

THE NORTH HARBOUR GATES, SEATON SLUICE. 1876.

X.—SEATON SLUICE.

BY WM. WEAVER TOMLINSON.

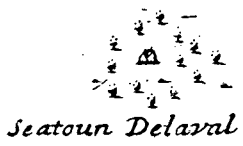
[Read on the 24th September, 1902.]

SHOULD a history of the rise and fall of local industries be written, few places would have a more interesting record than Seaton Sluice. It is situated in the manor of Hartley, which formed part of the extensive barony of Gaugy.

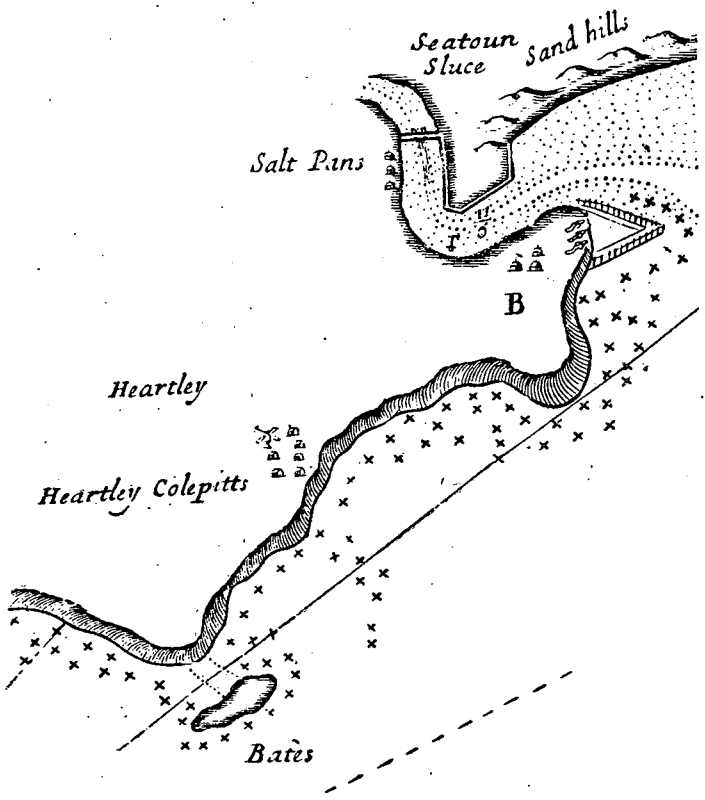
When we first meet with the place it was known as Hartley Pans—a name derived from its staple industry of salt-making. ‘Sir John Delaval’s Pans’ were deemed worthy of mention by Dr. William Bullein in 1564 when visiting the worthy knight, and the salt made in them was, we learn from another source, ‘esteamed by sutch as buye the same to be better than any other white salt, and to be as good as baye-salt or as salt upon salt.’ A great quantity of it was made at these pans and carried in wains to Blyth to be transported to other parts of the kingdom, chiefly to Yarmouth where it was used in the curing of herrings.

In the latter years of queen Elizabeth’s reign a dispute as to right of way from Hartley to Blyth’s Nook arose between sir Robert Delaval and Thomas Cramlington. The former claimed the right to pass with his carts, wains and other carriages along the road called the ‘Easter Waie’ which extended ‘alonge the Sea Linckes frome Hartley and Hartley Salt Pannes into and over the Grounds of Seaton Delavall and over Newsam Grounds, by the east end and along the east side of the Dike and Close called Blithes Nooke Close, and so to the Fore Street and house steeds of the said auncient towne of Blithes Nooke, and so to and alonge the sands there to the River and Haven of Blithe,’ and he pleaded ancient usage, his ancestors having ‘time out of mynde’ used the way at their pleasure ‘on horseback and on foot with carts and waynes.’

Thomas Cramlington contested this right and proceeded to cast a ditch over the ‘Easter Waie, nere the corner of the Dike Nooke there, by which ditche the passage by the said way was stopped or hindered.’ He further pulled down ‘two auncient beacons within or nere the lowe water sea merke standinge within the mouthe of the



Seaton Delaval



ENTRANCE TO THE HARBOUR OF SEATON SLUICE AND OUTLINE OF THE HARTLEY COAST

(From Greenville Collins's Chart in *Great Britain's Coasting Pilot*, 1693 Ed.)

said Haven to discover the Danger of the Barre there and for the safetie of shippes going out and coming in at the said haven'—beacons which had stood there time out of mind and been maintained by the land-owners of the town of Blithes Nook. On one occasion Sir Robert Delaval, hearing that an attempt would be made to stop the way, sent some of his hinds and servants, together with his bailiff, Thomas Delaval, to accompany his wains, ordering them to use 'the quietest and gentlest means' they could to persuade the obstructionists to let them pass. George Fordan, one of these men, had in his hand 'onely a stoute walking staff with a little yron picke in the ends thereof'; John Hill, another of them, 'a staff with a picke of iron in the same'; John Ward and Ralph Fenwick each 'a lance staff onely which they usually carried with them going abroad and according to the usage of the country.' They set out, no doubt, intending, according to their instructions, 'to use all meanes by persuasion and otherwise' that the said carriages should pass. They were met by Thomas Cramlington, who came with his sword drawn in his hand and in furious manner 'did strike at the cattell in the draughtes.' He was accompanied by Gilbert Wilson, who had his sword and buckler, and John Fenwicke and Oswyne Fenwicke and several others weaponed with swords, daggers, and lance staffs. Thomas Cramlington thereupon told them that they should not pass that way but 'over his bellye,' using withal 'most undecent and railing words.' Finally, however, at the request of his uncle Oswyne Fenwick, he consented to let the carriages pass for that time. The dispute was eventually settled by legal methods.

