

# ISAAC PITMAN AND THE FOURTH PHONETIC INSTITUTE

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Isaac Pitman was born in Trowbridge on 4 January 1813, the third in a family of eleven children to Samuel, a successful cloth factory overseer and Sunday School Superintendent, and Maria, a sincere and loving mother. He was imbued with his father's sense of purpose but it was tinged by a streak of Spartan eccentricity. From his youth Isaac was fascinated by language, and especially by systems for writing more fluently and quickly than mere words would allow, until in 1837 he was encouraged to improve on existing systems by devising one of his own. His first guide entitled *Stenographic Soundhand* was published late the same year, and he thereafter never ceased to develop and promote the study and use of his 'short-hand'. Isaac Pitman's determination also to rationalise English spelling cost him interminable labour, anxiety and frustration, to the extent that the only known memorial to his phonetic alphabet is the name of Kingston Buildings, painted not long ago, in phonetic characters on the corner of his Fourth Institute, the subject of this paper. Other interests through the years are testified to by modest but regular financial commitments to a number of worthy and ascetic movements. These included the Swedenborgian Local Church in Bath of which he was a devout disciple; the Vegetarian Society, for he was from an early age a vegetarian; Bath Temperance Society, on which principle he was so abstemious as to eschew the drinking of tea and coffee; and perhaps more marginally, Women's Suffrage.<sup>1</sup>



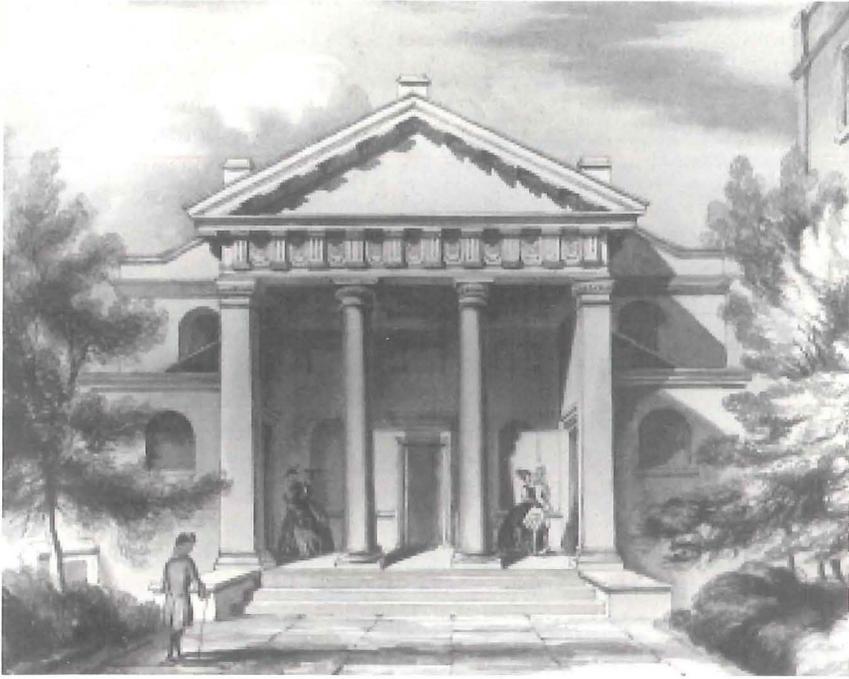
1. Sir Isaac Pitman (1813-1897).  
(*Photograph from the Pitman collection,  
by courtesy of the University of Bath*)

Isaac Pitman's education was limited by family circumstances and he worked as a clerk in Trowbridge, first in Edgell's cloth mill and then from

1829 in that set up by his father. In 1831 his father was able to send him for five months to the Training College of the British and Foreign School Society, from which he emerged at the age of nineteen as a sufficiently qualified teacher to take up an appointment at Barton-upon-Humber in Lincolnshire. Here he married in 1835 a widow with her own income, before moving the following year to Wotton-under-Edge in Gloucestershire, where he eventually started his own school. In 1839 he decided to move to Bath, where he opened a small school at his own residence in 5 Nelson Place. Within four years, the business of preparing and publishing his system of phonography had so expanded that in January 1846 he 'suspended the school, set up a [printing] press in one of the rooms, and used two other rooms for compositors and a bindery'. The building became the First Phonetic Institute. Then, as he later explained in a letter to a friend, 'in January 1851, to obtain more room, I removed to 1 Albion Place, Upper Bristol Road, where the business was carried on, under many inconveniences, in four rooms'.<sup>2</sup>

In 1855 the rented premises of this Second Institute at Albion Place were acquired for the Western Dispensary, and Pitman was obliged at short notice to move once more. He found a spacious room, but it was on the top floor of a block of buildings in Parsonage Lane, 'occupied principally by cabinet makers' although it had once been a brewery. This room became the Third Phonetic Institute, kept according to Pitman in 'apple-pie order', but 'situated in the only filthy lane I have seen in this beautiful city of crescents and squares ... The ground floor is a large gateway leading to a pig slaughterhouse that lies at the back; there is another pig slaughterhouse in front of my office, and a sheep slaughterhouse that does a deal of business, next door.'<sup>3</sup> This building, of c.1810, is now being gutted by developers of the old Wessex Newspapers site.

