

## Boom-town Picturesque: *C.B. Walker's Photographs of Melbourne*

IAN MORRISON

### *Land Boom and Bust: 'Marvellous Melbourne' in the 1880s and 1890s*

When fifty-one-year old landscape photographer Charles Bristow Walker arrived in Melbourne in 1886, the city was itself barely fifty years old. Its population was approaching half a million.

Let's think about that for a moment. This city had grown from nothing in Walker's own lifetime. In London in 1834, Charles was gestating in his mother's womb; on the other side of the world John Batman was noting in his diary, "This shall be the place for a village."

When Charles reached his tenth birthday, there were already 10,000 people in Melbourne, and thirty-odd thousand in the Port Phillip District as a whole. There was growing agitation to declare the district a colony in its own right, separate from New South Wales. Charles was fifteen when this separation was achieved, and a few months later the discovery of gold was announced. Between 1851 and 1854, the European population of Victoria jumped from 77,000 to 237,000. By 1857, when Charles was twenty-two, it had passed 400,000 — with about 100,000 in Melbourne. Patterns of development over the next twenty years were more complex, but the broad picture is one of rapid — if uneven — growth. By 1881, when Charles turned forty-six, Melbourne's population had reached 268,000, and Victoria as a whole was within sight of one million. The goldfields, the source of the huge injection of wealth in the 1850s, were in terminal decline; agriculture had hit the outer limits of viable expansion; and heavy industry was consolidating in the metropolis. Financial speculation was about to generate a spectacular land boom — and, in the 1890s, an equally devastating bust.<sup>1</sup> Between 1881 and 1891, Melbourne's population jumped from 268,000 to 473,000. Massively ambitious building projects, public and private, followed each other in rapid succession: the Royal Exhibition Building (1880), the Federal Coffee Palace (1887), the Australian Building (1889), to name a few of the more famous. It was a form of collective madness. Huge fortunes were invented by clever accountancy. Everyone was doing it. The sums of money involved are so huge they lose all practical meaning. When politician and temperance crusader James Mirams's business ventures collapsed, his debts amounted to £370,000 — and he was only the first of many.<sup>2</sup>

Around 1889/90, the dominoes started to fall; by the mid 1890s, the entire economy was in ruins. Unemployment, poverty, infectious diseases, violent crime

*Script & Print: Bulletin of the Bibliographical Society of Australia & New Zealand*  
29 (2005): 234-246

— every variety of human misery followed. Many people left for the goldfields of Western Australia, others settled in New Zealand. Melbourne's population fell by several thousand.

This is the background to Walker's Melbourne photographs. To understand them, we need to imagine the city as he saw it. A major metropolis that had grown up from nothing — sprouted out of the wilderness — in his own lifetime. It requires a mental shift for us, because these are photographs of old buildings, many of which are not there any more.

Plate 14 shows F.T. Derham's Australian Building under construction in late 1888, hung with an advertisement for the financial institutions that had fuelled the boom and would soon be consumed by it. In many ways, this building epitomised Melbourne's land boom. It was claimed to be the tallest building in the world. The total cost of construction was £80,000 — the equivalent of several million dollars today — money that, it turned out, did not actually exist. This was one of the financial scandals that precipitated the financial collapse of the 1890s. The skyscraper itself was demolished in 1980, barely ninety years after it was built. In Walker's photograph, it was brand spanking new.

It is doubtful that anyone regarded 'Smellbourne', with its dirt roads and open sewers, as paradise; but it was new — incredibly, awe-inspiringly new.

Walker's photographs are a hymn to newness. They were disseminated to an affluent, middle-class audience. Were they merely passive recorders of the boom or active participants in it? Did they help to construct the myth of 'Marvellous Melbourne' in the minds of its inhabitants? If you had money to invest, wouldn't a photograph like this arouse your interest in inner-city real-estate?

