

[The radial wall on either side.] It was thought to be a later addition for this reason, despite the fact that it was “seamlessly integrated in to the airway wall.” The fourth side, contexts 313 and 312 (on the opposite side of the airway), were extensions to the main brick linings “(although their place in the phasing sequence has yet to be fully determined.)” (See Figures 2.31, 2.32, 2.33 and 2.34 above, and 2.35 below.)

The south-east facing elevation of the airway (Figure 2.31 above) shows a metal feature, not described, set in to the brickwork at about 1m from the floor of the airway and about 2m from the line of the chamber. [It is suggested that, in conjunction with contexts 312, 313 and 363, it might represent something to do with the installation of a furnace feeder, one being patented by Mr Myron John Frisbie in 1868. Using this mechanism the coal could be fed from below the furnace, rather than from the working floor. At the time of writing no details have been found, but a general photograph is printed in the booklet<sup>24</sup> on the Red House Cone at Wordsley, Stourbridge.] The furnace collapsed in 1862<sup>25</sup> and about 1860 a partial rebuild of the cone was necessary due to foundation settlement.<sup>26</sup> This might have been the same event, as Mountain had a time span of “fifty to sixty years ago”, and although apparently too early to install a Frisbie feeder, something similar might have been available, and the opportunity taken to try it out. The comment is made in the report that there is no sign of anything similar at the New House Cone. [Para 5.3.2.1, pps. 13-14.]<sup>27</sup>

Alternatively, 363 may have been used in conjunction with the covered duct at the base of the airway for some sort of forced draught arrangement for the furnace, as mentioned above, but natural draught seems to have been adequate elsewhere. The duct appears, with some of the stone covers removed, in Figure 2.35 below. This was Photograph 12 in the 1995 report.

[Late in 2003, information on the Frisbie furnace feeder came to hand from two sources. The first was a copy of the *Scientific American*, dated December 2, 1876, and the second was the Science Museum Library. Frisbie’s British patent, No. 27, was dated 3<sup>rd</sup> January 1868. No patent number or date is given in the *Scientific American*, which describes it as an “Improved Furnace Feeder”. The article ends by stating, “We learn that there are already over thirty of the feeders now in use in Birmingham, England.”

The 1868 patent application, p.2, states, “The object and purpose of my said Invention is to provide by means of suitable mechanism or apparatus for feeding fuel into furnaces, fire-boxes, and fire-grates during the progress of combustion of the fuel therein at that part where the fresh fuel can be introduced with great certainty of ensuring the immediate and perfect combustion of the same, avoiding the formation of smoke and effecting the feeding in a ready and cleanly manner; and by the use of which Invention great economy of fuel will result.” On p.4 of the patent it says, “ Fig. 5 is a front elevational view and Fig. 6 a side elevational view shewing an arrangement for feeding fuel into glass-making furnaces, and is adapted to be fixed in the cave or ash-pit below the furnace.” Unfortunately there is no indication of exactly how the mechanism was incorporated in a glassworks’ furnace.]

Phases i and ii are regarded as 18<sup>th</sup> century in the report, but the reasoning is not given. The later phases are recognised as discrete events, but as there appears to be no dating evidence, there is little point in describing them in detail, other than to comment as follows:-

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<sup>24</sup> *The Red House Glass Cone -a unique glassmaking experience*, Red House Glass Cone, Dudley Metropolitan Borough Council, 2002

<sup>25</sup> Eyres, J, Letter to St George Gray, 10<sup>th</sup> July 1911

<sup>26</sup> Mountain, F, *History of Nailsea Glassworks*, Letter to the Curator, Bristol City Museum, 1915

<sup>27</sup> Parry, A H H, & Hume, L, *Nailsea Glassworks Site-1995 Excavation (Interim Report)*, AAU, May 1995

Phase iii: This is a small side airway, possibly relating to an auxiliary furnace of unknown function or, less likely on positional grounds, to the swinging pit shown on the 1870 plan.

Phase iv: This structure, not shown on the 1870 plan, was clearly built against the outer wall of Stage ii, and corresponds to the “flattening kiln” shown on the 1830s plan. It has an intriguing pit, for which there is at present no explanation, fed by a chute from a higher level. Figure 2.36 below is reproduced from Photograph 11 in the 1995 report. In Para. 5.3.4, it is suggested that it is a “tank”, saying that, “It may have served as a sand or water container or been used to mix chemicals or glass making ingredients.” It is now suggested that if such had been the uses it might have had a smooth render, but there is no mention of this. An alternative might have been as a coal bunker if indeed flattening kilns were in that extension. It has also been suggested to the writer that it might have been for pre-conditioning the clay for pots, but it is felt that the location, at some distance from the pot rooms associated with the Old House Cone, and in a presumably hot environment, would make this unlikely. There is no comment in the original report, but the north-eastern end appears in the photograph to be rather blackened

Phase v: The appropriate portions of the 1830s and 1870 plans have been scaled up [electronically, but it is believed that any errors are slight] to compare with the phasing plan (1995 Figure 7) and added to that plan, as shown in Figure 2.32 above. It would seem, in the absence of any contrary archaeological evidence, that there was some inaccuracy with the external dimensions of the cone on the 1830s plan, so what has been taken as contemporary in this phase may well not be. This comparison certainly raises doubts about the interpretation in para. 5.3.5.1 of the original report that the sunken feature 458 and wall 404 formed part of the blowing pit {26}. If the 1870 plan can be relied on, this feature would have been some five metres further east, as can clearly be seen on Figure 2.38 below.



Figure 2.35: Main Airway looking NE



Figure 2.36: Stone lined “tank “