

3

n<sup>o</sup> 13.

On the 20 November 1796  
~~where~~ I arrived at Marsvinsholm  
to confer with His Excellency  
Count Runtz respecting the  
Coal at Boganas, where I was  
met by Messrs Polheimer with  
whom in presence of His Excell.  
I examined the plans of the  
different Borings in search of  
Coal. After having in the absence  
of Mr C. Bagge signed ~~an~~ ~~expressions~~ series of resolutions  
with the Messrs Polheimer that the  
plans agreed on were the best that  
could be adopted - I set ~~off~~ ~~out~~ for  
Boganas where I arrived on the  
25<sup>th</sup> Nov<sup>r</sup> in company with Mr. C.  
Polheimer, in order to ~~investigate~~ <sup>examine</sup> the ~~Shaft~~ <sup>Shafts</sup> where they expected to  
find 11 inch seam of Coal ~~at a depth of~~ <sup>at a</sup> 5 fathoms deep with  
white peat with threads in it.  
After ~~XXXXXXXX~~ <sup>a journey</sup> to Helsingborg in  
order to procure the necessary ~~things~~  
Inplements for sinking a Shaft  
I returned to Boganas and for  
the first time ~~at Helsingborg~~ went  
to work and endeavoured to <sup>teach</sup>  
the People to ~~XXXX~~ <sup>sink</sup> according to  
the English mode but they

workmen not being pleased with  
 the hours I had allotted them  
 (3 hours down & 3 up) I was ob-  
 liged to change for 3 down the  
 pit & 6 up at home; and that  
 they should be paid at the rate  
 of 8<sup>00</sup> for shifts. On the 1 Dec<sup>r</sup>  
 after having been at Ålborg to  
 get more Sinking Stacks I found  
 strong white frost in the bottom.  
 When I went down the ~~pit~~ shaft  
 again on the 5<sup>th</sup> in order to see  
 how they had got through a streak  
 of shivery blue Metal, I found  
 hard frost at the Bottom again;  
 And, as after trial, Lamps were  
 found to cost much more than  
 candles, I <sup>ordered</sup> adopted the latter to  
 be used.

On the 6<sup>th</sup> December I bought the  
 fish wood for Trams & Blackshuff  
 and also made the first agreement  
 for Coop rods for the Rogans  
 swimming. After having been  
 down to instruct the men in  
 their new work for 3 hours  
 I heard something fall from  
 Bank, and ~~at six o'clock~~ <sup>that</sup> saw  
 a man had fallen down; the  
 Jack Rope having sprung, the  
 man was not much hurt but  
 this was the first accident which  
 happened at the ~~mine~~ gallery.  
 On the 9<sup>th</sup> I found blue Metal in  
 the bottom; and same day at  
 Helsingborg made a Coop Bow  
 and Clippas.

After the account given me  
 by M. P. I now thought that  
 we were at the Coal Roof, but  
 after sinking through found no  
 Coal. I then continued to bore  
 but

which cost 6<sup>00</sup> shillings.

but could not find at the depth of 9 feet. On consulting with Mr. A. Polkammer who informed me that he had bored through the Coal in many places, I concluded, that as, a little to the Rise there was Coal at 10 feet, ~~that~~ there must be a Slip between which we ought to have the bearing of, so that it might not deceive us in another place.

On the 11<sup>th</sup> December 1796 I first begin to sink the shaft which I call No. 2, and got the Stonehead. And ~~then~~ under a tender seam of Splend found ~~at~~ Coal at 9 feet from the surface 11 Inch thick. I now set out a Drift in order to find the Slip or Dyke; Four feet into this first Drift the Coal ~~seam~~ was of the same thickness, but a Band then came across the Drift to the Dip ~~of the seam~~ <sup>at about every</sup> appearance of it on the Clive side <sup>in the coal</sup>.

I now found the Band to be 1 1/2 Inch thick and the Bearing of the Coal to be N. 75.° W. consequently the line of Dip E. 75.° S.

As there was no appearance of a Slip altho' the Drift ~~was~~ went much to the Dip I began to bore ~~to the top~~ <sup>in No. 1.</sup>

And after having teams made and the proper Buckets lowered prepared to draw water, which first commenced at the Pit on the 9 January 1797. Still continuing to bore from No. 1 to No. 2, & well as ~~to~~ the drift in the latter, to find if possible the Slip or Dyke.

(1)

After having got the Water out  
of No. 7. I left off boring between  
the Shafts No. 1 & 2. at 3 fathoms  
14 feet, without any appearance  
of Coal, and began again to  
bore in No. 1. The Water being  
out of the A Pit, found the  
Drifts which had been made for  
the Clay to be the one about 3  
yards & the other 6, and the Coal  
where the Clay was taken from  
under it, 7 inches thick and  
2 feet broad.

After having set out a Drift in  
the A Pit in order to ~~take~~<sup>win</sup> as much  
Coal as possible, and finding the  
Band in No. 2 still the same, ordered  
a Borehole to be made between No. 1  
& 2. 12 yards from the latter, in  
which we got Coal on the 19<sup>th</sup>.  
On the 21 found the Dyke or Slip (which was afterwards found to be a  
paralllel Slip Dyke) at the depth of 6 feet, and began  
to sink a little shaft ~~to~~<sup>to</sup> find the bearing of it.