### *'A High-Class Photographer': C.B. Walker's Contemporary Reputation*

In my book *A New City: Photographs of Melbourne's Land Boom* (Carlton, Vic.: Miegunyah Press, 2003) I set out the biographical facts that I was able to find about Charles Bristow Walker. Subsequent discoveries have changed the way I read those facts, but have not altered the basic narrative — at least for Walker's life before he came to Australia. I thought then that Walker must have been obscure and unregarded in his own time. One of the simultaneously pleasing and galling effects of publishing that book has been the additional evidence that it has brought to light.<sup>3</sup> People have been alerted to this photographer, and I have now seen two further albums, copies of photographs from another album, three books with Walker's photographs published in them, and — most intriguing of all — material evidence that he sold his Melbourne photographs, in sets, with printed labels.

The little that is known about Walker's London studio suggests that he was something of an innovator, and locates him both as a busy professional and as a

member of the art photography movement: he is recorded as having used a revolving stage to allow rapid changes of background scenery.<sup>4</sup> He claimed to have worked for British and European aristocracy.<sup>5</sup>

His Melbourne photographs also offer evidence of technical and aesthetic experimentation. Busy street scenes exploit the limitations of his equipment to show human movement as a blur of activity. Two photographs improbably claim to be "balloon views" some fifteen years before the first verifiable aerial photographs in Australia (see Plate 14).<sup>6</sup> One of Walker's Melbourne clients, Cullis Hill, was an early patron of Australian impressionist painting. There is no evidence of Walker meeting any of the Heidelberg artists, but they were all working in the same town at the same time, wrestling with the same set of artistic problems — Australian light and landscape — and it seems more likely than not that they would have crossed paths at some stage.<sup>7</sup>

The Baillieu Library's Walker album is particularly significant because it contains his own handwritten captions. I now know of the existence of three other albums with identical titles stamped on the front cover, and broadly similar contents — so the Baillieu Library album was not just a one-off produced for display to potential studio clients.

Two Walker photographs were sold on eBay in January 2004. The photographs themselves are undistinguished views of St Patrick's Cathedral and Parliament Place (Plate 15) — not among Walker's best work — but they are exciting because they are mounted on printed cards.

To say that this information altered my perception of Walker would be something of an understatement. Here was evidence for the publication and distribution of his photographs — the sorts of people he expected to buy them (people with drawing rooms), and the uses he expected to be made of them. Reading more closely, there is evidence of Walker's aesthetics: he markets his photographs as "picturesque," as "enhancing the beauties of the scenes they represent."

Yet once again new evidence raises more questions than it answers. The series information is printed on the card, but the titles of the individual photographs are hand written. The positioning of the photographs within the printed border indicates that they were always intended to be captioned. What are we to make of that? Here is a man unable or unwilling to bear the commercial risk of printing a card for every individual photograph in the series. Perhaps he wanted to keep open the possibility of adding new images to the series, or issuing more copies of especially popular images, without getting new cards printed — or indeed being stuck with cards for images that did not sell. Perhaps he had been burnt before, and was not going to be again. Perhaps he was just disorganised. All guesses. The most basic facts that we would have about any printed book from this period —

what was it sold for, and whether this relatively cheap or relatively expensive by the standards of the time — are unknown.

What was the market for Walker's photographs? Did potential buyers think the hand written captions were cute, or did they find them clumsy? How many did he sell? How many did he need to sell in order to live comfortably? What proportion of his income came from landscape photography, and what from portraiture?