Pitman longed to build a more appropriate Institute in more salubrious surroundings. From 1859 he was beginning to put money aside for the purpose, but he was as patient as he was determined, and it was not until some fourteen years later that he began in earnest to set his plans in motion. At an early stage in his search (April 1873) he learned of the intention to dispose of the 'handsome' portico belonging to St. Mary's Chapel, on the corner of Queen Square (figs.2 & 3), which was then being demolished to provide better access to what is now known as Green Park Station. He bought the stone of the portico for £20 intending it to be re-erected as an impressive entrance feature to his proposed new building.<sup>4</sup> Until the eventual construction of the Fourth Phonetic Institute, the stones must have been held in store, it is not known by whom. We can see from his bank book that Pitman drew the sum of £20 on 26 April, presumably to pay for the portico, though the purpose is not actually stated.



2. (above) St. Mary's Chapel, Queen Square, as built: a watercolour view of c.1855 by H.V. Lansdown.

3. (right) John Wood's design of 1732 for the East Front of the chapel.

(Both reproduced by courtesy of Bath & North East Somerset Council: Victoria Art Gallery, Bath)

Pitman made several attempts to purchase land as a site for a new building, until in June 1874 he seized the opportunity of buying part of Kingston Buildings when the Earl of Manvers placed his extensive property on the market. He reported later that





4. Ordnance Survey map of 1886 (Somerset sheets XIV.5.14/15) showing Kingston Buildings and Church Street. (Reproduced by courtesy of Bath Record Office)

at the auction, which was held over two days, Thursday and Friday 28 and 29 May 1874, and which realised a total of about £44,000, 'lots 100 and 101 consisted of two houses, nos. 6 and 7 Kingston Buildings, near the Abbey Church'. His new acquisition, 'a block of buildings, five storeys high, faces the north, and has seven windows at uniform distances, on each floor ... No. 6 being a corner house, facing Church Street on the west, has also windows on that side, and no. 7 is lighted both front and back ... The houses are only one room in breadth from front to back ... originally built as one house whose spacious hall and staircase now belong to no. 6'. Pitman continues 'this house [no. 6] is thirty feet by sixteen feet four inches, and no. 7 is 25 feet by 20'<sup>5</sup> (fig.4). At the time of the auction sale both houses were occupied 'as private residences' with a Mrs. A. Lambert and a Henry O'Brien, artist, being in no. 6, and a tailor, Wm. Crowley, in no. 7.<sup>6</sup> But Pitman 'arranged with the present tenants to take possession' at the end of June 1874.<sup>7</sup>

Pitman hoped to complete the necessary alterations to the building in three months, and to spend another three months placing 'a boiler, engine and printing machine on the basement, and the different departments of the business in the several rooms above, with the necessary fixtures and furniture'. The cost would, he hoped, be borne by the subscriptions to a fund which had been opened in 1859 for the express purpose of providing a new Institute, and which was slowly approaching £1,200. As is usual with building contracts, he erred somewhat on the optimistic side

concerning both the time needed to complete it, and the expense involved. The stone of the Roman Doric portico from St. Mary's Chapel was to be re-used to raise the ceiling of the top storey to a full working height, and probably to help reconstruct the roof then 'old and out of repair'. This proposed development is confirmed by an elegant tinted sketch of the north elevation of 6/7 Kingston Buildings (in Bath Record Office) which shows the plan for the present four-storey façade. A decorative corner entrance was conceived but never incorporated, no doubt because so much money had to be spent on the more utilitarian improvements. The drawing is subscribed with the name of Thos. W. Gibbs, who was a solicitor in Bath, and it is dated 6 July 1874. In the bottom right-hand corner, a faint entry in Pitman's own immaculate shorthand script, reads 'Frederick John Williams, architect, Bristol'. There is no record in the accounts of any direct payment to Frederick Williams, who may have been a surveyor, not an architect, but Pitman sometimes paid professional fees in cash. A fee of 15 guineas for Wilson, Wilcox and Wilson, however, is entered on 4 August 1874. We can reasonably assume that this was payment for design work on the top storey of the Fourth Institute.