On the 10 Feb<sup>r</sup> got Coal in Borehole  
No. 2. 11 1/2 inches thick and hard  
Dank at bottom, at the depth of  
9 1/2 fathoms. Having occasion  
to go to Gothenburgh I set out a  
Borehole in which was found a  
Seam of Coal 18 inches thick and  
only 9 feet 8 from the surface.  
On my return bored through  
Coal 19 1/2 inches thick, & set  
out another borehole where according  
to my calculation the <sup>19 inch seam</sup> ~~seam~~ ought  
to be 18 fathoms deep, if the dipping is as much as in the A Pit  
February the 9<sup>th</sup> the first Vessel  
loaded with Coals from Hoganas  
sailed for Gothenburgh, after many  
difficult trials <sup>(owing to water)</sup> on the Fell. I  
tried on the field adjoining

But this not succeeding, set out a  
 Borehole <sup>(No 51)</sup> near Höganas Village  
 to find the same seams, we were  
 here much plagued with loose  
 stones falling from the sides. Set  
 out another ~~XXXX~~ <sup>borehole</sup> between Nos 385  
 where we were much hindered by  
 water and after ~~raising the shaft~~ <sup>to the depth of 11 feet</sup>  
 10 or 11 Inch seams were obliged to lay  
 it in.

On the occasion of Mr & Mrs Bagges  
 going down the A Pit. His Excellency  
 gave the Name of Fruit Bagged Pits  
 to the seam of Coal now working.

On the 5<sup>th</sup> June, the owners ~~signed~~  
 signed a Contract with me at  
 Helsingborg, and expressed them-  
 selves much pleased with my  
 plan of boring for & working  
 Coal.

About this time the air being  
 rather bad in the A Pit set  
 a fire lamp and made her an  
 upcast ~~Pit~~ Shaft which made  
 it immediately good again.  
 I now set out 3 other Boreholes  
 in one of which found Coal at  
 10 feet deep & 3 1/4 inches of Good hard  
 Caking Coal, and in the other at  
 the depth of 11 feet a seam 2 1/2 inch: thick  
 In a third borehole they got Coal at  
 21 feet. Tried also in several other  
 places for Coal, principally in the  
 neighbourhood of Tjörred, but  
 owing to Ducksand and much  
 water, many of them were without  
 success.

\* from Malmö, Gothenburg, & Linnæa.  
 I now procured Timber for  
 Building, Deals, Bricks <sup>Lime</sup> &c and  
 set out a sinking pit near the  
 Borehole No 17 & continuing

to build Workmen's houses &  
 make an agreement for a regular  
 post to go between Helsingborg  
 and Strapperup, there being no  
 regular communication before  
 this time. In the meantime  
 the A pit is working & Coals  
 shipped when the weather will  
 permit. <sup>There being great demand for them</sup> We are obliged to make  
 our fires of Fir, there being  
 no Oak to be had. I also at  
 this time procured more workmen  
 & set them to work day & night  
 at the new winning, where we  
 got Coal on the 11 Aug. at 10 feet [B pit]  
 and continued to sink a sump  
 for the water to stand, so that  
 the men may work as dry as  
 possible. I set ~~up~~ a fire ~~down~~ out  
~~at~~ a headways in the ~~at~~ A  
 pit, & wishing the men to take  
 it by bargain, but ~~could not immediately~~ <sup>could not immediately</sup> make an  
 agreement with them; however  
 they, after a few days consented to  
 work for 28s per barrel and 12s  
 for Tallow. The ~~the~~ Peasants  
 were also displeas'd with their bargain for  
 Driving Coals to the Sea but  
 I also satisfied them ~~with~~ <sup>after</sup> a  
 little altercation. The remaining  
 Hewers were paid 28s per score  
 for Corves of 5 Skops - as Ten Corves  
 could not be drawn by the Jack Roll.  
 I had also some trouble to get  
 the men to work where it  
 was in the least part wet,  
 they not being accustomed  
 to work in water

Having written to Mr Bagge  
 for timber I commenced a  
 Survey of the Harbour. ~~the~~  
 appearance of which was at first  
 rather inauspicious for building  
 a Bridge or Struth, owing to the  
 shallow water, and consequently  
 great expence of carrying such  
 a work so far out to sea. Endeavoured  
 to enter into a contract with the  
 Inhabitants of Niganaas for the  
 use of their Bridge, but without  
 success.

The first Clay was now sent  
~~off~~ <sup>on the 30</sup> ~~all~~ <sup>having been</sup> ~~our~~ <sup>employed</sup>  
 horses in leading it to the Harbour for 4 days  
 On the 19 Aug. having got the  
 water down to within a few  
 inches of the Scaffold, set a  
 pump and begin to draw  
 water; next day recommence  
 sinking but found the stone  
 hard that the sinkers had  
 begun to drill for a shot, they  
 however got thro' it at 10 inches  
 & a strong feeder of water came  
 up so that it was not worth while  
 to blast but endeavour to break  
 it up with wedges which plan  
 succeeded. I agreed with the  
 mason to build & finish 2 houses  
 for 130 ~~Att~~ but the work goes  
 slowly forward, so many men  
 being employed with the Harvest.