The cards were printed by Macmaster & Savage, a firm about whom almost nothing is known. Aside from these cards of Walker's, the only surviving evidence of their activity is an anonymous, undated temperance leaflet — which gives their address as 95 Collins Street East, the location of Walker's studio.<sup>8</sup> It is uncertain whether they were there at the same time as Walker. They are not listed in Melbourne directories for the 1880s and 1890s. Nor is there any record of them registering, either together or separately, as printers. Enforcement of the legislation was seldom rigorous: perhaps as many as one third of 19th century Victorian printers went unregistered.<sup>9</sup> However a printer who neither registers with the government nor pays for a listing in the standard commercial directory, and leaves only three printed sheets behind to show that he ever existed, may be assumed to be a small-scale operator. Why then, if Walker was as big as his advertisement claims, did he choose Macmaster & Savage? Maybe he sought quotes from all over town, and established that these people would provide the best service at the lowest cost. It seems more likely that he used them because they were literally next door — again implying rather more of a 'make do and mend' approach to the project than the text of the advertisement would have its readers believe.

How seriously, then, should we take Walker's claims about his career, his expertise, and his unique processes? It is clear that he had "picturesque" sensibilities, or at least knew how to create photographs attuned to them. Here he is (Plate 16) doing the standard 'picturesque' thing of cutting down trees to get a better view of the forest.<sup>10</sup> I like to think that the man in the photograph is Charles himself, and that it was taken by his wife, but that is pure speculation.<sup>11</sup>

Then there is the list of subjects that Walker is prepared to photograph — in particular "Moving Objects" and the tantalising reference to "a perfectly instantaneous and improved process known only to himself in this country." In *A New City* I argued that Walker's photographs exhibit an interest in human movement that was unusual among photographers of his time: for example, his view of the City Bank at the corner of Collins and Elizabeth Streets, in the heart of Melbourne's financial district (Plate 17).

Walker chose to photograph this busy city street at its very busiest — meaning that he was at least as interested in the human activity as he was in the buildings.

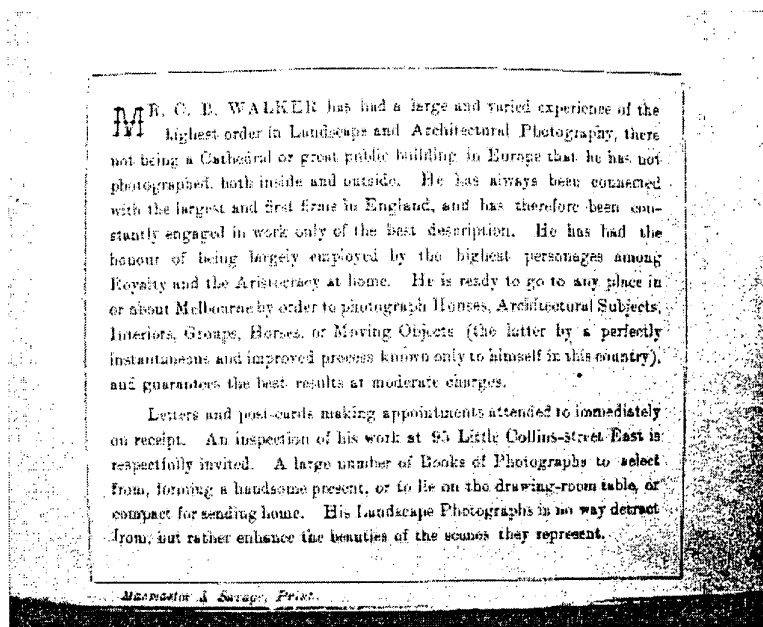


Fig 1. Advertisement for C.B. Walker, landscape photographer. Courtesy Peter Wade.

How much credence should we give to his claims to have been “employed by the highest personages among Royalty and the Aristocracy” and to have “always been connected with the largest and first firms in England?” I still resist taking them completely at face value, but I am much less sceptical than I once was. Perhaps those lengthy disappearances from the commercial directories were due to a steady stream of lucrative commissions?

I now suspect that it was a commission that brought this middle-aged landscape photographer to Melbourne. A number of Walker’s photographs were printed in view books during the 1890s, and there is some circumstantial evidence that he may have been one of the photographers engaged surreptitiously to provide material for the studio-based artists working on *Cassell’s Picturesque Australasia* (1887–89).

