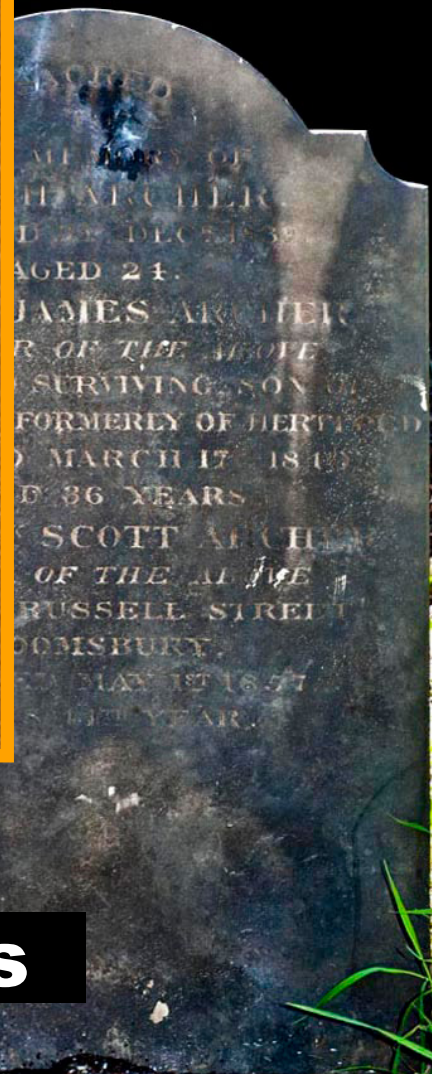


The 'Collodion Chemist' from Hertford

Frederick Scott Archer

A 'Catchers Tale'

**Featuring the Forgotten Lives of the Men and Women who
First Photographed the Heavens.**



Stefan Hughes

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1. The 'Catchers Tales'

Catchers of the Light

Frederick Scott Archer From Hertford

The Forgotten Lives of the Men and Women who First
Photographed the Heavens
Their True Tales of Adventure, Adversity & Triumph



Stefan Hughes

1.1 Introduction

The '*Catchers Tales*', each feature a single life of one of the men and women who first photographed the heavens. Their lives are ones full of adventure, adversity and triumph - which would test the abilities of even the best author or screenwriter to recreate as a work of fiction. Sadly their names are largely unknown and all but forgotten - confined now to the closed pages of history. Through the '*Catchers Tale*' you are about to read, they come alive once again.

These '*Catchers of the Light*', include the Scottish teacher from Dundee, Williamina Paton Stevens Fleming, who despite being abandoned, pregnant and alone in a strange country, gained employment as the housekeeper to a famous Harvard astronomer, and who became an eminent astronomer in her own right - even naming her son Edward Charles Pickering Fleming after her saviour.

Or of the young boy, Edward Emerson Barnard raised in the slums of Nashville, Tennessee during the American Civil War, and who dared to look up at the stars and dream, amid the cholera and death that surrounded him; and yet survived to capture some of the finest images of the heavens ever taken.

Or of the Irish Lord, William Parsons who married a rich heiress for her money, but in the end found true love, and the time to create a telescope in the grounds of his great estate, which enabled mankind to see for the very first time what the universe truly looked like.

Or of Milton Lasell Humason, who began his life driving mules up a mountain carrying the materials to build a Great Observatory, who then became its Janitor, then its Night Assistant and finally despite having no qualifications and little education - a Staff Astronomer there - working with his famous collaborator Edwin Powell Hubble, who together put a '*yardstick*' on the size of the Universe.

And of the fisherman's son from Estonia, Bernhard Voldemar Schmidt who blew off his right hand as a young boy in an experiment with gunpowder that went horribly wrong, but nevertheless lived to grind - literally single-handedly an optical system which is now aboard a Great Space Telescope, that has been used to find other '*Earths*' orbiting distant stars - and whose sad fate was to be left to die unrecognised and alone in a Lunatic Asylum.

These '*Catchers Tales*' tell their stories and those of the many others who had to overcome misfortune, disease, war, death, Irish Leprechauns and even very unfriendly Cannibal natives before they could even begin to take the even a single photograph.

Each '*Tale*' is divided into four chapters: an Introduction to the '*Catcher*'; a detailed account of their life and work; a series of Appendices covering several topic in more 'depth'; and an 'End Piece' which includes notes and a bibliography, a comprehensive index and acknowledgements and something about the Author.

The Author of the '*Catchers Tales*', Dr. Stefan Hughes has spent ten years researching and writing on the History of Photography, as well as the forty years of experience and expertise needed to even begin this task, in a diverse career as an amateur and professional Astronomer, a qualified Genealogist and a Historian. As a young boy the Author, like Edward Emerson Barnard looked up at the stars and wondered, marvelling at the magnificent photographs he saw in the pages of his books - and especially the iconic '*Horsehead*' nebula, longing to see it in his modest telescope - only to be disappointed. Forty years later he succeeded through the 'eyes' of the modern wonders of the Digital Camera and the GOTO telescope.

1.3 The Injustice of History

The chroniclers of History often have a bad habit of doing injustice to the people whose story they tell, whether by design, omission, prejudice, accident or even worse - incompetence. The Roman Politician and Orator, Marcus Tullius Cicero (106 BC -54 BC), once set down a set of rules for the writing of history, which sadly are sometimes never applied ^[1]:

- It is the first and fundamental law of history that it should neither dare to say anything that is false;
- nor fear to say anything that is true;
- nor give any just suspicion either of favour or disaffection;
- that, in the relation of things, the Writer should observe the order of time, and add also the description of places;
- that in all great and memorable transactions he should first explain the counsels, then the acts, lastly the events;
- that in the counsels he should interpose his own judgment on the merit of them;
- in the acts he should relate not only what was done, but how it was done;
- in the events he should show what share chance, or rashness, or prudence had in them;
- that in regard to persons he should describe not only their particular actions, but the lives and characters of all those who bear an eminent part in the story.

The story of Frederick Scott Archer (1814-1857), the '*Collodion Man*' of Hertford, is such a case - where Cicero's rules of history were completely ignored to the point of both indifference and blatant falsehoods. Not only have historians got the date and place of his birth totally wrong, but his parental background is at best inaccurately documented, furthermore his work is poorly chronicled and most serious of all - his place as one of the great Pioneers of early Photography improperly neglected.

He may not be have been as inventive as Joseph Nicéphore Niépce, or as charismatic as Louis Daguerre or as controversial as William Henry Fox Talbot, but nevertheless still deserves to stand in the same Photographic Hall of Fame as they do.

