

# THE EARLY YEARS OF STOTHERT & PITT Hugh Torrens

Stothert and Pitt, the famous Bath firm of engineers are today the largest industrial employers in Bath with about 2000 employees and known the world over for their pumps, cranes and construction plant.<sup>1</sup> That their history is a long one is equally well known. But exactly how old has never been established although there have been many different suggestions, none of them accurate.<sup>2</sup> These preliminary notes attempt to place on record the facts, as so far uncovered, about the origins of the firm and its forerunners; how and where it has evolved and what remains in the field of industrial archaeology are known.

We first hear of a Stothert in Bath early in 1779. At this time Bath was approaching the height of its fame as a fashionable resort. Arthur Young commented in 1771 'how flourishing this city is' and listed the 'amazing edifices of a town supported by pleasure and disease; the seat neither of government nor commerce'.<sup>3</sup> Details of social life in Bath abound, but we are on much less certain ground when seeking information about the artisans and tradespeople of Bath who serviced this fluctuating population. In the earliest Bath trade directory (for 1783)<sup>4</sup> we find listed four ironmongers, one named as Harris and Rotton, Horse Street. Thanks to the late in life Reminiscences<sup>5</sup> written 1824 of Richard Chippendall (born 1751) who was from 1784 London agent for Matthew Boulton the Birmingham industrialist, we know of a Stothert connection with this ironmongery firm from February 1779. Chippendall was first bound apprentice to an ironmonger in Kendal in 1768 and when this expired he moved to Manchester in 1774 to become book keeper to an ironmonger there called James Bateman.<sup>6</sup> Within a few years he moved to Bath to work for the above-mentioned Harris where he arrived in February 1779. He:

'found Harris a stupid, ignorant old man. No tradesman or man of real business, but a dealer in the marvellous plenty of low cunning and with whom everything was conducted at random. He had a partner in London who married his sister of the name of Paris and had a principal part in the concern at Bath. They employed workmen of all descriptions - Smiths, braziers, tinmen, plane-makers, etc., and had a Superintendent (of which I have before heard nothing) of the name of Stothert a young man of some abilities on whose care the whole management of the concern depended while the old man's chief employ was hopping about the shop telling marvellous tales to the customers. His wife appeared younger than himself and was evidently the Grey Mare and well fitted for it - a shrewd clever woman - and she only could keep him in order or at all regulate his rhodomontade proceedings. With this man blundering on through thick and thin the business was anything but a productive one. The trade starved, the partners quarrelling and everything unpleasant. Of course I wished myself out of it by the time I was in it'.

George Stothert was employed here at a salary of £30 a year. He was born in c.1754 so would only have been 25 when Richard Chippendall met him. His place and date of birth are not yet known but he is described as of a Kircudbrightshire family.

In 1782 the partnership between Harris & Paris was dissolved

and John Rotton of Birmingham instead taken into partnership. George Stothert continued working for them and at some stage before 1784 had married someone called Ann. The 1784 directory still lists Harris and Rotton as Ironmongers, Horse Street, but by 1785 John Harris was no longer in occupation in Horse Street. The few surviving rate books7 for St James Parish supply the information. That for May, 1781, shows John Harris rated for a house and a 'New House and Tenements' in Stall Street (obviously Horse Street was confusingly included with its continuation Stall Street by the rating officer). That for July 1785 (none survive in between) instead shows George Stothert now rated for John Harris's property. Confirmation that he must have taken over John Harris's ironmongery business by May, 1785, is given by the Bath Chronicle of May 5th, 1785, which notices the death on the Thursday night previously 'suddenly of Henry Smith, a workman belonging to Mr Stothert, in Horse Street'. The reason for the change of proprietor must surely be connected with the death of John Harris's wife in January, 1784<sup>8</sup>. Chippendall described how she was the only person who could keep his business in order and one can only presume with her death he must have decided to sell the business.

Taking the evidence above we can safely assume George Stothert had established himself on his own as an independent ironmonger in 1785 in the Horse Street premises of Harris. Unfortunately the 1785 Directory which would confirm this does not survive.9 The first Directory in which a Stothert appears in Bath is the 1787 Bristol and Bath directory in which 'George Stothert, Brazier and ironmonger, Horse Street' is found. In 1786 George's eldest son, George junior, was born and he became the only son of this marriage when his mother sadly died in 1788. In 1791 George Stothert married again. One would much like to know the significance of his choice of a woman who had been to school at Ironbridge, Shropshire - the home of the industrial Revolution. He married at Kinlet November 21st 1791, Elisabeth Asprey, daughter of John Asprey, Farmer of Ackleton, Shropshire and later of Kinlet.

