THE SHORT, SAD LIFE AND TRAGIC DEATH OF HANNAH GREENER

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The name lives on in text-books and learned journals, but she wasn't Hannah Greener to begin with, in fact, when her short life ended in 1848, she'd only been Hannah Greener for a few months. To see why, we must go back 15 years.

The date: the beginning of December 1832, the place: Delfare Houses near Path Head, Winlaton, and a young single girl, Hannah Shippen, lay dead. She'd just given birth to a baby girl and tragically she'd succumbed to one of the many perils of that process. A day or two later, on 6th December, the 19 year-old was laid to rest in Ryton Churchyard, and, as was the custom in such cases, the baby was baptised immediately after the internment. The baby took her mother's name, Hannah Shippen. Her life had begun in tragedy, but no one there on that December day could have guessed that little Hannah's life would end in tragedy too just 15 years later - and in a controversy that still rumbles on to this day.¹

Before continuing the story I'll introduce the principle players in this real-life drama. First, the young mother, Hannah Shippen. Hannah was born at Reeley Mires near Greenside on the 23rd May 1813, the daughter of
Thomas Shippen, a miller, and his wife Mary Fewster. Secondly the baby's father, John Greener. John was born at Greenhead, Chopwell on 3rd July 1813 to farmer, John Greener, and his wife Elizabeth Laws, but the family moved to Winlaton when John was very young. Next, Mary Rayne - the family name was variously spelt Raine or Rayne, but I'll stick with the latter - who was to marry John Greener, and would play an important role in the coming events. Mary was born at Winlaton on 3rd November 1809 to blacksmith John Rayne and his wife Sarah Smith. Mary's elder brother, John, born 4th January 1803, also a blacksmith, was also to play a significant role in the tragic conclusion to this tale.

Back to the story. Baby Hannah spent part of her childhood with "a person at Gateshead" who reportedly mistreated her and part with her widowed grandfather, miller Thomas Shippen, who lived at Greenwell House near Blaydon Burn and latterly at Greenside Mill.

On 24th February 1834, just over a year after the tragic death of his baby's mother, 20 year-old John Greener married 24 year-old Mary Rayne. Surprisingly they married at St John's in Newcastle, raising the possibility that their union was not supported by their families. If there were objections from John's family, they may have stemmed from the fact that Mary too had an illegitimate child: her son John who was born early in 1831 and was being raised by Mary's parents. But, whatever the truth, within a year of the marriage, when John and Mary's first child, Elizabeth, was born, relations were such that the young couple were living with John's parents at Hallgarth Farm, Winlaton and John was working there as a "husbandman".

But John soon found work as a husbandman on a farm at Haydon Bridge, and it was there that the young couple's second child, George, was born in 1837. Sadly the child died within the year and was laid to rest in Haydon churchyard on 29th March 1838. Perhaps because of this tragedy, perhaps for other reasons, the couple then returned to their home area, Blaydon, and John apparently moved from the land into industry - he was described as a "fireman" - presumably someone who tended a locomotive or stationary steam engine rather than a person who dealt with fires. That was the occupation shown on the birth registration of their third child, another George, who was born on 30th December 1838, but just three weeks later, on 20th January 1839, when they christened the child at St Paul's in Winlaton, John was described as a husbandman - probably again working for his father at Hallgarth Farm. Perhaps the job as fireman wasn't quite what he wanted, but seemingly John was determined to leave the land, and by 1841 the family had moved nineteen
miles to Coxhoe, Co Durham where John was working as a "waggonman" at the newly-opened East Hetton Colliery.

So, in 1841, the situation was that John and Mary, with the children of the marriage, seven year-old Elizabeth and two year-old George, were living at Coxhoe; John's eight-year-old illegitimate daughter, Hannah Shippen, was living with her grandfather, miller Thomas Shippen, at Blaydon Burn; and Mary's ten-year-old illegitimate son, John Rayne, was with his grandparents, blacksmith John Rayne and his wife Sarah, at Winlaton.

John and Mary, soon moved on to New Coundon where John worked as a banksman at the colliery, and there two more children were born, Sarah in 1844 and Joseph in 1846. And it was probably while they were there that they were also joined by their illegitimate children Hannah and John. Hannah's grandfather, Thomas Shippen, had died on 4th May 1845, and John's grandfather, John Rayne, had died a month earlier leaving his wife destitute. The youngsters had been using their mother's surnames - Hannah Shippen and John Rayne - when they were with their respective grandparents, but both changed to Greener when they moved in with John and Mary.