Sept 1 - Marked out a Waggon way  
 from the Sinking pit through the  
 village of Niganaas, to the Harbour

I set



Set it out 16 feet wide, in order that a cart way, can be at the side of it if thought necessary. continued to work in the sinking pit - and more men arriving from Buscrup begin to draw water out of the B pit and get the Lump cleaned. On the 6<sup>th</sup> a Galliot arrived from Gottenburg with Timber and a Boat with Brandy from Helsingborg

Order the men in the sinking pit to be down 3 hours & at home to alternately, as not half them could work in the Bottom. (Engine Pit)

The 9<sup>th</sup> Sept. it blew so hard and was so wet that no work could be done either at the sinking or Coal Pit.

A Meeting was held at Morarp on the 11<sup>th</sup> Sept. to know if any Landholder in this Paroad would take any part in the coal works: when they all declined, except the Countess Sparre of Skulla Gunnarstorp, who through Herr Inspector said that she would take a part of the Coal in case any should be wrought or bored through on her Estates. Bergmaster's Land from informed us that we might lay a way down whenever it might be judged necessary. A letter from Count of Skuuta informed me that he could not procure any men for the Colliery this Season - it being to late to send them down.

Sept. 13<sup>th</sup> = Set out for Carlscrona  
 where I arrived on the 15<sup>th</sup> in  
 order to procure workmen. On  
 my journey left word at every posthouse  
 that in case any should ~~pass~~ pass  
 there in want of work, they could  
 be employed at Hoganas. After  
 conversation with several of the officers  
 at Carlscrona found it very difficult  
 to get leave for any men who  
 were willing to go with me. I  
 however agreed with 7 men for  
 half a year from the 20<sup>th</sup> inst.  
 but on applying <sup>to the</sup> Landsholding  
 or Governor of the District for  
 Passports for the men I had engaged,  
 I was informed by his Honour,  
 (in whose Common Hall I was  
obliged to wait a couple of hours  
before admittance could be  
obtained,) that on account of  
 the scarcity of servants and the  
 Expected arrival of Their Majesties,  
 no passports could be granted  
 for workmen to go out of the  
 Land or District; I took  
 the liberty of informing him  
 that we had a right to take  
 men from any part of Sweden.  
 (wherever we found them inclined  
 to serve us) to work at the  
 Colliery, and he then consented  
 to let them have passports, on  
 condition that they were really  
Free Men, for ~~as~~ to ascertain  
 which they were obliged to appear  
 before him. After much trouble  
 this was settled; I wished also  
 that an advertisement might be  
 published in the District inviting  
 men to come to the Colliery, but  
 this was denied me.

On my arrival ~~at~~ home on

the 2<sup>nd</sup> inst found that nothing had been done at the sinking pit since my departure for Carlscrona, ~~on account~~ there being so much water, and many of the men having gone home to Bosompe. <sup>the</sup> Coals taken up ~~from~~ <sup>from</sup> that time being only 147 Barrels from the B pit. Next Day began to draw water out of the A pit, and towards Night 8 Men and 2 Boys came from Carlscrona, the remainder not being permitted on account of the expected arrival of the King.

I had a very ~~great~~ great deal of trouble with these ~~men~~ men from Carlscrona - and was at last obliged to set 4 of them away, finding that they spoiled those who were willing to work, and the others not agreeing to my terms I sent them back to Carlscrona.

Being under the necessity of travelling to Gothenburg & other places ~~and~~ sometimes to be absent for several days I always found ~~at~~ on my return home that the work had in the interim either stood entirely <sup>at least</sup> or advanced very slowly, a proof how much my presence was necessary for the welfare of this new Undertaking - I frequently went down ~~and~~ <sup>and</sup> drew Coals for half a day or more, encouraging the men by my example ~~and~~ <sup>and</sup> convincing them how much could be done by industry and perseverance. My endeavours however did not

at first succeed the men not  
 having being accustomed to such  
 work particularly where it was  
 wet, and constantly <sup>as</sup> at the com-  
 mencement of any new sinking  
 &c. expressing themselves dissatisfied  
 with the wages offered them.  
 and when at work it went so  
 very slowly with the sinkers that  
 I was ~~found~~ the necessity of being  
 a little harsh with them; they  
 not ~~would~~ sinking more in  
 a week than the same number  
 of men in England would in a day.  
 It was really not in my power  
 to induce them to do more, I don't  
 believe it was in their nature  
 either to work hard or to take  
 any delight in working.

~~But B. Finished, and removed the  
 materials to the new Borehole  
 at the top.~~

The B Pit which was sinking I  
 found necessary to discontinue  
 until an Engine could be erected  
 for which could not be done  
 until we got Boiler plates  
 from Gothenburg. Mean time  
 the B Pit continued to be wrought  
 but not to any great extent  
 as the men were sometimes sick  
 and sometimes pretended to be so.  
 Those not able to haul Coals I set  
 to a new Borehole (No 10) where  
 I ~~did~~ hoped to find the quality  
 of the coal on the other side of the Dyke

Several were also employed making a new Cartway which had been planned some time before. At the close of the year 1797 the men went to their respective homes to spend the holidays.

New Year Day 1798 brought me 8 men from the gold mine in Smalands from whence I have since at different periods had some of the best workmen at the Collicry whom I set to work after the holidays were over. Like the other men they were at first afraid to venture on the work thinking that they could not earn a livelihood by hewing Coals - but I soon convinced ~~them~~ & satisfied them to the contrary.

The Boiler plates & pumps having arrived from Gothenburg but I found the pumps were bored only 4 1/2 inches instead of 6 as <sup>was</sup> ordered so was obliged to make them larger here.