We can best tabulate future partners in the Stothert story with a partial family tree<sup>10</sup> (ignoring all those many descendants who played no major part in the development of Stothert and Pitt) which shows three of the nine children of this second marriage.

The earliest archival material relating to Stothert so far located is the firm's bill head dated 26th September, 1795<sup>11</sup> which shows him supplying gun powder from 21 Horse Sreet and notes him as 'ironmonger, Smith, Brazier, Tin Man and Plane Maker, also operator of a Manufactures Register and supplies of all kinds of stove grates'. Our knowledge of the firm for these early years is very fragmentary and information is likely to come from the most surprising sources. In 1796 for example George Stothert's name appears as a subscriber to Edward T. Jones' book **The English System of Book Keeping** published in Bristol which described a patented 'plan



for detecting even trifling errors in accounting'. One might venture that this was slight, but confirmatory evidence of a Stothert Scottish ancestry!

In 1798 we find George Stothert and Co. supplying Members of the Bath Armed Association (a local Militia formed that year) with warranted firelocks at £2 each from his warehouse at 15 Northgate Street.<sup>12</sup> This is the first we hear of expansion to Northgate Street, a fact confirmed first by a Directory entry in 1800. The first intimation that George Stothert had some enemies comes in March 1800, when several threatening and incendiary letters received by the Mayor of Bath and an atrocious attempt having been made to fire the premises of Mr Stothert are reported.<sup>13</sup> Mr Stothert one of the 'most respectable, publick-spirited and esteemed inhabitants of Bath' seems a strange choice for such attack. It is worth speculating whether the writer of letters a few days before<sup>14</sup> to the Bath Chronicle who signed himself Extinguisher St James (the Stothert Parish) might not be George Stothert and the cause of his being singled out. The writer of these letters criticised both the state of the fire engines used by the Bath fire fighters, which had failed in a recent conflagration, and the views of another correspondent on the subject. One reason the writer pointed out for this failure was that the pump plunger had shrunk by not being kept wet. He conveys considerable knowledge of pump technology and may well have been George Stothert since his obituary notice later speaks of his many years manufacturing of hydraulic engines, etc. The parish is right and criticism of private fire fighting forces may have sparked off recrimination against him.

& Co. were appointed assignees<sup>15</sup> for a firm of local woollen manufacturers who had got into financial difficulties. In the same year we first find Mr George Stothert, Bath entered as a member of the Bath and West of England Agricultural Society, his name continuing until 1817 when he is noted as now over 7 years in arrears with his subscription!

Until this date (1802) we could hardly regard the Stothert empire as a major or significant one. We have only evidence<sup>5</sup> of his visit in 1797 to Soho to see Matthew Boulton to act as a surety for Richard Chippendall if needed. There is every likelihood that Stothert may have been a Bath agent for Boulton's famous Birmingham manufactory. In March 1804 we first hear of George Stothert's eldest son George junior (1786-1858) when he acts as a courier for a letter written on 25th March, 1804, by his friend William Smith 1769-1839 (the Father of English Geology, who up till then had lived most of his adult life near Bath) to Richard Trevithick 1771-1833 (the father of the locomotive) at Merthyr Tydfil.<sup>16</sup> Stothert junior was then about eighteen and was travelling with 'Mr Brough an Ingenious Engineer'17 who was about this time in partnership with a millwright in Bath with offices at the Quay very near the Horse Street works of father and son Stothert.

These two were travelling through Wales obviously visiting manufacturing districts. William Smith's letter provided an introduction to Trevithick and asked for them to be shown round the Penydarren works near Merthyr and its 'ingenious mechanism'. Sadly Trevithick was in Cornwall when they arrived so they did not meet him but were shown round the works and must have seen the Penydarren locomotive which had first run on rails on 13th February, 1804, the previous month - a 'most ingenious mechanism'.

How Smith & Stothert junior met we do not know, but they were both involved in very similar engineering activities in the Bath area. The Somerset Coal Canal may have been a link, but we find no evidence of a Stothert connection with this until 1811 when Stothert senior is supplying padlocks to the Canal Company.<sup>11</sup> George Stothert appears as a subscriber to William Smith's famous geological map of 1815.