This short biography of his life has been written to coincide with the true bicentennial of his birth, which takes place in the year 2014. It is hoped that in the years to come, his story will be told in the way that Cicero would have approved.



Paphos, Cyprus, October 2013

2. The Life & Works of FSA



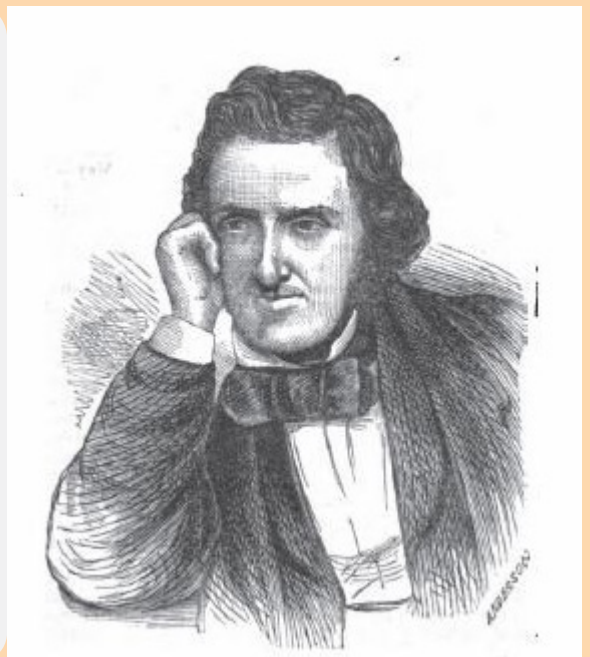
The portrait to the left of FSA is the only one known to exist of him or any other member of his family, and as such is of great historical importance. It is a copy taken from an original Collodion negative, by the Ipswich artist Robert Cade (1820-1879), and was taken in about 1856, a year or so before his death.

It is entirely fitting that a copy of this portrait is to be found in the National Media Museum, in Bradford, an institution dedicated to preserving the history of photography and the cinematic arts, as well as promoting an awareness of their importance to the public at large.

One other photograph of FSA is known to have been taken, that of the London Photographer, Thomas John Barnes, a drawing of which appeared in a tribute to FSA published (somewhat belatedly) in the British Journal of Photography in 1875.

Frederick Scott Archer (1814-1857) of HERTFORD

Thomas John Barnes (1809-1901) was born at Queen Anne Street, Whitechapel on the 8th of December 1809, and began his career as a Brace Maker and later as a Photographer. From 1863 until 1887 he ran a photographic studio at 422 Mile End Road in East London. For a number of years he worked for Dr Barnardo's Homes, taking before and after photographs of homeless and destitute children at the Homes, and also for the Methodist Children's Home in Bethnal Green. His work for Barnardo's ceased in 1887. In 1836 he married Mary Sarah Towler (1801-1882) and they had one son, Thomas John Barnes (1840-), who was also a Photographer. Thomas John Barnes senior, died at his home at No. 20 Barclay Road, in Leytonstone, Essex on the 11th February 1901.



Frederick Scott Archer, from a Photograph by Thomas John Barnes

2.1 Unrecognised

Frederick Scott Archer (FSA) was without doubt one of the great pioneers of early photography, whose name should without doubt stand near to, if not alongside the likes of Joseph Nicéphore, Niépce, Louis Daguerre and William Henry Fox Talbot.

The publication of his discovery in 1851 of the so called wet collodion process revolutionized photography, making it easier to obtain images with exposures of a few seconds only, and which also enabled multiple positive copies to be quickly made from the same glass negative plate; unlike the Daguerreotype process which produced a one off positive image on a silvered copper plate which could not be readily replicated. The Wet Collodion Plate was the preferred photographic process from its introduction in the early 1850s until the advent of the mass produced Dry Gelatin Plate in the late 1870s and early 1880s.

The importance of Archer's work to Photography was recognized by Lady Margaret Huggins, when in her 1889 obituary of the great pioneering Astrophotographer Warren De La Rue she wrote of the Collodion Process ^[2]:

"In 1851 Scott Archer and Dr. Diamond introduced the collodion process in practical form, and this finally prepared the way for such a worker as Mr. De La Rue; for the introduction of the collodion process was an event in photography second only in importance to the discovery by Daguerre in 1839."

Yet at the time of his death in 1857, although well respected by his photographic colleagues, he was largely unrecognized by the rest of the public at large; certainly unrewarded and definitely in impoverished circumstances. Even today he is not as well known as the other early photographic pioneers. The 150th Anniversary of his death in 2007 came and went largely unnoticed by the world, despite ample opportunity in the years since his death for historians to reassess his contribution to the development of photography.

"Frederick Scott Archer first applied collodion to photography, but failed to patent the invention, and consequently it was adopted by everyone acquainted with the art; but it did no good to the inventor, while providing a subsistence for thousands in all parts of the world. He, poor fellow, made his own cameras and apparatus adapted for taking views on the spot by the help of a knapsack camera, which he first introduced; but though finding bread for multitudes, he was unable to secure a beneficial result for his own family, and I have reason to believe that disappointment sent him to a premature grave."

From a talk called: "An Unpretending Genius" given at the St. Leonard's Historical and Philosophical Society, held on Thursday 9th January 1879, by Mr. E. J. Brietzke.

"Till 1851 photography played only a modest tune, but in that year Frederick Scott Archer introduced the Collodion (or wet plate) process of photography which transformed the entire world of pictorial knowledge. The sensitive chemicals could now be held on a glass plate instead of paper; the time of the exposure was greatly reduced and the range of detail remarkable. Moving objects still eluded the camera, but the great push on had started and everything that could be taken was taken. Mankind was provided with a roving eye and the world was brought to his doorstep."

From an article by Charles Harvard, in the Yorkshire Post and Leeds Intelligencer 10th January 1939, written to celebrate 100 years since the birth of photography (according to Daguerre!).

2.3 The Archers of Hertfordshire

Frederick Scott Archer was the sixth of seven children born to Thomas Archer, a butcher of Hertford and his wife Elizabeth (née Scott). He was born on the 30th August 1814 at his father's premises in Bull Plain, Hertford ^[11]; and not at Bishops Stortford contrary to the popular belief stated in all other biographies.

