyhuddai David Jones, Goppa, o'r un lle, o ymosod arno ar y ffordd fawr wrth ysgoldy Glasfryn, ar y 25ain o Hydref.

Ymddangosodd Mr. J. E. Humphreys, Llanrwst, dros yr erlynydd, a Mr. David Jones dros y diffynydd.

Holwyd a chafwyd tystiolaethau gan y Mri. John Jarret, John Roberts, W. Evans, Trawsfynydd, a heddgeidwad. Dirwywyd David Jones i 1*p*., a'r costau.

Croes-wŷs.—David Jones a gyhuddai Richard Evans o ymosod arno yntau yr un noson. Dirwywyd Evans, trwy y costau, i 23*s*., ac i gadw heddwch y naill at y llall am flwyddyn.

Y Rhufeiniaid.—Nos Iau diweddaf, bu Mr. R. H. Huws (*Cynfoel*), pôst-feistr, yn darllen papur dyddorol iawn ar 'Ddylanwad arosol y Rhufeiniaid ar y Cymry,' o flaen Cymdeithas Gwŷr Ieuaingc y Masnachdai. Llywyddwyd gan Mr. T. R. Davies. Caed ymdrafodaeth fuddiol, a diolchwyd i Mr. Hughes am ei bapur da. —*Treborfab.*

CERDDORIAETH MEWN YSGOLION CANOLRADDOL.

MEWN cyfarfod o'r gangen leol o Gymdeithas yr Athrawon, a gynnaliwyd yn Ngholeg y Brifysgol, Aberystwyth, dan lywyddiaeth Mr. D. Samuel, bu trafodaeth ddyddorol ar bapur a ddarllenwyd gan Mr. L. J. Roberts, arolygydd ysgolion. Yr oedd y Prifathraw Roberts, Mr. F. Watson, Mr. D. Jenkins, *Mus. Bac.*, ac eraill, yn bresennol. Pasiwyd penderfyniad yn annog byrddau llywodraethol i wneyd trefniadau ar gyfer addysg gerddorol yn yr ysgolion canolraddol, trwy bennodiad athrawon oddi allan os bydd raid.

Claddwyd y diweddar Mr. George Augustus Sala yn Hove Cemetery, Brighton, ddydd Iau. Gwasanaethwyd yr offeren yn eglwys y Galon Gyssegredig, Norton Road, Hove. Yr oedd yr arch wedi ei gorchuddio â blodeu.

English translation summary.

Llanrwst a'r cylchoedd.

Workings. There is more work starting out in the area than usual. Mr Owen J. Owen, *Llythyrdy, Rhiw Blaenau Ffestiniog.* Has reopened the Siabod Hone Quarry. I think there was a Mr Dafydd Dafis there as a supervisor years ago, he had many connections with quarries in the area. When he departed all the machinery had to be left *in situ* as this was part of the Gwydyr lease agreement, making it easier to restart a quarry. After the closure of the quarry there were many finished hone stones left behind, and a man known as *Sion Cŵn* used to call at the quarry to collect the hones and carry them on his back to be sold. He reckoned he could get between 3p and 6p each for them. Mr Owen recently received a letter from Madrid showing interest in purchasing hundreds of tones of these hones.

7. EXCAVATION REPORT.

In March 2013, a pathway had to be cleared to the site of the Siabod mill, because of thick undergrowth, also trees inside the mill had to be cut back, before any excavations could be started.
Excavation work was started on the fireplace in the western gable end of the mill, where about a 100 hone stones were found in a pile. This fireplace proved to be an enigma, in that it was an original fireplace, then converted into a doorway, **(DRG. No. 5.)** and then back again to a fireplace. **(DRG. No. 2.)**

An excavation, near the centre of the mill was started to find the sand saw. A connecting arm **(DRG. No. 26.)** was found to the south of the sand saw, while another two were found to the north, one *in situ* ***(Fig: 13.)*** These would have conveyed the swinging motion to the sand saw cradle. The wooden base of the sand saw was revealed, showing a row of wooden sleepers ***(Fig: 17.)*** and traces of a sacrificial stone to protect the wood. ***(Fig: 18.)*** Above the wooden sleepers a cradle holding 15 saws was discovered. ***(Fig: 10.)*** **(DRG. No. 30.)** A *sondage* was excavated on the North West side of the sand saw; this revealed about 0.6m of solid compacted sand. This sand is thought to be a mixture of the abrasive sand used, metal from the saws, and dust from the hone stones.

Towards the eastern gable end of the mill, an excavation was carried out, where some ironwork was protruding out of the rubble. This area also contained sand about 0.3m. It also included a 2 m diameter iron band with opposed adjuster. This enclosed two metal supports and a third centrally placed support with the shell of a bearing. It is possible that the circular metal band held a metal platform which could be rotated whilst the central bearing actually held whatever tool was in use.***(Fig: 14.)*** Further investigation has revealed that these were part of a sand polishing table. **(DRG. No: 27.)** ***(Fig: 20.)*** But underneath the ironwork and large slabs of slate, voids started to appear. Further investigation revealed a water wheel pit, ***(Fig: 15.)*** which was probably the first motive power for the mill. A waterwheel probably measuring 3m in diameter by about 1m wide would have been housed there.
While excavating the outside waterwheel pit, sawn ends from a sand saw were found in the build. This waterwheel pit was approximately twice the diameter of the internal one.

Excavations were started at the main entrance to the mill to establish the floor. Near the doorway a collapsed slate roof was found on top of the sand. A flat bottomed 2 foot gauge railway with wooden sleepers was found entering the mill through the main doorway, heading in a north westerly direction. A covered water drain was found under the threshold of the doorway, draining the mill. The mill floor was covered by about 0.6m of sand. Most probably the polisher also used sand to polish the final hone stone.

The annex to the north west of the mill housed a base for a fly wheel, but due to the instability of the west gable end it was decided not to excavate any more of the area.

Excavating of the north east annex was started, and sand saw blades were found with unfinished hone stones, also the bearings for a drive shaft to power the sand saw.

Excavations on the North West corner of the smithy/ barracks, revealed a stack of slates of different sizes, with no nail holes in them. The fireplace was excavated in the smithy/barracks, and an ash pit was found containing fragments of coal, charcoal and peat ash. A retired blacksmith came on site confirming the interpretation of this building as a smithy.

A metal detector was used to find the tramway from the quarry to the mill, ***(Fig: 08.)*** the rail had been removed but the metal sleepers remained *in situ*. **(DRG. No. 10.)** A wagon wheel was found outside, on the south side of the mill **(DRG. No. 13.)** and this would have run on the flat bottomed rail found inside the mill **(DRG. No. 14.)**

On the east side of the mill in the river one section of the clapper bridge was found, the other part was about 20m lower down on the east side of the river. A Tirfor winch was hired to remove the stone slab from the river**. (*Fig: 19.)***

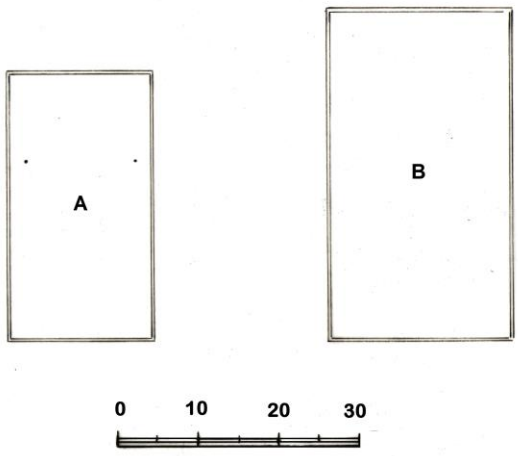
8. CONCLUSION.

After 44 days excavating the exercise was well worth while. In that the only existing reciprocating sand saw was discovered *in situ* (**Drg. No. 17.)** Could this reciprocating sand saw be the last one, in a line extending back 4500 years?
Sand was also used in polishing the hone stones; this was vindicated by finding the remains of a sand polishing machine, probably built during the upgrading of the mill by Owen J Owens c1895, as it was powered by the outside water wheel, which was a bigger waterwheel ***(Fig. 5.)*** replacing the smaller internal one ***(Fig. 15.)*** which was built in 1846 by a Mr Pike. The water came from the *Afon Stimiau* along a water channel into a wooden launder; this was the head race to the water wheel. The outside water wheel tailrace was built to join the original tailrace from the internal water wheel, and eventually returned to the *Afon Stimiau.* The mill was built by hauling stones along a track that came from the early workings at the quarry, about 10m above the existing rail track, and then they were toppled over the side down to the mill floor. The railway was a (1 ft 11 $\frac{5}{8}$ in) gauge, with pressed steel sleepers **(Drg. No. 10).** Although wooden sleepers were used inside the mill. The produce was carried along a right of way to Capel Curig ***(Map 3.)*** a clapper bridge was found collapsed into the river to the west of the mill.

Cautionary note.

The two gable ends are unstable, especially the west end one. The gable ends could be reduced to a safe height and then capped with lime mortar.
Also the pegs holding the lintel above the smithy/barrack door are in a very poor state due to rust. They could be replaced with new ones.

List of drawings



Note

The original mill was roofed with moss slates, held in place by wooden pegs.

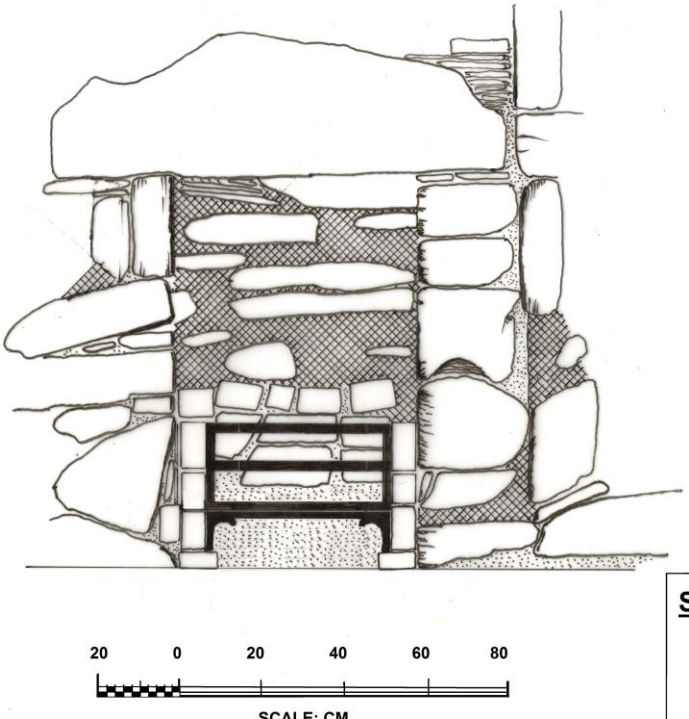
A
Slate found on mill floor, fixed on to the roof by two nails in a 4mm dim: holes. The slate also show the remains of lime torching.

B
This slate has been made at the mill, it is the same greenish colour and texture of the hone stones, and it has no nail holes in it.

SIABOD HONE QUARRY
DOLWYDDELAN
Grid ref: SH 72455425
Slates

Drawing No: 1.