George junior had been taken into partnership by 1813<sup>18</sup> but this did not last long for in 1815 we note an event which can be taken as a crucial stage in the development of Stothert & Pitt of today. A notice appeared dissolving the partnership between George Junior and senior, Furnishing ironmongers and manufacturers 'which business will be continued by George senior'. George junior announced that he had established an iron-foundry at 17 Horse Street (see illustration).<sup>19</sup> The diversification of interest and product associated with today's company had begun and from this date we find an ever increasing variety of manufactures being undertaken. For a short while the contacts built up by the father would have been of great use to the son's expansion and this would have been greatly helped by father's membership of the Bath Agricultural Society and his Trusteeship of, and active interest in the Bath Turnpike trust.

George senior died in London on 24th November 1818, after a few hours illness. He was 64. The obituary notices<sup>20</sup> which appeared leave no doubt of the esteem in which he was held both by his customers and his workmen, which latter were described as old but numerous. They also speak of his many years as an eminent ironmonger, and manufacturer of hydraulic engines [ie. pumps], planes, etc. These last survive in considerable numbers (see p 29)

With his father's death we find George junior continuing in charge of the Horse Street foundry. But the ironmongery business, now run from Northgate Street, had passed to the hands of his two eldest sons by his second marriage, John & William who first appear as Messrs. Stothert in the 1819 directory. These two brothers described here as 'Furnishing ironmongers to his Majesty', evidence of a most useful royal patronage, continued at 11 Northgate Street until 1837. About this time William Stothert retired and from then till 1841 John Stothert alone was in charge. In addition John Stothert had a financial say in the running of the family engineering works both in Bath and Bristol. In 1842 he took into partnership Thomas Walker and the business became Stothert and Walker (see p 29) surviving until 1856 when John Stothert must have sold the ironmongery which became Walker and Parham in 1858. Walker retired in 1862 and William Parham alone carried on the business by now in existence almost one hundred years, but with no Stothert connection.

The Horse Street foundry continued busy. By 1823 George had taken his half-brother Henry into partnership and we first note the foundry operating in both brass and iron at this time. One of their first contracts was for the supply of treadmills and buildings for the 'houses of correction at Taunton and Shepton Mallet in 1823<sup>21</sup>. They supplied a further treadmill for Bath Gaol in 1867.<sup>22</sup>



From Bath and Cheltenham Gazette, 20 September 1815

On 6th May, 1826 a fire broke out in Horse Street<sup>23</sup> which consumed nearly all the eastern side of this street. Stothert's were presumably affected and took the opportunity of rebuilding, for from 1826 we find them recorded as in Philip Street which backs onto the eastern side of Horse Street, which after rebuilding was renamed Southgate Street. Stothert's do not seem to have moved despite the double change of name and may not have been as much disturbed by the fire as one would imagine. The Bath Chronicle reported an explosion at the Southgate Street foundry on 19th May, 1827, of a steam engine boiler 'The apparatus was not of Mr Stothert's construction, but was erected many years ago'. This note also shows that Henry Stothert was now in sole charge of the foundry, George having retired earlier in this year and spent the winter of 1827 in the South of France.<sup>24</sup> One imagines he took the opportunity presented by the fire to seek an early retirement at the age of 40.

Henry Stothert who took over was obviously a remarkable man, and fully took the opportunity given him. In the same year we find him taking out the first patent registered by a Stothert, one relating to Ploughs (No. 5481), and in the next few years we notice many further moves which helped to build up the Bath company. Probably the most significant of these was his taking on of the first Pitt, Robert Pitt (fl. 1831-1883), as an apprentice. I have not yet been able to discover much about Robert Pitt. He is first known to be with Henry Stothert in November 1837 when in a letter addressed to the Bath works he is described as a Chartered Engineer.<sup>25</sup> He was still at school in 1831 and is presumed to have joined the Bath firm about 1832. The Pitt family connection is still happily preserved in the present firm as can be seen in the partial family tree.

