



## CINEMATOGRAPHY

### Pioneers of Early Cinema: William Friese Greene (1855-1921)

William Friese Greene was a natural optimist and, despite twice becoming bankrupt, marrying twice, separating twice and being imprisoned once, he was always positive about the future. The inscription on his grave in Highgate cemetery, London claims that he was 'the first inventor and patentee of cinematography'- a claim made in a romantic and unreliable biography *Friese Greene, Close-up of an Inventor* and an even more romantic film, *The Magic Box* (1951), but probably not supported by his actual achievements in that field.

Born William Edward Greene in 1855 to a Bristol metalworker and his wife, he left school in 1869 to become an apprentice to a local photographer, Maurice Guttenberg. Proving to be a fast learner with a particular facility for portraiture, he soon established his own studio in Bath. In 1874, he married Helena Friese, and changed his surname to Friese Greene. As a mark of his success, by 1877 he had two studios, one in Bath and another in Plymouth. Sometime during 1880 John Arthur Roebuck Rudge, who had been experimenting with magic lantern devices to create moving picture projection since the early 1870s, introduced him to animated photography. William was fascinated by the process and worked with Rudge to develop the lantern and conduct his own experiments.

In 1885 he moved to London and opened two studios with the photographer Alfred Esmé Collings, who later became a film-maker. Because of Friese Greene's talent these became highly fashionable and popular establishments, and he quickly opened several other London shops to cope with demand. Friese Greene demonstrated Rudge's Biophantascope lantern to the Photographic Society in London in 1886 and 1887, claiming that he had designed it. Then, in March 1889, he demonstrated a pair of lanterns at Crystal Palace, once again claiming them as his own, despite Rudge's attempts to draw attention to the fact that he had designed the original Biophantascope.

In the same year, Mortimer Evans, a civil engineer joined Friese Greene and they designed a camera for sensitised paper film, which took picture sequences at four or five pictures per second. This was patented on 21 June 1889. However, there is no record of Friese Greene projecting the sequences. By then also, Etienne Jules Marey in France and Louis Le Prince in Britain had succeeded in recording picture sequences on film at rates of up to twenty per second – a speed more than sufficient to record and synthesise movement when the pictures were 'replayed'.

In 1890 Friese Greene used a stereoscopic sequence camera designed by Frederick Varley. It took pairs of pictures 8.3cm (3¼") square at the inadequate rate of about three per second – not surprising, considering the large size of the film used. Friese Greene's concentration on this work led to him going bankrupt in 1891. He faced social disgrace and was forced to sell the majority of his equipment. Nevertheless in 1893 he patented a camera/projector very similar to Varley's stereoscopic model. This is in the Museum's collection. In 1896 he teamed up with the leading British cine camera maker, John Alfred Prestwich, to develop a twin-lens projector in order to try and eradicate the problem of pictures flickering on screen. This did not develop beyond a prototype. This is also in the Museum's collection.

In 1898 Friese Greene patented a somewhat impractical process of colour photography. This was the beginning of an obsession that continued up to his death. In 1905 he patented a two-colour process for moving pictures. This pre-dated George Albert Smith's patent for the commercially successful Kinemacolor process by a year. In 1913, Friese Greene and his financial backer, S F Edge, initiated a legal challenge to the patent, now owned by the film producer Charles Urban. Though they first lost the case, Friese Greene and Edge won on appeal, and this was upheld by the House of Lords in March 1915.

Until his death in 1921, Friese Greene continued to work on colour processes. His son, Claude, a leading cinematographer, responsible for major feature films such as *The Great Mr Handel* (1942), developed his father's two-colour process, Biocolour, and used it for a documentary *The Open Road* (1926). The film was never completed and was the subject of a BBC series *The Lost World of Friese Greene* in 2006.

Friese Greene was a prolific and obsessive inventor; not surprisingly, some of his inventions were impractical. But others were just ahead of their time, such as phototypesetting. Some of his inventions were commercially exploited, for example rapid photographic printing for cigarette cards. Despite his bankruptcy and imprisonment, he had periods of wealth and success. Friese Greene's death in 1921, after giving a speech at a cinema industry meeting held to discuss the crisis in cinema, was suitably romantic and pathetic, especially when it was discovered that he had just 1/10d (11p) in his pocket. It is a feature of how his story was romanticised that that sum was reported as the price of a cinema ticket – it could equally have been the cost of a loaf of bread or a tube fare!

## Further Reading

Ray Allister, *Friese Greene, Close-up of an Inventor* (London: Marsland, 1948)

John Barnes, *The Beginnings of the Cinema in England 1894-1901* (Exeter: University of Exeter Press, 1996-1998)

Michael Chanan, *The Dream That Kicks* (London: Routledge and Kegan Paul, 1980)

Brian Coe 'William Friese Greene and the Origins of Kinematography', *Photographic Journal*, March/April, 1962, pp92-104 and 121-126 and *Screen* Vol 10 Nos 2, 4, 1969

Gordon Hendricks, *The Edison Motion Picture Myth* (Berkeley, California: University of California Press, 1961)

Stephen Herbert and Luke McKernan (eds.), *Who's Who of Victorian Cinema* (London: BFI Publishing, 1996)

Henry V. Hopwood, *Living Pictures* (London: Hazell, Watson & Viney Ltd, 1899); reprint (New York: Arno Press, 1970)

## Websites

The story of film and cinema in Brighton and Hove from the earliest days:

<http://www.terramedia.co.uk/brighton/index.htm>

Who's Who of Victorian Cinema (entry on Friese Greene): <http://www.victorian-cinema.net/friese Greene.htm>

Screenonline's biography of Friese Greene: <http://www.screenonline.org.uk/people/id/508948/>  
<http://www.findagrave.com/cgi-bin/fq.cgi?page=gr&GRid=3213>

BBC interview with Interview with the Jan Faull of the British Film Institute on the restoration of the Friese Greene collection:

[http://www.bbc.co.uk/history/programmes/programme\\_archive/interview\\_bfi\\_01.shtml](http://www.bbc.co.uk/history/programmes/programme_archive/interview_bfi_01.shtml)

DVD of *The Lost World of Friese Greene*: <http://www.bbcshop.com/inv/bfivd727>

National Media Museum  
Bradford BD1 1NQ  
Tel: +44 (0)844 856 3797  
Fax: +44(0)1274 723155  
[www.nationalmediamuseum.org.uk](http://www.nationalmediamuseum.org.uk)