We learn incidentally from this case that there were fishermen living at Hartley who had been accustomed time out of mind to 'take, gather, digge for, and get baites for fishe (sand-eales, wormes, lempetts, so they are particularised in another document) in, upon, and alonge the coast of the sea against the lands and grounds of Newsame and Blithes Nooke within the lowe water mark there, and also in anie part or place of the sea sands where the salt water ebbeth and floweth against the grounds of either of the said townes of Newsame and Blithes Nooke without interrupcion.'¹

¹ Delaval Papers; MSS. in the possession of the Society.

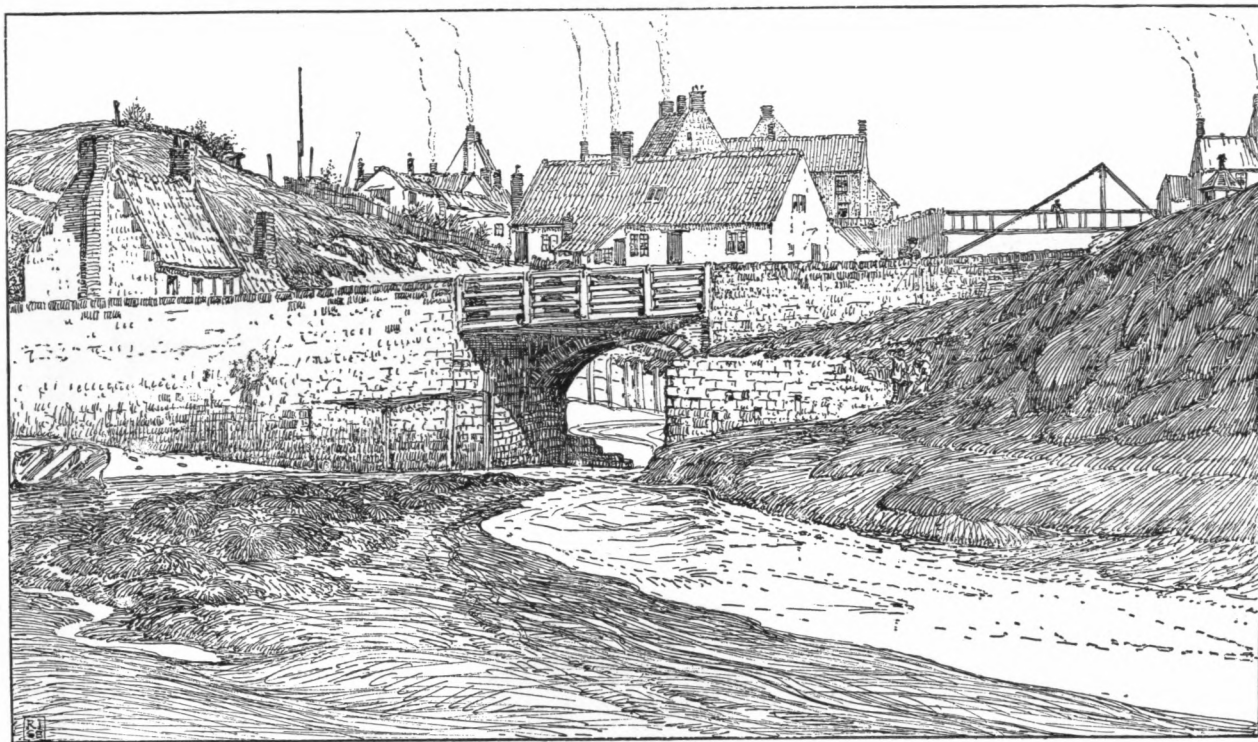
In the latter half of the seventeenth century the little salters' village became a small seaport and acquired its present name. It was sir Ralph Delaval, the first baronet, who effected the transformation—one of the inevitable results of the opening out of the Hartley coal-field. Up to the year 1595 the underground treasures of the manor had remained untouched. An inquisition having been taken by Edward Grey and Anthony Felton (the latter a Customer of the Port Newcastle), by virtue of a special commission of the Court of Exchequer they certified, on the 26th of August, 1595, 'that within the precincts and bounds of the manor of Hartelowe, viz., in the South Field and in the North Field there existed, and might be sunk, a certain coal-mine, which, until the day when the inquisition was taken, had not been dug, won or leased at all, and that the yearly letting-value of the mine would not in their opinion exceed fourteen shillings and four pence.'²