By 1830 the Works in Philip Street had been named the Newark Foundry. In the next year the Bath City Council Minutes record Henry Stothert involved in the installation of a steam pumping engine at the Hot Bath.<sup>26</sup> 1834 brought a second Stothert patent registered for ships' Hearths or Cabouses (No. 6736). The Bath Chronicle confirms the continued interest of the firm in agricultural implements and by 1834 Stothert was sole agent<sup>15</sup> for Finlayson's Harrow still described in 1854 as 'not exceeded in utility by any tool of that kind in the present day list of agricultural implements'.<sup>27</sup> 1835 sees Stothert supplying cast iron gratings for Bath Abbey, and 1836 the supply of a water pump for the Kennet & Avon canal at Crofton which may still survive. Henry was obviously growing bolder for he unsuccessfully tendered the same year for the Bath Victoria Bridge - an early suspension bridge.

Undeterred by this in 1836 or the very beginning of 1837<sup>28</sup> we find him purchasing land at St Philips in Bristol for a locomotive factory, a very bold step. He is first found in the Bristol directories in 1838 trading as Henry Stothert & Co. Locomotive Steam Engine manufacturers, Avon Street, St. Philips. Here were built the first two West Country locomotives, Arrow and Dart, used for the opening in August 1840 of the Bath-Bristol section of the Great Western Railway.<sup>29</sup>

Stothert was involved in other ways in the creation of the Great Western Railway for it was he who supplied the pumps from Bath which were so vital in tunnelling into the eastern end of Box Tunnel<sup>30</sup> which was the great obstacle to the completion of the whole line. Nor was this activity entirely dominant. We find even while the final stages of the Box Tunnel were being frantically constructed in 1840 and 1841 that Henry Stothert and John Stothert had both become financially involved in Iron Works near Aberystruth, Monmouthshire (1840), that Henry was supplying the New Water Mains for Bath's Water Supply (1840) and was involved with one of the two Box Tunnel contractors, Lewis of Bath, in ' building the New Bath Gaol for which Stothert also tendered unsuccessfully to supply the heating system (1841).<sup>22</sup>

In the Bristol business too, activity continued unabated; locomotive building continued for the Great Western Railway who ordered 8 further broad-gauge engines - giants at this early date - which were delivered between July 1841 and January 1842. The Eastern Counties Co. were also supplied with two standard gauge engines in 1841. In this year Edward Slaughter was taken on as a partner in Bristol bringing with him useful engineering skills shown in three patents from 1842-1849 covering railway wheels and marine and locomotive engines.

1844 saw yet another diversification in Bristol as it was the year in which Stothert & Slaughter started ship building, again in Avon Street.<sup>31</sup> The first were built in 1844 and named Avon and Severn. These were iron screw steamers and caused lively interest, the more so when Severn the month after entering service was caught by the tide and sank at Newport Bridge. Stothert & Slaughter overcame this and Stotherts continued building ships in Bristol under George Kelson Stothert (1833-1908) who took over about 1854 at first

with Ernest T. Fripp. This continued until 1933 when the works were sold. This was one of the pioneering firms in iron shipbuilding and in true Stothert tradition the steamships were fitted with machinery made at the same works. Walter Pitt (son of Robert) who later played such an important part in building up the crane making side of Stothert and Pitt was, for a time, chief draughtsman here, emphasising once more the many links between the companies in Bath and Bristol.

Locomotive building continued but unfortunately there are few surviving records of the years before 1860. J.W. Lowe<sup>32</sup> has described the later history of the locomotive works here. About 1852 when Henry Stothert retired from business the locomotive works were taken over by Edward Slaughter and Stothert's play no further part in its development which is described well by L.T.C. Rolt.<sup>29</sup> About 150 engines had been built before Henry Stothert's retirement.

At the Bath firm, 26th November 1844<sup>33</sup> saw the managing engineer George Rayno and Robert Pitt both formally taken into partnership by Henry Stothert, and the engineering works now operating as Stothert, Rayno and Pitt.