FSA's father, Thomas Archer was descended from a long line of Butchers and Farmers in Hertford and the neighbouring parishes of Buntingford and Westmill, and previously from the market town of Saffron Walden in Essex. When FSA was born his father Thomas was the tenant at Priory Farm which he rented from the Lord of the Manor, Lord John Townshend ^[12]. He had a thriving butchery business, where he sold the meat from the livestock he reared at Priory Farm.

When Frederick was a young boy his father's business began to fail. In the Hertford Chronicle of the 20th June 1820 an advertisement appeared asking for the creditors of Thomas Archer, a bankrupt butcher of Hertford to come forward ^[13]. Shortly afterwards on the 8th August, the same newspaper was advertising the sale of live and dead farming stock formerly belong to Thomas Archer ^[14]. A meeting of creditors followed on the 13th February 1821 ^[15]. The ultimate shame - a trial at the Hertford Assizes took place on the 23rd July 1822 ^[16]. At this trial in which Thomas Archer did not appear having apparently fled the town, his creditors were in dispute with the assignees of the bankrupt butcher's estate over ownership of certain items of farming stock. It was alleged but not proved that Thomas Archer knew he was to become bankrupt and sold the farming stock to his assignees before disappearing.

According to popular belief FSA's parents died when he was but a child. This view is not entirely correct. His mother Elizabeth had in fact died in 1817 some years before her family's financial troubles ^[17]. However his father Thomas still managed to carry on in Butchery business, as is evident from entries in Trade Directory entries for the period 1823 to 1829 ^[18]. He also took on a new Apprentice in 1826, one Thomas Feast whose father John Feast was a wealthy farmer from Patmore Hall, Albury near Bishops Stortford ^[19].

Furthermore, in 1830 FSA's father remarried, when on the 22nd of February that year he wed at All Saints Church, Hertford, Frances Radwell (née Robins), the widow of Frederick Radwell of Baldock, Hertfordshire ^[20]. It is not known what became of Thomas Archer and his new wife, for no record can be found pertaining to their life after their marriage. It is not known when or where Thomas Archer died, and therefore at what age young FSA became an orphan, but from the evidence available it is clear it was not until he was at least fifteen years old. However it is certain his father did not remain in Hertford. As to the childhood of young Frederick nothing is known for certain. It is popularly believed that he was brought up by distant relatives, probably by one of his many aunts and uncles that lived in the nearby villages of Westmill and Buntingford (FSA's Great Grandfather, James Archer of Buntingford, had at least 18 children and four wives!) ^[21].



Scenes of Old Hertford



On the 24th of February 1854, FSA took out a patent on his folding Collodion Camera.

A metal stamp was attached to each of these cameras detailing his patent.

It is unfortunate for him that he did not take out a similar patent on his 'Wet Collodion' process; and perhaps his life may have turned out like many of his contemporaries who earned fortunes from it.

For example, the chemist, Richard Wheeler Thomas (1823-1881), who sold Thomas' *Collodion Mixture*, left over 24,000 Pounds Sterling when he died in 1881, well over a million in today's money.