*Cassell’s Picturesque Australasia* was one of the great collaborative publications produced to mark the centenary of British settlement in Australia. Like its major rival, the *Picturesque Atlas of Australasia*, it appeared over several years. Cassell’s, like the Picturesque Atlas company, found that it was more cost effective to have their artists work from photographs in the studio rather than in the field. They also kept it secret: for marketing purposes it was much more effective to maintain the illusion that all the illustrations had been produced directly from life. If Walker was one of the photographers engaged by Cassell’s, it would help to explain his

late-career move to Melbourne and the lack of any direct correspondence between himself and official bodies, such as the Town Clerk or the Chief Secretary, who would surely have been involved in granting access to the many public buildings he photographed.

The evidence for Walker's employment by Cassell's rests on two photographs of the University of Melbourne. The first is a view of Wilson Hall and the original Quadrangle.

This photograph appears to have been taken from an elevated position, slightly south-west of Wilson Hall — almost certainly from the first floor of one of the professors' houses that were lined up along the western side of the campus.

The most likely candidate is the house of Professor Tucker, head of Classics and Philosophy, and long-time chair of the library committee. It is tempting to claim that Walker's vantage point could have been the house of Tucker's neighbour, Professor Morris — head of English, and general editor of *Cassell's Picturesque Australasia*. However, contemporary maps show that the view from Morris's house would have shown more of the southern face of Wilson Hall.<sup>12</sup> The most I can say is that Walker was operating as a professional photographer in the very near vicinity of Professor Morris's house around the time that Professor Morris was working on a book that employed numerous professional photographers.

Another of Walker's photographs of the University (Plate 18) offers more direct evidence. The lake was by general agreement the most 'picturesque' element of the University's landscape, and the favourite view for artists and photographers. This particular photograph of Walker's, however, is an almost exact match for the engraving published in *Cassell's Picturesque Australasia* (Plate 19).

There are three notable differences, each explicable as the intervention of an artist briefed to emphasise the "picturesque" elements of the scene. The shrub on the far left has been converted into something vaguely suggestive of a weeping willow; the figure in the middle foreground is in an attentive, sitting pose rather than a languid sprawl, and the pine tree on the far right is a standard framing device. For the rest, there are some minor differences in details, but the orientation to the buildings is precisely the same in both images, and the trees and shrubs in the middle view are at exactly the same stage of development. If Cassell's artist was not working from Walker's photograph, he was standing beside him when he took it!

Several of Walker's photographs were published in opulent view books in the late 1880s and early 1890s, and in each case it seems more likely that the photographs were commissioned by the publishers rather than offered on spec by the photographer.

The first of these was J.E. Matthew Vincent, *The Australian Irrigation Colonies on the River Murray in Victoria and South Australia*, London: Chaffey Brothers,

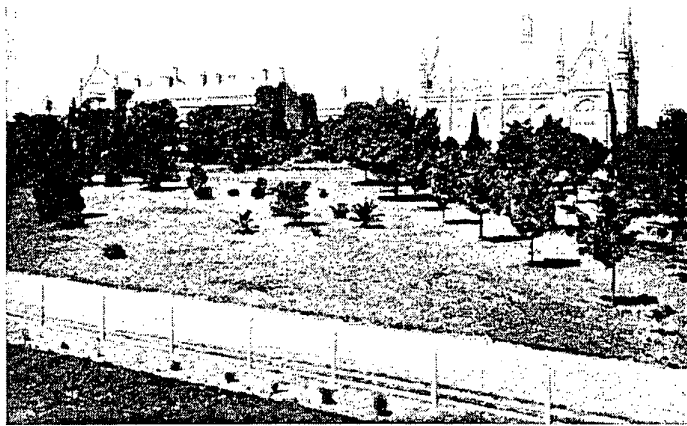


Fig 2. C.B. Walker, 'University' [Wilson Hall from one of the Professor's houses]. albumen print, ca.1888/89? Special Collections, Bailieu Library, University of Melbourne.