The very necessary problems of sewage disposal seem to have taken up some of the last active years of Henry Stothert. In 1850 he had published privately a 'Plant for Removing and Deodorising the Sewage of London and for applying it to the purposes of Irrigation'.<sup>34</sup> This plan was presented to the Honourable Commissioners of Sewers who by then had rightly become worried about simply letting the Sewage empty into the Thames. Henry proposed the sewage be collected in distinct cesspools which would be adapted to the existing drains. The sewage would then be pumped from these by Cornish engines to two points one on each side of the Thames. The flow of these two currents would be used to drive stirring machines which would mix in antiputrescent matter to deodorise the sewage. The final product could then be used as a fertiliser; an idea he protected with a third patent taken out in 1852 (No. 14073 - Manufacture of Manure). Parts at least of this scheme were adopted and the very large crops of vegetables he raised at his Bath home using this manure are also recorded.<sup>35</sup>

It is a happy co-incidence that just as we can associate the founder, George Stothert senior, with the first construction of pumps in the company's history; so we can credit Henry Stothert and his two associates with the first production of cranes which have become so synonymous with the name of Stothert & Pitt today. The first recorded is the small hand operated crane exhibited at the Crystal Palace Exhibition of . 1851, engravings of which are reproducted in **S & P Magazine** vol. 13 (1/2) p. 80-81. There is of course good precedent for a Bath craneamaker in the work of John Padmore in the 17305.<sup>36</sup>

On May 6th 1852, Henry Stothert<sup>37</sup> retired from business<sup>33</sup> and his share in the firm passed to John Lum Stothert (1829-1891), his only son, who had been an apprentice at the Bristol locomotive works from 1845. In 1855 George Rayno was forced to retire<sup>38</sup> through illhealth and the present name of Stothert and Pitt dates only from this time. The name Stothert and Pitt on surviving machinery thus always dates from 1855 or after.

One of the first contracts completed by the new company

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was one due to I.K. Brunel, the great engineer. Stothert's had been associated with him in several engineering works from the early days of the Great Western Railway and, in February 1855, Brunel turned to them again.

After the horrifying bloodshed and disease of the first winter of the Crimean War Brunei was asked by the war department to design and construct hospital buildings to help alleviate the terrible suffering of the soldiers and sailors fighting ' there.<sup>39</sup> One of the most graphic eye-witness accounts comes from the Rev. Samuel Kelson Stothert (1826-1892), eldest son of ironmonger John, who had been appointed Chaplain of the **Naval Brigade** in 1853. He arrived in the Crimea in 1854 and as a non-combatant was in a good position to describe the appalling conditions. In January 1855 the army death toll was 3,168, the sick list 23,076. Some of S.K. Stothert's letters describing the conditions were printed in the Times and may have influenced Government urgency to help relieve the conditions in some way.

Stothert & Pitt involvement is unfortunately not well documented. They were given the job of constructing the machinery for supplying water to the hospital built at Renkioi on the Dardanelles.<sup>30</sup> Since some of the ancillary buildings were of iron Stothert and Pitt may have produced some of the fabric for these as well. Most of our information comes from George Measom's description of the Bath firm's works in 1860<sup>30</sup> while general details of Brunel's part in the project are given by L.T.C. Rolt in his splendid biography.<sup>39</sup> Rev. S.K. Stothert's letters home were partly published in 1902<sup>40</sup> and others are preserved.<sup>41</sup> From these we gather that George Kelson Stothert was out in the Crimea at this time as well, though for what purpose is not yet clear. He may simply have been selling ships. In any case he took the opportunity to visit his brother there in August, 1855. A further Stothert connection with the Crimea is that, at least from March, 1855, the Scamander - a passenger carrying iron screw vessel built in 1854 at Stothert's Bristol yard was in service in Crimean waters on charter to the French.

From 1860 our knowledge of the firm's range of activities improves. George Measom in his Official Illustrated Guide to the Great Western Railway<sup>30</sup> included a report on the works which lists the work then in progress and illustrates the 'New Premises' of the Firm. This is so similar to the engraving published in 1885<sup>42</sup> of the 'New Works in Lower Bristol Road' that it seems certain the widely quoted date for the move to today's Lower Bristol Road site as in 1875 is yet another myth. Measom states the architect for the Newark Works was Mr Fuller, who is Bath born Thomas Fuller (1822-1898),<sup>43</sup> architect of the Parliament buildings in Ottawa whence he emigrated in 1857. It seems clear that the Newark Works were one of his last commissions before moving to Canada and that they date from c. 1855-1857, and not from 1875. This is borne out by the 1858 Bath Directory which already records Stothert and Pitt at Newark Street and Lower Bristol Road. Sadly no trace of the original works at Newark Street now remains.

In 1883 because of the ill-health of both partners Stothert & Pitt became a limited company.<sup>33</sup> In 1885, which would have been their centenary year if they had realised it, the company produced a 316 page<sup>42</sup> sumptuously-illustrated first catalogue of its wares; copies of which are still treasured by members of the firm today. It provides fascinating insight into the enormous range of products then available.