After experiencing ~~great~~ much trouble and Delay in shipping the Coals, owing to the frequent reparation of the Carts, the difficulty of discharging into the Boats, & the great expence of keeping so many <sup>more</sup> horses than are necessary on a Railroad.

I took a survey of the Harbour

marked out the situation for  
the Bridge & gave orders what  
dimensions it should be; I  
then called a Meeting of the  
Inhabitants who had any  
Land through which the intended  
Railway might have to pass.

At this meeting (on the 16 Feb<sup>y</sup>)  
the people <sup>concerned,</sup> at once positively,  
told me that they would never  
consent to any way being laid  
through their property, for the  
use of the Colliery, unless the  
King adjudged it, and added  
that should he take from  
them their Bread he ~~might~~  
should take their lives also -

They also used a great deal of  
ill language, loading with  
curses both the Colliery and  
all concerned in it, particularly  
me, who they represented as  
having come into the country  
to ruin them, asking me at  
the same time if I was not  
afraid to go out at nights, or  
even between my ~~house~~ house  
and the Shaft, or that the  
curses of the poor should not  
alight on my head; with such  
like threatening (and abusive  
language - Having patiently  
heard their abuse which

told them I had not in the least despoiled, I reminded them how a process would end in their ruin, & that they had been forewarned how it might be avoided.

After pacifying them a little by mild language I got them to look at the proposed way, & if any other <sup>possibly</sup> could be pointed out which would injure their property, I would certainly agree to it if ~~proved~~ - At length they consented to the road being made on condition that I procure them a letter from the Regent (Master of Mines) of the Province, signifying that I had the liberty of making a Road to and from the Colliery where I might find it most expedient - which having promised them, our conference <sup>thus</sup> ended.

After beginning with the bridge the people began to murmur again so I thought it best to consult the Governour for which purpose I went to Malmo, a Meeting of those

concerned was accordingly appointed  
to be held at Farhull in this  
neighbourhood when leave was  
obtained to lay a Road on condition  
of paying <sup>for the</sup> Damage done to their  
Land a 10<sup>th</sup> ~~of~~ of the Corn they  
might sow. This I would not  
agree to - but would allow them  
after a fair Valuation.

This being settled I began with the  
Bridge and Railway immediately,  
but found great difficulty in  
obtaining timber particularly  
Oak for the sleepers (or cross  
pieces for the rails to rest on)  
the Boors ~~in the vicinity~~  
were so inveterate against me,  
and others in the vicinity of the  
Colliery who had timber to  
dispose of, were afraid to let  
me have it on that account.

The price I paid to a man for  
laying the way was 6<sup>l</sup> 3<sup>s</sup> 6<sup>d</sup>.

I now set out several Boreholes  
in different directions upon the  
fell from the sinking pit or  
let C in order to try the Coal  
which having found nearly the  
same as in all - I was set out  
a pit to be sunk to Grefwinan  
Quartz flots - and at same time  
built a shop to warm boiler  
plates & began with a boiler  
box bottom for the intended  
for the 28 inch Cylinder Engine  
to be set up at the  
Shaft D.

James being



July 11, 1798 ~~was~~ <sup>was</sup> the Day appointed  
for a Meeting of the Proprietors  
of the Colliery, to be held at  
St. Mary's ~~Colliery~~

~~where~~ I was ~~not~~ obliged to  
attend there the meeting concluded  
on the 13<sup>th</sup> & on the next Day  
set the first Coal Waggon on  
the new <sup>rail</sup> way in order to shew  
the Owners how it answered.

The Way <sup>is</sup> now ready to fill  
I commenced immediately with  
a Ballast Waggon and on the  
27 June the first Coals were  
led on the Waggon way.

During the latter part of this year  
built an Engine for drawing  
water but had much trouble  
in learning the men to work  
her properly, The Cylinder was  
28 inches Diameter & the Depth  
of the pit (letter D) 8 1/2 fathoms ~~Deep~~

At the request of ~~some~~ several  
respectable Gentlemen in Lundserone  
& Malmo I went thither & left plans  
and directions in what manner  
the builders <sup>could</sup> best set up  
pans for Distilling with Coal  
instead of wood, which ~~had~~ was  
~~then~~ the only kind of fuel  
hitherto in use - ~~At~~

~~the~~ ~~report~~ ~~of~~ ~~the~~ ~~distillation~~  
~~of~~ ~~the~~ ~~new~~ ~~kind~~ ~~of~~ ~~fuel~~  
~~and~~ ~~the~~ ~~great~~ ~~advantage~~ ~~which~~

The experience of upwards of 20  
 Years, ~~xxxx~~ with the continued use  
 of the Bergans Coal has ~~xxxxxx~~ convinced the Community,  
 that these plans and directions  
 were properly made, and the  
~~general~~ general use of them since  
 established in other parts of  
 Sweden has fully proved their  
 superiority of Coal, and the  
 benefit Sweden ~~is to~~ <sup>may</sup> derive  
 from the Bergans Colliery.