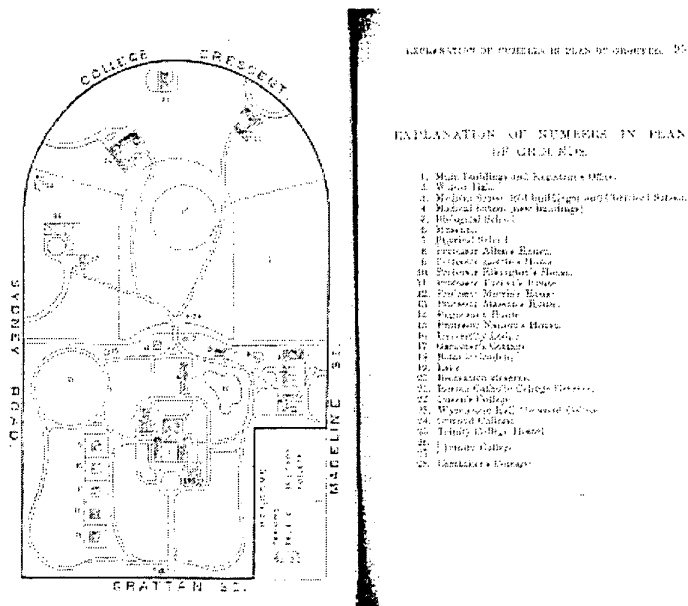


Fig 3. Plan of the grounds, Melbourne University Calendar, 1891, Special Collections, Bailieu Library, University of Melbourne.

[1888], a large folio volume issued both in cloth and soft cover, to publicise the settlements being established around the Murray River by the Chaffey Brothers.<sup>13</sup> If it wasn't Cassell's who brought Walker to Victoria, it might well have been the Chaffeys.

The wording of the acknowledgements is interesting. The photographs "have been chosen from an extensive collection...and are by the following high-class photographers..." The publishers of *this* book, at least, seemed to think that "Mr Walker" needed no particular introduction. The individual photographs are not credited, however at least two — one of the University and another of the central city — are definitely by Walker, and at least one — a view of the Fitzroy Gardens — is very similar to one in a Walker album in private hands.

Walker is credited, intriguingly, as "Mr Walker, Melbourne, &c.": all the others, who include such notables as Nicholas Caire and Charles Kerry, are placed unambiguously in a single city. Can we take this to suggest that he operated studios in more than one city simultaneously? — implying, if not an inter-colonial business empire, at least some kind of paid workforce. The Baillieu Library's album is said to have come "from an estate sale connected with the Perth branch of the firm": the lack of evidence to support the story, and the obscurity in which Walker died, inclined me to dismiss this story as one of those typically distorted family oral traditions. Now I'm not so sure. Perhaps it simply means that at his point he was exhibiting a vague intention of returning to London. Perhaps it was at this point that he was commissioned by Cassell's.

The two other books in which I have found Walker photographs were view books published by the prolific Ballarat printer, F.W. Niven: *Marvellous Melbourne Illustrated, 1835-1892* (1892?); and *Victoria and its Resources* (1893). Niven's fame rests largely on his "crisp photo process" — an innovative lithographic process for reproducing photographs in books. There is considerable overlap in the content of these two books, as there is between other similar books produced by Niven. Again, in the absence of conclusive evidence, it seems plausible that Niven could have commissioned many if not all of the photographers.

Niven's books credit many individual photographs. One photograph of the rotunda in the Fitzroy Gardens — a favourite haunt of Walker's, to judge by the number of photographs he took there — is credited to "C.W.B." No photographer with these initials is listed; it seems reasonable to assume that this credit should read "C.B.W."