Archer's Collodion Camera, c1854

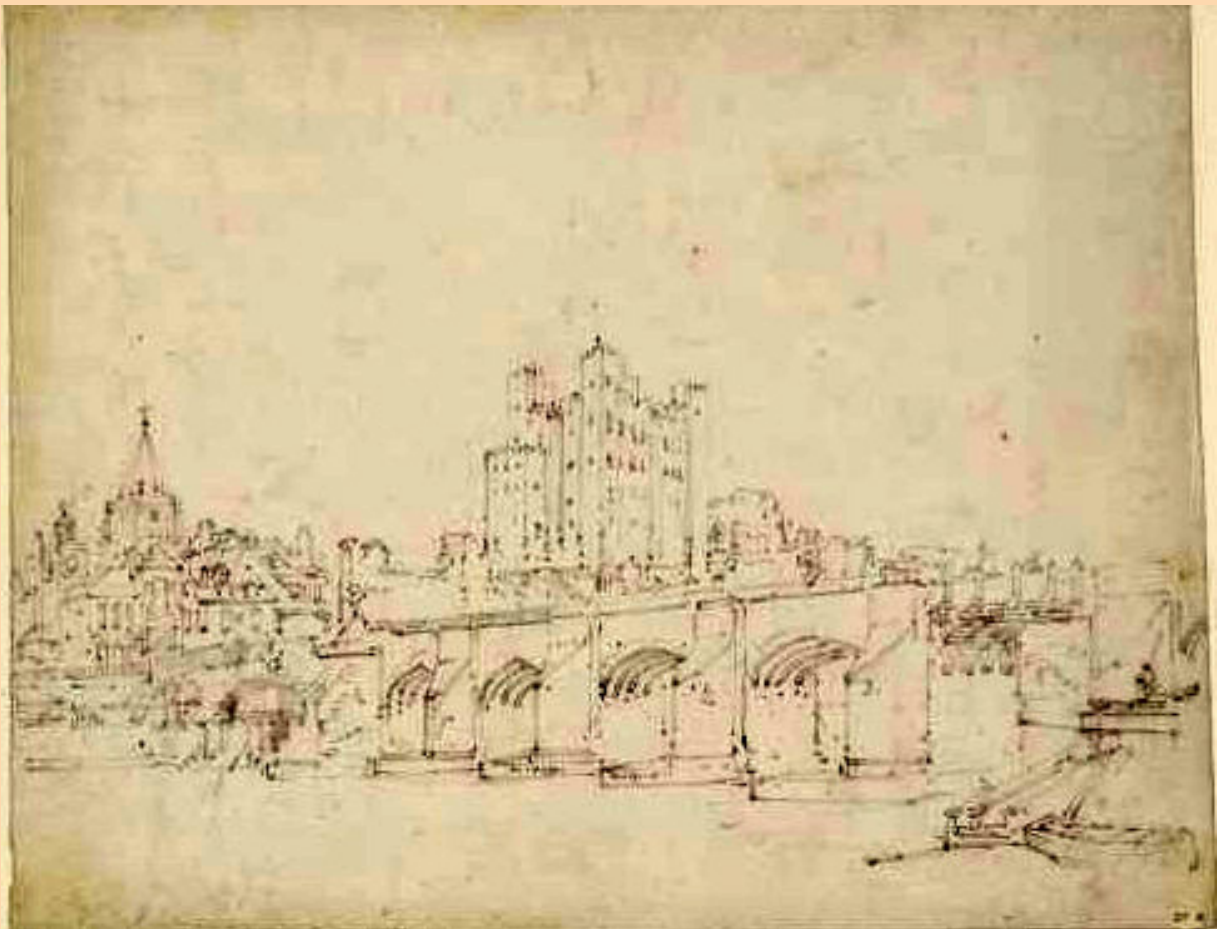
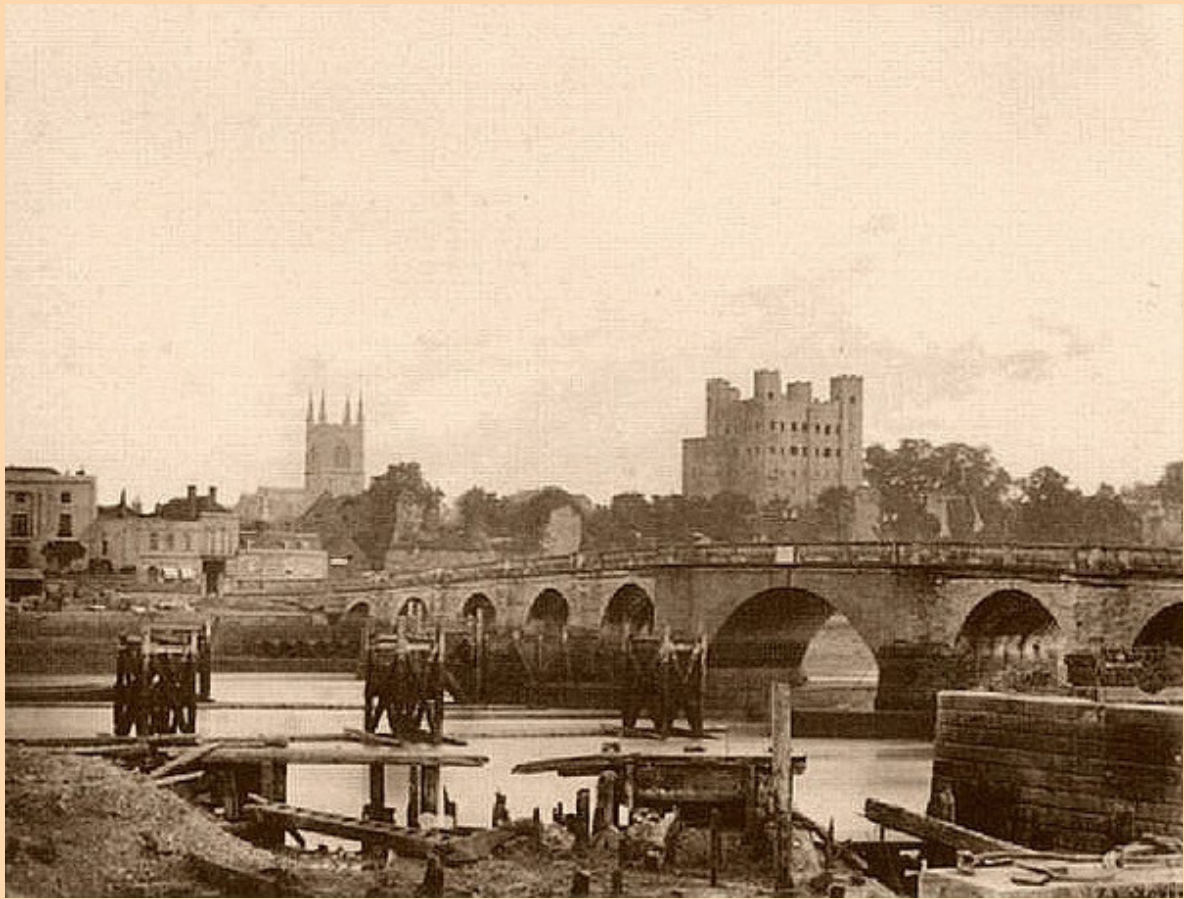
"THIS camera, when folded up, is a box 13 in. long, 13 in. deep, and 8 in. wide; this is the smallest size constructed. It opens out into a camera 13 in. wide, 13 in. deep, 21 in. long (the length being the sum of the width and the depth).

Externally the front of the camera is furnished with a sliding piece, into which the lens is fastened; the back has an opening cut in the hinged door, against which the face is placed when operating. The sleeves have an elastic band passing through the two upper sides, and spring over the end of the camera, thus forming a dark chamber.



Metal Stamp on Archer's Folding Camera, Registered 1854

The sleeves are permanently fixed by the two other sides to the main box, and the bottom of the expanded camera. Yellow light is admitted through an opening in the top of the main box, into which yellow glass is fixed; a hinged door closes over the outside of this opening. The folding part of the camera is composed of three framed boards, hinged to each other and to the main box, the part forming the back of the camera when closed lets down, and forms the continuation of the bottom of the camera. The back is hinged to the bottom, and opens outwards; the top is hinged to the upper part of the back, and is firmly fixed to the upper part of the main box with two brass catches...



View of Rochester Castle and Old Bridge; FSA (top) and J.M.W. Turner (bottom)



Frederick Scott Archer, Neglected Grave, Kensal Green Cemetery

In the years following FSA's death the memory of his immense contribution to Photography got less, as the grass and weeds around his grave grew more, until both were forgotten and covered up by the passage of time. The Photographic Historian, Sean MacKenna whose modern day Collodion photograph of FSA's grave is shown above, was one of the few who remembered Frederick Scott Archer - a man who gave freely his invention to the world but at great cost to himself and his family.

3. Appendices



St. Paul's Covent Garden, London - Baptism Place for FSA's 3 Daughters



North Street, Bishops Stortford - Birthplace of Frances Garrett Machin

Appendix A: Sculptures

This Appendix aims to give an account (however incomplete) of what is known of the Sculptures executed by Frederick Scott Archer in the years 1836 to 1851. From the table below taken from Algernon Graves' -'The Royal Academy of Arts - A Complete Dictionary of Contributors and their Work from its Foundation in 1769 to 1904', it is clear that FSA produced his Sculptures at three addresses in London: 1836-1838: 18 Hamilton Place, King's Cross; 3 Cecil Street, Strand: 1839-1842; and 1843-1851: 18 Tavistock Street, Covent Garden. In the main his work was that of busts of well known figures in the Arts and Sciences, as well as several Philanthropists.

ARCHER, F. S..... .. Sculptor.

18, Hamilton Place,

King's Cross.