It seems likely that the columns of the portico from St. Mary's Chapel were not adapted for use on Kingston Buildings. Pevsner notes the suggestion that they were taken to Heathfield, a house on Lansdown.<sup>8</sup> This is possibly true of the two square Doric outer pillars, parts of which could be those now supporting the lintel at the entrance gate. Some surviving columns of the Ionic order, of which one complete example can be seen near the Cleveland Bridge, have excited speculation and received a mention on the Bath Preservation Trust plaque at the site of the former



5. Pillars at the entrance to Heathfield, Lansdown.



6. Pillar in a garden near Cleveland Bridge.

chapel. However it is likely that these were not from the portico but were interior columns, described by Ison as being of the Roman Ionic order. The distinction can be seen in figures 5 and 6.

If the portico pillars went elsewhere, so perhaps also did the ten triglyphs which once featured along the frieze above the pillars of the chapel. On the other hand, most of the carved panels, or metopes, between the triglyphs can possibly be identified. Seven rosettes which now appear between the windows of the top storey on the north face of the Fourth Institute must surely have come from the original frieze. An eighth panel, shown on the left of fig.7, is different, having a laurel wreath carved on it. The three spaces between the windows on the west face now have blank recessed panels, but in pictures of the Institute which are contemporary with Pitman's occupation of it (see for example fig.8) two more rosettes and one other laurel wreath are to be found. This total of nine rosettes coincides

7. (below) Decorative panels on the north face of nos. 6 & 7 Kingston Buildings.

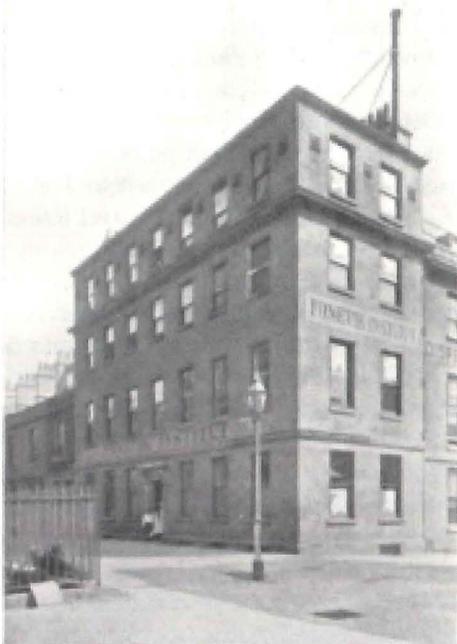


neatly with the number of metope panels which Pitman acquired from the St Mary's portico, and which are shown on Lansdown's watercolour (fig.2). The wreath panels are not depicted there but they or something similar can be seen on Wood's drawing (fig.3), which suggests that this design may have been executed elsewhere in the portico, later to be purchased and re-used by Isaac Pitman.

The advantage of Pitman's work in raising the height of the attic storey can be judged from the appearance of Kingston Buildings (now known as Abbey Chambers), both in the past (fig.8) and in the present day. The roof-line of Pitman's building over-tops that of the neighbours, whose present sky-line must be similar to that of nos. 6 and 7 before this was remodelled.

Messrs. Bladwell undertook a good deal, if not all, of the building work for Pitman. Their bills were particularly heavy at the turn of 1874-5, amounting as they did to over £500, which was paid in three instalments. A sum of £100 was paid on 12 December 1874 when the work was completed, the workmen having left the building on 7 December ('eight weeks after the expiration of the contract term' while the masons were employed on the outside of the house), and a further £200 was paid on each of 27 February and 27 April 1875.

Bladwell's bills were not all for the reconstruction of the roof, and just as much work, if not more, was going on five floors down in the basement. At the time of his move to the new premises, Pitman was anxious to increase both the size and the distribution of the weekly *Phonetic Journal*, the house publication which carried news and exercises in both phonography (shorthand) and phonotypy (phonetic spelling), and which now provides us with most of our information about the work undertaken



8. The Fourth Phonetic Institute, Kingston Buildings, Abbey Churchyard, c.1877. (Alfred Baker, 1913, facing p.196)

in his new premises.<sup>10</sup> In order to achieve this expansion in production he needed to purchase and instal one of the recently developed steam-operated presses. He therefore took steps to purchase a steam engine, a boiler to go with it, and a press to replace his existing manual one. The origins of the engine and boiler remain obscure, although Pitman's surviving account and bank books show that on 22 October 1874 an individual or firm of the name of Hornsey was paid the sum of £60.12.6d 'for engine and boiler etc.', and Reed tells us that it was a two horse-power vertical engine.<sup>11</sup> Pitman also spent £100 on a second-hand 'platen' press to go with his engine and boiler. From scattered references to the press, or 'machine' as it was usually known, we learn that it weighed five tons, was a 'double platen' press, and needed a 'walled pit' to house it. A further minor item 'for the machine' was the purchase, probably in December 1874, of 'straps' from Ashman of Bristol.<sup>12</sup> A report, which was reprinted three years later in the *Phonetic Journal*, describes the press more specifically as a 'double platen, double crown, press, by Messrs. J. Brown & Co., Kirkcaldy, Scotland'.<sup>13</sup>