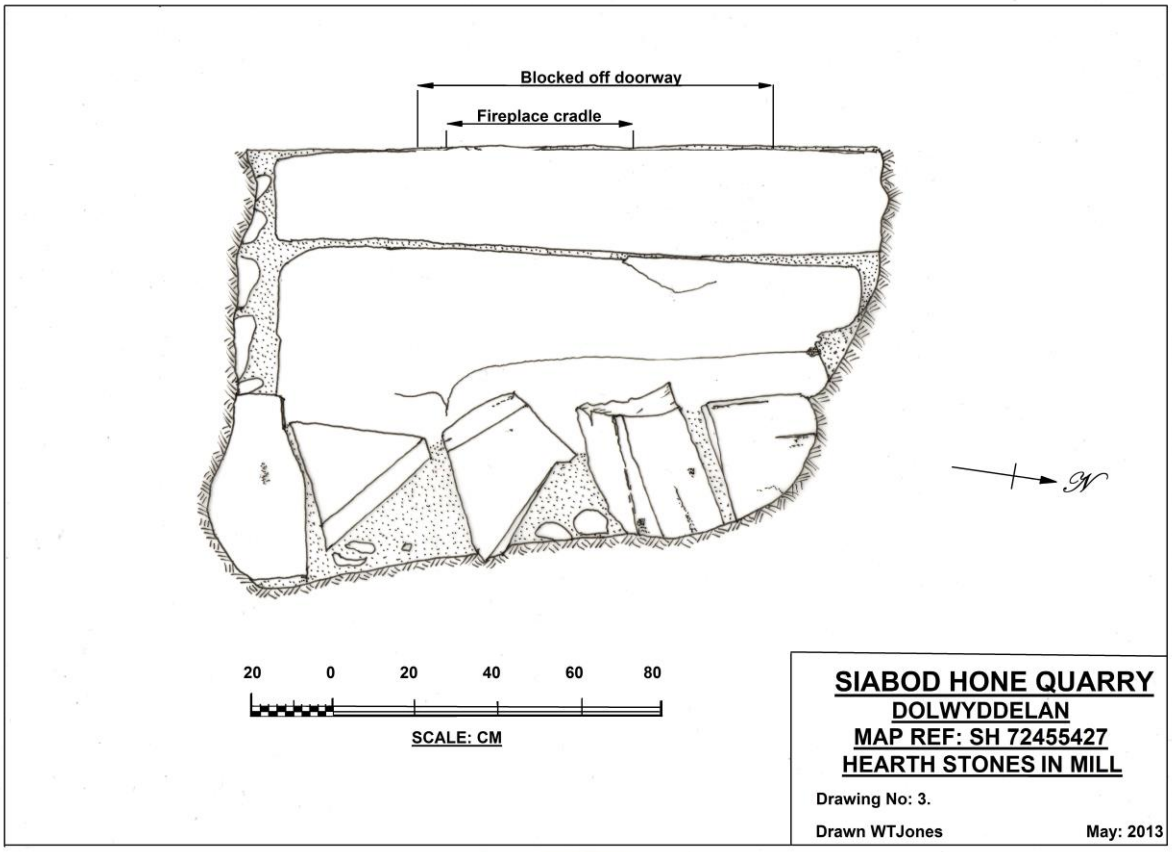
Drawn W.T.Jones. March 2013



SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
DOORWAY FIREPLACE
MAIN MILL

Drawing No: 2.

Drawn WTJones. May: 2013.


Blocked off doorway
Fireplace cradle
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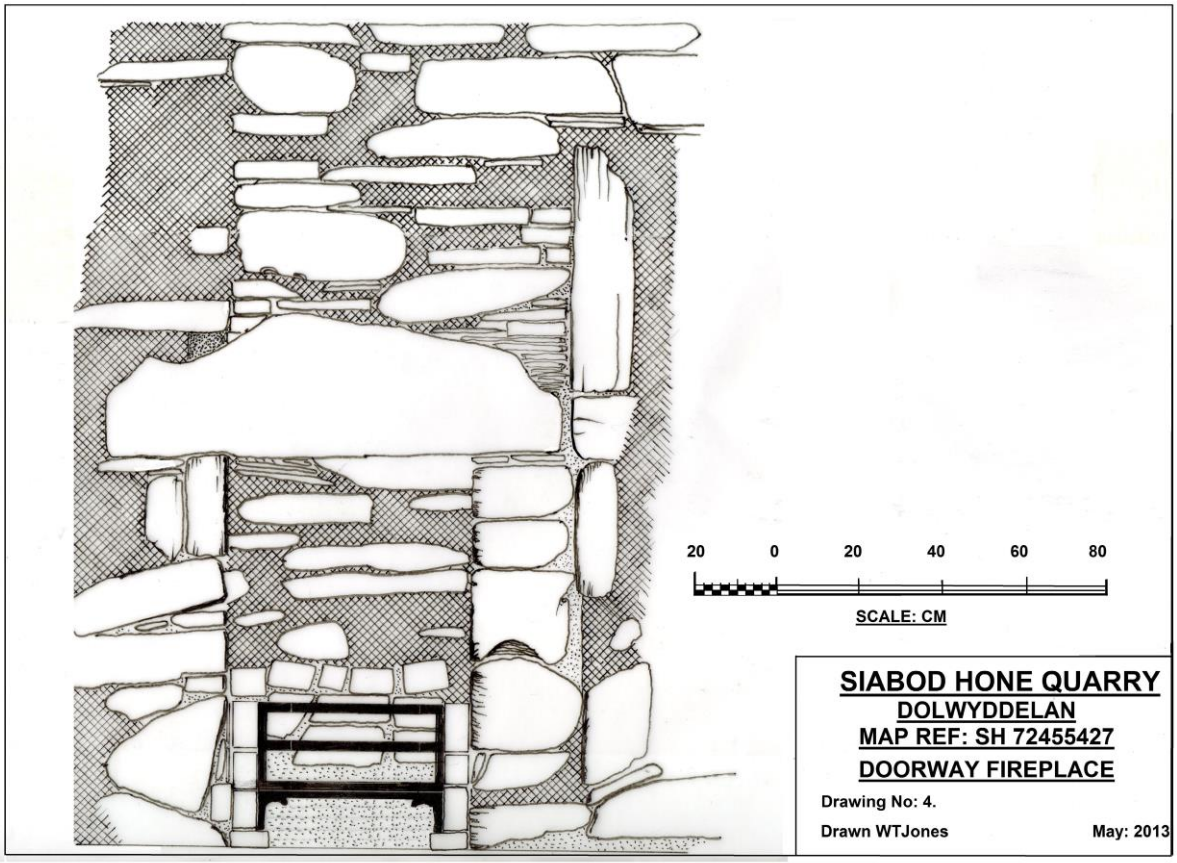
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
HEARTH STONES IN MILL
Drawing No: 3.
Drawn WTJones
May: 2013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DOLWYDDELAN
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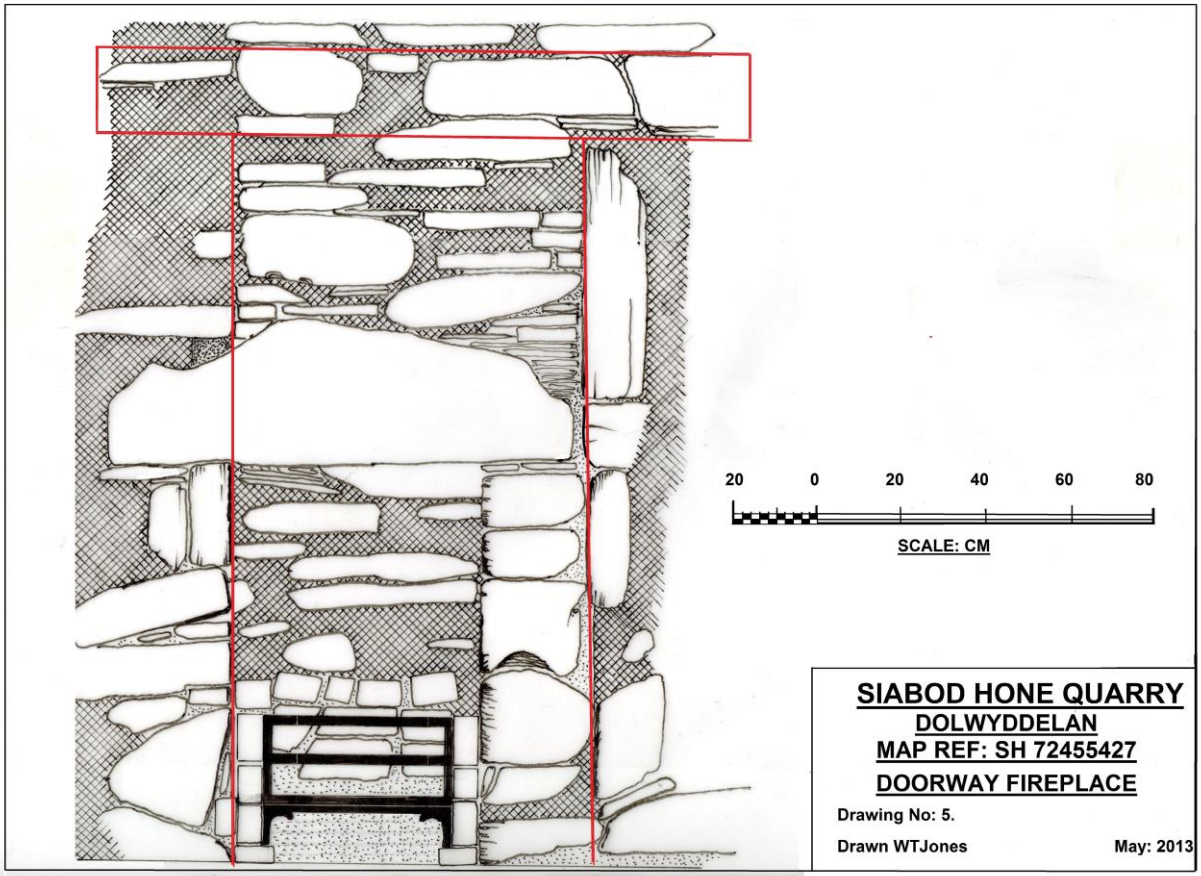
DOORWAY FIREPLACE
Drawing No: 4.
Drawn WTJones
May: 2013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DOORWAY FIREPLACE
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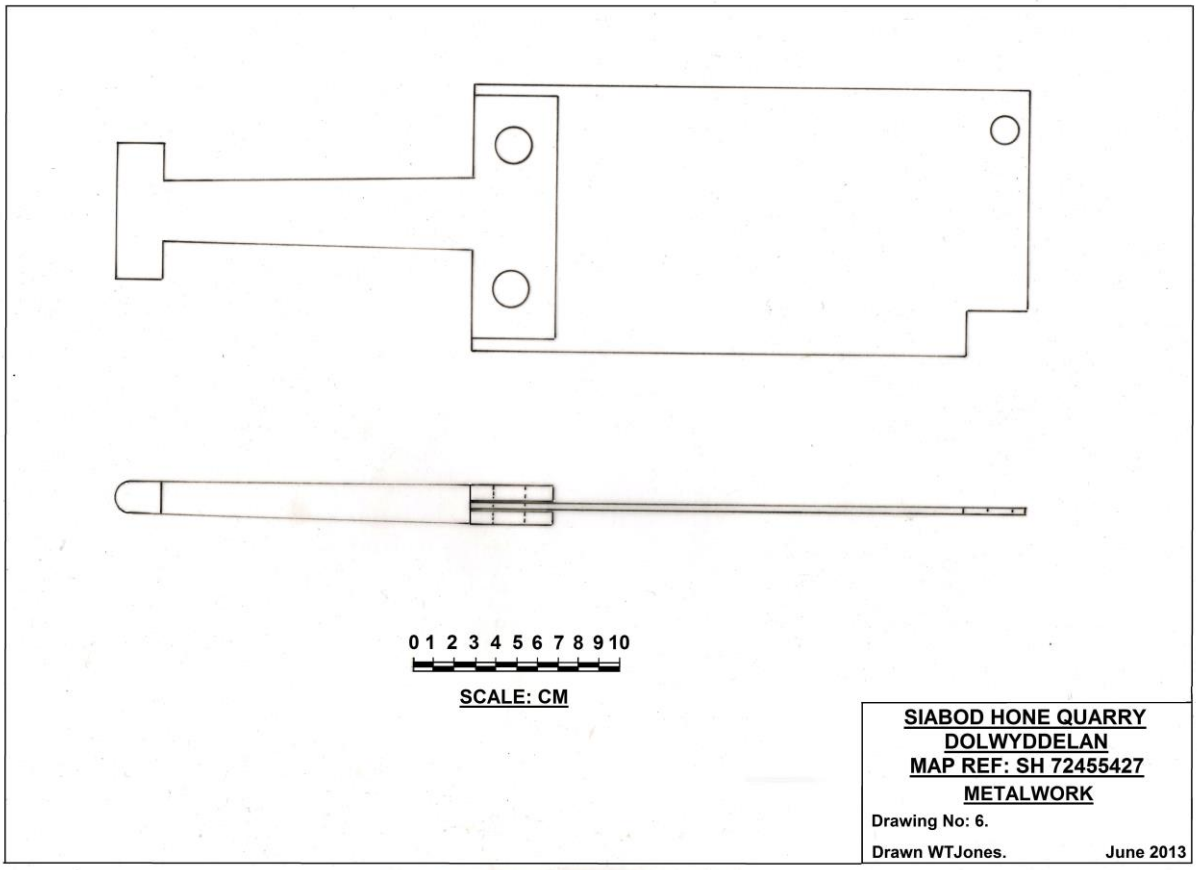
Drawn WTJones
May: 2013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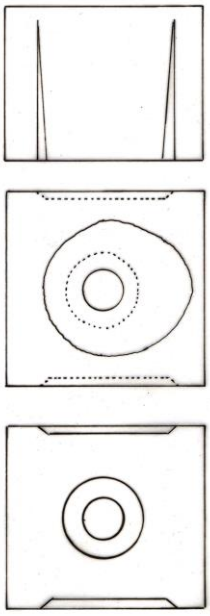
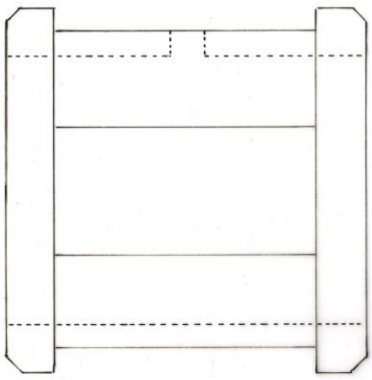
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
METALWORK
Drawing No: 6.
Drawn WTJones.
June 2013