- | | | |
|-------|------|---|
| 1836. | 1154 | Falling Angels. |
| 1838. | 1342 | Bust of a little Boy. |
| | | <i>3, Cecil Street, Strand.</i> |
| 1839. | 1363 | Sir George Smart; bust. |
| 1840. | 1090 | A Boy; bust. |
| 1841. | 1281 | Richard Hollier, Esq.; bust. |
| | 1310 | Sir I. M. Brunel; medallion. |
| 1842. | 1302 | do. do. |
| | 1371 | John Lee, Esq.; bust. |
| | | <i>18, Tavistock Street</i> |
| 1843. | 1456 | Charles Few, Esq.; bust. |
| | 1474 | Nicholas Carlisle, Esq.; bust. |
| 1844. | 1381 | Alexander Sim, Esq.; bust. |
| 1845. | 1443 | A Lady; posthumous bust. |
| 1846. | 1485 | Thomas Weeding, Esq.; bust. |
| 1847. | 1373 | George Sim, Esq.; bust. |
| 1848. | 1351 | Young Britons receiving in-
struction. |
| | 1389 | Dean of Manchester; bust. |
| | 1426 | Francis Smedley, Esq.; bust. |
| 1849. | 1236 | A Bas-relief. |
| | 1298 | John Hodgkin, Esq.; bust, |
| 1850. | 1451 | Marquess of Northampton. |
| 1851. | 1272 | Statue of Gertrude Hanson. |
| | 1372 | Benjamin Webster, Esq., actor;
bust. |

Appendix B: Photographic Exhibits

It is known that FSA exhibited his photographs as 123 separate exhibits in the following 11 exhibitions between the years 1852 and 1857:

- **London, Society of Arts, 1852**; 18 John Street, Adelphi, London; from 22nd December 1852 to 29th January 1853;
- **1st Tour, Society of Arts, 1853-1854**; Various Locations; from 14th September 1853 to 27th February 1854;
- **2nd Tour, Society of Arts, 1854**; Various Locations; from 17th April 1854 to 29th September 1854;
- **Dundee, Royal Infirmary Fund, 1854**; from March 1854 to April 1854;
- **London, Photographic Society, 1854**; Gallery of the Society of British Artists, Suffolk Street, Pall Mall, London; from 4th January 1854 to end of February 1854;
- **Glasgow, British Association, 1855**; Upper Gallery of Messrs Wylie & Lohead's Warehouse, No 45 Buchanan Street, Glasgow; from September 1855 to ?;
- **London, Photographic Society, 1855**; 168, New Bond Street, London; from January 1855 to end of June 1855;
- **London, Photographic Society, 1856**; Gallery of the Society of Water Colour Painters, 5 Pall Mall East, London; from first week of January 1856 to 29th March 1856;
- **Norwich, Photographic Society, 1856**; Exhibition Rooms, Broad Street, St Andrews, Norwich; from 17th November 1856 to 14th February 1857;
- **Yeovil, Mutual Improvement Society, 1856**; Society's Rooms, Church Street, Yeovil, Somerset; from 2nd June 1856 to ?;
- **London, Photographic Society, 1857**; Gallery of the Society of Water Colour Painters, 5 Pall Mall East, London; from first week in January 1857 to 28th march 1857.

The details of the subject, date and exhibitions for FSA's photographs are detailed in the table given below, together with the dates of the Turner drawings on which they are based.

What is clear is that in a number of cases the same photographs were shown at more than one exhibition. What is particularly sad is that in many cases no copies of the photographs described are known to exist, but hopefully at least some of them have survived, albeit unknowingly.

Much more research clearly needs to be done on his photographs and there present whereabouts.

Exhibit	Year	Exhibition	Subject
332	1852	London, Society of Arts	Tintern Abbey; J. M. W. Turner (1792-1793)
349	1852	London, Society of Arts	Tintern Abbey; J. M. W. Turner (1792-1793)
352	1852	London, Society of Arts	Welsh Scene
598	1852	London, Society of Arts	Portrait of a Gentleman
767	1852	London, Society of Arts	View on the Usk, Monmouthshire; J. M. W. Turner (1795, 1798, 1799)
768	1852	London, Society of Arts	Tintern Abbey; J. M. W. Turner (1792-1793)
26	1853-4	1st Tour, Society of Arts	A Study of Perspective
83	1854	2nd Tour, 1st Set, Society of Arts	Study of Perspective
66	1854	Dundee, Royal Infirmary Fund	The Alscot Park Buffet
331	1854	Dundee, Royal Infirmary Fund	Hatfield House, Hertfordshire
332	1854	Dundee, Royal Infirmary Fund	Ann Hathaway's Cottage, Shotton, near Stratford on Avon; J. M. W. Turner (1836)
36	1854	London, Photographic Society	Kenilworth Castle; J. M. W. Turner (1789, 1790, 1794, 1830, 1832)
257	1854	London, Photographic Society	The Alscot Park Buffet
284	1854	London, Photographic Society	Anne Hathaway's Cottage, Shotton, near Stratford-on-Avon' J. M. W. Turner (1836)
285	1854	London, Photographic Society	Old Houses, Warwick; J. M. W. Turner (1794, 1798, 1799, 1832)
290	1854	London, Photographic Society	Warwick Castle; J. M. W. Turner (1794, 1798, 1799, 1832)
87.01	1855	Glasgow, British Association	4 Views, viz: Waterfall on the Llyerhyd, Vale of Neath, Glamorganshire; J. M. W. Turner (1794)
87.02	1855	Glasgow, British Association	Portcullis, Kenilworth Castle; J. M. W. Turner (1789, 1790, 1794, 1830, 1832)
87.03	1855	Glasgow, British Association	Walnut Tree, St. Donats, Glamorganshire; J. M. W. Turner (1798)
87.04	1855	Glasgow, British Association	Window in Great Hall, Kenilworth Castle; J. M. W. Turner (1789, 1790, 1794, 1830)
92.01	1855	Glasgow, British Association	Frame containing Four Views: Warwick Castle; J. M. W. Turner (1794, 1798, 1799, 1832)
92.02	1855	Glasgow, British Association	Chepstow Castle; J. M. W. Turner (1792)
92.03	1855	Glasgow, British Association	Court in Chepstow Castle; J. M. W. Turner (1792)
92.04	1855	Glasgow, British Association	Pont-Neath, Vaughan, Glamorganshire; J. M. W. Turner (1794)
95.01	1855	Glasgow, British Association	Frame containing Four Views: Rochester Castle; J. M. W. Turner (1795)
95.02	1855	Glasgow, British Association	Rochester Bridge, Castle, and Cathedral; J. M. W. Turner (1793-1794)
95.03	1855	Glasgow, British Association	Clare Hall, Cambridge; J. M. W. Turner (1794)
95.04	1855	Glasgow, British Association	King's College, Cambridge; J. M. W. Turner (1794)
98.01	1855	Glasgow, British Association	Frame containing Four Views: Isleworth on the Thames; J. M. W. Turner (1789, 1793, 1794)
98.02	1855	1855, Glasgow, British Association	Twickenham on the Thames; J. M. W. Turner (1805)
98.03	1855	Glasgow, British Association	Caerphilly Castle, Glamorganshire; J. M. W. Turner (1798)
98.04	1855	Glasgow, British Association	The Thames near Brentford; J. M. W. Turner (1789-1791, 1805)
102	1855	Glasgow, British Association	Frame containing Four Views: Barking Creek; J. M. W. Turner (1815-1817)
102.02	1855	Glasgow, British Association	Towing Path on the Thames near Mortlake; J. M. W. Turner (1820-1830)