Pitman's choice of printing machine was apparently a well-advised one, even if he found that his staff had a lot to learn about the new, much more complicated machinery. The double-feeder bed and platen press was particularly sought after as a machine for reproducing copy of a meticulous clarity, such as Pitman's shorthand certainly was. Developed initially around 1830 as a superior alternative to the powered rotary press, some of the earliest models remained in use with specialist printers at least until the 1930s. Pitman was lucky enough to pick one up second-hand just at the moment when 'other recently-invented presses [had] now partially superseded them',<sup>14</sup> so that the price of £100 which he paid compares very well with those of from £400 to £1400 which were being asked by Napier for similar machines only a short time before.<sup>15</sup>

The installation of engine, boiler and press was almost certainly the combined work of Samuel Griffin, engineers and millwrights in the Lower Bristol Road, Bath, and Joseph Bladwell, Pitman's regular builders, of 5 Railway Place. Both firms received part payments at the end of 1874: Bladwell receiving £100, as we have seen, as a 'first payment' for his building work, while Griffin received £15, later to be topped up by a further £25 on 1 February 1875, as a 'balance of account for general work'.

However, all was not well with the engine. After the first two issues of his expanded, 16-page *Journal* at the beginning of January 1875, Pitman headed his next, shrunken 8-page, issue 'A DISAPPOINTMENT' and explained that:

when the time arrived for printing [*Phonetic Journal*] No. 1 we found that our large printing machine ... could not be worked with our comparatively inexperienced hands fast enough to do the required 10,000 copies in time, and we were compelled to send the two 'formes' of type to Frome, to be machined by Messrs. Butler and Tanner. We hoped that another week's experience would suffice, but it only showed that our supply of water was inadequate for the daily wants of the engine, and No. 2 was, of necessity, also printed at Frome, at a very great additional outlay.<sup>16</sup>

Both the inadequacy of the supply of water and the ineptitude of the operators were being exaggerated by faults of which Pitman was not then aware. Meanwhile he arranged to have a more 'continuous supply of water from the fire-main of the city', and while his new and augmented staff learned to grapple with the recalcitrant machinery he accepted 'the kind offer of Mr. Lewis, of the *Bath Express & County Herald*, to work a single forme of type each week on one of his machines'. This could indeed have been a kind offer, as there is no trace of a payment for the work of printing the next three 8-page issues (nos. 3, 4 and 5). On the other hand, each of these bore a declaration that they were 'Printed by Isaac Pitman (Inventor of Phonography) at the Phonetic Institute, Kingston Buildings, Bath'. Perhaps this was a compromise statement in that Pitman did print his own 8-page *Journal*, but on Lewis's machine.

With issue no. 6 Pitman was able to resume his bumper 16-page numbers, which were published from 6 February 1875 to 27 March, a run of eight weeks' issues. But his problems were far from over and they were evidently making production of the paper on his own premises a nightmare. Writing in the issue of 3 April, he lamented that:

impediments have arisen from having to use a boiler that leaks. A small leakage was discovered soon after its erection. It was speedily enlarged by use, and the fire that is kept up to generate steam to drive the machine is rendered ineffective by the leakage of the boiler to such an extent that we can work but one or two hours, but then have to stop to get up steam. The boiler cannot be repaired without being taken down; we have therefore had a new boiler set ...

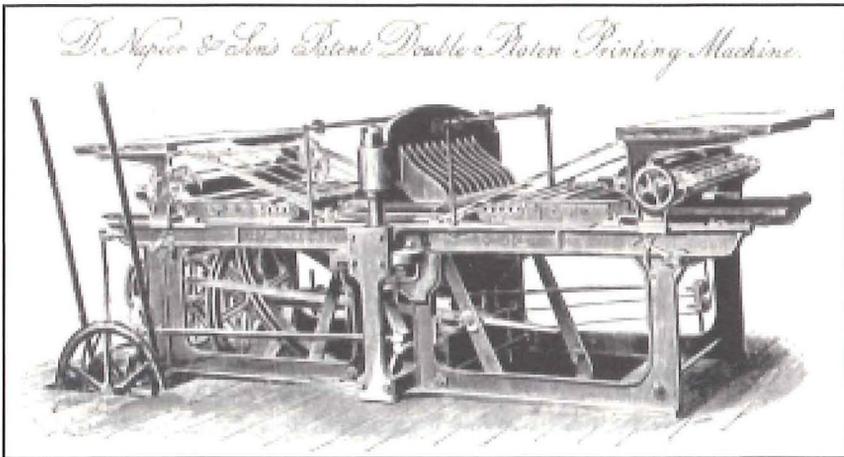
But it was not only the boiler which had to be replaced. By the beginning of May 1875 Pitman confessed frankly to his 'difficulty of getting our machine [i.e. the printing press] to work at all, through our having been deceived in the purchase of an engine and boiler that eventually proved not worth the

cost of erection ...' He gave no further details of his travails with the engine, but we learn from his notice published in the issue of 3 April that, in addition to replacing the boiler he eventually had 'a new engine made' which was a horizontal four horse-power engine. 'We are promised', he continued, 'that the new engine shall be at work in a fortnight from this date, 22 March.'<sup>17</sup>