On account of many of the men  
 hitherto engaged being discontented  
 with their work, (principally  
 on account of the novelty of it)  
 & in consequence wishing to quit  
 the Colliery, at a moments Notice,  
 I thought it right, in order  
 to prevent this in future, to  
 have the men bound for a  
 certain time (according to the  
 method practised in ~~the~~ England  
~~mines~~), not less than ~~an~~ <sup>a</sup> year.  
 The first of these bindings was  
~~at~~ at Michaelmas this year  
 when 12 men were engaged for  
 one year. It being now <sup>found</sup> necessary  
 to use Horses ~~down~~ underground  
 I made the first sledge & sent  
 2 Horses down on the 5<sup>th</sup> Nov<sup>r</sup>  
 and was, <sup>down</sup> several days learning  
 the boys to drive them.  
 As I found ~~it~~ too much expense  
 & trouble in working the Coals  
 in the Engine pit (Let. Q.) thought  
 it most proper to drive only a

headways to the new Sinking  
 (Let C) until I can see if the  
 Coal be better worth working,  
 & then to sink to the lower or  
 Mr. Bagge's Seam as soon as  
 possible, & in the mean time  
 made ~~the~~ calculations of  
 what power an Engine would  
 be required to draw the water  
 from same seam, ~~and~~ I found  
 that a larger one than that  
 now in use was most necessary.  
 For which purpose I went to  
 Gothenburg in order to consult  
 with Mr. Bagge.

On my return from Gothenburg set  
 out a New Pit Let F, a borehole  
 at Långwyd & another at Wäsby, in  
 which latter was found Coal at the  
 depth of 42 fathoms 2 feet thick with  
 nearly 2 fathoms of fine Clay under.  
 The Frost was so severe this winter  
~~as to prevent~~ that the men were not  
 able to work, (and) in the month of  
 February Wine & Brandy actually  
 froze in the Bottles in a room over  
 my kitchen. In the beginning of  
 this year we bought a Sawm  
 at Södåkra in the neighbourhood  
 of the Colliery. Being much troubled  
 with water I made inquiries at  
 Copenhagen & elsewhere if they  
 could bore pumps as I found it  
 highly necessary to have a larger  
 Engine, and after drawing the  
 pumps of the one then at work

<sup>meeting</sup>  
 and ~~staying~~ them, which did not  
 answer the purpose I was obliged  
 to let the pit stand until a larger  
 cylinder could be procured for  
 which purpose went to Newby  
 where I bored a cylinder and  
 turned a piston head to fit, <sup>(75 inch)</sup>  
 this I did with my own hands  
 they not understanding such  
 process. on my return from  
 whence I set up the Horse pump  
 at the F. pit where we had much  
 water. In Novr I got the little  
 Engine to work at the Cleonora  
 and received from England a  
 28 inch Cylinder by way of  
 Cleonora and pumps & pipes for  
 the same by way of Gothenburg  
 During this year I sunk 2 new  
 pits letters E. & F. and ceased  
 work in those called A. B. & C.  
 at the meeting of the owners  
 this year three shares or  $\frac{1}{40}$   
 part of the folliery were allotted  
 to me - In December went to  
 Norway in order to engage Workmen  
~~from~~ <sup>from</sup> Klungsberg who arrived  
 here in February and signed the  
 usual bond ~~for~~ <sup>as</sup> workmen. In April  
 however 3 of them run away  
 but were soon retaken. On the  
 7 of Feb by this year set the pumps  
 in the <sup>little</sup> Engine pit and in the 18 April  
 laid in the F. pit there being so  
 much water. At the beginning of

of this year the Frost was very severe so much so that Sir C. Bagge drove in March from Copenhagen to Landskrona in a Sledge - over the Ice; a very rare circumstance. Finding my present dwelling house rather inconvenient I agreed with a person to build one for me and afterwards to build 12 rooms nearer the working pits. Being at Esnere on business I engaged there from an English Vessel a boy who had formerly wrought in the Newcastle Coal Mines & whom I thought would have remained here to have instructed the hewers, but he ~~did not~~ came again after a short stay at Boganas, his Master having promised to procure me workmen from Newcastle.

On the 25 June His Majesty King Gustaf Adolp paid his first visit to the Colliery, where he dined and afterwards inspected the whole, with which he expressed himself much pleased. On my introduction to him he ~~was~~ paid me some handsome Compliments & thanked me for my exertions in bringing forward this undertaking. Promising me his assistance in whatever I might request, & wished me every success. After Tea his Majesty departed.

In July this year the Men made a Strike or in other words refused to

to work because I ordered them  
 to go down the pit at 5 o'clock  
 in the morning (instead of 6) ~~in~~  
 in order that the boys at work  
 might have ~~the benefit of~~ <sup>time to</sup> attending  
 a Night school which I had  
 established for their benefit. I found  
 myself under the necessity of sending  
 for the Lausman in whose presence  
 I ~~warned~~ <sup>warned</sup> told them the probable  
 consequence of their conduct; they  
 seemed penitent and returned to  
 their work. To prevent such an  
 occurrence in future I made an  
 alteration in their ~~pay~~ <sup>wages</sup> viz that  
 those who did not have 36 Barrels  
 of coals each pay (14 days) should  
 be paid at the rate of 4 1/2 ~~sh~~ <sup>per Barrel</sup>  
 those who took up less than 36 Barrels  
 were ~~only~~ to have only 4 <sup>sh</sup>.

On the 15 August I got the pumps  
 down in the Engine pit bett. D. and  
 immediately set out a Drift and on  
 the 9 Oct<sup>r</sup> got the Engine to work with  
 a sliding chain to the I pit, which  
 was half filled with water by the  
 breaking out of a Feeder.