Appendix C: Family Pedigree

Thomas ARCHER of Saffron Walden b. abt 1687 Saffron Walden, Essex, England
 c. 21 Sep 1687 St. Mary, Saffron Walden, Essex, England
 + **Sarah FLACK** b. abt 1689 Saffron Walden, Essex, England
 m. 23 Dec 1714 St. Mary, Saffron Walden, Essex, England

① **James ARCHER of Buntingford** b. abt 1726 Saffron Walden, Essex, England
 c. 20 May 1726 St. Mary, Saffron Walden, Essex, England
 d. Nov 1797 Vine Farm, Buntingford, Hertfordshire, England
 bu. 12 Nov 1797 St. Mary the Virgin, Westmill, Hertfordshire, England
 + **Ann WRIGHT** b. abt 1724 Furneux Pelham, Hertfordshire, England
 c. 27 May 1724 St. Mary, Furneux Pelham, Hertfordshire, England
 m. 27 Sep 1748 St. Bartholemew, Layston, Hertfordshire, England

① **Catherine ARCHER** b. abt 1749 Buntingford, Hertfordshire, England
 + **Thomas BROWN** m. 22 Jan 1776 St. Botolph without Aldgate, London, England

② **Thomas Wright ARCHER of Hertford** b. abt 1751 Buntingford, Hertfordshire, England
 d. Nov 1817 Hertford, Hertfordshire, England
 bu. 10 Nov 1817 St. Mary the Virgin, Westmill, Hertfordshire, England
 + **Rose MICKLEY** b. abt 1759 Aspenden, Hertfordshire, England
 c. 1 Feb 1759 St. Mary, Aspenden, Hertfordshire, England
 m. 22 Jun 1777 St. Mary, Aspenden, Hertfordshire, England
 d. Oct 1800 Hertford, Hertfordshire, England
 bu. 20 Oct 1800 St. Mary the Virgin, Westmill, Hertfordshire, England

① **Frederick ARCHER** b. abt 1778 Westmill, Hertfordshire, England
 c. 19 Mar 1778 St. Mary the Virgin, Westmill, Hertfordshire, England
 d. Oct 1846 Baldock, Hertfordshire, England
 bu. 29 Oct 1846 St. Mary the Virgin, Baldock, Hertfordshire, England
 + **Mary (---)** b. abt 1799

② **Thomas ARCHER of Hertford** b. abt 1779 Westmill, Hertfordshire, England
 c. 16 Jun 1779 St. Mary the Virgin, Westmill, Hertfordshire, England
 bu. 6 Sep 1833 St. Mary, Chatham, Kent, England
 + **Elizabeth SCOTT** b. abt 1779 Little Munden, Hertfordshire, England
 c. 29 Oct 1779 All Saints, Little Munden, Hertfordshire, England
 m. 15 Dec 1802 All Saints, Little Munden, Hertfordshire, England
 d. abt Feb 1817 Hertford, Hertfordshire, England
 bu. 26 Feb 1817 All Saints, Hertford, Hertfordshire, England

① **Henry Thomas ARCHER** b. abt 1805 Hertford, Hertfordshire, England
 c. 7 Oct 1805 St. Andrew, Hertford, Hertfordshire, England
 d. abt 1858
 + **Amelia ALGAR** b. 26 Feb 1821 Newington, Surrey, England
 c. 8 Feb 1837 St. Mary, Newington, Surrey, England
 m. 8 Apr 1843 St. Martin in the Field, Middlesex, England
 d. 1862 Holborn, London, England

① **Henry Algar ARCHER** b. 12 Sep 1845 Trafalgar Road, Greenwich, Kent, England
 c. 18 Sep 1846 St. Alfège, Greenwich, Kent, England
 d. 1924 Eton, Buckinghamshire, England
 + **Louisa BOX** b. abt 1839 Enstone, Oxfordshire, England
 m. 1867 London, England
 d. 1908 West Ham, Essex, England

② **Charles Henry ARCHER** b. 15 May 1847 Trafalgar Road, Greenwich, Kent, England
 c. 16 Jun 1847 St. Alfège, Greenwich, Kent, England

③ **George Scott ARCHER** b. 27 Sep 1850 37 Great Portland Street, Marylebone, Middlesex, England
 c. 11 Jan 1856 St. Bride, Fleet Street, London, England

④ **James Henry Scott ARCHER** b. 16 Aug 1852 37 Great Portland Street, Marylebone, Middlesex, England
 c. 11 Jan 1856 St. Bride, Fleet Street, London, England
 + **Hannah Jane DAY** b. 11 Apr 1852 Limehouse, Middlesex, England
 c. 6 Jul 1855 St. John, Limehouse, Middlesex, England
 m. 5 Jun 1877 Trinity Church, Stepney, Middlesex, England

① **Frederick Charles Scott ARCHER** b. abt 1879 Dunedin, Otago, New Zealand
 d. 1957 New Zealand
 + **Eliza SHEFFIELD** m. 1903 New Zealand
 + **Gertrude Louie WABY** m. 1919 New Zealand

② **Edward Day Scott ARCHER** b. abt 1880 Dunedin, Otago, New Zealand

1 2 3 4 5 6 7

Appendix D: Archer Testimonial

In the month following the death of FSA on the 1st of May 1857, a number of his friends and members of the photographic community organised a Testimonial Fund to raise desperately needed funds for his widow and three young daughters. A committee was set up under the chairmanship of the architect, Matthew Digby Wyatt (1820-1877), with the artist, Sir William John Newton (1786-1869) and the photographer, Roger Fenton (1819-1869) acting as joint treasurers. The first meeting of the committee took place on the 8th of June 1857 at the rooms of the photographer, John Jabez Edwin Mayall (1813-1901).