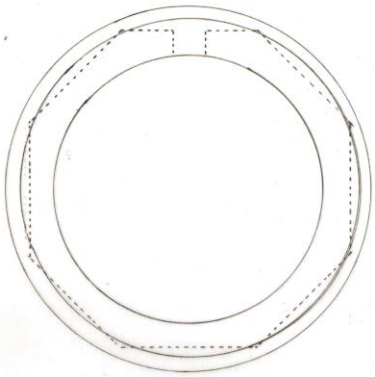


SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
BRASS BEARING FOR A RECIPROCATING SAND SAW

Drawing No: 7.

Drawn WTJones. June 2013



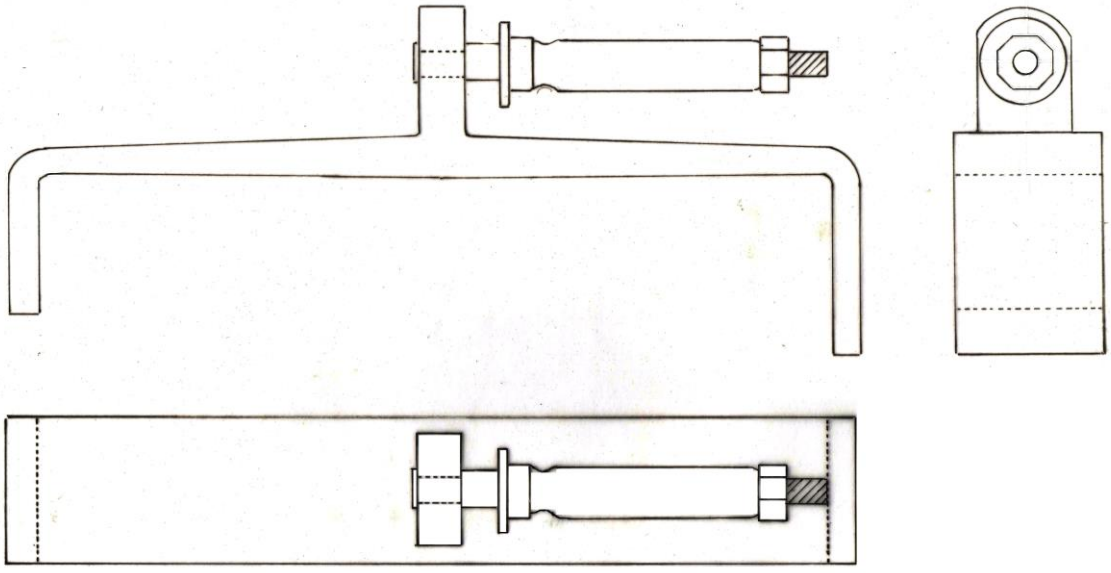


SCALE: ACTUAL SIZE

SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
BRASS BEARING

Drawing No: 8.

Drawn WTJones. June 2013



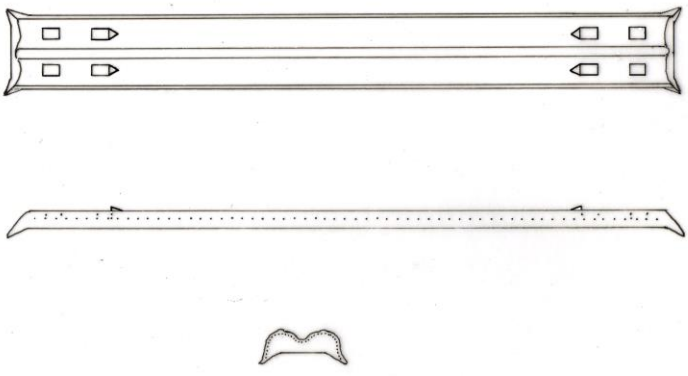
1 0 1 2 3 4 5 6

SCALE: CM

SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
BELT ADJUSTER

Drawing No: 9.