The working of this coal, on a large scale at least, seems to have been deferred until the time of sir Ralph Delaval when operations began to be carried on with much spirit. Wanting a shipping-place for the produce of his collieries, he constructed a harbour capable of accommodating twelve or fourteen vessels of 300 tons burden at the point where the Seaton burn, after running due east, turns abruptly to the north. To protect the entrance he built a pier which 'fended off the surge to the north-east.' As this breakwater was, at first, formed of squared stones laid with and without cement it was soon breached by the sea. He, therefore, at great cost, had the blocks joined together by means of 'dovetails of heart of oak let into the stone and that held effectually.'³

Again, by the silting up of the harbour another difficulty presented itself. This he overcame by placing tide-gates across the channel of the stream where the present bridge crosses it, thus forming a backwater which, being released at the ebb, scoured away the sand lodged upon the rock and washed it 'as clean as a marble table.' These sluice-gates acted automatically; they were closed by the water from the sea rushing into the harbour at the flow of the tide, and were flung open at the ebb by the dammed-up water of the

² See Appendix I.

³ Roger North's *Life of Lord-Keeper Guilford*.



SEATON SLUICE, 1880.

stream which had accumulated behind them. The harbour and salt pans were protected against French or Dutch attacks by a small battery. This proved very serviceable in 1667 at a time when we were at war with Holland. 'On Wednesday last,' so Richard Foster informed Joseph Williamson in a letter dated from Newcastle on the 14th of June, 'a Dutch priueter of 10 guns did give chase to a small vessell loden with marchant goods, whoe maed to a bay sume 5 miles distant ffrom Tynmouth, and neare Sr Raph Delleuales peare: Sr Raph beange thare sent 2 botes who toued her under the comand of sume guns Sr Raph hath planted thare for the security of his harbor and pans, but the man of warr did pursue the vessell till he came within musket shot, and then severall shot beinge maed at him and as it was thought some ded het, for she presently tacked about and stood of to sea whare she hovered all day, but the small vessell was got into the harbor.'⁴

In 1670 the port of Seaton Sluice was annexed to that of Newcastle-upon-Tyne, the officers of customs being authorised to appoint a person to be constantly resident there. Sir Ralph Delaval, who up to this time had spent £7,000⁵ in making the sluice and harbour fit for the export of salt, coals and grindstones, received a grant from Charles II. appointing him collector and surveyor of his own port. Ships were registered at the port at least as early as 1672, for one of them, the 'Ann' of Seaton Sluice, was recommended to be taken as a victualling vessel for the navy, her master being well acquainted with the coast of Holland.⁶

The right honourable Francis North, baron of Guilford, lord keeper of the great seal, when on circuit in the north of England in August, 1676, paid a visit to sir Ralph Delaval and was shown the little port of Seaton Sluice with the salt pans there. To his youngest brother—Roger North—we owe the best, as it is the earliest, description of the place in the graphic account which he gave of this visit.

Sir Ralph Delaval having finally expended above £15,000 over his pier whereby so considerable a revenue accrued to the exchequer that the king 'in consideration thereof and that the said Sr Ralph would

⁴ *State Papers, Domestic, Chas. II.*, vol. 205, No. 62.

⁵ *Calendar of State Papers, Domestic, Chas. II.* 1660-1670, p. 635.

⁶ *Ibid.*, 1672, p. 353.

erect and build an other Peere for the greater benfit of Trade' granted him a Privy Seal for £1,500. Sir Ralph accordingly built this second pier at a great cost, but only received £500 of the sum granted and the balance, in consequence of the king's death, remained unpaid. In 1703 and 1704 this pier was much injured by 'great storms and stress of weather,' and sir John Delaval, son of the founder of the port, spent other £500 in repairing the damage.⁷

In 1704 there were eight salt pans at work and some idea of the trade of the port may be gathered from the fact that £6,000 was paid this year to the Government for duty on salt and customs. Upwards of 1,400 chaldrons of coal were shipped to London from the port and this branch of trade was shewing signs of developing.⁸

The increased activity in the coal trade here was, no doubt, due to the connexion with the colliery of some of the most enterprising coal owners of the district. A draft has been preserved of an indenture quadripartite, dated on the back 20th April, 1703, between John Delaval of Seaton Delaval, John Blakiston of Newcastle, John Hall of Seaton Sluice of the 1st part, Josias Horn of the 2nd part, John Rogers of Newcastle of the 3rd part, and John Ord of Newcastle of the 4th part, respecting 'collierys, coale mines, seame and seamess of coale, saltpanns or boyleries of salt, situate lying and being within the Manor or lordship of Seaton Delaval and Hartley, and the Port and Haven lying or being within the said Mannor of Seaton Delaval and Hartley.'⁹

The John Rogers mentioned in the indenture afterwards married Ann, the daughter of sir John Delaval, who died while staying at Seaton Lodge in January, 1723.¹⁰

About the middle of the eighteenth century, other industries were established at Seaton Sluice by Thomas Delaval, esquire, who had received a commercial training in Hamburg. To turn to profitable account the pyrites with which the coal-mines abounded, he established floors and crystallising cisterns for the extraction of copperas,

⁷ See Appendix II. Delaval Papers; MSS. in the possession of the Society.