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#### Some surviving remains

Most of what has gone before discusses industrial history and makes little mention of any surviving relics. Despite the airraid of April 1942 which destroyed much historical material at the Bath works<sup>44</sup> enough survives to provide a remarkable testimony to the recorded Stothert industrial presence in Bath for nearly 200 years.

Undoubtedly the earliest remains are a good selection of woodworking planes which must date back to the earliest ironmongery days. According to W.L. Goodman the earliest surviving planes would suggest a date of origin of about 1780 which agrees well with the evidence presented on p 24 and makes them undoubtedly the earliest known Stothert artifacts. About 2 dozen Stothert planes survive, seven are embossed simply Stothert, these are presumed to be the earliest type; the others have the same stamp with an additional Bath stamp as used by several other Bath planemakers of this period. These must range over 1785-1841.

From 1842 Stothert & Walker appear in the directories and they were also active in plane making. About half a dozen planes of their manufacture are known; two are illustrated in **S & P Magazine 14**, (1) p.61, and **S & P News 24** (2). It is not possible to date exactly any of these planes, we can only say that the Stothert & Walker ones date from 1842 to 1856, using information in directories, and that the others are earlier.

In 1795 we have evidence of George Stothert selling 'all kinds of stove grates'.<sup>11</sup> These also must survive in considerable numbers, but are equally difficult to date. Those seen so far fall into two groups; (a) with an oval brass plate rivetted by two brass rivets onto the stove door. The one seen<sup>45</sup> seems original in a house built in 1812 and is thus likely to be one supplied by George Stothert senior at this date, but not manufactured by him. The second group (b) are different an example is illustrated in **S & P News 27** (4), p. 6 at Wadswick and another is preserved in Bradford-on-Avon. These both have a door with Stothert BATH cast integrally and are similar, but not identical. In addition, the two are hinged on opposite sides.

Dating these is difficult. It is safe to suggest that the earlier type is that with the rivetted name plate. By 1815, Stothert's would certainly have been in a position to cast their own oven doors and were in fact advertising this (see illustration). The date of the house in which the earlier oven survives may thus be significant. We may tentatively suggest that pre 1815 ovens have a rivetted name plate and post 1815 examples have the name cast integrally. More research on this, as so many aspects of S & P history is much needed. Cooking ranges and fire grates with the Stothert name cast integrally have also been seen in Bath houses. Study of these would be fascinating if applied to the dates of the houses in which they were found.

More substantial industrial remains of the Stothert presence also survive but, again, dating is difficult. Probably the best known remains are the two canal foot bridges over two of the Widcombe locks on the Kennet and Avon canal.<sup>46</sup> Confusion here has arisen because there are two other bridges over nearby Sydney Gardens which are dated 1800 in the casting, but bear no name. The Stothert bridges have the name but no date. People have claimed on this account and a similarity in styling that the Stothert bridges are also of this date.<sup>47</sup> However, it seems unlikely, in view of what we now know of Stothert's activities, that they would have had the foundry facilities at this date. Furthermore, a detailed guide to the Kennet and Avon Canal of 1811<sup>48</sup> mentions only the bridges dated 1800 'thrown over the Kennet & Avon in Chinese taste'. Further research is needed to locate the first description of the two Stothert bridges, which must at least date after 1810 (see photograph).

Similar problems arise with two industrial remains purporting to date from the 1830's. One, a steam pumping engine, formerly in use in the Mineral Water Hospital, Bath, has been preserved at Bath University of Technology, where it bears a recent plate recording its replacement by electric drive in 1952 and stating 'Reported as manufactured and installed in 1830'. Certainly there is a record of a steam engine to be installed by Stothert at the Hot Bath in 1831 (see p 27) but there seems no evidence to prove this is that machine. It bears a makers plate stating Stothert & Pitt, Ltd., engineers, Bath, which if original (as seems likely) will date from 1883 at the earliest. We must applaud the hesitancy of Buchanan and Cossons who refer to this engine as one of the late 19th Century design.<sup>49</sup>