Drawn WTJones. June 2013



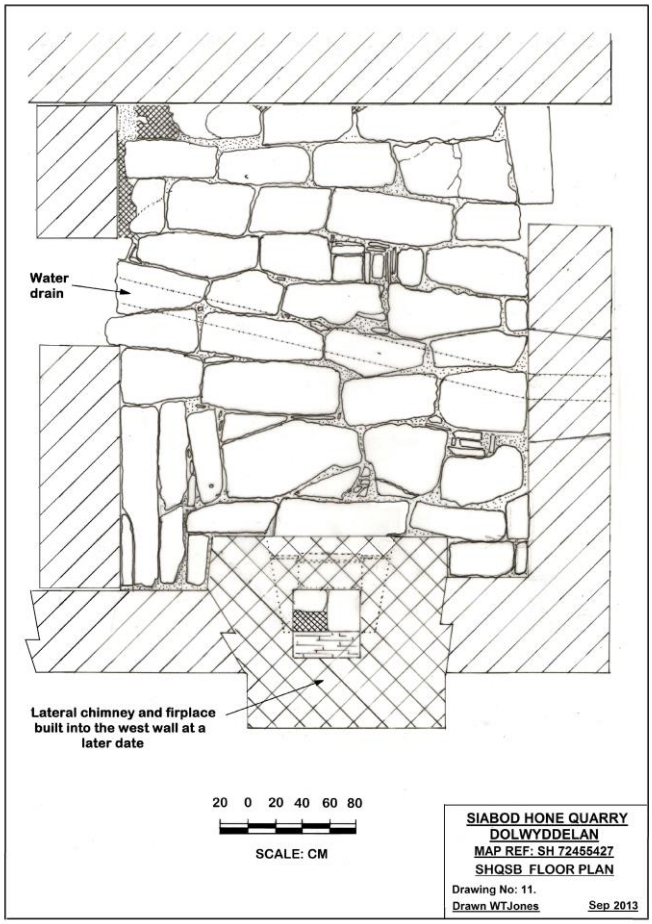
10 0 10 20 30

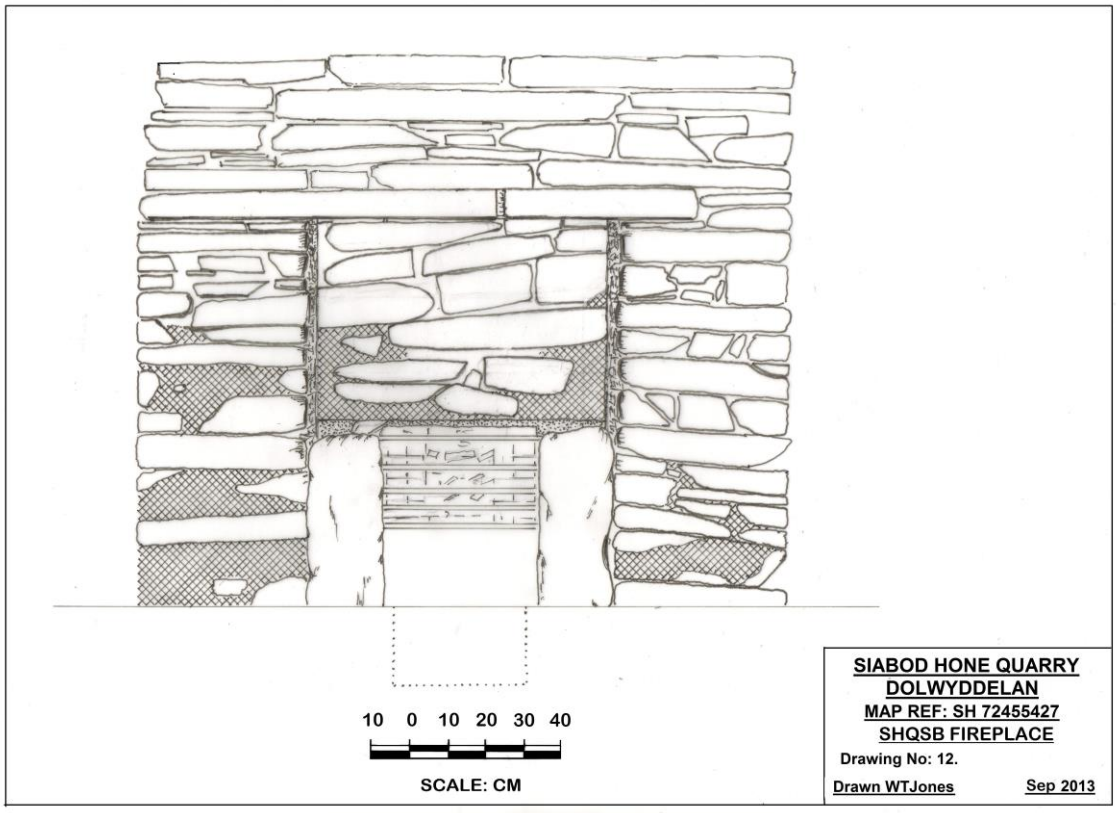
SCALE: CM

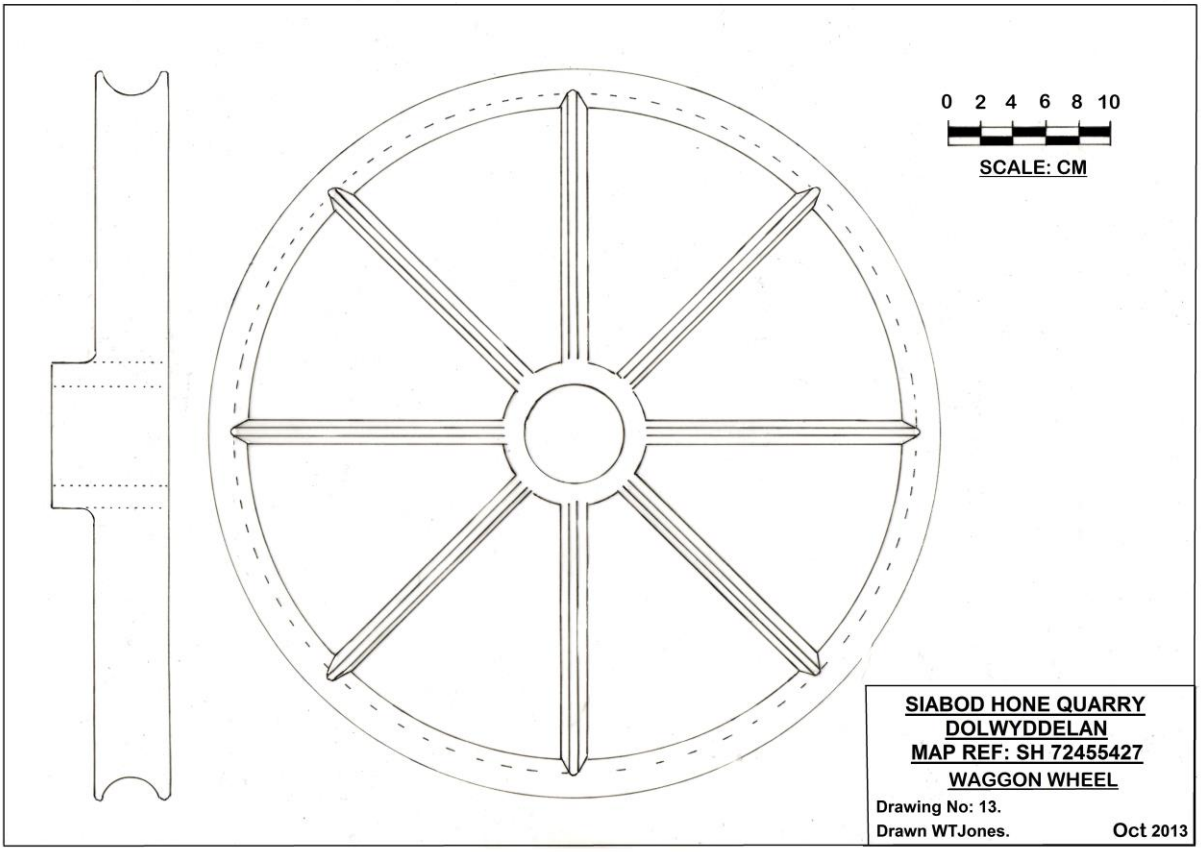
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
RAILWAY SLEEPER

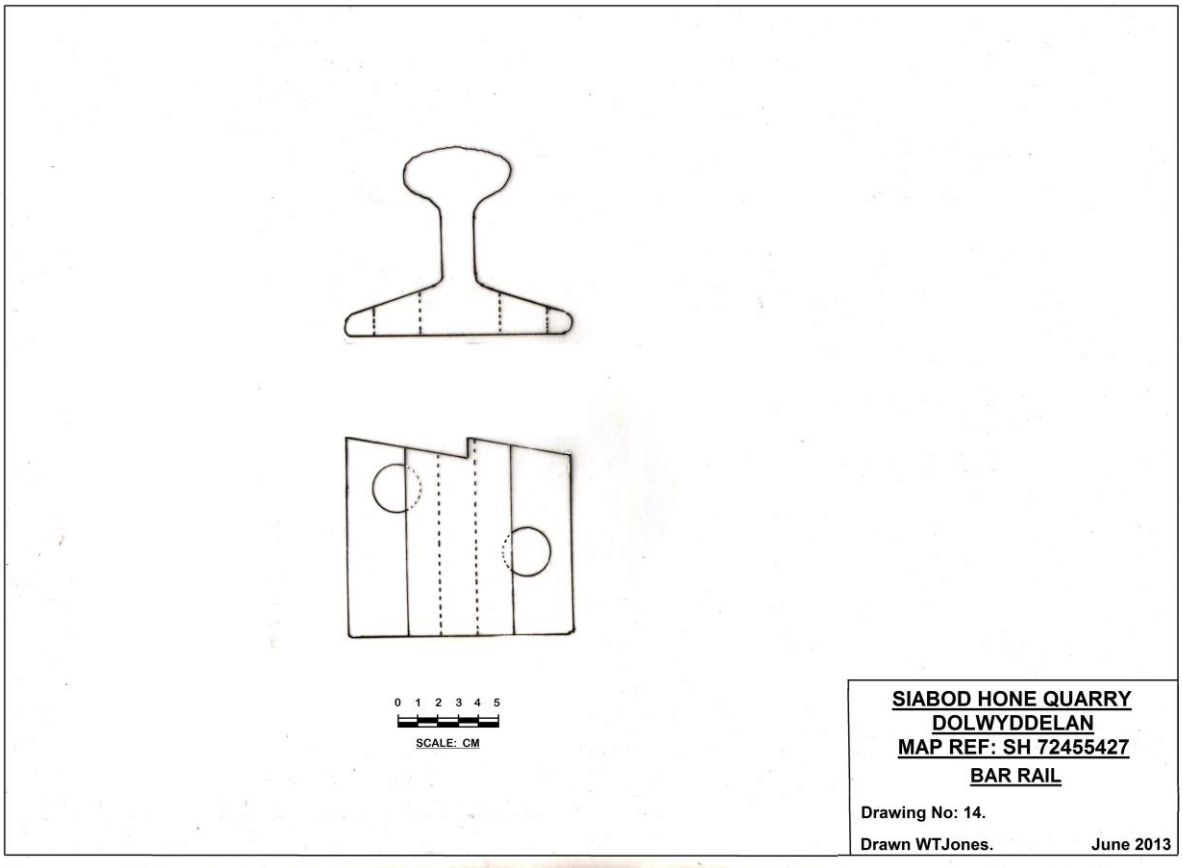
Drawing No: 10.

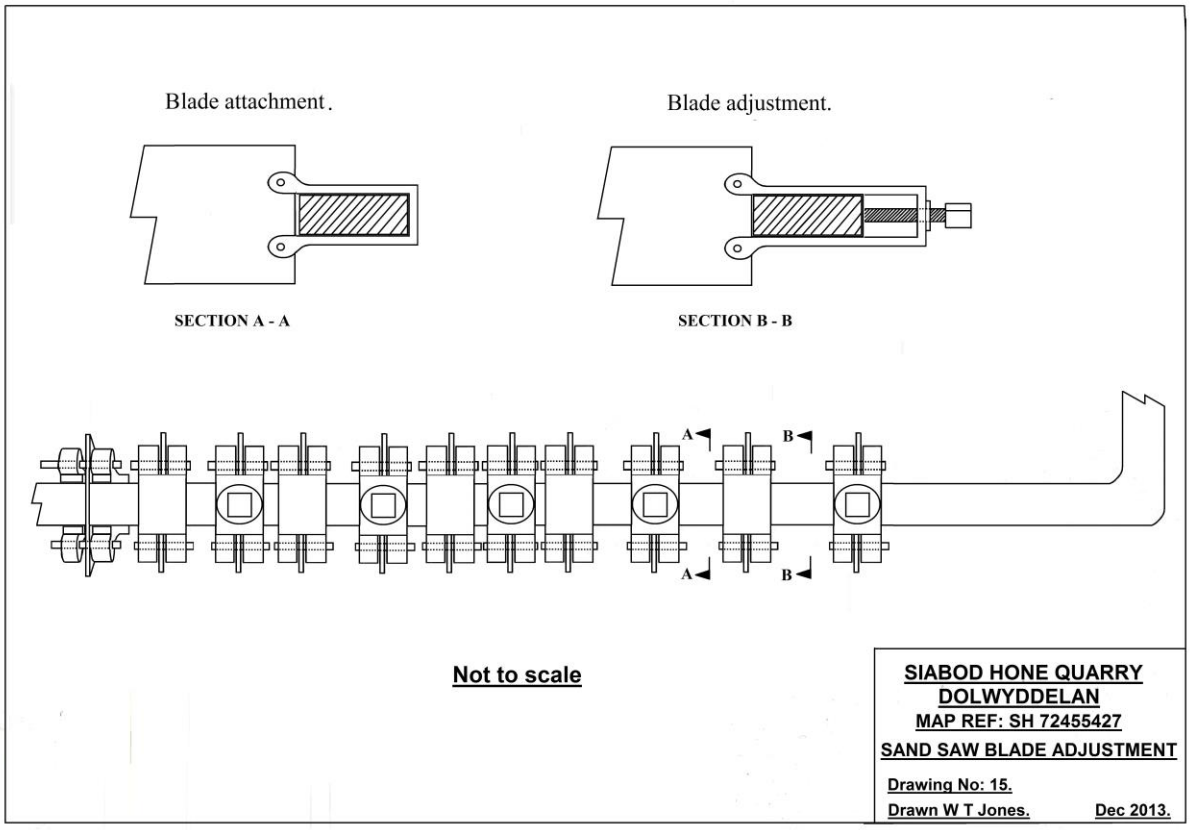
Drawn WTJones Aug 2013

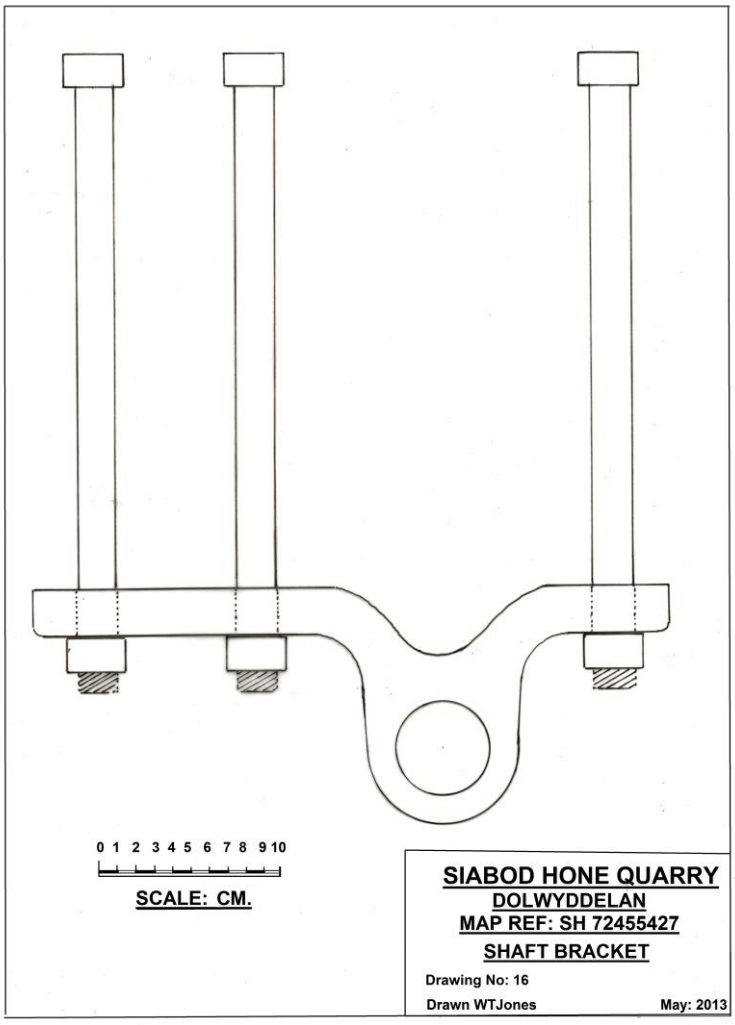

Water drain
Lateral chimney and firplace built into the west wall at a later date
20 0 20 40 60 80
SCALE: CM
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
SHQSB FLOOR PLAN
Drawing No: 11.
Drawn WTJones
Sep 2013