⁸ *Ibid.* See also *Calendar of Treasury Papers, 1702-7*, p. 438.

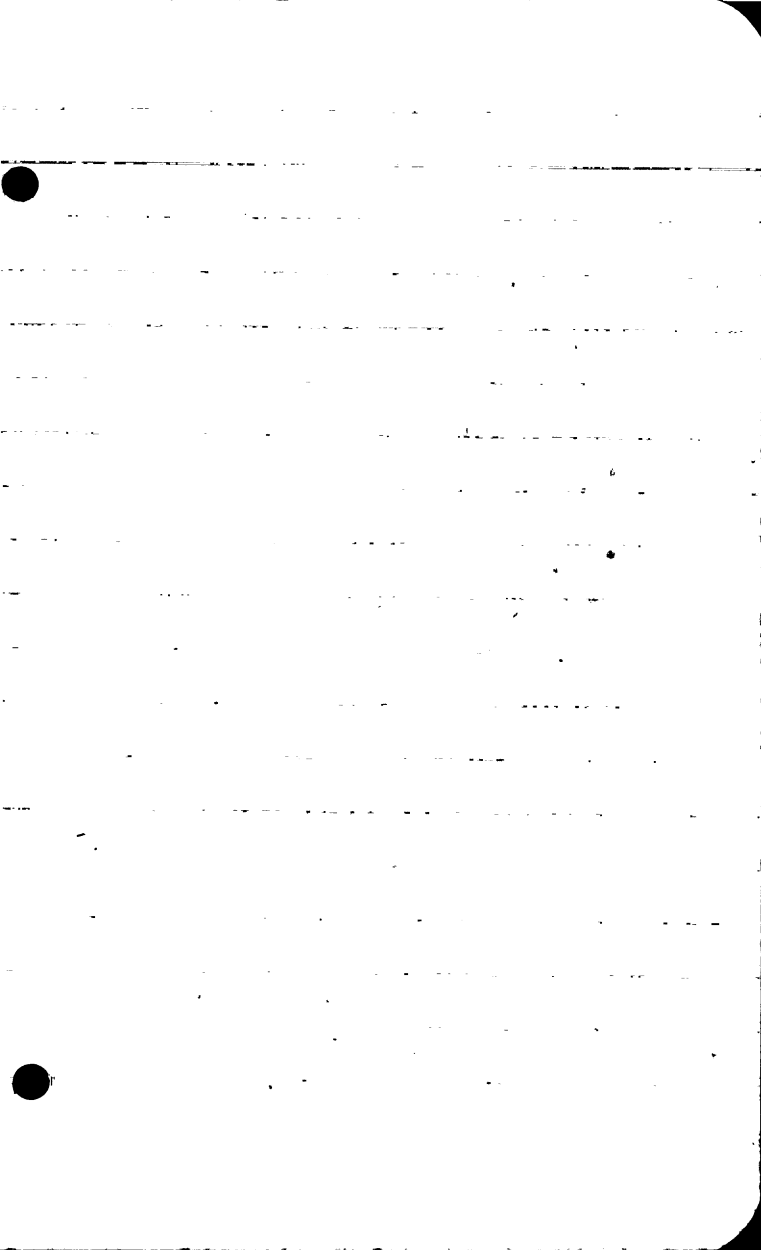
⁹ MS. in the library of the Mining Institute.

¹⁰ The story told by Spearman that Mrs. Rogers was poisoned by Mrs. Poole, sir John Delaval's mistress, is dealt with in *Denton Hall and its Associations*.

Vol. of Treasury papers 1702-7
contains on p. 438. an interesting entry
relating to a Report of the Comrs for
duty on Salt to the Lord High Treasurer,
on the memorial of Sir John Delaval, Part
for consideration of the great charge to
which he and his father had been put in
building and repairing a pier at Seaton
Delaval.

Dated 22 May 1706. Six other docu-
ments connected therewith. One is
an account of the charges ~~of~~ in building
the new pier at Seaton Sluice. 9 pages.

[Other items concerning salt making in
the North in the same Vol.]



and, to utilize the small coal unburnt by the salt-pans, he founded a glass manufactory—described in 1769 as ‘a handsome building two hundred and twenty feet in front, the side walls to the roof thirty-six feet’¹¹—bringing skilled workmen from Hanover to teach the art of glass-making.

Finding the old basin inadequate to the trade of the port he, with the approval of his brother sir John Hussey Delaval, prepared plans for a new harbour or dock, eight hundred feet long, thirty feet wide, and fifty-two feet deep, with an entrance from the east. Begun in 1761, it was finished in 1764, and became one of the engineering curiosities of the north of England, having been cut through the solid rock at a cost of about £10,000. The site forms part of the ‘Pan close.’¹² A pier similar to that of the north entrance protected the east entrance. At both ends were dock gates consisting of heavy booms or balks of timber sliding in grooves and raised by means of cranes.