The second relic is one found when Crofton Beam Engines were being refurbished after 1968. Here a small pump was found with 3"-4" diameter plunger supported against the well side of the beam well. The suction side of the pump was blanked off, but the delivery pipe passed through the engine house wall, last seen heading northwards. It appeared to serve no useful purpose for the engines at Crofton. A minute was found in the Kennet & Avon records at 14th September, 1836, asking that the Marquis of Ailesbury's nearby house be supplied with canal water via the engine at Crofton. The Kennet & Avon Committee instead sought and got an option opinion from Mr [Henry] Stothert of Bath as to how this could be supplied. It is surmised that the surviving pump must be that contrived to serve the Marquis at this time. No identification is to be seen on the pump so this conjecture is again unconfirmed.<sup>50</sup>

We are on much safer ground with the small Stothert & Pitt Beam engine which is well documented as built in 1866 and exhibited at the Paris Exhibition of 1867.<sup>26</sup> The medal it won itself on this occasion also happily survives,<sup>51</sup> and the engine is now preserved at Bath University.

The field for which Stothert and Pitt are so well known today, crane-making, is also a most fruitful one for the Industrial Archaeologist. The firm has been described as 'probably the oldest firm of crane makers to be found anywhere in the world'.<sup>52</sup> The company's house journal is full of photographs sent in from many different parts of the world of cranes made by the firm. Hopefully the notes here of the company's changes of name and chronology will help in dating some of these. The oldest recorded is one manufactured by Stothert, Bath, and exhibited at the 1851 Crystal Palace exhibition.53 The oldest surviving is one claimed as built about the same time a 3 ton hand-crane still in Carmarthen.54 This needs locating. The documentation of the magnificent 1875 Steam Crane preserved in Bristol is very good and has improved thanks to the discovery of some fine original drawings of it recently located in the company's archives. News of any other S & P relics would be most welcome.

#### **ACKNOWLEDGEMENTS**

This preliminary account, which has entirely ignored the later history of Stothert and Pitt and many fascinating facets of the earlier history as well, would have been impossible without the willing help of many people. Many miles and as many years from the facts described have not made the job easier. I must single out Messrs G.R. Owen & J. Pestridge of Stothert & Pitt who have very willingly let me study what remained in their records. Peter Bartrum early on gave me much appreciated help with the problems of Stothert genealogy. For help with the Pitt contribution I thank Mrs Norah Pitt. Grahame Farr and W.K. Williams provided much help with Stothert ship and locomotive building in Bristol, as has W.L. Goodman with Stothert plane making. I must also acknowledge my debt to the staff of the British Library, Keele University and Bath Reference Libraries and the Record Offices at Bath and Taunton.

#### NOTES ON SOURCES

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- 2 Late in 18th century J.S. Brownlie (ref.52) Early in the 19th century J.S. Bartrum (ref. 35). 1820 Stothert & Pitt 1885 Catalogue p.vii (ref. 42) After 1840 K Hudson (ref.54)).
- 3 A. Young, 1771. A Farmer's Tour through the East of England, vol.4, pp. 26-27.
- 4 Bailey's Western and Midland Directory for 1783 pub. 1783, pp. 196-200 (Guildhall Library).
- 5 MSS Owned by Mrs J.D. Fitzjohn of Bradford-on-Avon. Transcript and copy in S & P Archives.
- 6 For whom see A.E. Musson & E. Robinson. 1969. Science and Technology in the Industrial Revolution, pp. 408-423, 449-451.
- 7 In Bath Record Office.
- 8 **Bath Chronicle** 29.1.1784.
- 9 J.E, Norton, 1950. Guide to the National and Provincial Directories of England and Wales, excluding London, published before 1856, p.32. ,
- 10 Compiled from parish registers, obituary notices, etc. using clues initially furnished by P.C. Bartrum.
- 11 Bath Reference Library- S. Sydenham scrapbooks.
- 12 Bath Chronicle 17.5.1798
- 13 Bath Chronicle 20.3.1800.
- 14 Bath Chronicle 27.2.1800 and 6.3.1800.
- 15 RS. Neale, 1964. Economic conditions and working class movements in the City of Bath 1800-50. MA thesis, Bristol University, p.12.
- 16 J.M. Eyles, 1974. 'William Smith, Richard Trevithick and Samuel Homfray: Their correspondence on steam engines 1804-1806'. Trans. Newcomen Soc. 43, pp. 140-141.
- 17 This must surely be as previously suggested William Brough of Bristol. In 1802 Brough & Deverell were advertising a steam engine manufacturing service in Bath, an early reference to such activity here. Deverell must be the William Deverell who took out a patent in 1798 relating to pumps when he is described as of Widcomb, Somerset, millwright. He is though to have moved t0 London by 1804.