Many of the photographs credited to C.B. Walker in Niven's books appear alongside photographs by Charles Rudd (Plate 20). There is a possibility that these two worked together: in the University of Melbourne's album, which contains Walker's own pencilled captions, the photograph of the opening procession of the 1888 Centennial International Exhibition has a separate annotation "C.



Rudd?" Unlike Walker, Rudd retained a studio in the central city throughout the 1890s. They both died in 1901. Some other photographs identifiable as Walker's appear uncredited, for example the Law Courts, and probably the Melbourne Club, Parliament House and Government House in the page of "Public Buildings in Melbourne."

It says something about Melbourne that its pre-eminent gentleman's club, the Melbourne Club, could be presented without any overt attempt at satire as a 'public building' of equal stature to the courts and parliament.

### *Retreat to the Suburbs?*

There is considerable evidence of Walker's commercial and professional success in the late 1880s. But his death in 1901 received only one brief notice in the press (it was placed by his widow), and he is buried in an unmarked grave. So what happened?

Walker maintained his studio near the top end of Little Collins Street — an up-market address — from 1888 to 1897. He then went down-market, first to Johnston Street, Fitzroy, 1898-1900, then, in the last year of his life, to Carlton — the corner of Elgin and Lygon Streets — a prominent location in what was then a very seedy area. This series of moves is suggestive of declining fortunes.

We might speculate about the effects of the "bust." The last evidence of Walker's success — the use of his photographs in Niven's *Victoria and its Resources* — dates from 1893, the year the land boom collapsed amid a series of financial scandals, ushering in a long and devastating depression: Even if Walker was not himself directly damaged by the "bust" — and remember, he kept his central city studio for another four years — we can assume that many of his clients, and potential clients, suddenly found themselves with a lot less cash for such luxuries as studio portraits.

This was a period of extreme financial hardship for a large proportion of the population. It was also a period of rapid technological change. By 1897, the equipment that Walker had used to such brilliant effect in the summer of 1888/89 would have been old and outmoded. To replace it with the latest and best would have required a significant capital investment. In the late 1890s, a top of the range "Premier" camera from W. Watson & Sons, with all accessories, cost as much as £43 — around three thousand dollars in today's terms. A professional photographer would ideally want two or more, taking different size plates. Or, if he just wanted some new lenses, Watson's Rapid Rectilinear Lenses ranged from £2 to £19.<sup>14</sup> Again, a professional would require several different sizes.

Walker by now was in his sixties, and he had met someone. In January 1897 he married a forty-five year old spinster named Mary Higgens. The ceremony took

place in a registry office: this may suggest an absence of formal religiosity, a need or desire to minimise cost and fuss, or both. Mary gave her occupation as artist — and continued to do so well into later life. It is their marriage certificate that supplies the year of death of Walker's first wife (1867).

I was able to find out much more about Mary's family than about Charles's. Perhaps the most significant discovery came serendipitously — after my book was published. Let this be a lesson to you all: I had plugged the names of Charles and his wife into every database I could get my fingers on. If I had only put the name of Mary's spinster sister into my own library's catalogue ... In the stacks, in search of something else, I chanced on a little volume called *Cloud and Sunshine: An Autobiographical Sketch of Miss H.R. Higgens*, which ought to have been difficult to overlook, because it went through multiple editions from the 1890s to the 1930s.

This portrait (plate 21) was published as a frontispiece to the 1899 edition. It is uncredited, but I think it is reasonable to assume that it was taken by her brother-in-law.

Hannah Roselie Higgens suffered a debilitating arthritic condition that was treated by amputation — a leg and both arms. She spent most of her adult life completely bed-ridden. This is her own sketch of the prosthetic devices that were custom-made to allow her to read and write.

Her book is more a spiritual than a temporal autobiography — long on the comforts and consolations of religious faith, short on the details of family life.