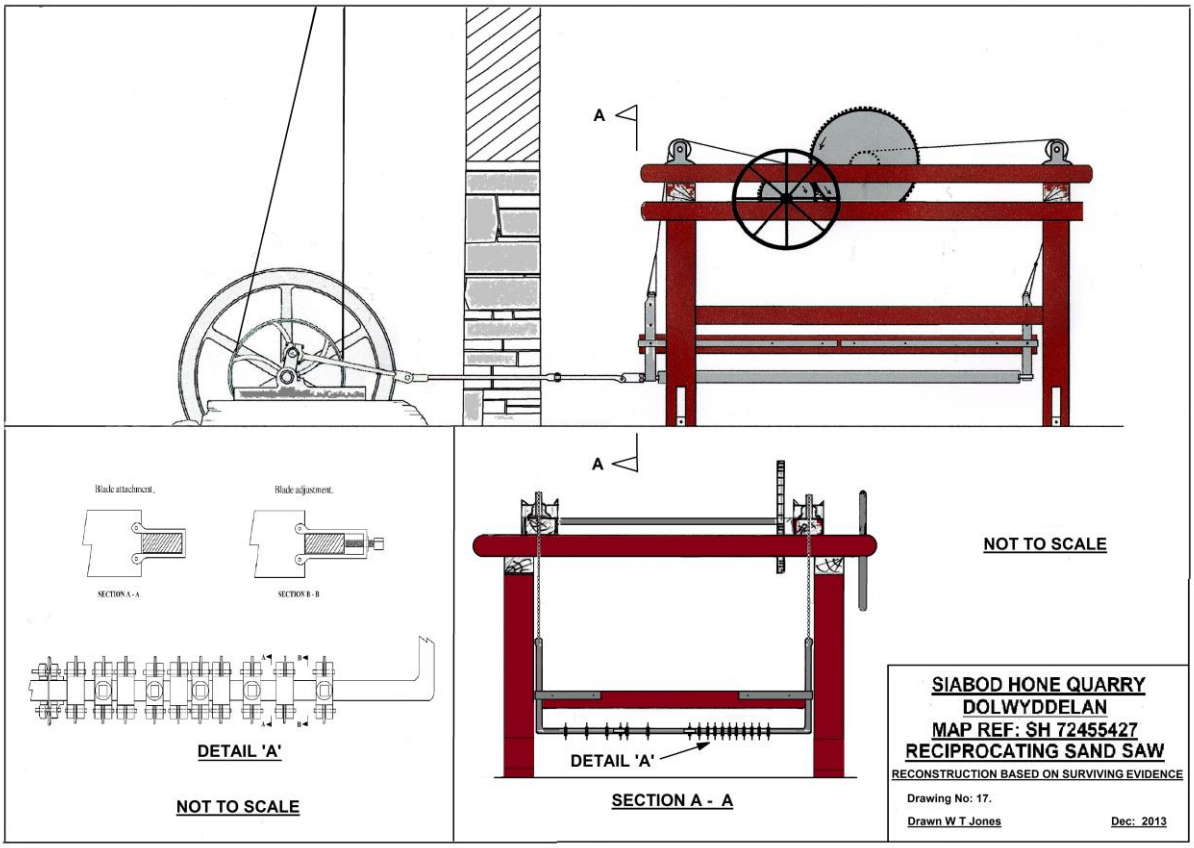

10 0 10 20 30 40
SCALE: CM
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
SHQSB FIREPLACE
Drawing No: 12.
Drawn WTJones
Sep 2013

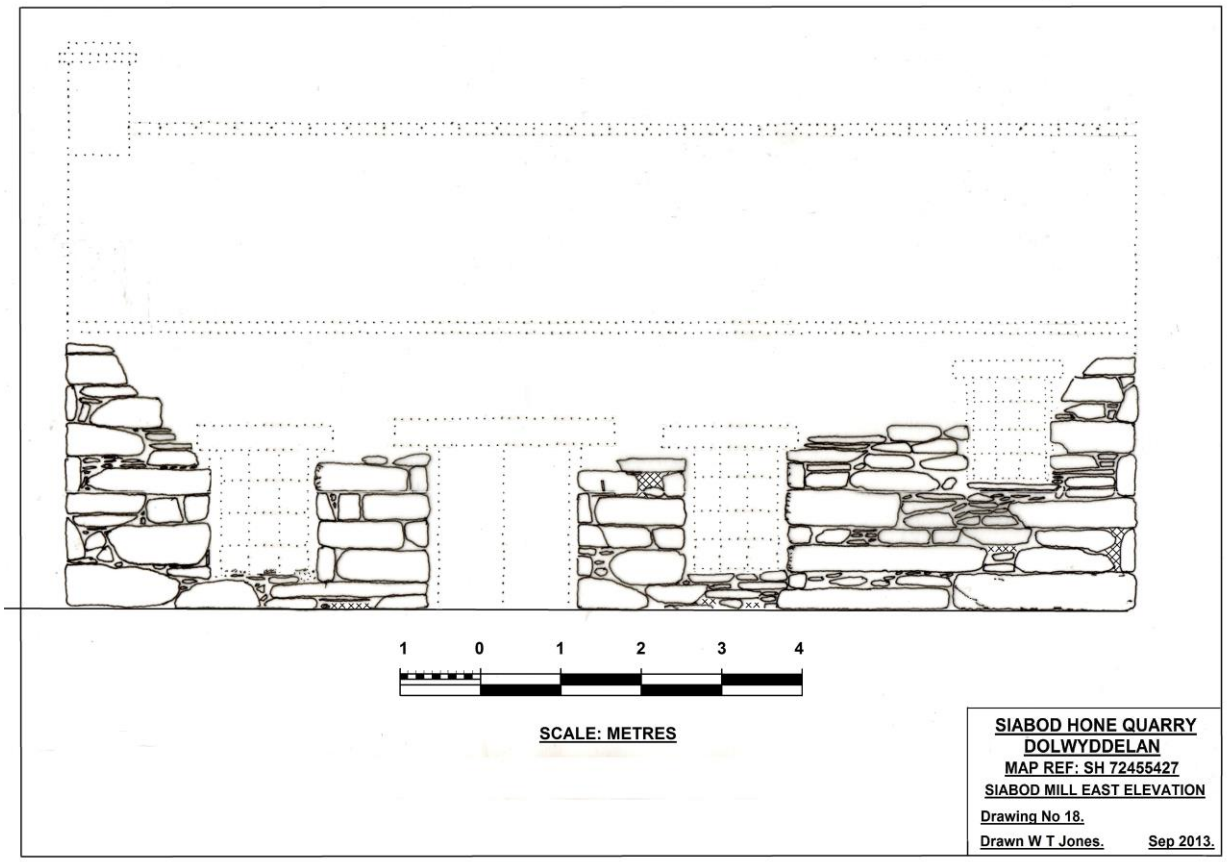

0 2 4 6 8 10
SCALE: CM
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
WAGGON WHEEL
Drawing No: 13.
Drawn WTJones.
Oct 2013

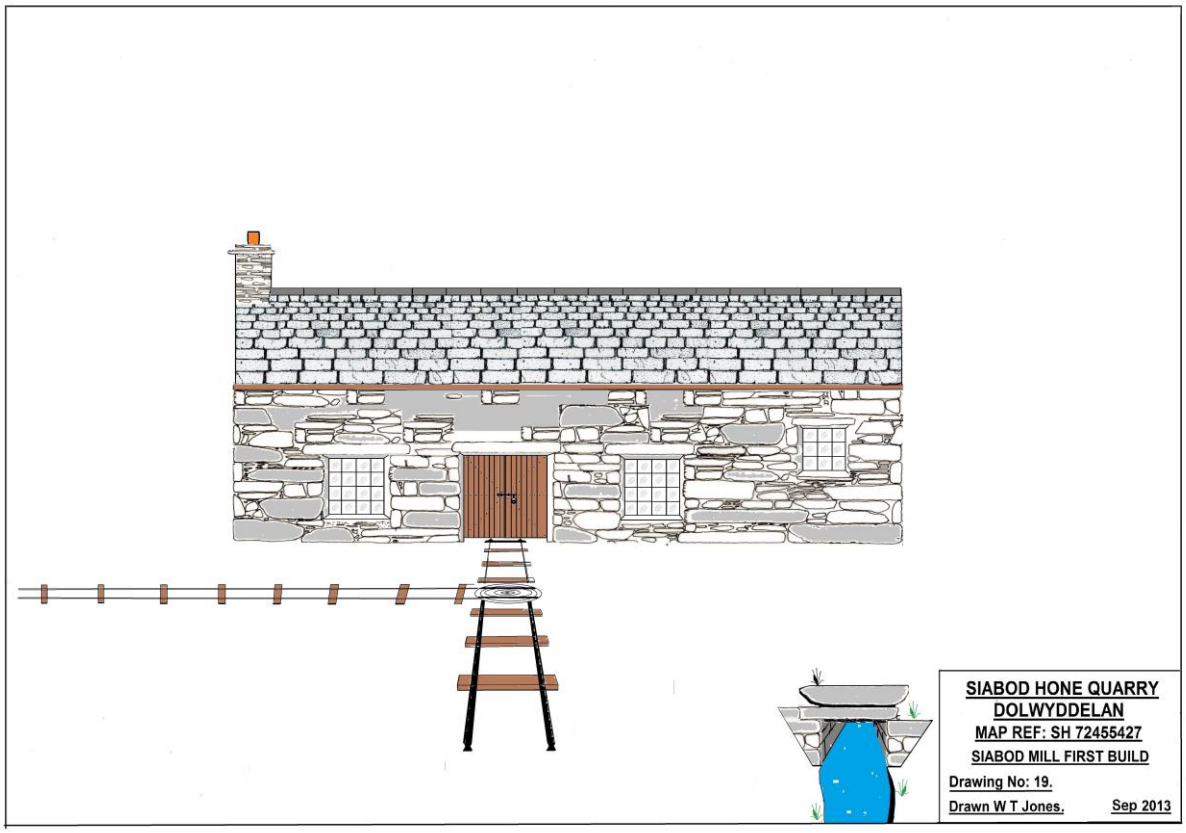

0 1 2 3 4 5
SCALE: CM
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
BAR RAIL
Drawing No: 14.
Drawn WTJones.
June 2013