Shortly after Joseph's birth in 1846, the augmented family moved back to Winlaton and John took up employment as a banksman at Blaydon Main Colliery. But they had a problem: young Hannah was greatly troubled by her feet: she suffered constant, crippling pain from badly infected and swollen big toes caused by seriously ingrown toe-nails - a condition called onychia maligna. Both big toes were affected, most particularly that on the left foot. Eventually Hannah's father decided to seek medical treatment for her, a far from trivial financial commitment for a working-class man to make. Dr Meggison of Whickham was called and he sent Hannah to the Infirmary.

Hannah was admitted to Newcastle Infirmary at Forth Banks on 22nd October 1847 and placed in the care of surgeon, H.G. Potter. Four days later, on 26th October, Mr Potter removed the worst-affected toe-nail; that on Hannah's left big toe. Because this operation was "one of the most painful operations of surgery", Mr Potter used a general anaesthetic, ether (diethyl ether), so that Hannah would be insensible. This was a new technique and not an exact science. Dr Potter tried two different applicators to administer the ether without effect, before successfully using a third, known as "Hooper's". Dr Potter stated that Hannah "screamed during the operation, but did not feel any pain", and Hannah later confirmed that she felt no pain during the
operation, and added that she "was asleep the whole time." The only adverse side effects which Hannah complained of was that "the ether made her head bad for two or three days" and that she coughed from irritation of the windpipe. 24

Hannah remained in hospital for nine weeks, during which time she "fretted ... but never complained of ill treatment", and was taken home by Mary, her stepmother, on the 18th December, the Monday before Christmas Day. Mary noted that Hannah had lost weight while in hospital and suggested that the pain had affected her appetite. Her appetite improved a little when she got home but Hannah still lost weight. And when Mary poulticed Hannah's toes "rotten flesh came off the one from which the nail was removed."25

Dr Meggison was called again and he suggested that the other big-toe nail, the right one, should be removed; and because this one wasn't as badly affected as the other, he suggested that he himself should perform the operation at the Greeners' home in Winlaton. Hannah and her family agreed. John, Hannah's father, said "she had better suffer a bit of pain for a moment than have her head made bad again for some days with the stuff", but Hannah insisted saying she would "not have the operation performed if they would not let her have it". Dr Meggison said he would use chloroform instead of ether as he had not observed any ill effects when he had administered it.26

Hannah dreaded the operation and fretted a lot, and, on the day of the operation, Friday, 28th January 1848, she began sobbing as soon as Dr Meggison and his assistant, Dr Lloyd, entered the house and she continued until she was seated in the "operating chair".26 Also present in the room was blacksmith, John Rayne, the brother of Hannah's stepmother, who had agreed to assist.27 And so the operation began.

In a letter to the London Medical Gazette, Dr Meggison described the operation as follows:

"commencing the inhalation, which was done from a handkerchief on which a teaspoonful of chloroform had been poured. After drawing her breath twice, she pulled my hand from her mouth. I told her to put her hands on her knees, and breathe quietly, which she did. In about half a minute, seeing no change in breathing, or alteration of pulse, I lifted her arm, which I found rigid. I looked at the pupil and pinched her cheek, and, finding her insensible, requested Mr. Lloyd to begin the operation. At the termination of the semilunar incision she gave a kick or twitch, which caused me to think the chloroform had not sufficient effect. I was proceeding to apply more to the handkerchief, when her lips, which had been previously of good colour, became suddenly blanched, and she spluttered at the mouth, as if in epilepsy. I threw down the
handkerchief, dashed cold water in her face, and gave her some internally, followed by brandy, without, however, the least effect, not the slightest attempt at a rally being made. We laid her on the floor, opened a vein in the arm, and the jugular vein, but no blood flowed. The whole process of inhalation, operation, venesection, and death, could not, I should say, have occupied more than two minutes."\textsuperscript{28}

Dr Meggison immediately informed the police and told them that an inquest should be held\textsuperscript{29}. The coroner for the area, Mr James Milnes Favell, was contacted and an inquest was arranged for the following day, Saturday 29\textsuperscript{th} January, at the New Inn, Winlaton. There was excitement and interest as news of the tragedy spread around the village, and next day all eyes were on the little pub as the inquest began.\textsuperscript{30}