In all four lists were published by the Archer Testimonial Committee. The first was prepared on the 16th of December 1857 and published in *'The Chemist'* (1857-58, Volume V, pp. 254-256), and contains names of persons who promised to pay nominated sums. The second and most important list published on the 23rd May 1859 in the *British Photographic Journal* and contains the names of those subscribers who have actually paid into the Archer Testimonial Fund the sums promised. This list is reproduced in its entirety in this Appendix. The third list contains a small number of late subscribers to the fund before it closed in the August of 1859. The final list refers to several individuals who made contributions after the official closure of the fund, and included one subscription received as late as the 11th June 1860 from a Mr. Arthur Green of £2 2s 0d.

Let us now consider these lists in detail as they reveal some interesting facts concerning the subscribers themselves and how they responded to the Archer Testimonial appeal. In the list published in the *'Chemist'*, 205 subscribers promised to pay a total of £657 7s 7d. Of these promised subscribers, 40 did not appear in any of the three other lists, and are presumed not to have paid, and as a result the fund had a shortfall of £166 2s 6d. Antoine Claudet later paid up the £10 10s 0d he promised, leaving a £156 2s 6d deficit. The BJP list of 23rd May 1859 had contained 232 subscribers, of which 68 were new. The total subscription collected by this date was £747 0s 11d. In the third list of subscribers who paid before the fund was closed, a further £20 3s 0d was collected from 3 contributors, the photographer, Antoine Claudet, £10 10s 0d, Mr. Osborne £8 13s 0d and £1 0s 0d from Mr. Valentine of Dundee. The Archer Testimonial Fund had by August 1859 had collected £767 3s 11d. A further 17 people subscribed to the fund with an additional £30 5s 0d collected. In all FSAs three daughters received a total of £797 8s 11d to share between them, not forgetting their own 11 pence a day State Pension!

The list of subscribers who promised money but seemed not to have paid included FSA's friend Dr. Hugh Welch Diamond, and his two brother-in-laws, Samuel Hanson (1804-1882)- one of the richest men in England and the Rev. George Edmundson (1805-1878). Samuel Hanson was married to Mary Choppin Machin (1804-1867), an elder sister of Frances Garrett Archer.

The Rev. Edmundson was married to Frances Garrett Archer's sister Eliza Debenham Machin (1803-1871). It was at his vicarage at Saintfield in County Down, Ireland that FSA's eldest daughter Alice Archer died aged 17 on the 14th February 1863.

The full text of the Archer Testimonial Fund report is given below:

"The Committee of the Archer Testimonial, considering it necessary to furnish a statement of the course pursued towards the attainment of their object, desire to lay before the subscribers and the public generally a full report of their proceedings.

Shortly after the death of Mr. F. Scott Archer, a preliminary meeting of a few friends was held, and it was determined that a printed address should be issued to the photographic world.

Sir William Newton, cordially co-operating in the movement, at once made application to Her

*Subscriptions to the Archer Fund received
by the Treasurers.*

	£	s.	d.
H. M.	20	0	0
The Photographic Society	50	0	0
The Rev. Iltydd Nicholl	20	0	0
Henry Vaughan.....	10	10	0
Sir W. J. Newton.....	2	2	0
Messrs. Hopkins and Williams	5	0	0
G. De Morgan	2	2	0
J. H. Aylmer.....	2	2	0
W. E. Kilburn	2	2	0
A. Farre	2	2	0
H. Bath	10	0	0
R. R. Redway	5	0	0
A. D. Robertson	1	1	0
E. R. Tenison	5	0	0
A. M. Welwood	2	0	0
Sir George Clerk, Bart.	5	0	0
J. G. Bergman	1	1	0
Miss Moore.....	1	0	0
Miss Hardy.....	1	0	0
R. B. Clayton	1	0	0
R. Hollond	5	5	0
J. R. Williams	5	5	0
Sir Thomas M. Wilson, Bart.	2	0	0
Coalbrook-dale Iron Works.....	2	2	0
George Shadbolt	2	2	0

The Archer Testimonial Fund attracted donations from a wide variety of personages both inside and outside the photographic field from Queen Victoria to Peers of the Realm, photographers (professional and amateur), artists, writers, family members and the ordinary public. The size of the donations ranged from £50 to a few shillings.

Appendix E: Glossary of Terms & Personalities

The following is a Glossary (albeit brief) of photographic terms and certain individuals linked to FSA during his lifetime.

Albumen: A generic term referring to processes employing albumen, a pure form of the white of an egg, as a binder for the light-sensitive silver salts. It was used to make either positives or negatives on paper or glass.

Ambrotype: a photographic processes invented in 1852 by Frederick Scott Archer and his friend Peter Wickens Fry. It derives its name from Ancient Greek, meaning immortal impression. It is a photographic process that creates a positive image on a sheet of glass using the wet plate collodion process. The ambrotype was much less expensive to produce than the daguerreotype, and it lacked the daguerreotype's shiny metallic surface, which some found unappealing. By the late 1850s, the ambrotype in the USA was overtaking the Daguerreotype in popularity; by the mid-1860s, the ambrotype itself was supplanted by the tintype and other processes. In England it was called the collodion positive. In the ambrotype process one side of a very clean glass plate is covered with a thin layer of collodion, which is then dipped in a silver nitrate solution. The plate is further exposed to the subject while still wet. (Exposure times vary from five to sixty seconds or more depending on the amount of available light.) The plate is then developed and fixed. The resulting negative, when viewed by reflected light against a black background, appears to be a positive image: the clear areas look black, and the exposed, opaque areas appear light. This effect is achieved by coating one side of the glass negative with black varnish. Either the emulsion side or the blank side can be covered with the varnish: when the blank side is blackened, the thickness of the glass adds a sense of depth to the image. In either case, another plate of glass is put over the fragile emulsion side to protect it, and the whole is mounted in a metal frame and kept in a protective case. In some instances the protective glass was cemented directly to the emulsion, generally with a balsam resin. This protected the image well but tended to make it darker.