On the 20th of March, 1764, the harbour was opened in the presence of many thousands of spectators, two vessels sailing in, though the sea was uncommonly high and the wind easterly. The event was celebrated by the roasting of three large oxen and the broaching of several hogsheads of ale. On the 22nd the ‘Warkworth’ sailed out with a cargo of two hundred and seventy-three tons of coal.

A distinguished member of the Royal Academy of Science at Paris, M. Gabriel Jars, came to Seaton Sluice in 1765, to see the little harbour with the waggonway¹³ leading down to it, the glass-works, and especially the steam engine at the colliery with the new machinery set in motion by it—an invention of Joseph Oxley’s—for

¹¹ *History of Northumberland*, by John Wallis, vol. ii. p. 278.

¹² Aug. 18, 1761. Whereas it is resolved to make an Amendment to the Harbour at Hartley Pans immediately, and in order to do so it is necessary to make a large Cut thro’ the Pan Close there, which Cut will be part in Clay and part in Stone: Notice is hereby given that any person or persons desirous to undertake the said Cut or any part thereof or any of the Walls or Piers necessary to be done are desired to apply at the office at Hartley pans aforesaid, where attendance will be given to receive proposals and to shew the dimensions of the said intended Cut, Piers and Walls.—*Newcastle Journal*, Aug. 22-29, 1761.

¹³ This old waggonway, about 1½ miles in length, is now a footpath and may be followed through the fields from the ‘Brierdene’ Pit, near the Brierdene Farm-house, past an astonishing number of old pit-heaps to the west end of the village of Hartley and thence down to Seaton Sluice.

drawing coal out of the pit without the employment of horses. It had commenced working on the 19th of March, as the newspapers said, 'with incredible success,' raising a corf a minute, but was out of order at the time of the visit of M. Jars, and he did not see the mechanism. 'It was not much thought of,' he tells us, 'being very apt to go wrong.'¹⁴

Three years later (about 1768), a greater than Jars was attracted to Hartley by this new engine—James Watt. He found it working sluggishly and irregularly, but, unlike the previous visitor, was able to examine the engine—the first self-acting rotatory engine he had seen.¹⁵

An interesting view of the harbour by J. Bailey, which appears in Hutchinson's *History of Northumberland*, 1779 (reproduced on the opposite page), depicts a busy little place: a vessel is passing through the 'gut' into the harbour where another one is already moored, other vessels are sailing out by the old entrance. A waggon drawn by a single horse is on the wooden waggonway in front of the old 'King's Arms' inn, about to turn round to the staithes on the south side of the 'gut,' the shipping place of the famous Hartley coals.¹⁶

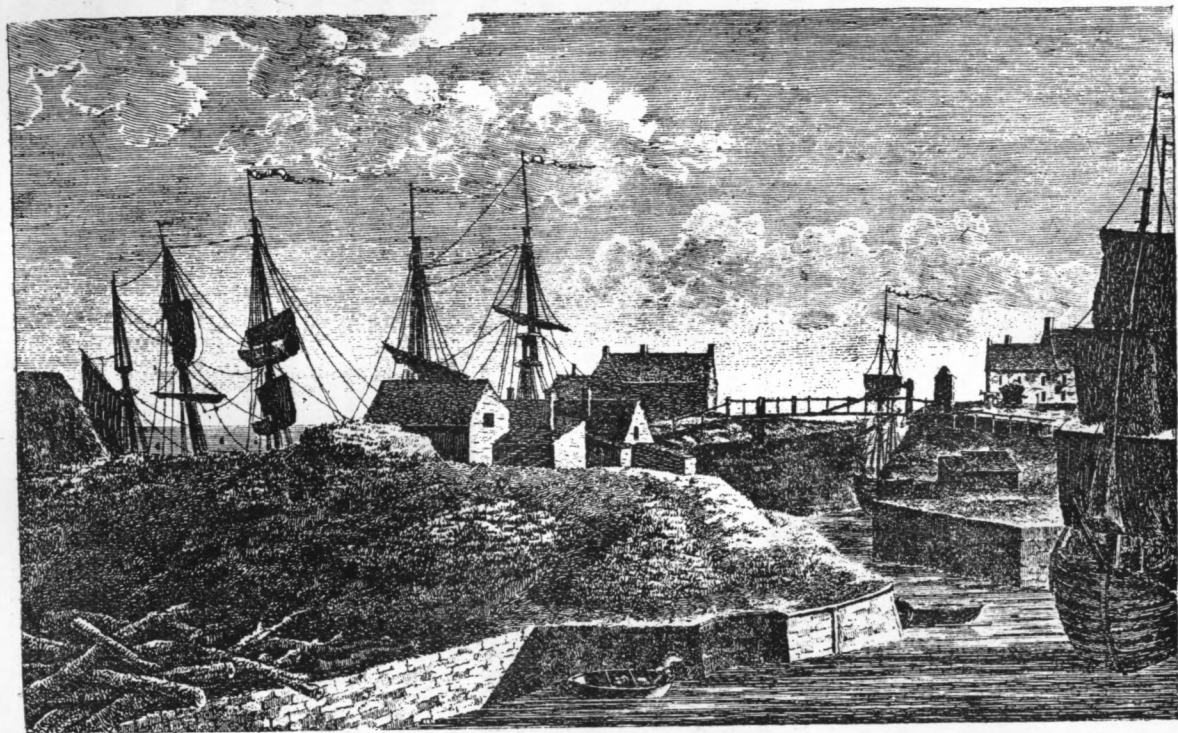
From the regulations it is evident that the trade of the port was carried on under somewhat unfavourable conditions. A vessel was not to be loaded up to her full capacity unless she could get away at high-tide; there was not a sufficient depth of water in the harbour basin at neap-tide to float a loaded vessel and she would therefore have to lie in the 'gut' obstructing the rest of the shipping. A portion only of her cargo was to be put on board and then she was to be towed into the basin to wait until the loading could be completed for her despatch the next tide. The spout nearest the sea was reserved for ships that could sail round from the north entrance, take in their cargoes and get away at high water, when from one cause or another loaded vessels in the 'gut' were unable to put to sea.¹⁷ At an