A jury was sworn and, after viewing the body, they heard evidence from John Rayne who witnessed the tragedy, from Mary Greener, Hannah's stepmother, and from doctors Meggison and Lloyd, who performed the fatal operation. Each gave their own account of the happenings of the previous day or the events leading up to it. Apart from minor discrepancies, the accounts were consistent - the facts weren't in dispute, but nonetheless, the inquest couldn't be concluded without a full examination of the body, so the proceedings adjourned until the following Tuesday so that a post-mortem examination could be held.\textsuperscript{31}

The post-mortem was conducted at about 3 pm on the same day, Saturday 29\textsuperscript{th} January, by Sir John Fife, a well-respected Newcastle surgeon, and Dr. Robert Mortimer Glover who was a lecturer at the Newcastle School of Medicine and Surgery and was regarded as an expert in the use of chloroform. Dr Meggison was also present.\textsuperscript{32} And next day, Sunday 30\textsuperscript{th} January, Hannah was laid to rest in Winlaton churchyard after a service conducted by Rev Charles Tinley. A marginal note in the register of burials reads “Died from effects of chloroform”.\textsuperscript{33}

The inquest resumed at the New Inn at 1.30 pm on Tuesday 1\textsuperscript{st} February. The coroner began by reading excerpts from the London Medical Gazette of 3\textsuperscript{rd} December 1847, which showed that, while chloroform was widely used in both surgery and midwifery and had many advantages over ether, its, use was not without
danger. The Gazette referred to some 1842 experiments on animals by Dr Glover which demonstrated that chloroform had “a tendency to cause congestion of the lungs”.\textsuperscript{34}

Before the doctors were asked to report on their post-mortem, Hannah’s father, John Greener, was called as someone said that he had some evidence to give. However Mr Greener merely reiterated what others had said about the first operation, the state of Hannah’s toes and her wish to have chloroform for the second operation despite his advice that she should do without it.\textsuperscript{35}

Sir John Fife was then sworn in and he read out his report of the post mortem:

“...The body was that of a well-grown female of about 15 years of age. The development seemed on the whole in tolerable relation to the age. The legs were rather thin: calves not sufficiently fleshy. Breasts tolerably well developed: and although on the whole thin, she was not altogether devoid of fat, as appeared on proceeding to open the body. The body was perfectly free from spots or stains of any kind, except from the marks of the phlebotomy to which she had been subjected, and some slight livid stains about the neck. The toes showed the nature of the operations which had been performed. There was simply the ordinary degree of rigidity. Mouth a little open: eyes presented no appearance of congestion. On opening the chest the lungs were not collapsed. One or two very slight adhesions were encountered on separating them from the walls of the chest. The external appearance of both lungs, over the whole surface, but especially in the inferior portions, was that of organs in a very high state of congestion. They were mottled with patches of a deep purple, blueish, or scarlet hue. They were everywhere crepitant. Along the outer and interior border of both lungs, particularly of the upper lobe of the left lung, were several emphysematous bubbles of small size. On cutting into the pulmonary tissue it was found free from tubercles; unless some hard bodies about the roots of the bronchi (enlarged and partially-indurated glands) could be called so. The pulmonary tissue was filled with bloody froth, which was also found in the interior of the bronchi, mixed with mucus. There was no appearance of hepatization. On examining the larynx and trachea, the epiglottis was found reddened at the summit, of a vermilion hue. The mucous membrane of the larynx was redder than natural - mottled with vascular patches. The sinuses of the larynx contained a good deal of dark mucus. The oesophagus was healthy. The stomach was distended with food. Some of the veins were more distinct than usual. Digestion had been going on at the time of death. The liver, kidneys, and spleen, were more congested than usual. The heart contained dark fluid blood in both its cavities: very little in the left. Its structure, and that of the great vessels near it, quite healthy. The brain, externally and internally, was more congested than usual; and the ventricles contained rather more than the usual quantity of serum.”\textsuperscript{36}
After giving the facts, Sir John then proceeded to give his opinions on the case. He believed that the cause of death was congestion of the lungs caused by the inhalation of chloroform, a known side effect of that substance. He added, however, that there did not seem to have been anything in Hannah’s condition which should have prevented the use of chloroform during this very painful operation. He went on to say that such was “his conviction of the value of chloroform in lessening human suffering, and of the comparatively small amount of danger attending its use, taking into account the number of cases in which it was applicable, that if he was himself under the necessity of submitting to an operation such as the one now under consideration, or to any other operation involving much pain, he would insist upon taking chloroform.” He concluded by saying that “since the occurrence of this event he had used it; and he should continue to do so, with the fatal result in the present instance staring him in the face.” In fact he would use it in all but the most “trifling cases”.37