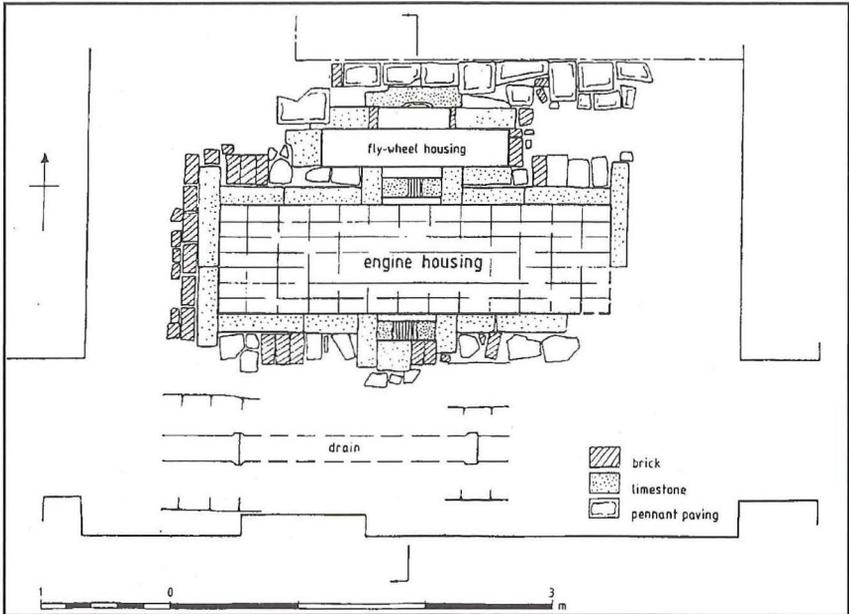
Pitman's new engine was made for him by Samuel Griffin. There is no specific reference to a payment for an engine, but Pitman as we have seen met several bills from Griffin at about this time, and the report from the *Printer's Register* in 1877, already quoted, states that the engine then *in situ* was 'a small horizontal engine with high-pressure speed-governor, made by Mr S. Griffin, of Bath'. The report went on to explain that 'the exhaust steam [is] utilized for warming the building and drying the sheets as they leave the machine'. Although we have no further details of the engine itself, it is probable that one similar was supplied to Bowler's in about 1876 when the production of mineral waters began at Corn Street, where it may have been used to drive the pumps. A small engine like that which is now in the Bath Industrial Heritage Centre (known as the Victoria Engine) would easily have operated such a press as Pitman had bought: little power is required because the moving parts are well counterbalanced.<sup>18</sup>

Whilst the hardware was creating mechanical difficulties for its inexperienced operators, Pitman had, in his enthusiasm for the advancement of his project, entirely overlooked the environmental effects of installing his new technology in the confines of an inner city tenement. He later reflected ruefully that 'the noise caused by the printing machine is so great as to constitute a "nuisance" to the occupier of No.8 Kingston Buildings: it is heard in every room of his house'.<sup>19</sup> Pitman did not name the neighbours, but they can be identified from the contemporary *Post Office Directories* as T.J. Tuttell, surgeon chiropodist, and Mrs E.S. Tuttell, surgical chiropodist.<sup>20</sup> Mr Tuttell seems to have tolerated the continued use of Pitman's equipment once it was in full working order and a 16-page Journal was produced from 6 February to 27 March, evidently printed by Pitman. But an undertaking was given to move the machinery away from the neighbour's wall. Arrangements had been made to replace the boiler and to order a new engine, and advantage was taken of these changes to move both of them away from the 'neighbour to the east'. But the press needed substantial structural changes for its re-installation, and on 22 March Pitman wrote that, 'in removing the printing machine to another part of the premises' he had to 'make a new walled pit for it, and turn one of the underground arches in front of the Institute into a habitable room for the workmen and the machine'.<sup>21</sup>