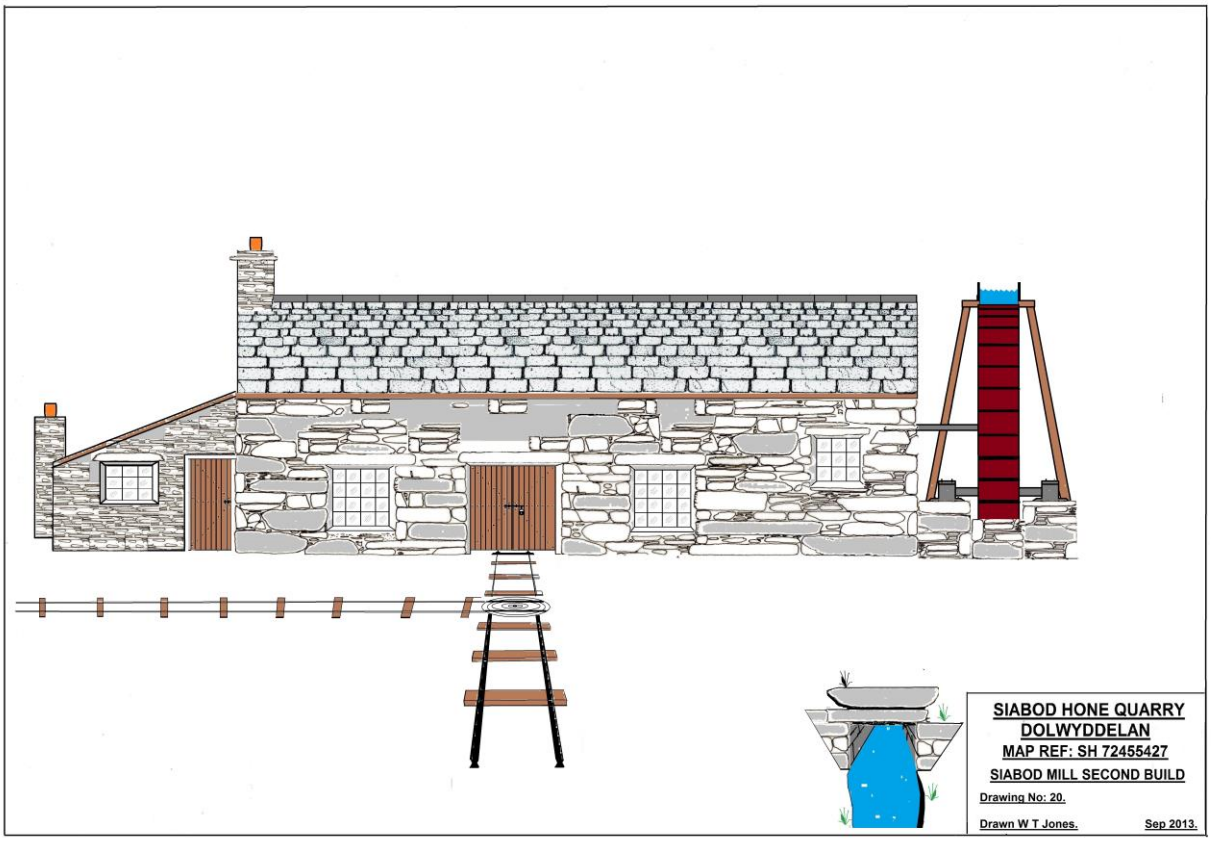

Blade attachment.
Blade adjustment.
SECTION A - A
SECTION B - B
A
B
A
B
Not to scale
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
SAND SAW BLADE ADJUSTMENT
Drawing No: 15.
Drawn W T Jones.
Dec 2013.

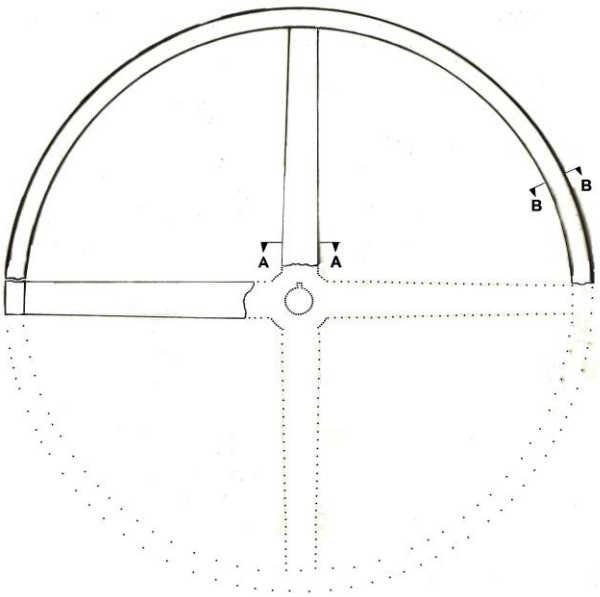

0 1 2 3 4 5 6 7 8 9 10
SCALE: CM.
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
SHAFT BRACKET
Drawing No: 16
Drawn WTJones
May: 2013


A
Blade attachment.
Blade adjustment.
SECTION A - A
SECTION B - B
DETAIL 'A'
NOT TO SCALE
A
DETAIL 'A'
SECTION A - A
NOT TO SCALE
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
RECIPROCATING SAND SAW
RECONSTRUCTION BASED ON SURVIVING EVIDENCE
Drawing No: 17.
Drawn W T Jones
Dec: 2013


1 0 1 2 3 4
SCALE: METRES
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
SIABOD MILL EAST ELEVATION
Drawing No 18.
Drawn W T Jones.
Sep 2013.


SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
SIABOD MILL FIRST BUILD
Drawing No: 19.
Drawn W T Jones.
Sep 2013


SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
SIABOD MILL SECOND BUILD
Drawing No: 20.
Drawn W T Jones.
Sep 2013.



SECTION A - A

SECTION B - B

0 10 20 30 40

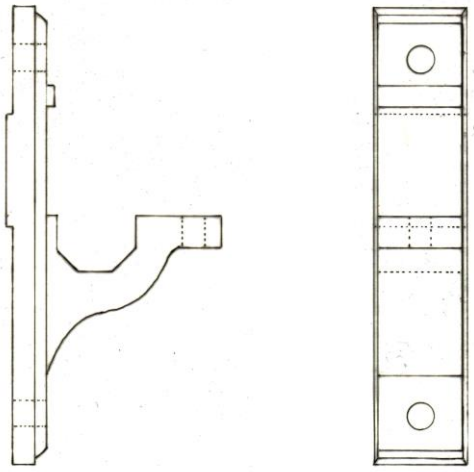
SCALE: CM

SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427

HAND WHEEL FOR HOISTING THE RECIPROCATING SAND SAW

Drawing No: 21.

Drawn W T Jones. April 2014.