Dr Glover was then called and, while expressing less conviction that chloroform was safer than ether, he said that Dr Meggison “was perfectly justifiable in adopting chloroform” and that his efforts to revive his patient were “in accordance with the practice recommended by the highest authorities.” The final witness was Dr Meggison and he agreed with the evidence of both Sir John Fife and Dr Glover.38

The Coroner then addressed the jury and stated the law and the facts and concluded by saying “that the jury had enjoyed the advantage of hearing both Sir John Fife and Dr. Glover on the case before them, and would have little difficulty in coming to a right verdict.” The jury retired to another room and after a short time returned with their verdict which was read out by the jury foreman, Mr John McEwan. He said they were "unanimously of opinion that Hannah Greener died from congestion of the lungs, produced by chloroform, and that no blame could be attached to Dr. Meggison or his assistant.” The Coroner recorded the verdict accordingly.38

And so the dreadful events at Winlaton drew to their conclusion. Poor Hannah was dead and laid to rest - and free from suffering at last - and doctors Meggison and Lloyd had been exonerated, but that wasn’t the end of it. Far from it. Why? Because not everyone agreed with Sir John Fife and the Coroner’s jury that the cause of death was "Congestion of the lungs by inhaling vapour of Chloroform when under a Surgical operation.” Two medical heavyweights in particular thought the verdict quite wrong.
The first attack on the verdict came from Professor James Young Simpson of Edinburgh University who had popularised the use of chloroform in clinical practice through a paper published in November 1847. He believed that Hannah's death was not caused by the chloroform at all, but rather by some of the attempts to revive her; specifically the water and brandy given by mouth. Dr Meggison said Hannah had swallowed the liquids with difficulty, but Professor Simpson believed that she would have been unable to swallow when unconscious and the liquids would, in fact, have obstructed Hannah's breathing and asphyxiated her. He thought that Hannah would have fully recovered had the doctors done nothing at all - or perhaps if they had applied artificial respiration.39

Next came Dr John Snow, anaesthetist to Queen Victoria, who had strong links to the North-East, having been apprenticed to a Newcastle surgeon and, later, a medical practitioner at Burnopfield. He would go on to achieve great fame for his work on cholera and the germ theory of disease. Dr Snow disagreed with both Sir John Fife and Professor Simpson and instead blamed the method used to administer the chloroform. He said the death resulted from the "over-rapid action of chloroform when administered on a handkerchief." By obstructing the flow of air, the handkerchief increased the concentration of the chloroform. Hannah had, in fact, had an overdose of chloroform, even though the actual quantity of the chemical used was less than that safely used on others. If Dr Meggison had used one of the many available instruments - specially designed masks or vaporisers - he could have applied the chloroform in a more controlled and safer manner.40

So it was either the chemical action of the chloroform on the lungs of a susceptible person (Fife), choking on the liquids given to revive her (Simpson), or an overdose caused by the use of a handkerchief (Snow). In the end, Snow's view prevailed, and even as late as 1908, the American Medical Association felt able to state that "all accidents of chloroform are due to overdosage".41

The next significant step was an experiment conducted in 1911 by Alfred Goodman Levy which showed that an animal under light chloroform anaesthesia could suffer from a fatal heart arrhythmia (ventricular fibrillation) when injected with epinephrine - a hormone which the adrenal gland releases when the body is cut as in a surgical operation.42 The significance of this in the case of Hannah Greener is obvious - she was lightly anaesthetised with chloroform and seems to have died at the instant the operation began.