He and Brough who in 1802 gives his address as c/o James Saunders, grocer, Gloucester Lane, Bristol, then offered a Boulton & Watt engine service, trading from the Quay, Bath (Bath Chronicle 18.2.1802). In 1805 William Brough alone was advertising a similar service from Bristol (Bath Chronicle 26.3.1805).

- 18 Bath and Chelt. Gazette 11.8.1813.
- 19 Bath and Chelt. Gazette 20.9.1815.
- 20 Bath Chronicle 26.11.1818. Bath and Chelt. Gazette 2.12.1818
- 21 Somerset Record Office.
- 22 Minutes of Bath Gaol Committee. Bath Record Office, information kindly supplied by R. E.Morgan.
- 23 R.E.M. Peach, 1893. Street Lore of Bath. p.81.
- 24 Bartrum MSS, letter from Benjamin Bartrum to Rev. J.P. Bartrum in Boston, U.S.A. 4.9.1827.
- 25 MSS in S. & P. Archives
- 26 S. & P. Mag. 9, (1), p.12.
- 27 John Donaldson. 1854. Agricultural Biography pp.111-112.
- 28 Bath and Chelt. Gazette. 24.1.1837.
- 29 L.T.C. Rolt, 1964. A Hunslet Hundred. Chapter 6.
- 30 G. Measom, 1860. Official Illustrated Guide to the Great Western Railway, pp. 726-730.
- 31 G. Farr, 1967. West Country Passenger Steamers
- 32 J.W. Lowe. 1975. British Steam Locomotive Builders An interesting aspect of Stothert, Slaughter & Co's. locomotive activities is their running of the Bristol and Gloucester Railway from 1843 to 1845. They not only built locomotives, carriages and wagons, but looked after the running of the line entirely. See C. Maggs, 1969. The Bristol and Gloucester Railway.
- 33 This date is given in an agreement between John Lum Stothert & Robert Pitt dated 13th January 1883, and confirmed by a Bill head dated December 1844, referring to the Bath Gaol account (both in S. & P. archives).
- 34 A single copy survives in the British Library (C.T. 345/8).
- 35 J.S. Bartrum. 1891. The Personal Reminiscence: of an old Bath Boy. pp. 40-41.
- 36 M. Watts, 1976, in **BIAS Journal 8**, pp.17~19.
- 37 He died 15.12.1860 and was rewarded with a single line obituary notice in the **Bath Chronicle**.
- 38 Obituary of J.L. Stothert in JI. Proc. inst. Civil Engineers 1891,104, pp. 301-302.
- 39 L.T.C. Rolt. 1957. Isambard Kingdom Brunel, pp.227-230.
- 40 Mrs Tom Kelly, 1902. From the Fleet in the Fifties a History of the Crimean War.
- 41 MSS in Keele Univ. Lib. (Archives).
- 42 C. Cornes and T. Calvert. 1885. **Illustrative and Descriptive Price-Book of Machinery and Ironwork** (made by Stothert & Pitt, Ltd).
- 43 F. Boase. Modern English Biography, vol. 5, p.372.
- 44 J. Gourlay in S. & P. Mag. 13 (1/2) p.17.
- 45 In 25 Sydney Buildings. Bath, and kindly brought to my attention by G.F.R. Simmins (the owner).
- 46 R.A. Buchanan. 1969. Industrial Archaeology of Bath.
  - misdated 1810
- 47 S &. P. Mag. 17 (2/3) p.9 and (4), p.33.
- 48 Anon. 1811. An authentic description of the Kennet and Avon Canal. p.8.
- 49 R.A. Buchanan and N. Cossons. 1969. The Industrial Archaeology of the Bristol Region. p.275.
- 50 Information kindly sent by Roy Simmons.
- 51 S. & P. Mag. 2 (3), p.23.
- 52 J.S.Brownlie. 1973. Railway Steam Cranes, a survey of Progress since 1875.
- 53 S. & P. Mag. 13 (1/2) pp. 80-81.
- 54 K. Hudson. 1963. Industrial Archaeology: an Introduction, pp. 44-47.

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