0 1 2 3 4 5 6 7 8 9 10

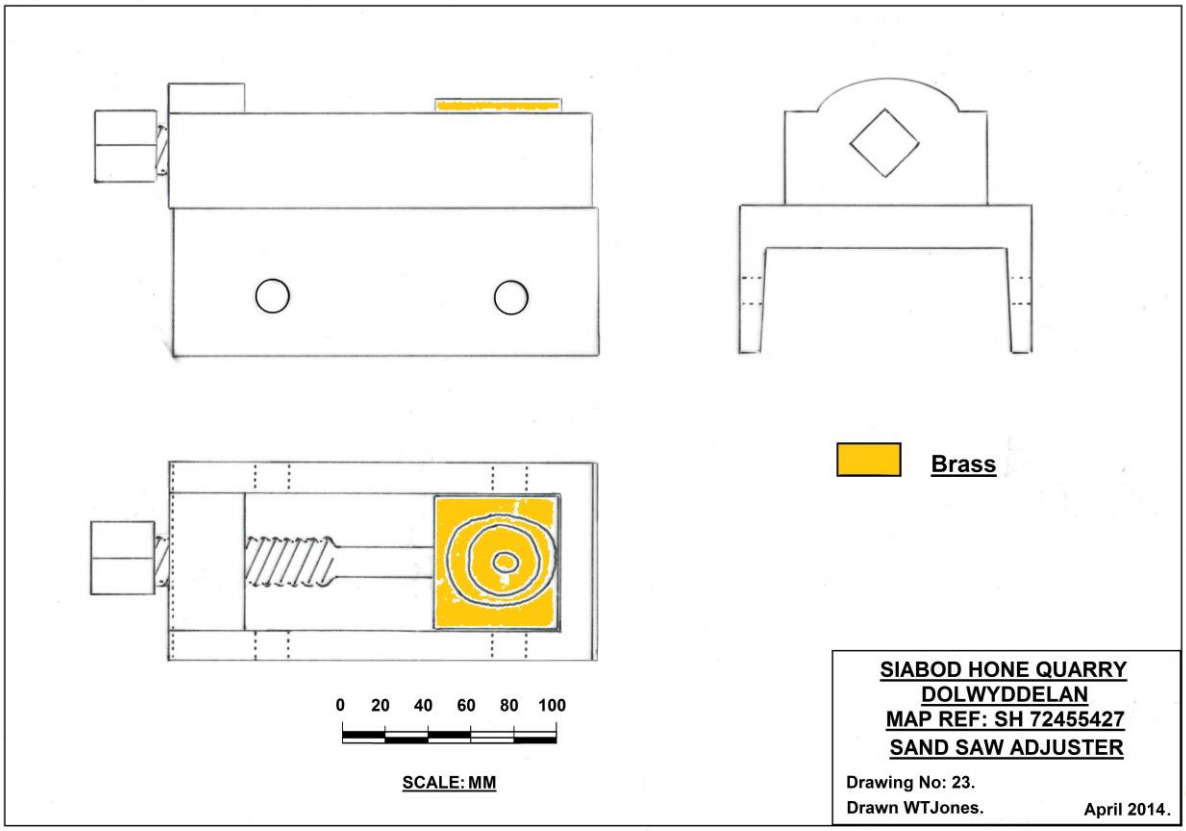
SCALE: CM

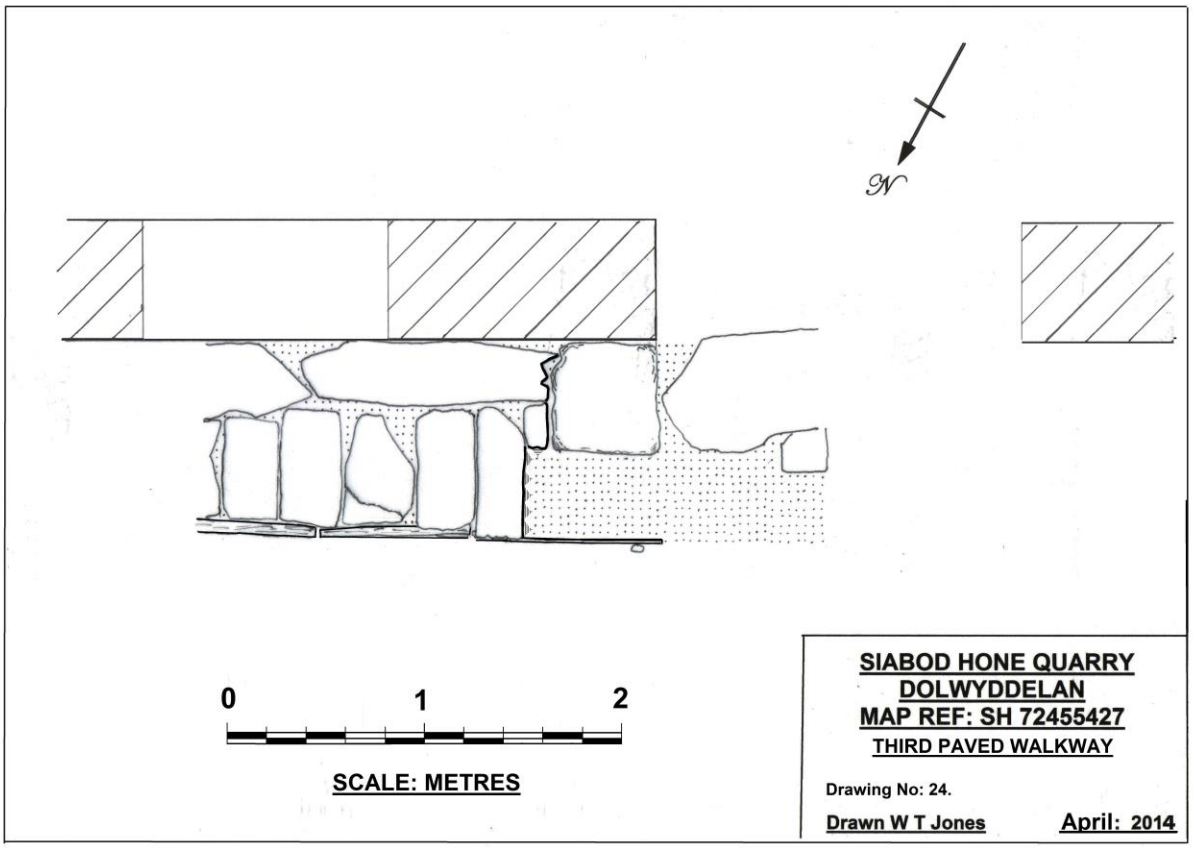
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427

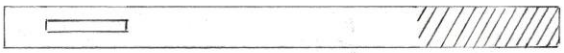
WALL BRACKET FOR DRIVE SHAFT

Drawing No: 22.

Drawn W T Jones April: 2014


Brass
0 20 40 60 80 100
SCALE: MM
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
SAND SAW ADJUSTER
Drawing No: 23.
Drawn WTJones.
April 2014.


N
0 1 2
SCALE: METRES
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
THIRD PAVED WALKWAY
Drawing No: 24.
Drawn W T Jones
April: 2014

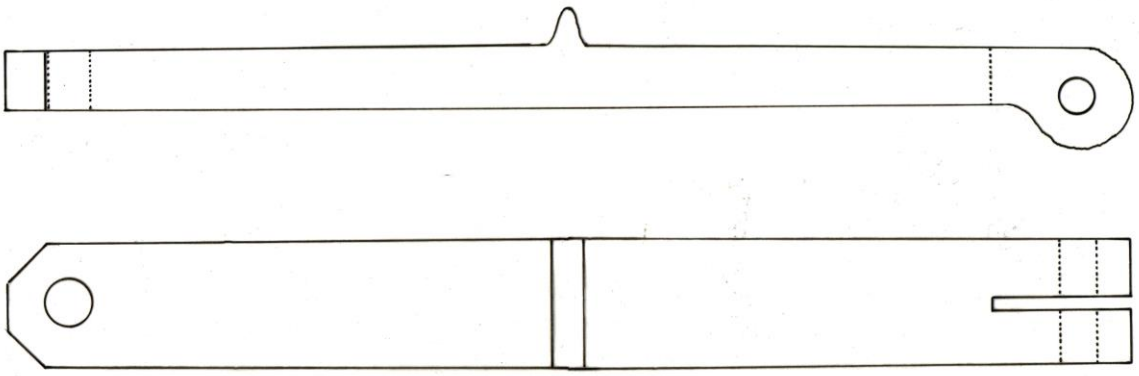


0 1 2 3 4 5

SCALE: CM

SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
THREADED BOLT.