But chloroform continued to be popular despite its inherent danger - on average it killed roughly one patient in every 4,500, compared with ether’s figures of roughly one in 20,000. It was the rise in popularity of
nitrous oxide and the discovery of hexobarbital in 1932 which led to its rapid decline in the years leading up to World War II. 44

The Greener case, however, continued to be controversial, and even today the actual cause of death is argued over. In 2002 a leading US medical journal published an article which attempted to examine the case in the light of modern knowledge and reach a scientific answer to the cause of Hannah’s death 154 years earlier. Four possible causes were examined, the three identified at the time – injury to lungs, asphyxia and overdose – plus the fourth which was identified in 1911 – cardiac arrhythmia.45

The authors quickly eliminated the theories of Doctors Fife and Snow. The fact that Hannah moved when the incision was made in her toe-nail showed that she was lightly anaesthetised and had certainly not had an overdose of chloroform as proposed by Dr Snow, or nearly enough to physically damage her lungs as proposed by Dr Fife. They could not dismiss the other theories - cardiac arrhythmia induced by a hormone surge when under light anaesthesia, or asphyxia caused by administering liquids to a person incapable of swallowing - and could not positively decide between them, though they did, on balance, favour the former. If they are correct then Hannah died when Dr Lloyd made the cut and epinephrine rushed to her chloroform-affected heart and stopped it, and she was dead before the water and brandy was even placed in her mouth.45

Few in Hannah’s home village today have even heard of her, but her name lives on in academia at least – she was the first person in the world to die under chloroform anaesthesia. Immortality of a sort, but it doesn't make up for a life cut short so tragically.

NOTES

1) Accounts of this child's death on 28th January 1848 refer to her as Hannah Greener and give her age as 15. However there is no christening record for anyone of that name anywhere in the area at the appropriate time, and nobody with that name and birthdate appear on the 1841 census for the area. The answer is provided in the account of the inquest in the The Hull Packet and East Riding Times of 4th February 1848 which quotes a witness as stating "The deceased was an illegitimate child whose mother died in childbirth." Then, relying on the tradition that children whose mothers die in childbirth were christened the day that the mother was buried, it was a simple matter to identify all the young women of child-bearing age who were buried in the Winlaton/Ryton areas between January 1832 and January 1833 - there were only a handful - and then to look for the baptism of an illegitimate infant with the same surname and the forename "Hannah" on each of their burial dates. Only one fitted the bill - Ryton Burial Register entry 2059 on page 258, (DCRO EP/Ryt 1/26) records the burial of "Hannah Shippen - Delfare houses - Dec 6 [1832] - 20 years - Hen. Wardell Curate" and Ryton Baptism Register entry 497 on page 63 (DCRO EP/Ryt 1/11) records the baptism of her child "1832 Dec 6 - Hannah [child of] Hannah Shippen - Delfare houses - Spinster - Hen. Wardell Curate". So we can conclude with confidence that the girl who was to be known as Hannah Greener, began life as Hannah Shippen, the illegitimate daughter of Hannah Shippen of Dalfire Houses.
2) Ryton Baptism Register records the christening on 20 June 1813 of "Hannah [child of] Thomas and Mary Shippen, Miller of Relamires" and notes that her birth date was 23 May 1813 (DCRO EP/Ryt 1/10). Ryton Marriage Register records the marriage of Thomas Shippen and Mary Fewster on 18 May 1801 (DCRO EP/Ryt 1/18). The birth date shows that Hannah was only 19 when she died rather than 20 as recorded in the burial register.

3) Ryton Baptism Register records the christening on 6th October 1816 of "John [child of] John and Elizabeth Greener, farmer of Winlaton" and notes that John was born on 3rd July 1913 (DCRO EP/Ryt 1/10). So he was aged three when he was baptised. His place of birth is recorded on the 1851 census (HO107/2403 Folio 290 Page 13 Schedule 48) as Chopwell, but this isn't very clear. On the 1861 census (RG9/3808 Folio 11 Page 15 Schedule 73) it is given as "Chappel" and on the 1871 census (RG10/5065 Folio 47 Page 28 Schedule 142), again as "Chopwell". The family's residence at Chopwell is supported by the christening records of John's older siblings, Joseph and Sarah, in the Ryton Baptism Register in 1810 and 1811 respectively - which give the residence as Chopwell. The evidence therefore suggests that the family had moved from Chopwell to Winlaton between John's birth in 1813 and his christening in 1816. Elizabeth maiden name, Laws, is recorded in the 1810 and 1811 christening records referred to above and, of course, it appears on her marriage record. Ryton Marriage Register records the marriage of John Greener and Elizabeth Laws on 27th April 1809 (DCRO EP/Ryt 1/19).