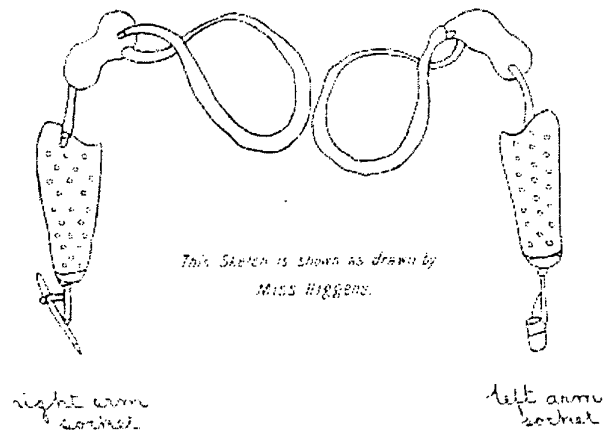


Fig 4. Miss Higgens's prosthetic limbs, sketch published in *Cloud and Sunshine*, enlarged edition, 1909. McLaren Collection, University of Melbourne.

There are photographs of the house, probably taken by Walker (other photographs by Walker, in an album in private hands, show an excursion on the nearby Yarra River; among the group photographed is an elderly man similar in build and appearance to Mr Higgens), but only passing mentions of her family. Mother and Father feature regularly enough, but siblings are seldom mentioned — and never by name. In-laws are not mentioned at all, although later editions of the book are produced by a local printer, Mr Saxton, whose brother became Mary's second husband.

The Higgenses were small business people; they had a fancy goods store in Smith Street, Collingwood. Around the time that Hannah Roselie's ailments degenerated into extreme disability, her parents effectively retired from the shop to their home "Gladwish" in the nearby suburb of Clifton Hill. It was a respectable enough location, but not a particularly opulent one. The photographs in the book suggest an air of genteel comfort, but the financial strain on the family — amid the general desperation of the 1890s — must have been immense.

In 1897, the Higgens's other daughter, Mary, got married. The new son-in-law moved his business to the suburb next door — and surely was giving them whatever support he could, whether in kind (photographs for a rather extraordinary book perhaps?) or in cash.

We will never know the full story. But part of it seems to go like this: Walker's age and family circumstances, the increasing scarcity of affluent clients, the spiralling costs of keeping up with technological advances — and the appearance during the 1890s of Kodak's cheap cameras marketed to the holidaymaker and sightseer — any combination of these factors could have conspired to send this once high-class photographer into obscurity.

### *Postscript, August 2005*

Some months after presenting this paper, I gained online access to the 19th century English census records — and the story of Charles Bristow Walker twisted yet again. The 1861 census (conducted in April) shows Charles living in London, at 379 Strand (North Side), with his mother Mary and his wife Kate. Mary's occupation was recorded as "book keeper," her age fifty-five, and her birthplace as Queen's County, Ireland. Kate's age was recorded as twenty, and her birthplace "Naxo, Greece"; she must have been a teenager when she married Charles in Alexandria in 1859. Charles gave his occupation as "advertizing agent," prompting the immediate question — what exactly did an "advertizing agent" do in London in the mid 19<sup>th</sup> century? The Walkers were sharing a house with — and appear to have been tenants of — another, more obviously middle-class family, the Oppenheims: Joseph, aged eighty-one, was a retired merchant; his French-

born wife Stephanie, sixty-one, was blind; their son Frederick, twenty-nine, was an "importer of foreign goods"; daughter Emma, thirty-five, had no occupation; they had a live-in servant, Irish-born Catherine Scammell, thirty-two. It seems plausible that Mary Walker — a solicitor's widow — was the Oppenheims' book-keeper, and that her son Charles may have done some advertising work for them. In the following year, 1862, Charles appears in the London postal directory for the first time, as a photographer.

In the 1871 census he appears alone, as a boarder in the house of analytical chemist Jack Richard Goold, in Penge, Surrey. His occupation is given as "landscape photographer."

