

# 3½-INCH SQUARE PHOTOGRAPHIC SLIDES

Lester Smith

I have for a long time been very impressed with the early photographic magic lantern slides dating from the 1850s when the standard slide size was 3½-inches square (the size adopted by the Microscopical Society). They were mounted in 7 inch by 4 inch wooden frames and embellished with attractive labels, sometimes on both sides of the slide. During the 1870s, the 3¼-inch square slide became the standard<sup>1</sup> and was ideal for the various quick slide changers that were becoming available. That size was perfect for the popular magic lantern using a 4-inch condenser.

These are some of the early pioneers of photographic magic lantern slides who used the 3½-inch square format.



1. Frank Haes

## FRANK HAES (1832-1916)

In 1864, Frank Haes (Fig. 1), was commissioned by the Zoological Society of London to photograph 60 stereoscopic views of the animals including, for the first time, a live elephant. He delivered a paper to the Photographic Society describing the difficulties he encountered in taking these pictures. The camera plates were slow so the creatures had to be still and looking in the right direction for at least 10 seconds – it could take a while to capture the right pose. Sometimes the wet plate would dry out and he would have to start all over again – once exposed, the plate had to be developed immediately.

The resulting stereo plates were published by McLean & Haes of 26 Haymarket, London, as collectable 'stereo' cards – a format that had become very popular. The plates could also be divided into individual positive slides for the magic lantern. During 1865 Haes returned to photograph a second series, aided by Frederick York.<sup>2</sup> They took five pictures of the quagga, a type of plains zebra from South Africa that became extinct in the late 19th century, so a rare breed in the zoo at that time. These are the only photographs of the quagga that exist (pending some comeback through DNA cloning). Original stereo cards or lantern slides of the quagga and Tasmanian wolf are extremely rare. A year later, he photographed 'Lecompte with the sealion' (Fig. 2).

There are at least three different forms of the wording on the outside ring of the slides. The label refers to 'No 7 Haymarket' as the address but '26 Haymarket' appears on all their published written material. They appear to have two buildings on Haymarket for different purposes. Figs 2-4 show examples of Haes' photographic slides.



2. Lecompte with the sealion No 12 (Frank Haes)



4. Lion No 2 (Frank Haes)

## SAMUEL HIGHLEY (1826-1900)

Samuel Highley was an important pioneer in the projection of dissolving views and microscopic photographs, particularly for educational use. He specialised in natural sciences such as botany, geology, astrology, pathology and zoology. His slide set *Highley's Science and Art Photographs for the Magic Lantern* appeared in 1856. The slides have decorative labels on both sides, one side with the set title (*Highley's Science ...*) around the circular image and the other with the name of the particular subject, the initials 'SH' and the date 1856. Examples are shown in Figs 5-7.

Between 1862 and 1869 Samuel Highley was the editor of the *British Journal of Photography*. On 14 January 1863 he read, and subsequently published, a paper to the Society of Arts on his developments in projection and microscopic photography.

Many of his wonderful drawings and explanations were published in the *Technical Educator*, *Popular Educator* and *Popular Recreator*, all published by Cassell & Co. around 1880-1890. He experimented with many varieties of light source, explained the effect of different lens combinations and examined in thorough detail other types of optical devices and amusements.



3. African Wild Ass No 28 (Frank Haes) – front and reverse





5. Hogarth's Apprentices No 10 (reverse) (Samuel Highley)



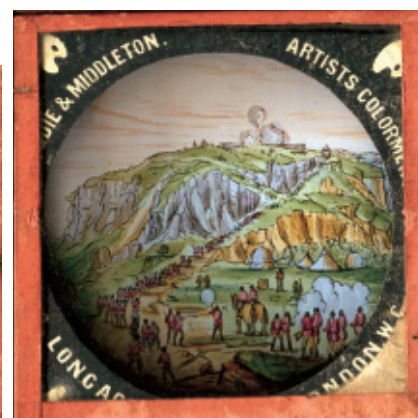
6. Hogarth's Apprentices No 4 (front). 'AD 1856' appears in the top left corner (Samuel Highley)



7. Hogarth's Finis – also with 'AD 1856' appears in the top left corner (Samuel Highley)

## BRODIE & MIDDLETON, ARTISTS' COLOURMEN

This business started around 1838 at 79 Long Acre, London W.C. and is still trading today. The founder John Brodie (1816-1849) described himself as an 'artist colourman' and arranged for his mother, Ann Brodie, to carry on the business after his early demise. Thomas Middleton (1817-1889) had been an employee and became listed as a partner in 1854. Fig. 8 shows two Brodie & Middleton images of the Crimean War (1853-1856).



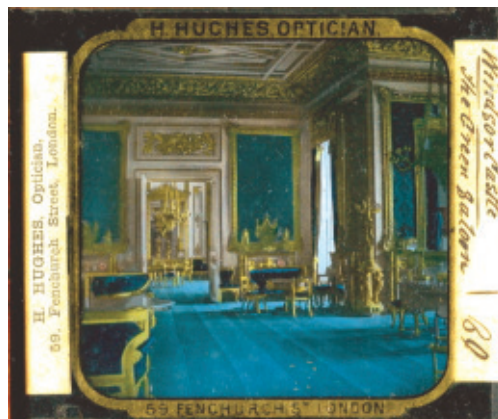
8. Two images of the Crimean War (Brodie & Middleton)

## HENRY HUGHES & SON

This company of opticians and scientific instrument makers was founded by Henry Hughes (1816-1879) and operated from around 1840 to 1900. They were based in various addresses in Fenchurch Street. Eventually they sold their stock of lanterns and slides to Mr Walter Tyler of Waterloo Road, London S.E. for £3,000. Two of their slides, of Westminster Abbey and the Green Saloon at Windsor Castle, are shown in Figs 9 and 10.



9. Westminster Abbey (Henry Hughes) (left)



10. Windsor Castle, the Green Saloon (pity the gold does not shine!) (Henry Hughes) (right)

## CHARLES BAKER

Charles Baker specialised in optical, surgical and surveying equipment and his company at 243 and 244 High Holborn flourished between 1851 and 1909. They continued to make microscopes for another 50 years. An example of the slides is shown in Fig. 11.

### NOTES

1. In 1874/75 Alfred Pumphrey of Birmingham was selling 3¼-inch cover glasses to people who bought coloured transfer sheets to make their own slides (a considerable saving in wood!). Certainly by 1885 the 3¼-inch size was accepted as standard – see Ann Hecht, 'transfer slides', in *Encyclopaedia of the Magic Lantern*, MLS, London, 2001
2. Frederick York (1823-1903) of Lancaster Road, Notting Hill, set up business in 1863 and is famed for his high quality slides.

As well as the *Encyclopaedia of the Magic Lantern* I have drawn on other sources including John Barnes, 'A list of magic lantern manufacturers and dealers active in England during the 19th century' in *Magic Images*, MLS, London, 1990, pp.19-30. Most of the slides illustrated in this article have been cropped in order to show the images more clearly.



11. Dangerous waters (Charles Baker) (below)