The expression 'one of the underground arches' requires some explanation. Many, if not most, of the properties in the centre of Bath are provided with vaulted cellars which extend in front of the house at basement level, often reaching out to a common underground party wall with the houses on the opposite side of the road. In the case of Kingston Buildings there are no houses on the other side of the road, but the Abbey itself. The 'underground arches in front of the Institute' therefore reached out almost to the footings of the Abbey wall, and provided a spacious, but isolated area which would normally have been used for storage – of coal for example. In Pitman's case he used this conveniently remote part of his new premises to house his most anti-social piece of machinery – his printing machine. In 1995 this space was rented from the owners of Kingston Buildings and incorporated in the Abbey vaults. In anticipation of this move an archaeological excavation was undertaken in 1993 and a walled pit was discovered. This was at first thought to have been a steam engine base,<sup>22</sup> but it now seems however that just such a provision would have been made for a large press like Pitman's. A widely conducted search for the structural details of this particular machine has so far drawn a blank, but it has attracted much helpful advice, especially the information that a press with a similar specification, D. Napier and Son's Patent Double Platen Printing Machine, has dimensions and seating requirements similar to those uncovered in the Abbey Vaults, and as described by Pitman<sup>23</sup> (figs.9 & 10).



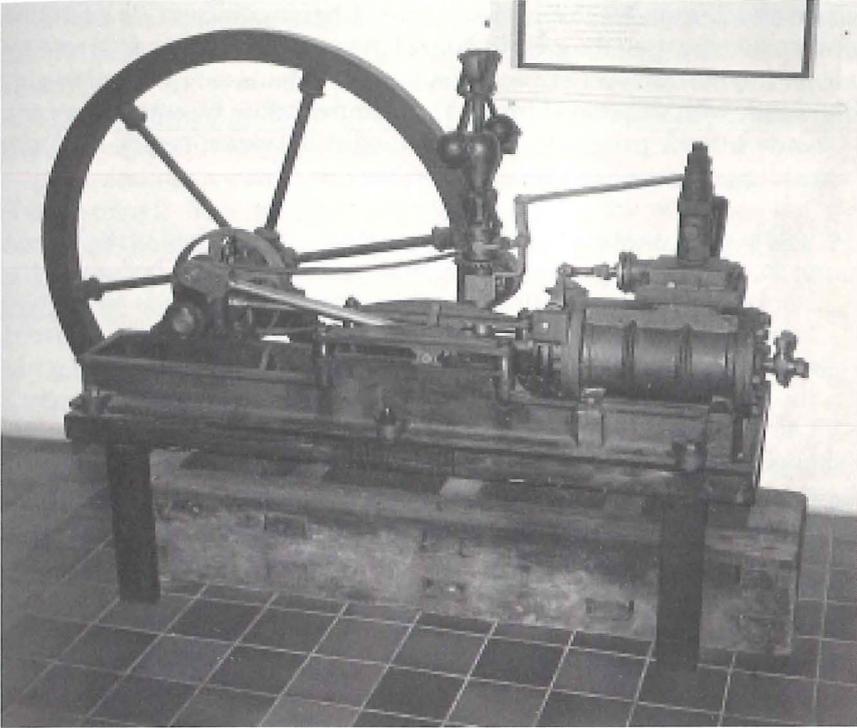
9. Napier's Patent Double Platen Printing Machine. (Moran, 1973)



10. Plan of the machine base in the Abbey Vaults. (*BIAS Journal*, 26 (1993), p.32)

In contrast to this heavyweight printing machine, Griffin's new little steam engine need not have called for more than a wooden baseblock, measuring perhaps 5ft by 1ft 3ins, possibly with a small recess for the flywheel (fig.11). This engine was apparently removed at least twice within the basement of Kingston Buildings without any recorded problems. Presumably it was located near the boiler, which was so situated that the flue from its fire fed into the chimney stacks adjacent to the 'neighbours to the south' – whose reaction to this unwelcome supplementary heating Pitman was soon to experience.

For practical reasons the engine and any belt drive would be kept well away from the press and the paper in order to prevent soiling the work, as grease or other lubricants were liable to be spattered around moving parts. It seems likely that an underfloor shaft would have led from the engine to the cellars where the printing machine was established. It is true that Pitman had little experience of engines and engine-driven presses, so would not have known enough to insist on this, but Griffin was certainly more knowledgeable and could well have advised on the eventual layout of the equipment. Clearly Griffin had won the confidence of Pitman, since he had been asked by him to build his new engine, and to install and maintain it.