¹⁴ See Appendix III.

¹⁵ *Life of James Watt*, by J. P. Muirhead, p. 274.

¹⁶ Our vice-president, Dr. L. W. Adamson, has a picture in oils representing a vessel sailing out of the harbour. It was painted by J. C. Ogilvie about 60 years ago.

¹⁷ *The Delaval Papers*, edited by John Robinson, pt. iv. pp. 174 and 175.



'HARTLEY HAVEN' (reproduced from an old Engraving in Hutchinson's *Northumberland*).

earlier period ships at neap-tide, having taken a part of their cargo on board in the old harbour, were obliged to go into the roadstead, where the remainder of it was brought out to them by keels.¹⁸

The waggomen who brought the coals from the pit to the staithes were subject to heavy fines for breaches of the regulations. A delinquent, however, had the satisfaction (if such it were) of knowing that the shilling forfeited for leaving his loaded waggon was 'to be drunk by the rest of the waggomen.'¹⁹

The second half of the eighteenth century was the most prosperous period in the history of Seaton Sluice, as much as £24,000 being contributed in one year to the public revenue by the little port. The large cones known by the names of 'Gallaghan,' 'Success,' and 'Charlotte' rose as conspicuous landmarks, and increased the output from the glassworks: eight hundred and forty thousand bottles were exported in 1776. The salt pans were also working well, and there was a brisk demand for Hartley coals. In one year (1777) one hundred and seventy seven vessels cleared from the port for London, with 30,686 chaldrons of coals.²⁰ Even shipbuilding on a small scale was carried on at Seaton Sluice during this period.

During the wars with Napoleon it was considered necessary to protect the place by means of a blockhouse and a battery of three eighteen-pounders on an artificial mount formed of ballast, a party of soldiers from the garrison at Tynemouth being stationed here.²¹

With the progress of the century Fortune turned her wheel to the disadvantage of Seaton Sluice. First the salt and copperas works were discontinued, then a dreadful gale, which raged on the 2nd of February, 1825, accompanied by a phenomenally high tide, seriously damaged the stone pier, and threatened to destroy the harbour. A minor misfortune happened on August 28th, 1838. Ten loaded waggons ran amain on the colliery rail-road and two of them, being jolted off and precipitated through the stone wall at the turn of the road by the side of the harbour, killed an old man of eighty-three.

¹⁸ *Great Britain's Coasting Pilot*, 1693 ed., pt. ii., p. 12. See reproduction of chart, p. 230.

¹⁹ *The Delaval Papers*, edited by John Robinson, pt. iv. p. 175.

²⁰ *Ibid.* p. 177.

²¹ Mackenzie's *View of Northumberland*, 1811, vol. 2, p. 508.

When the Melton Constable hotel was built in 1839 it was noted that more than half a century had elapsed since any buildings had been erected or any improvements made, and the event formed an occasion for rejoicings.

Seaton Sluice, a few years later, came into vogue as a pleasure resort. On Sunday, July 2nd, 1843, the 'Venus,' described as a 'powerful steam vessel' commenced running from the New Quay, North Shields, to Seaton Sluice twice a week; the fare there and back, including tea and a plate of fruit at Seaton Delaval gardens, was 1s. 3d.

A passing allusion may be made in this connexion to the Blyth and Seaton Sluice races. For seven or eight years previous to 1831 they had only been partially held, but in this year they were revived, chiefly through the instrumentality of Mr. M. L. Jobling, and for many years afterwards were well patronised.²² In 1842 they still maintained their popularity and presumably also to a later date.

With the remarkable development which took place in the steam coal district of Northumberland in the early 'forties,' the deficiencies of Seaton Sluice as a coal-shipping port became only too obvious. Mr. N. G. Lambert, one of the lessees of the Hartley and Cowpen collieries, giving evidence in 1848 in support of a project for docks at the Low Lights, North Shields, and a railway in connexion with them, declared, 'We ship our Hartley coals at Seaton Sluice. *Sometimes for ten weeks together a ship cannot get to sea from that port* and it is of the utmost importance to the well-being of the colliery that we should get a better place of shipment. Our colliery is the original Hartley from which all the others have taken the name; other collieries have taken the name of the coal and sold large quantities, while we have not had facilities for doing so.'²³

This agitation for better shipping accommodation led to the formation of the Northumberland dock on the Tyne and the improvement of the harbour of Blyth. From this time may be dated the decline of Seaton Sluice as a port.