4) Ryton Baptism Register records the christening on 26 November 1809 of "Mary [child of] John Rain and Sarah Smith" and notes her date of birth as 3 November 1809 (DCRO EP/Ryt 1/9). Their residence and John's occupation are noted on the christening record of Mary's younger sibling, Isabella in the Ryton Baptism Register. On 12 October 1817 we find "Isabella [child of] John and Sarah Raine of Winlaton, Smith" (DCRO EP/Ryt 1/10). Sarah's surname is confirmed in their marriage record in the Ryton Marriage Register which records the union of John Rayne and Sarah Smith on 12 July 1794 (DCRO EP/Ryt 1/17).

5) Ryton Baptism Register records the christening on 17 July 1803 of "John [child of] John Raine and Sarah Smith" and notes his date of birth as 4 January 1803 (DCRO EP/Ryt 1/7).

6) The Hull Packet and East Riding Times of 4th February 1848 quotes a witness at Hannah's inquest as stating "She had previously lived with a person at Gateshead and was much trashed about".

7) The 1841 census (HO107/302/4 Folio 10 Page 15) shows Thomas Shipping, a Miller, aged 70, Hannah Shipping, aged 8, and Isabella Young, a servant, aged 20 living at Greenwell House.


9) Marriage Record of John Greener and Mary Raine at St John's Parish Church, Newcastle on 24th Feb 1834 "John Greener of this Parish and Mary Raine of this Parish were married in this Church by banns this twenty fourth Day of February in the Year One Thousand eight hundred and thirty four By me John Fox. This Marriage was solemnized between us John Greener/Mary Raine's mark X. In the Presence of Henry Cockburn/John Thompson - from Bishop's Transcript of Newcastle St John Marriage Register, Durham Diocesan Records (DDR/EA/PBT/2 / 192 / 1861).


The 1841 census for Winlaton Village (HO107/302 Book 7 Folio 7 Page 9 Line 23) shows "John Rayne 68 Smith, Sarah Rayne 68, Richard Rayne 31 Smith, John Rayne 10"


16) The 1841 Census (HO107/313 Book 10 Folio 35 Page 23 Line 9) for Forster Street, Coxhoe, Co Durham shows "John Greener 28 Waggon Man, Mary Greener 30, Elizabeth Greener 7 and George Greener 2"


18) John Rayne, the brother of Hannah's stepmother, speaking at the inquest on 29th January 1848, said Hannah "came home from her grandfather's about a year ago" (quoted in Gateshead Observer 5th February 1848). But Hannah's grandfather, Thomas Shippen, died on 3rd May 1845 (see note 19 below), so she couldn't have "came home from her grandfather's" any later than that. Presumably her uncle had simply underestimated the time.

Mary's illegitimate son, John, had been staying with his grandparents, John & Sarah Rayne, (see note 10 above) but John too died in 1845 leaving his widow without a breadwinner (see note 20 below) and, although this is very much an assumption, it seems likely that young John returned to his mother at that time. All we know for sure is that he was there by 1851 - 1851 census for Winlaton records "John Greener 38 Colliery Worker , Mary Greener 31, John Greener 20 Coal Miner , Elizabeth Greener 17, George Greener 12 Colliery Worker, Sarah Greener 7, Joseph Greener 4 " (Ref: HO107/2403 Folio 298 Page 28 Schedule 106).


21) Hannah's use of the "Shippen" surname is shown on the 1841 census (see note 7 above ) and, of course, her use of the "Greener" surname by 1848 is shown by its use throughout the inquest.

John's use of the "Rayne" surname is shown on the 1841 census (see note 10 above) and his use of the Greener surname by 1851 is shown on the 1851 census (see note 18 above).

22) The report of the inquest in the London Medical Gazette includes:- “John Greener was accordingly sworn. He deposed that he was a banksman at Mr. Ramsay's colliery.” ("Death from Chloroform during a
Surgical Operation" - London Medical Gazette - New Series - 1848; 6:250-254). The Durham Mining Museum’s listings showing that Blaydon Main Colliery was owned by George H. Ramsay at that date. (Durham Mining Museum http://www.dmm.org.uk/colliery/b043.htm).