11. Griffin's steam engine, now in the Bath Industrial Heritage Centre. (Photograph reproduced by courtesy of Stuart Burroughs)

Pitman's hopes of 22 March 1875 that the work then in hand to adapt his cellar space would be completed a fortnight later were again disappointed, and on 3 April he had to tell his readers 'we regret to be compelled again to issue for two or three weeks an 8-page Journal, which we must get printed off the premises, while removing our printing machine, and getting a new boiler and engine, shafting etc. to work'.<sup>24</sup> This was finally achieved, and on 24 April he announced with relief that 'we have this week the pleasure of printing this Journal again on our own premises, but in consequence of the interruption caused by the presence of engineers, masons and carpenters for three weeks we are not in a position to print a 16-page Journal in time for this week, but shall do so next week.' This he did, for just one issue, for if one consequence of the relocation or replacement of his equipment was the successful production of one 16-page *Phonetic Journal*, another was an immediate, and peremptory verbal assault from his 'neighbour to the south'.

The attack took the form of a personal harangue from the medical gentleman who used the ground floor of the premises, swiftly followed by a letter from his lawyers Maule, Robertson and Maule of Northumberland Buildings, who demanded immediate compensation or cessation of the nuisance caused, principally, by the noise of the steam engine. Pitman was at first outraged, but then told his readers that:

within three days after ... the lawyer's letter ... means had been devised to so reduce the amount of noise, and the heat from our boiler fire, the smoke of which passed into a stack of chimneys common to the two houses that we hope soon to be safe from an action at law... Masons and engineers [Bladwell and Griffin] are now engaged in carrying out the plan, which will take about a month from the date of this Journal. Our first neighbour, to the east, bore the infliction of the noise of the engine with even an excess of patience for three months in the hope that on the erection of our second engine, and the removal of the machine [i.e. the printing press] to a greater distance, there would be no further trouble. Our second neighbour, to the south (this being a corner house) was as unmercifully prompt ... as the other was kind and forbearing ... [When] the engine was removed to the other side of the room, and an additional wall built, the sound of the engine could not be heard, but the sound of the [printing] machine was now heard, which before was overpowered by the greater and nearer noise of the engine.<sup>25</sup>

It is unfortunately not clear from this account at what juncture 'the engine was moved to the other side of the room', but perhaps this took place during Pitman's enforced cessation of work between the issues of 30 April and 22 May. It is also unclear what plan 'the masons and engineers' were 'engaged in carrying out' as the issue of 22 May was prepared. Was this, for example, when the separate vent pipe, which we see appearing above the roof next to the chimney stack in pictures of the Institute, was run up through the building from the steam engine in the basement? (see fig.8)

Pitman never reveals the identity of the 'medical gentleman' to the south. In the pictures of the period the premises are labelled 'Dispensary ...', although no such appellation appears in the Directories until 1884 when 4 Lower Church Street [not 5, as stated by Pitman] is called the Dispensary for Skin Diseases. In 1888 the occupier is listed as 'H. Culliford Hopkins esq., surgeon and physician', so perhaps he was the offended party; he was the only resident in either street to aspire to the title of 'esq.'. In 1875, however, only the lodgers' names were listed, for as Pitman tells us

'The house in question is let out in unfurnished apartments, except the ground floor, which the lessee, a doctor, keeps for receiving patients between 12 and 1 o'clock at noon'. In an attempt to placate him, wrote Pitman, 'we promised to stop the engine during this hour each day'. The only result was 'another lawyer's letter ... [which] was returned to the writer'.<sup>26</sup>

It was another seven weeks before, on 10 July 1875, a 16-page Journal was resumed. This was presumably printed on the premises, but we cannot be quite sure because the surviving copies of the Journal lack the outer covers, until we come to the issue dated 4 September 1875. And then, at the foot of the back cover, we have, triumphantly:

Printed by Steam Power by Isaac Pitman (Inventor of Phonography)  
at the Phonetic Institute, Kingston Buildings, Bath ...

Mr & Mrs Tuttell, surgeon chiropodists, continued to attend to their ladies and gentlemen next door, to the east; by 1878 Mr Tuttell had acquired, or assumed, the title of Professor. The Dispensary for Skin Diseases continued to occupy the premises to the south. Both parties were still in occupation when in March 1889 Isaac Pitman moved out of Kingston Buildings to his last, purpose-built Fifth Institute on the Lower Bristol Road. Its opening was celebrated by a 'substantial' tea; the celebrants were lucky, as Pitman had not always been so tolerant of stimulating liquors. His firm survives there as the Bath Press.<sup>27</sup>

## Postscript

Since May 1995 the ground floor of Kingston Buildings has been occupied by Bath City Tourist Office. This circumstance could offer an opportunity to exploit the coincidence that the building was home to a movement guided by a man whose reputation has been more widespread than that of any other Bath resident. The extent of his influence can be judged from two reports over 100 years apart. In the first, his biographer Alfred Baker recalled that in Isaac Pitman's last public address in September 1893 he remarked:

In every part of the world where our noble tongue is spoken, phonetic shorthand is written. It has been adapted to the writing of fourteen foreign languages, and eleven foreign systems have been published ... the Debates in the Japanese Houses of Parliament are reported in Phonography.