Beattie John (1820-1883): a Scottish photographer born in Kilnockie, Perthshire, who settled at first Yorkshire where in 1846 he married a local girl Naomi Hunter (1827-1920) and at the time of the 1851 Census was living in Goole as a Lecturer and Photographer. He later settled in Bristol, and by the time of the 1861, was listed there as a Photographic Artist. He spent some time in Leicester, but returned to Bristol. He seems to have later gained some notoriety as a spiritualist and for his related investigations in the realm of spirit photography. In 1872 Beattie captured, 'like clay in the hands of an artist' apparitions in his camera lens; and fairies, increasingly purged of their complexity and sexuality, were '*diminished of their mythic force*'. He died at No. 2 Richmond Hill, in Clifton, Bristol on the 14th October 1883, age 63. His wife survived him by another 37 years.

British Journal of Photography (BJP): It was established in 1854 in Liverpool as the Liverpool Photographic Journal. It was printed monthly until 1857 when it became the Liverpool and Manchester Photographic Journal and was then published every two weeks. From 1859 to 1860, its name was changed again to the Photographic Journal after which it assumed its present name the British Journal of Photography. The magazine was published weekly from 1864 to the March of 2010, when it changed back to its original monthly format. It is now also available as an electronic magazine.

Brown, William Morgan (1823-1883): Patent Agent and friend of FSA, who was closely associated with his early work on the collodion process. He was born on the 7th June 1823 in Grafton Street, Westminster, London, the son of Thomas Morgan, a Cheesemonger and his wife Mary Morgan. For a number of years he worked as a farmer in Ewell, Surrey, and is listed in this occupation in the 1851 Census. He died on the 31st March 1883 at Meadowside, Finchley, London. Perhaps FSA should have made use of his services in patenting his collodion process, but sadly at the time his friend needed him most Brown was in all likelihood not practicing as a Patent Agent.

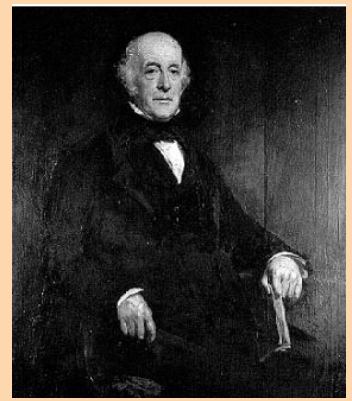
4. End Piece



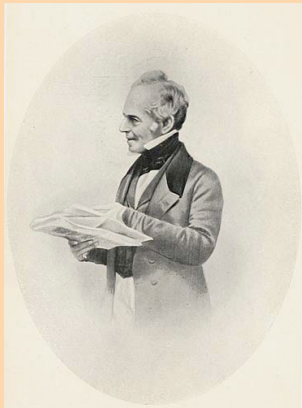
Queen Victoria
Monarch



Sir Matthew Digby Wyatt
Secretary of the 'Great Exhibition'



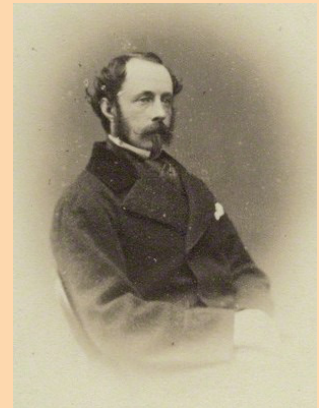
Sir George Clerk
1st Lord of the Admiralty



Robert Lucas Chance
Glassmaker



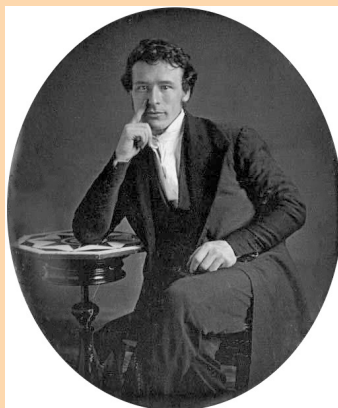
Dr. Henry Hyde Salter
Asthma Doctor



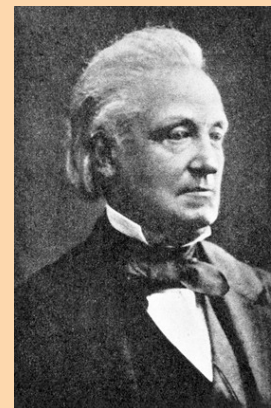
Lord Otho Fitzgerald
Soldier & Politician



Robert Cade
Photographer



John Jabez Edwin Mayall
Photographer



Robert Hunt
Scientist & Antiquarian

Some of FSA's Contemporaries Who Contributed to His Testimonial Fund

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The Author

Stefan Hughes began his career as a professional astronomer, gaining a 1st Class Honours degree in Astronomy from the University of Leicester in 1974 and his PhD four years later on the 'Resonance Orbits of Artificial Satellites due to Lunisolar Perturbations', which was published as a series of papers in the Proceedings of the Royal Society of London.

After graduating he became a Research fellow in Astronomy, followed by a spell as a lecturer, firstly in the Department of Engineering at Warwick University and then in Applied Mathematics at Queen Mary College, University of London. Then came a ten year long career as an IT Consultant, working on large technology infrastructure projects for an international software house.

In '*mid life*' he spent several years retraining as a Genealogist, Record Agent and Architectural Historian, which he practiced for a number of years before moving to the Mediterranean island of Cyprus.

During his time working as an Architectural Historian and Genealogist, he was a regular contributor to Family History and Period Property Magazines.

For the past ten years he has been imaging the heavens, as well as researching and writing the '*Catchers of the Light*' - '*Featuring the Forgotten Lives of the Men and Women Who First Photographed the Heavens*'.



The tale of Frederick Scott Archer the '*Collodion Man of Hertford*' is one of injustice, hardship, poverty, an early death and the ultimate insult of total obscurity. His only crime was to give freely to the world an invention which dominated Photography for over three decades; which made others vast fortunes, saved his Government millions of pounds, enabled astronomers to capture stars the eye could not see, and brought his '*Art*' within the reach of the ordinary man. Today his name is known to none except a few aficionados of Photography. Even historians did him no favours - not even being able to get right - when and where he was born; or bothering finding out who his parents were; and failing miserably to accurately document his life and work. The year 2014 marks the real two hundredth anniversary of his birth - let him be remembered once more as one of the truly great Pioneers of Photography.

The '*Catchers*' series of stories like Geoffrey Chaucer's famous Canterbury Tales are about the lives of ordinary people told against a common '*backdrop*', his was a Pilgrimage and here it is Astrophotography; but both were of adventure, adversity and triumph - only the '*Catchers Tales*' are true and based entirely on fact.

The Catchers of the Light