In 1851-2 Seaton Sluice was less isolated than it is now; it was connected with the old Seghill railway (afterwards the Blyth and Tyne

²² See *Tyne Mercury*, July 12, 1831, and *Gateshead Observer*, Aug. 6, 1842.

²³ Enquiry before Capt. Washington.

railway) by a short waggonway, and passengers were booked from the village to Percy Main twice a week, on Tuesdays and Saturdays. From 1853 to 1862, when the Hartley colliery was laid in, the waggonway was used exclusively for mineral traffic.

An engine factory introduced into Seaton Sluice by Messrs. W. K. Horsley and Company in the later 'fifties' was closed not long after the colliery ceased working. The day of Seaton Sluice as an industrial centre was nearly over. The bottle works continued to flourish for a time, but in 1870 they were closed, and in 1873 abandoned. They were finally sold in 1894. The massive cones remained standing till 1896, when they were brought down by the agency of dynamite, the site being devoted to building purposes.

The demolition of the bottle works closed one chapter of the history of Seaton Sluice. Another has commenced with the laying out of part of the Hartley estate for a watering place.

It is not without a feeling of melancholy that one wanders through the old village, noting the details which tell of former prosperity, details which yet impart a touch of picturesqueness to the place—the old harbour, unused except by a few fishing cobs; the dark, deep 'gut' with its rusty mooring rings and fragments of broken cranes; the scattered stonework of the piers; the mounds of ballast; the quaint octagonal colliery office, now a reading-room; the spacious brewhouse, now a church; the business premises of the bottlenworks, surmounted by a bell-turret, at present used as a schoolroom connected with the church; the glass-house square, with its weather-bleached eighteenth century houses, the most characteristic bit of Seaton Sluice; the gaunt wall of the copperworks screening some gardens from the sea-wind; the waggonway, now a footpath with some of the stone blocks that held the rails still visible in it; and, on the other side of the stream, the most picturesque, as it is the *oldest* building in Seaton Sluice—the thatched house of sir John Delaval.

APPENDIX I.

EXCH. SPECIAL COMMISSIONS, NORTHUMB. 37 ELIZ. NO. 117.

Virtute istius Commissionis nobis directe assessimus ad manerium de Hartelowe infra specificatum. Et tam per cogniciones nostras quam aliorum in hiis casibus peritorum et fide dignorum supervisum et inquisitionem fecimus diligenter in et per tot limites manerii predicti per quem invenimus et baronibus infrascriptis

certioremus quod infra precinctum et limitem manerii de Hartelowe predictum videlicet in agro australi et in agro boreali est et fodi potest quedam minera carbonum que usque diem capcionis hujus inquisitionis minime fossata nec inventa nec dimissa fuit. Quodque eadem minera carbonum valet clare per annum ad dimittendum 13s. 4d. et non ultra secundum sanas discretionones nostras. In cujus rei testimonium presentibus sigilla nostra apposuimus vicesimo sexto die Augusti anno regni domine nostre Elizabethæ dei gratia Angliæ, Franciæ et Hiberniæ reginæ, fidei defensoris etc tricesimo septimo infrascripto.

Edw. Graye.

Anthony Felton.

APPENDIX II.

May it Please your Lord^{ps}.

In obedience to yo^r Lord^{ps} Com'ands signified to us by M^r Lowndes on the annex't Memorial of S^r John Delival Bar^t setting forth That S^r Ralph Delaval, ffather of the said S^r John, did, in the Reign of his late Ma^{tie} King Charles the 2^d erect and build A Peere at Seaton Delaval for the benefit of Trade & Encouragm^t of Navigation That the said Peere cost the said S^r Ralph above 15,000^{li} whereby so considerable a Revenue accrued to his said late Ma^{tie} That in consideration thereof And that the said S^r Ralph would erect & build an other Peere for the greater benfit of Trade His said late Ma^{ty} was graciously pleased to grant him A Privy Scale for 1500^{li} as by a Copy thereof thereunto annexed may appeare.—That the said S^r Ralph at great Charge Built an other Peere and received the sume of 500^{li} in part of the said 1500^{li} towards Building thereof That notwthstanding the said S^r Ralph Erected the said other Peer at his great Charge Yet the remaining 1000^{li} granted by the said Privy Seal, rests unpaid, by reason of the Demise of his said Majesty That ever since the Erecting of the said Peer considerable yearly Revenues have accrued to the Government more particularly to her p'sent Ma^{ty} ffor that there was the then last year paid at the said Port for Custome and the Duty of Salt 6000^{li}. That by reason of great Stormes & Stress of Weather, the said Peer became Ruinous & in decay, and hath cost the said S^r John these last two yeares the sume of 500^{li} in building a new Peer to sustaine the other for the benefit of Trade & Navigation : Desireing yo^r Lord^p to take into consideration the great Charge the said S^r Ralph & S^r John have been at for the increase of the Revenue and the Incouragem^t of Trade & Navigation That the remaineing 1000^{li} or such other sume of mony may be granted the said S^r John to enable him to support & maintaine the said Peer's for the benefit of the Revenue. Wee doe Humbly acquaint yo^r Lord^p That in our Letter of the 11th of December last Wee Inclosed Copy of the said Memorial to the Collector of Newcastle directing him to Examine the Allegations therein contained, And in answer thereunto by his Letter of the third of January last, Copy of which is hereunto annexed He reported to us That upon Enquiy he found That S^r Ralph Delaval Did Erect and build in the Reign of King Charles the 2^d at Seaton Delaval A Peer And that he the said Collector was assured that it was not without a very consider-