In 1997 the Editor of the *Bath Chronicle* wrote:

In spite of all the developments in modern technology, accomplishment in shorthand remains an absolute priority for today's aspiring journalist ... while other forms of speed writing and shorthand come and go, the Pitman method enjoys the greatest longevity ... once conquered, it remains a qualification for life.<sup>29</sup>

These pages have tried to reflect the strength of Pitman's commitment to the promotion of a cause which he was convinced was supremely worthwhile, and to show how this indefatigable pioneer fought and won the battle of the Fourth 'Fonetik Institut'.

## Notes

- 1 See two major biographies of Isaac Pitman: *Biography of Isaac Pitman* by Thomas A. Reed (Bath, 1890) and *The Life of Sir Isaac Pitman* by Alfred Baker (Bath, 1913).
- 2 Reed, p.84.
- 3 Reed, pp.84-85.
- 4 *The Phonetic Journal (PJ)*, 26 April 1873. The journal was published weekly from January 1873 until 1905 when it became *Pitman's Journal* and then (in 1925) *Pitman's Journal of Commercial Education*, and from 1930 evolved into *Office Training* and the teacher's companion volume.
- 5 *PJ*, 13 June 1874, p.185.
- 6 *Post Office Directory*, 1874.
- 7 *PJ*, 13 June 1874, p.186.
- 8 Nikolaus Pevsner, *North Somerset and Bristol* (1958), p.122n.
- 9 Walter Ison, *Georgian Buildings of Bath*, (1948: reprint, Bath, 1991), p.72.
- 10 *PJ*, 1874, *passim*.
- 11 Pitman's Bank Book, in the Pitman Collection, University of Bath Library; Reed, p.128.
- 12 Pitman's Account Book, Pitman Collection, University of Bath Library, 6 January 1875, cost £6.3s.0d.
- 13 *PJ*, 3 November 1877, p.520, reprinted from the *Printer's Register* for August of that year.
- 14 John Bryson, *Industries of Kirkaldy and District* (1972).
- 15 James Moran, *Printing Presses* (1973), p.120, drawn to my notice by Bernard Seward, printer at Bristol Industrial Museum and Matthew J. Hume of Summerlee Heritage Trust.
- 16 *PJ*, 16 January 1875, p.25: Butler's account for printing numbers 1 and 2, together with the paper, cost Pitman £44.3s.3d., which he paid promptly on 15 January 1875.
- 17 *PJ*, 8 May 1875, p.195; Reed, p.128.

- 18 Information from Stuart Burroughs and Alan Stock, Bath Industrial Heritage Centre.
- 19 *PJ*, 3 April 1875, p.146.
- 20 It seems likely that Pitman was a good customer of T. J. Tuttell, as he made him a payment of £50 in January 1885, perhaps for the previous year's treatment. Pitman's Account Book, p.113.
- 21 *PJ*, 3 April 1875, p.146.
- 22 Robert Bell, 'A horizontal steam engine in the centre of Bath', *BIAS Journal* (1993), Vol.26, pp.30-32
- 23 See note 15, p.120.
- 24 *PJ*, 22 March 1875.
- 25 Describing the location of Pitman's works, the correspondent of the *Printer's Register* for August 1877 said 'It stands at the corner of Church Street and Kingston Buildings, the names of which are written up in phonetic characters', see fig.18.
- 26 *PJ*, 22 May 1875. A reader's letter, in a sympathetic allusion to the lawyers' names, refers to Pitman having been 'mauled' by his neighbour.
- 27 The premises of the Fourth Institute in Kingston Buildings were taken up as the offices of the then recently created Bath Stone Firms Ltd. See Norman Bezzant, *Out of the Rock* (1980), p.166.
- 28 Baker, p.291.
- 29 *Bath Chronicle*, editorial column for 22 January 1997.

## Acknowledgements

The main source of data for this paper has been the Pitman Collection at the University of Bath, in the care of Tony Holbrook, Social Sciences Librarian. Because many of the notes are in Pitman's own immaculate but minuscule shorthand, assistance in reading them has been crucial. The initial excavation of the machinery base which led to this study was by Robert Bell of Bath Archaeological Trust, who has encouraged this further examination of the written records. This study has benefited from facilities available at the University of Bath through the Centre for the History of Technology (Director, Professor R. A. Buchanan).

In addition to those mentioned in the notes, the assistance of the following in matters of detail is gratefully acknowledged: Ralph Emanuel (lecturer in the history of architecture at Bath University), Graham Gerrard (Bath City Engineering Services), Andy King (Bristol Industrial Museum), Colin Johnston (Bath Record Office), Susan Sloman (Victoria Art Gallery, Bath), and Peter Martin (Head Verger, Bath Abbey).

Errors in interpretation are, however, the author's own responsibility.