23) The London Medical Gazette report of the inquest quotes John Rayne as saying “Dr. Meggison, of Whickham, surgeon, had visited her several times. [prior to her stay in the Infirmary]” and quotes Mary Greener as saying “Dr. Meggison had been attending her for her toe.” (“Death from Chloroform during a Surgical Operation" - London Medical Gazette - New Series - 1848; 6:250-254)


25) The Gateshead Observer’s report of the inquest quotes Mary Greener as saying “She was in the infirmary for her toes for nine weeks. Witness brought her out on the Monday before Christmas-day. She had a toe-nail taken off in November. She told witness she was made insensible before it was done, and felt no pain. … She was in good health before she went into the infirmary. She fretted in the infirmary, but never complained of ill treatment. She grew thinner while in the infirmary, and also after she came out. She took her victuals better this last month. She had complained of a pain in her chest, and doubled herself up, both in and out of bed; she was never subject to anything of the kind before she went into the infirmary. She suffered much pain in her toes, in the one from which the nail was removed and in the others. Witness thought the pain was so great as to prevent her thriving. The toe-nails were growing into the flesh, which was much swelled. Witness had poulticed her toes, and rotten flesh came off the one from which the nail was removed.” ("Death from Chloroform" Gateshead Observer, 5th February 1848)

26) In reference to John Greener’s evidence at the inquest, the Gateshead Observer reported: “The night before the second nail was taken off witness said that she had better suffer a bit of pain for a moment than have her head made bad again for some days with the stuff. She said she would not have the operation performed if they would not let her have it; so they agreed that it should be given to her.” (Ibid)

In a letter to the London Medical Gazette, Dr Meggison wrote: “On Friday, Jan. 28, Mr. Lloyd, my assistant, and myself, having determined upon the necessity of removing the nail and matrix in a case of onychia, proceeded to do so, putting the patient (who was a well-developed girl of 15) under the influence of chloroform. About two months previous, she had, under the influence of ether, undergone a similar operation on the other toe in the Newcastle Infirmary. She described the ether as having full effect, but leaving a headache, which lasted for a day or two, and produced coughing, from the irritation of the windpipe. She was recommended by her father to undergo the operation without taking any of the "stuff," and bear a little pain. She, however, refused to submit unless something was administered to deprive her of feeling. We recommended chloroform as preferable to ether, not having left any ill effects where I had administered it. She appeared to dread the operation, and fretted a good deal: in fact, she commenced sobbing on our entering the house, and continued so until seated in the operating chair,” ("The Fatal Case of Chloroform Near Newcastle - Letter from Dr Meggison" - London Medical Gazette - New Series - 1848; 6:254-255)

27) The Gateshead Observer’s report of John Rayne’s evidence at the inquest includes: “The persons present were Dr. Meggison, his assistant, and witness. … Witness held her leg to steady the foot.” ("Death from Chloroform" Gateshead Observer, 5th February 1848)


29) The London Medical Gazette’s report of the inquest refers to the Coroner’s closing remarks – he said that “he might now mention, what he had not thought it right to name before, that Dr. Meggison, immediately after the fatal event, informed the police of it, and suggested that it would be necessary to hold an inquest.” ("Death from Chloroform during a Surgical Operation" from the London Medical Gazette - 1 Feb 1848 - London Medical Gazette - New Series - 1848; 6:250-4)

30) The Gateshead Observer report of the inquest begins “On Saturday, the 29th ult., an inquiry, ofgrave importance and universal interest, was opened at the village of Winlaton, about 5 miles distant from Newcastle-upon-Tyne, in the public house kept by Mr. Thomas Liddle, by J. M. Favell, Esq., the coroner of
Chester ward, in the county of Durham, to ascertain how and by what means Hannah Greener, aged 15, had come to her death.” ("Death from Chloroform" Gateshead Observer 5th February 1848)

The Gateshead section (page 16th) of Ward's Northumberland and Durham Directory 1850 includes “Liddle Thomas, New inn, Winlaton”, thus identifying the public house referred to in the Gateshead Observer.