able expence. That the said Sr Ralph at his great Charge did also Build a Second Peer Which by distress of Weather being become Ruinous was Repaired by the present Sr John Delaval to his Charge of 500^{li} And (as he is Informed) he is still adding to the same, By which means the Salt Panns there are increased to 8, which have made the Quantity of Salt That the Excise thereof doth amount to upwards of 5000^{li} p. annum communibus annis, That there has been Loaden from thence the last year upwards of 1400 Chaldrons of Coals which It is beleived will increase, But as to any Customes paid at Seaton He the said Collector knowes of none, It being no Port for Importation or Exportation And that he does not think it necessary to add any more Officers then at present, there being only a Coast Trade that is driven there, which accompt he has from the Officers there aswell as other good hands And beleives them to be true Soe that, as there is noe benefit or advantage to the Revenue under our Management, from the Expence of Erecting and maintaining the said Peer, But only to the Salt duty being now Advanced to upwards of 5000^{li} a year by the Increase of the Salt Panns there, as appeares by our Collectors said Letter Wee humbly Conceive, That the Comm^{rs} for that Duty are the more proper persons to give their Opinion in the present Case.

Which is humbly submitted to your Lord^{sh}s Consideration,

Custome House, London,
2 March 1705.

T. Newport
Will Culliford
Jo: Werden.
T Hall

Endersed :

'Sr Jn^o. Delavals, Report from ye Com^{rs} of, Customs to the Treasury.'

APPENDIX III.

DESCRIPTION OF HARTLEY FIRE-ENGINE AND SEATON SLUICE, BY M. GABRIEL JARS.

A environ huit milles Nord-est de Newcastle, près d'un village nommé *Hartly*, un particulier qui a un bien considérable, sur lequel il a les droits régaliens, exploite une très-grande quantité de mines de charbon: une de ses machines à feu est très-considérable; elle a deux grandes chaudières pour fournir la vapeur à un cylindre de soixante pouces de diamètre. Cette machine en fait mouvoir une autre de nouvelle invention, pour élever le charbon des mines. Nous n'en avons pas vu la mécanique, elle étoit dérangée lorsque nous fûmes sur les lieux, & l'endroit où sont les rouages étoit fermé; mais on nous a dit qu'elle est extrêmement compliquée, composée de six ou sept rouets ou lanternes, & sujette à casser très souvent. On ne fait pas cas de son usage. Celui qui en est l'inventeur & le constructeur a obtenu un privilège exclusif, ce qu'on nomme *Patentes du Roi*, pour quatorze ans. Au lieu d'une pareille machine, qui doit employer beaucoup de la force ou plutôt de la puissance de la machine à feu; il seroit mieux d'élever l'eau de la machine à feu au dessus d'une roue, qui feroit mouvoir un treuil pour élever le charbon.

Mines de
Charbon
de terre de
Hartly.

Privilège de
14 ans.

L'entrepreneur de ces mines n'étant pas d'abord situé avantageusement pour la consommation de son charbon, quoique peu éloigné des bords de la mer, a fait une dépense considérable pour la sûreté des vaisseaux qui transportent son charbon. Il a fait couper un rocher sur plus de cent toises de longueur & quarante pieds de profondeur. Cette coupe forme une espèce de canal, par lequel les vaisseaux entrent & sortent d'un bassin où ils viennent charger le charbon. Mais afin que les bâtimens ne soient point agités & brisés dans le bassin, lorsque la marée remonte, on a pratiqué à l'entrée & à la sortie du canal, des coulisses où, à l'aide d'un pied de chèvre tournant, des poulies & des cordes, on descend de grosses pièces de bois, qui forment une espèce de vanne d'écluse pour briser les vagues. On nomme cet endroit *seaton-slaice*. On prétend que cette coupe a coûté plus de dix mille livres sterling. De plus on a pratiqué des routes, telles qu'on les a ci-devant décrites, pour voiturier le charbon de chaque mine jusqu'au bassin. Le même particulier a sur les lieux une verrerie très-considérable.—*Voyages Métallurgiques*, vol. i., p. 207-8, Lyon, 1774.



John Delaval

Yours sincerely
 Thomas Delaval.