About this time the Royal Society  
 of Sweden were pleased to elect  
 me a member of their ~~respected~~ Honourable  
 Society.

In December I set out the place for a  
 New shaft called the Aa. which after  
 setting the Pumps down began to work on  
 the 21 May 1801. During the whole  
 winter of 1800-1801- we were very much

troubled with water, so that the work was often at a stand, ~~and~~ to convince them what could be done if they would work, I frequently filed at the Engines myself, when the water uniformly sunk in the pits whereas it rose when the men were left to fire <sup>by themselves</sup>. And in the ~~beginning~~ Spring of 1801, so much water <sup>was</sup> lying constantly on the Fells between Langmand, Huitato, & Wasby that I thought it expedient to cut a ditch to carry it off, as otherwise it sunk into the earth & we must necessarily pump it up; for this purpose I took the level of the sea at Rogarvas & found it to be 9 feet below the surface of the abovementioned lakes.

In April I went to Philipstad where I purchased part of a Steam Engine viz Cylinder, Cylinder bottom, & Piston. And the same year journeyed to ~~Skane~~ Falsterbo. & the Koll in order to <sup>make a</sup> contract for ~~lighting~~ <sup>supplying the lighting</sup> the ~~fire~~ houses at these places. I was also at Copenhagen endeavouring to sell coals there. To prevent waste I ordered the candles to be weighed out to the Pitmen and allowed them a 1/2 sk more for ~~blow~~ on that account.

In the Borehole at Hultrabq. (No 22) bored through Countess Ruuth's Seam at 34 fathoms, after finding mixed with the gravel, detached pieces of clear Coal & Marble, which have every appearance of having been formerly washed up by the sea, which has undoubtedly, at one time overflowed

both this & the neighbouring parishes  
near the Shore. - The Coals being  
unsuitable for the Engines I made at  
way on way to the A pit.

Sept 1800 - 39 men arrived here from  
Norway 10 of whom were married &

se #2 14/9 - 1800!

obtained work at the Follery; these  
were the worst desperados I had  
ever seen, continually Drinking  
& fighting - & when they did work  
could not earn sufficient to live on.  
I had much trouble with them, often  
under the necessity of sending for the  
Crown officers, and ~~under~~ delivered  
over to their charge 3 of them. Several  
absconded & the remainder I  
sent off.

November 28 1801 I got the 45  
inch Cylinder Engine to work <sup>(in Lett D)</sup> and

WA. They could not cast the pumps at  
H'borg without me. -

same month it was resolved to build  
a bottle house - and 8 Glasmen came  
here for work. - Set also a Borehole  
No 2 1/2 at Brorsbacke, In September  
the King & Queen of Sweden were here -  
& same month <sup>first</sup> the first died a Swedish  
workman at the Follery: this was the  
first one.

On the 7 Decr I began with the  
foundation for the Glasshouse.

In January 1802 I set out a Borehole  
near Sangaryd and after boring thro'  
the soil in that & the one at Brors-  
backe I set out another ~~one~~  
at the place now called Ryd, in  
which at the depth of 31 fathoms I found fourteeth Runth's Seam  
~~found~~ 17 inches thick lying under  
20 inch of flis, and afterwards bored through



the lower or Mr. Bagges seam which was found to be 4 feet 3 inch thick, at 48 fathom 9 feet from day. After a journey to Stockholm & Åkersbruk to enquire if a 74 inch cylinder could be cast I agreeing with the Messrs. Reuterschold at Uton to build a Steam Machine for their Iron Mines I arrived home in April & immediately set out a ~~Barrel~~ to the New Engine pit a little to the Dip of Borchole 25.

That appearing to me the most proper place of any for winning the coal; and in furtherance of this it was subsequently agreed to cut a Canal to the harbour 15 feet wide as the easiest & best method of ~~the~~ <sup>transporting</sup> the coals from the new Winning.

The line of Canal <sup>being</sup> marked out it was begun with on the 27 June, the Owners of the land to have 300 of Lunland for the best & 2 for the worst ground for 100000, for damage done by the New Winning.

The Autumn of this Year, I was at Åkersbruk where the 74 inch Cylinder was cast and bored and 24 Sept. I returned home after having <sup>cast</sup> seen the Piston, 27 inch working barrell, Windbore, bucket tree & 2 common Pipes also the working barrell to 18 inch set & one common pipe & set them to bore the cylinder. it being too much expence to bore the other parts there.

During my absence they had so misused the engine that I set the A pit to work again there being too so much water in the C.

Oct 28 We bored through Iron Bagges  
Coal in N. 26 at the depth of 54 <sup>feet</sup> 5 <sup>feet</sup>  
This appears to be on the North side  
of the Dyke which throws the fault  
up between the Boreholes N. 22 & 23.

~~xxxx xxxxx xxxxxx~~  
I was stopped in this month by (with the Machine)  
the Foundry in Helsingborg, they  
having there been so negligent  
I made such Bothersome work  
in casting a Cylinder lid &  
communication pipes, and had  
much trouble with her <sup>this winter</sup> owing  
to the severity of the Frost which  
stopped us at the sinking.

In the latter end of February 1803.  
the Ice in Harbour here broke  
up and carried away <sup>3/4</sup> of the  
bridge which we had built  
at the end of the waggon way, the  
water having risen 3 feet higher  
than ever known. In the Spring  
of this Year a Turnpike Road  
was made from the old Colliery  
to Ryd, as also a Windmill  
for pumping water out of the  
working pit. — A new bridge  
or jetty was also built at the end  
of the Canal — up which His  
Excellency Ruuth & some other  
Noblemen sailed on the 7 July.