More intriguing was the 1881 census. Charles claimed on the certificate of his marriage to Mary Higgins in 1897 that there had been no issue from his first marriage. The 1881 census shows him living at 91 Upper Street, Strand, Middlesex, with a twenty-one year old daughter, Annie. There is one plausible match in the civil registration indexes, an Annie Elizabeth Walker born in The Strand in the June quarter of 1861. This Annie, however, was not registered as the daughter of Charles and Kate Walker; and if Charles did have a daughter, where was she when the 1871 census-taker called? Once again a flash of fact opens more questions than it resolves. Walker lied about his family on at least one official form, in 1881 or in 1897, and we are left trying to imagine why.

*Endnotes*

<sup>1</sup>Three major studies of this period are Michael Cannon, *Land Boom and Bust*, (Melbourne: Heritage Publications, 1972), re-published as *The Land Boomers: The Complete Illustrated History*, (Carlton, Vic.: Melbourne University Press, 1995); Graeme Davison, *The Rise and Fall of Marvellous Melbourne*, (Carlton, Vic.: Melbourne University Press, 1978); Geoffrey Serle, *The Rush to be Rich: A History of the Colony of Victoria 1883-1889*, (Carlton, Vic.: Melbourne University Press, 1971).

<sup>2</sup>Richard Fitzherbert, 'Price Conversion Factors for Historians,' *Australian Actuarial Journal* 10(3), 2004, 617-622, online version at <<http://www.sag.org.au/forms/value.pdf>> viewed 19 January 2006, suggests a conversion factor of 64.1 for 1892/93, putting Mirams's debts at \$23,717,000 in 2004 values.

<sup>3</sup>Particular thanks are due to Michael Aitken, Kerry Agnew, Jack Gillespie, and Peter Wade.

<sup>4</sup>Helmut Gernsheim, *The History of Photography from the Camera Obscura to the Beginning of the Modern Era*, revised & enlarged edition, London: Thames & Hudson, 1969, 299.

<sup>5</sup>Email from Peter Wade, 16 March 2004.

<sup>6</sup>Plate 14 is one of these; it was almost certainly taken from the Insurance Companies Fire Tower. See *A New City*, 6, 56-58.

<sup>7</sup>Walker photographed Cullis Hill's Harcourt Street mansion in 1890 or 1891 — see *A New City*, 94. The group of artists that became known as the Heidelberg School began to form in 1886, the year that Walker arrived in Melbourne; their first exhibition, *9x5 Impressions* (1888), was sponsored by Hill. One of the founders of the group, Frederick McCubbin, lived in Hawthorn, a few minutes walk from Hill's residence, during the late 1880s and early 1890s. McCubbin's paintings from this period include *Winter Evening, Hawthorn, 1886*.

<sup>8</sup>*Moderate Drinking in Relation to Health*, Ferguson 12672.

<sup>9</sup>See Thomas A. Darragh, *Printer and Newspaper Registration in Victoria 1838-1924* (Wellington, NZ: Elibank Press, 1997), xiii.

<sup>10</sup>See Tim Bonyhady, *The Colonial Earth*, (Carlton, Vic.: Miegunyah Press, 2000), 190-217; also Tony Hughes-d'Aeth, *Paper Nation: The Story of the Picturesque Atlas of Australasia*, (Carlton, Vic.: Melbourne University Press, 2001), 40-57.

<sup>11</sup>See *A New City*, 1-4.

<sup>12</sup>Aerial photographs from the 1920s, held in the University Archives, confirm the accuracy of the 1891 map. Tucker, who had taught in Auckland in the early 1880s, contributed an article on the Tarawera eruption to *Cassell's Picturesque Australasia*.

<sup>13</sup>The publication of this volume is discussed briefly by Michael Cannon, *The Land Boomers*, 78.

<sup>14</sup>W. Watson & Sons, *Illustrated Catalogue of Photographic Instruments and Accessories*, 4th ed., Melbourne: Hart Printing Co., [1890s]; thanks to Sally Murdoch for locating this reference.