31) "Death from Chloroform during a Surgical Operation" from the London Medical Gazette - 1 Feb 1848 - London Medical Gazette - New Series - 1848; 6:250-4

32) Ibid page 252

33) Winlaton Burial Register Durham County Record Office EP/Win 1/21 (See illustration)

34) "Death from Chloroform during a Surgical Operation" from the London Medical Gazette - 1 Feb 1848 - London Medical Gazette - New Series - 1848; 6:250-4

35) Ibid page 252

36) Ibid pages 252-3

37) Ibid pages 253-4

38) Ibid page 254

39) Article entitled “Remarks on the Alleged Case of Death from the Action of Chloroform” By Dr J.Y. Simpson M.D. Professor of Midwifery in the University of Edinburgh, February 1848. The Lancet 1848; 1:175-176


41) “Chloroform Anaesthesia” by W.D. Haggard - Journal of the American Medical Association 1908; li:1578-82

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45) "An Unexplained Death - Hannah Greener and Chloroform" by Paul R Knight and Douglas R Bacon (Anesthesiology V 96 No 5, May 2002, 1250-1253)

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Birth Certificate of Sarah Greener - 5 Apr 1844 - GRO Ref: Q2 1844 Auckland XXIV 2

Death Certificate of Thomas Shippen - 3 May 1845 - Gateshead Ref: Q2 1845 Reg 3 WIN Ent 97

Death Certificate of Hannah Greener - 28 Jan 1848 - Gateshead Ref: Q1 1848 Reg 4 WIN Ent 83
Death Certificate of Mary Greener - 10 Jun 1876 - GRO Ref: Q2 1876 66 Gateshead 10a 440
Death Certificate of John Greener - 18 Mar 1879 - GRO Ref: Q1 1879 66 Gateshead 10a 493

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Baptism Record of Joseph Greener at Ryton - 23 Sep 1810 - Ref No. EP/Ryt 1/9 Ryton Register of baptisms
Baptism Record of Mary Shippen at Ryton - 12 Jul 1812 - Ref No. EP/Ryt 1/9 Ryton Register of baptisms
Baptism Record of Hannah Shippin at Ryton - 20 Jun 1813 - Ref No. EP/Ryt 1/10 Ryton Register of baptisms
Baptism Record of John Greener at Ryton - 6 Oct 1816 - Ref No. EP/Ryt 1/10 Ryton Register of baptisms
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Baptism Record of John Raine at Ryton - 20 Feb 1831 - Ref No. EP/Ryt 1/11 Ryton Register of baptisms
Baptism Record of Hannah Shippen at Ryton - 6 Dec 1832 - Ref No. EP/Ryt 1/11 Ryton Register of baptisms
Burial Record of Mary Shippen at Ryton - 27 May 1827 - Ref No. EP/Ryt 1/26 Ryton Register of burials
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Marriage Record of Thomas Shippen and Mary Fewster at Ryton - 18 May 1801 - Ref No. EP/Ryt 1/18 Ryton Register of Marriages
Marriage Record of John Greener & Elizabeth Laws at Ryton - 27 Apr 1809 - Ref No. EP/Ryt 1/19 Ryton Register of Marriages

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Burial Record of George Greener at Warden & Chapelry of Haydon. - 29 Mar 1838 - DDR/EA/PBT/2/129/182
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Burial Record of Hannah Shippen at Ryton - 6 Dec 1832 - DDR/EA/PBT/2/275/639
Burial Record of John Rayne - 27 Apr 1845 - DDR/EA/PBT/2/275/232
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Census Returns (Online www.ancestry.co.uk)

1841 Census entry showing Hannah Shippen with her grandfather. - Ref: HO107/302/4 Folio 10 Page 15 Line 16

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1841 Census entry showing family of John and Elizabeth Greener of Hallgarth. - Ref: HO107/302/8 Folio 30 Page 54 Line 3

1841 Census entry showing John and Mary Greener and their family at Coxhoe - Ref: HO107/313/10 Folio 35 Page 23 Line 9

1851 Census entry showing John and Mary Greener and their family - Ref: HO107/2403 Folio 290 Page 13 Schedule 48

1851 Census entry showing Sarah and Martha Rayne as Paupers - Ref HO107/2403 Folio 298 Page 28 Schedule 106

1851 Census entry showing John Greener and family of Hallgarth - Ref: HO107/2403 Folio 331 Page 44 Schedule 177

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1861 Census entry showing John and Mary Greener and their family - Ref: RG9/3808 Folio 11 Page 15 Schedule 73

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