The sinking at Ryd was frequently  
stopped by water, but the ~~20~~ 7 1/2 inch  
Cylinder from Akenbruk having  
arrived here in May I got the  
Engine ready and started her  
in presence of His Excellency Count Ruuth  
Count Rosen and Major Wahrensloff on the 8 Aug. 1803.

The workmen, having often  
been drunk and neglected their  
work, ~~by drinking~~ in consequence thereof  
I went to  
the Court of Assize to procure an

an order to prevent the servants  
 in the Neighbourhood, selling  
 Brandy in smaller quantities  
 To give some idea of the quantity  
 of Water we had at Ryd ~~at~~  
~~at Ryd~~, I need only mention  
 that in the month of September  
 it rose in the shaft 6 inches  
 for minute or 4.3. Sept 11<sup>th</sup> to 10.5  
 for hours; this was partly owing  
 to a feeder which broke out; the  
 want of leather, (and that we  
 had not being good,) occasioned  
 the changing of Buckets & clacks  
 much more often than would  
 have been necessary  
 This Year I began a Glass  
 house here <sup>(at Ryd)</sup> and having procured  
 Glasmen from ~~the~~ Norway, with  
 whom (by the bye) I had some  
 trouble, I got her however to  
 work ~~to make~~ Bottles &c. &c. &c.  
 in but she stopt again  
 in the year

December 30 1803 I began to  
sink a New pit on the Fall near  
to Ljöröd which ~~at~~ I began to  
work for in 1804 the 16 February  
I also have found the water to rise  
or sink in proportion as the 7400  
Great Engine has been at work  
or not. During the holidays  
of 1803-4 I thought it most advisable  
to stop the Engine, but could not  
keep the water down until I  
put the fires in order & kept  
them so myself which I for  
a long time ~~was~~ often did  
both night and day, when the  
Engine ~~often~~ ~~was~~ ~~at~~ ~~work~~

(for the most made 11 or 12 strokes  
per minute)

In the beginning of this year  
a violent Epidemic Fever  
broke out amongst the people  
and carried off many both  
good workmen & their wives  
~~which~~ it continued with  
us until

I was ill myself and ordered  
the fumes to be fumed with Juniper  
I set them to bore in the Ryd  
sinking but a great deal of  
water came up the borehole  
therefore I put a 7 inch pump  
down, and set an 18 inch Cylinder  
Engine to work here. We also  
procured, ~~by~~ <sup>with</sup> permission ~~of~~ <sup>from</sup> the  
English & Swedish Governments  
Four Englishmen from Newcastle  
as sinkers with whom a contract  
was entered into to sink 2 pits, one at Ryd & one  
at Brorsbacke which was  
began on the 24 May 1804. when  
according to the custom in  
England, I as Director laid  
money in the hole for Drinkmoney to the workmen

In the month of May we also  
 got an 11 inch set of pumps down  
 at Ryd, where we were very  
 often stopped by the quantity  
 of water and continual changing  
 of Buckets. The same also was  
 our misfortune at Bros Backe  
 though the sliding spears which  
 I made from the 7 1/4 inch Engine,  
~~at Ryd~~ in a great measure  
 assisted us. In June I laid  
 out the ground for a 45 inch  
 Cylinder Engine, at the above  
 mentioned pit which was  
 completed, and got to work  
 first with a 6 inch & afterwards  
 with a 14 inch set of pumps.

The Coal in Brosbacke pit  
 was found very good and the  
 first lot down on the 31 Dec<sup>r</sup>

~~The water in the pit was so much  
 that it was necessary to put  
 down a 14 inch set of pumps  
 to draw it out. The water  
 was so much that it was  
 necessary to put down a 14  
 inch set of pumps to draw  
 it out.~~

Thinking it to be too far for  
 the Boy to put from No. 2.  
 I sunk a shaft a short distance  
 from thence, (No. 4) which came  
 to work in September

The water having increased so  
 much at Brosbacke that the  
 45 could hardly keep it down  
 it was resolved to let her stand  
 untill the days got longer & then  
 set an air pump & condenser to  
 her.

In January 1805, His Majesty

Gustav IV Adolph was at  
 Goelsingborg and held a court,  
 when His Excellency Ruuth  
 presented him, in the name of  
 the owners, with a piece of  
 Coal from Bronsbacke; we  
 were most graciously received  
 by His Majesty and the Queen.  
 Their Majesties ~~was~~ dined at the  
 Colliery, when the King expressed  
 his wish to assist us in our  
 great undertaking, & was  
 pleased to let us take 50 men  
 out of those inrolled as sailors  
 in case of need for the defence  
 of the Country - These I found  
 to be a very quarrelsome people,  
 Not so those I had from Amalund  
 & Skane whence I procured 26  
 Men this summer.