Drawing No: 25.
Drawn WTJones
March 2014

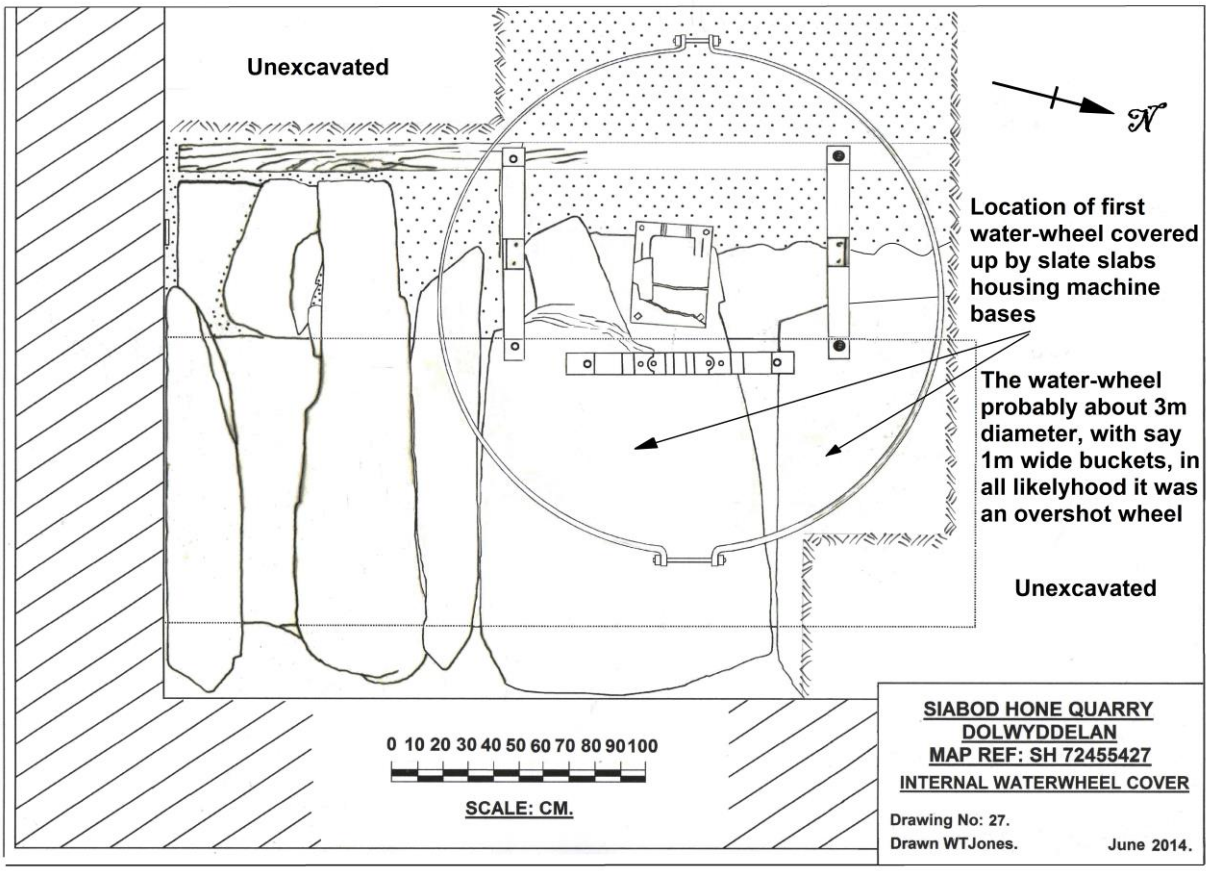


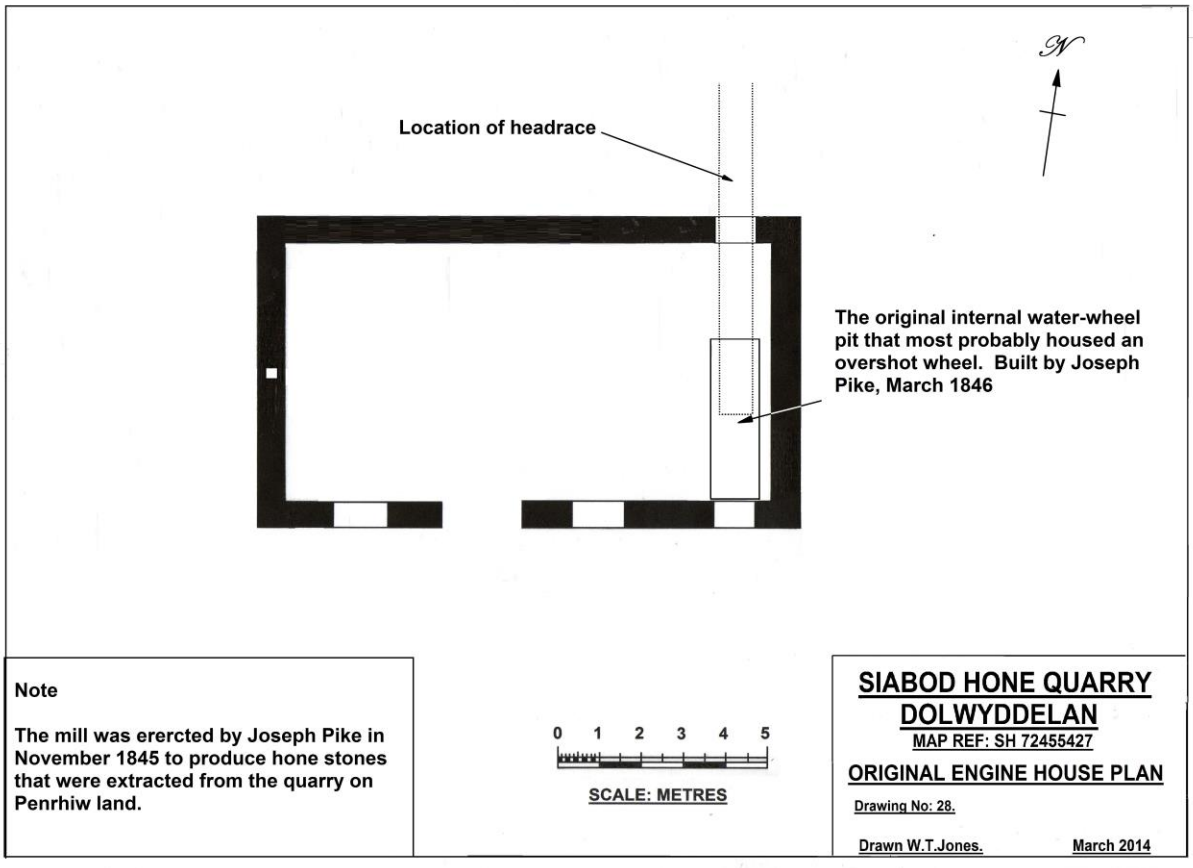
0 100 200

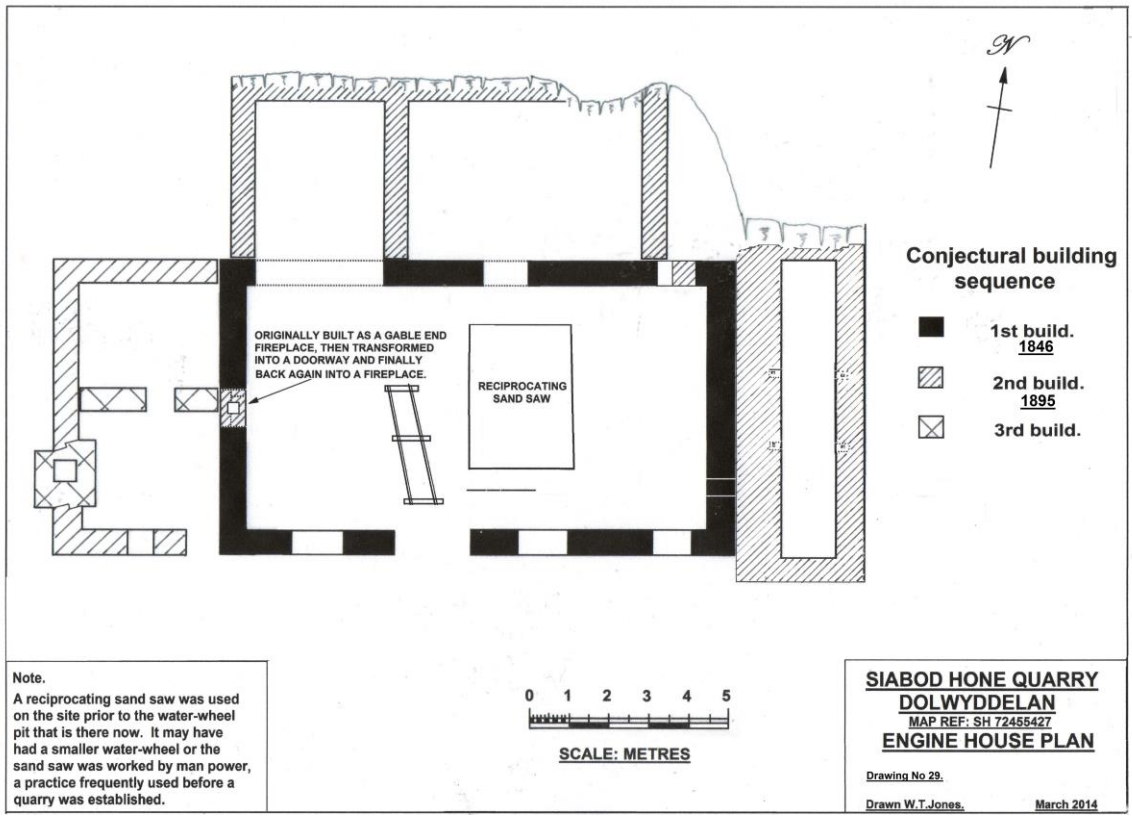
SCALE: MM.

SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
SAND SAW CONNECTING ARM

Drawing No: 26.
Drawn WTJones.
May 2014.


Unexcavated
N
Location of first water-wheel covered up by slate slabs housing machine bases
The water-wheel probably about 3m diameter, with say 1m wide buckets, in all likelyhood it was an overshot wheel
Unexcavated
0 10 20 30 40 50 60 70 80 90 100
SCALE: CM.
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
INTERNAL WATERWHEEL COVER
Drawing No: 27.
Drawn WTJones.
June 2014.


N
Location of headrace
The original internal water-wheel pit that most probably housed an overshot wheel. Built by Joseph Pike, March 1846
Note
The mill was erercted by Joseph Pike in November 1845 to produce hone stones that were extracted from the quarry on Penrhiw land.
0 1 2 3 4 5
SCALE: METRES
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
ORIGINAL ENGINE HOUSE PLAN
Drawing No: 28.
Drawn W.T.Jones.
March 2014


ORIGINALLY BUILT AS A GABLE END FIREPLACE, THEN TRANSFORMED INTO A DOORWAY AND FINALLY BACK AGAIN INTO A FIREPLACE.
RECIPROCATING SAND SAW
Conjectural building sequence
1st build. 1846
2nd build. 1895
3rd build.
Note.
A reciprocating sand saw was used on the site prior to the water-wheel pit that is there now. It may have had a smaller water-wheel or the sand saw was worked by man power, a practice frequently used before a quarry was established.
0 1 2 3 4 5
SCALE: METRES
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
ENGINE HOUSE PLAN
Drawing No 29.
Drawn W.T.Jones.
March 2014

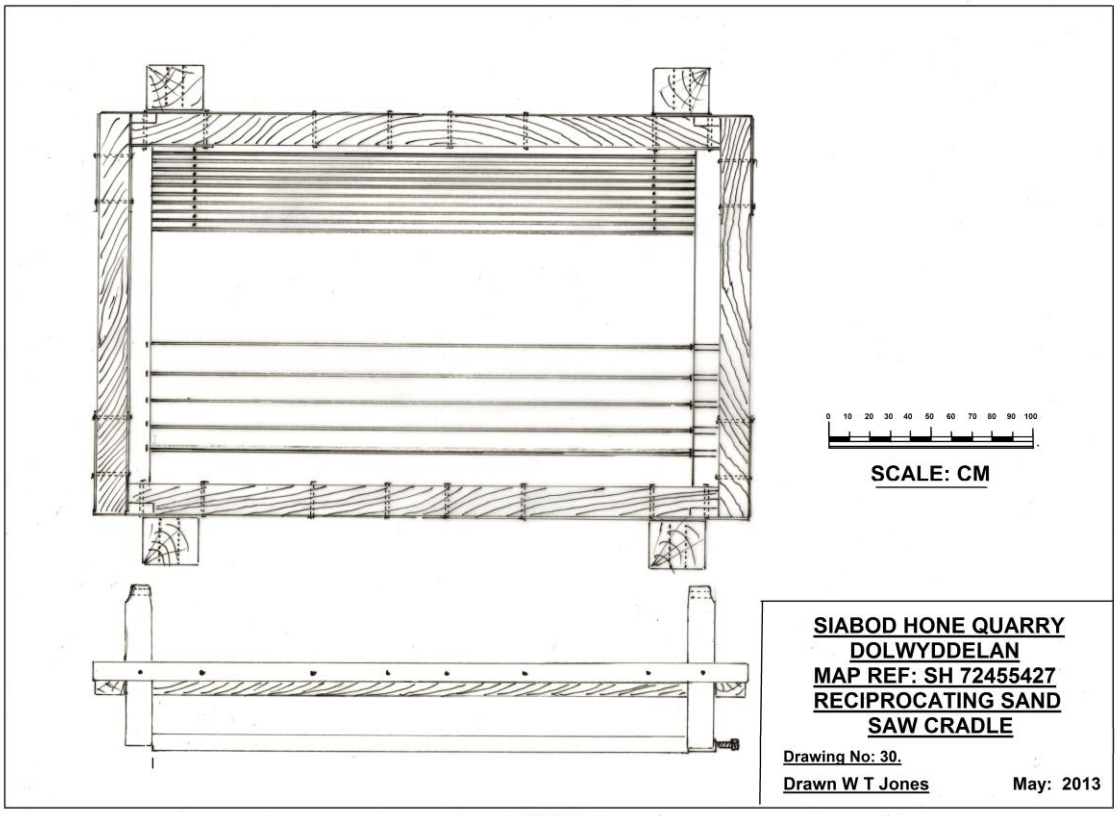

0 10 20 30 40 50 60 70 80 90 100
SCALE: CM
SIABOD HONE QUARRY
DOLWYDDELAN
MAP REF: SH 72455427
RECIPROCATING SAND SAW CRADLE
Drawing No: 30.
Drawn W T Jones
May: 2013

Fig: 01.

Fig: 02.

Fig: 03.

Fig: 04.

Fig: 05.

Fig: 06.

Fig: 07.

Fig: 08.

Fig: 09.

Fig: 10.

Fig: 11.

Fig: 12.

Fig: 13.

Fig: 14.

Fig: 15.

Fig: 16.

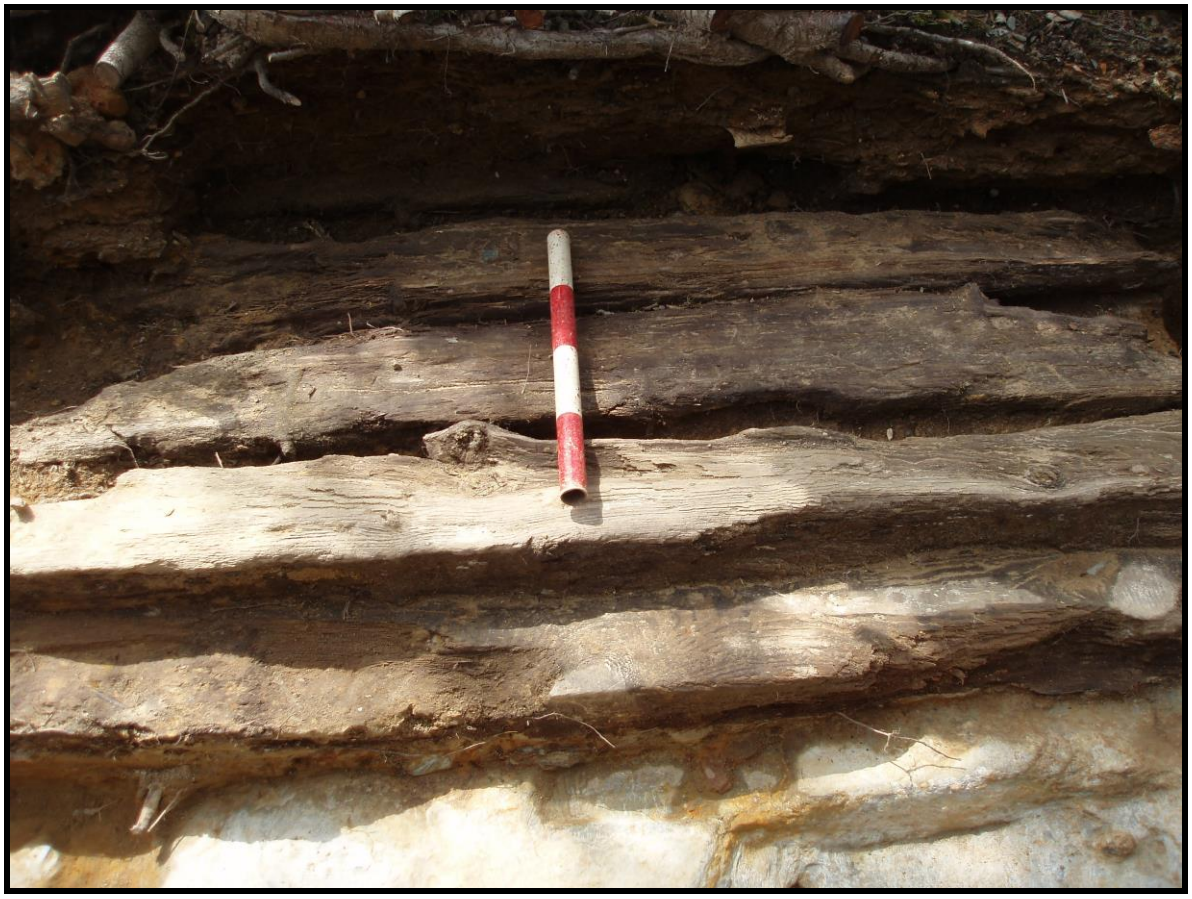


Fig: 17.

Fig: 18.

Fig: 19.

Fig: 20.

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