

The “Tartan Ribbon”

Shown is a copy of the photograph of a full-colour print that was made using the VIVEX process in the early 1930s. The actual print is in the National Media Museum in Bradford.

In the VIVEX process, three images, on suitably tinted, stretchable cellophane, are overlaid. For the print, the three were produced from James Clerk Maxwell’s three black-and-white magic lantern slides. These slides were made each for a different colour, nominally red, green and blue, using filters in front of the camera lens. The plates used to make the slides were made with the ribbon in bright sunlight. (Details in “The Illustrated History of Colour Photography”, by Jack H Coote (Fountain Press, 1993)).

The strategy for producing full-colour projected images was outlined by Maxwell in a paper to the Royal Society of Edinburgh in 1855, published in detail in the Society’s *Transactions* in 1857.

The most recent use of the print is the illustration in the book “Being a Scot” by Sean Connery and Murray Grigor (Weidenfeld & Nicolson, London, 2008). Also illustrated in the book is the set of Maxwell’s black-and-white slides which are on permanent display in our display cabinet. These three slides are probably the three that Maxwell used, together with – in the magic lantern projector beams – the corresponding filters that had been used to make them. Thus, at a discourse in the Royal Institution, in London, in May 1861, he demonstrated his strategy to produce a full-colour projected image.

The Rumford medal of the Royal Society of London “is awarded in recognition of an outstandingly important recent discovery in the field of thermal or optical properties of matter made by a scientist working in Europe.” Maxwell was awarded the medal in 1860 “For his research on the composition of colours, and other optical properties.”