In the Spring of this Year (1805.)  
 the 45 inch Engine at Bronsbacke  
 was set to work having made  
 an air pump & Condenser to  
 her; and the water being kept  
 down ~~by~~ with the assistance of  
 a Steam Machine & water tubs.  
 we began to hew Coals in April.  
 but after having set sliding spears  
 from the 74 inch Engine at Ryd  
~~in use~~ to try if we could not keep  
 the water down, we were obliged  
 to desist untill another Engine  
 could be built there, which  
 was resolved on at the August  
 Meeting, when it was agreed  
 to build a 53 inch Cylinder Engine.

at the same place. In order to overlook the casting of the Cylinder & other pieces necessary for this, I was obliged often to be from home, during the latter part of the Year. I constructed a Rail Road from the abovesaid Pit to the old Colliery, that coals might be, with less expence, transported to the Engines.

The <sup>immense</sup> quantity of water at Iron Backe having for the present, prevented ~~one~~ working Coals there, it was resolved in June to set a Steam Engine at the old working, and sink a New pit there. The shafts begun there during this year, were Nos 5, 6, 7, & 8. Those which ceased to work were Nos 1, 2, 3, & 4.

In the beginning of the Year (March) we began to blow bottles at the Glasshouse at Ryd. and after journeying to Copenhagen <sup>Denmark</sup> transported bottles to Denmark the same Summer.

The same summer I built an ~~oven~~ oven & burnt the first Coke I suppose had ever been burnt in Sweden.

At the end of the year a regular office was begun, with Bookkeeper Cashier, Clerks &c.

In the beginning of 1806, we had so much water in the two working pits Nos 5 & 6 that I judged it best to put a Condenser into the 28 inch Engine, & alter the 15 inch at No 6 to a close topped Engine.

and put a set of pumps down  
 that pit as the water could not  
 well be kept down with Tubs.  
 The <sup>great</sup> quantity of snow on the rail  
 way forced us to load Coals ~~by~~  
 in Boon-waggons to Brons Backe  
 where we for a time burnt Nat.  
 the being a scarcity of the other  
 sorts. In Feby we bored thro'  
 the lower seam in Hole N<sup>o</sup> 30.  
 and in April thro' the same seam  
 in N<sup>o</sup> 31, at the depth of 28 1/2 fathoms  
 in presence of His Excellency  
 Count Rantzau & Sic Ch. Røge.  
 the Coal was found to be 40 in  
 thick with 9 1/2 of flis. —

On the 19 April I started the  
 53 inch Cylinder Engine at  
 Bronsbacke, and in order the  
 better to superintend the work  
 there, I caused a small Cab  
 to be erected between the two  
 Engines & ~~erected~~ <sup>stair</sup> there almost  
 constantly. From this time  
 I had one continued trouble  
 with the Engines, principally  
 owing to the necessity of frequently  
 changing of flacks, to their slipping  
 through the pump, and to the pumps  
 themselves being split so that I  
 let the 45 stand fearing lest  
 the whole set should go to wreck.  
 the water having been more than  
 once down to 17, 18 & 20 fathoms.  
 I got 31 screw hoops put on to  
 tighten the pumps, but was at  
 length under the necessity of



drawing the 11 inch set in May,  
 & the 14 inch set in the <sup>5<sup>th</sup></sup> following  
 month & although very bad  
 weather blowing a gale of  
 wind, I got them set again  
 on the 8<sup>th</sup>. The new or 53 inch  
 Engine having gone perfectly  
 well, so that although the  
 14 inch Engine at Syd was  
 standing for want of foals and  
 innumerable accidents daily  
 happened, I got the men down  
 and recommenced working foals  
 on the 7<sup>th</sup> of July. but on the 27<sup>th</sup>  
 of same month a feeder of water  
 broke out, and 8 days afterwards  
 the water or ~~water~~ <sup>surfeit</sup>  
 combined (inflammable air)  
 broke down the girde or beam  
 which is in the roof of the Coal  
 which with much force  
 where the water issued out so  
 fast that I found both Engines must  
 be kept going with with all power  
 in order to keep the water down.  
 Fortunately only one man was  
 a little bruised by this accident.  
 We ceased working Coals on this  
 day at 13. 13. although the Engines  
 continued to go.

It was now resolved by His Excellency &c &c.  
 to drive the old Colliery with  
 all force as we found that with  
 200 Coal workmen she could be  
 wrought to advantage

During the course of this Year in  
Nos. 5 & 6 we ceased coal working  
the one in July the other in August  
& began to ~~flow~~ flow in No. 11 in October  
& in No. 12 in November; also  
removed the 18 inch Cylinder Engine from Ryd  
to No. 9. —

Decr 5, was here, Mr Murray, chief  
partner & Manager of the House  
of Fenton, Murray, & Co, Engine  
Makers at Leeds; He had at  
my request & that of some of the  
owners ~~of the Colliery~~ come to see  
our Engines, as well as the situation  
of our Colliery, Mr Watson Viewer,  
of Willington near Newcastle, had  
also desired him to come this way,  
for the same purpose.

He Mr. M. declared to me that  
he had not expected either to see  
so much work done, or to find  
such good Engines & Machines  
in Sweden, and that excepting  
theirs or those of Stephenson  
& Watts (of Birmingham) there  
were none so good at Newcastle. —

In the beginning of 1807 <sup>140</sup> (150) of the Men  
(Batsmen) allowed us by His Majesty  
came here under charge of a Lieut's  
these I shortly found were all or the  
major part of them very lazy, quarrelsome  
fellows, and so that very few  
Coals were taken up, wherefore  
I issued orders that all the Gowers  
should be down at 5 o'clock and  
not come up before they had sent  
up, at least 2 Barrels of good Coals