

FILMING A BODLEIAN MANUSCRIPT

By MICHAEL HEANEY

BODLEIAN MS. Eng. misc. e. 664 is described in the Bodleian catalogue as 'a flick book showing George Butterworth dancing'. In fact it is much more than this, being an example of an early form of 'home-movie' in the form of approximately 640 photographs arranged radially on a spool, to be viewed on a Kinora viewer on the 'what-the-butler-saw' principle. The subject of the film is the composer George Butterworth (1885-1916). Butterworth was a close associate of Cecil Sharp in the collection of English folk music and dances, and was a member of the Demonstration Team for Morris dancing of the English Folk Dance Society. He was acknowledged as the best dancer in the team, the majority of whose members—Butterworth included—perished in the First World War. In the film he is demonstrating the steps of dances from the village of Sherborne in Gloucestershire, which Sharp described as 'the most intricate that I have yet found'.¹ The film is also the earliest known film depicting Morris dancing. It is, therefore, of great value for research into the subject.

Unfortunately the Kinora system is rather delicate, making accurate viewing a difficult operation potentially hazardous to the film. The basic principles on which the device operates were first utilized in the 1890s by Eadweard Muybridge, but the Kinora itself was a British invention marketed approximately between 1912 and 1916. Its novelty lay in the use of paper negatives, which were much cheaper than celluloid; and in the use of the device as a 'home-movie' system. The advertising stresses the ease of use, saying that 'Animated photography has, for the first time, been brought within the range of the amateur, and within the bulk of a fair-sized hand camera'.²

What the advertisement does not mention, of course, is the fragility of a Kinora spool. When viewed on a Kinora viewer, each frame on the spool is momentarily held back by a ratchet while the spool continues to rotate, until the pressure of a spring at the rear of the spool pushes the frame past the ratchet and the next frame is revealed. Individual frames are liable to become worn or frayed at the outer edge, where they are held back; and weakened at the inner edge where they are glued to the hub of the spool. They have little lateral strength and can easily become detached. The hazards of attempting to view the film without a Kinora viewer are even greater. The Bodleian does not possess a Kinora viewer,

so the film was virtually unusable for serious study. The answer to this problem was to transfer the film onto ciné-film, but two obstacles had to be surmounted first: finding finance and establishing a method of filming.

The first obstacle was surmounted when the national federation of



FIG. 1. The Kinora spool, MS. Eng. misc. e. 664 = Cons. Res. e. 16.

Morris dancing clubs, the Morris Ring, offered the Library a grant to pay for filming as part of its archival filming programme. Copies of early films of Morris and other ritual dance forms made under this programme are deposited in the National Film Archive of the British Film Institute, the Vaughan Williams Memorial Library of the English Folk Dance and Song Society, and are also kept by the Ring itself.³ In this case a copy was also to be made for the Bodleian.

The second obstacle was surmounted in stages. Before the film could be viewed at all a Kinora viewer had to be found. Fortunately the University's Museum of the History of Science possesses a viewer identical to Model No. 6 depicted in the company's advertisement of 1912.⁴ With the co-operation of the Curator of the Museum, Mr. F. R. Maddison, and his technician Mr. J. Simon, I was able to use the viewer to view the film several times. By establishing the sequence of steps

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performed by Butterworth I was able to establish that the intended duration of the film was approximately one minute. The Kinora camera was hand-cranked, so film speed was variable; but a film one minute long consisting of 640 frames gives an average film speed of $10\frac{2}{3}$ frames per second (fps). If the film is shown at 12 fps it will last $53\frac{1}{3}$ seconds.

If each photograph were simply transferred on to ciné-film and shown at the modern standard speed of 24 fps, the result would be a double-speed sequence; if shown at 12 fps on a suitable projector, the film would flicker badly. It was therefore decided to treat the original speed as 12 fps, but to photograph each frame twice and show the ciné-film at 24 fps. This would enable the film to be seen without flicker at approximately the correct speed.

The Physics Photography Unit of the Department of Nuclear Physics undertook the filming, and thanks are due to Messrs. Cyril Band and Paul Flint for their work. The Museum of the History of Science was kind enough to allow its Kinora viewer to be borrowed for the filming. Filming was accomplished by removing the lens hood of the viewer and positioning a Beaulieu R16 ciné-camera in its place; then rotating the spool frame by frame, taking two pictures of each frame before moving to the next. The spring at the rear of the spool which pushes the frame in view onwards as the spool revolves is inherently too strong for the mechanism as the film reaches its end, and has worn a hole through the last two pictures in the sequence. The strength of the spring also bends the last dozen pictures as they are presented to the viewer, and the last half dozen are bent too much to allow the ratchet to hold them. The distortion of the last few frames is evident on the ciné-film, and the last six frames could not be filmed at all. The duration of the affected sequence is approximately one second. The film used was a low contrast black and white 16 mm Ilford FP4 Type 652 film rated 80 a.s.a.; copies of archival quality were made from the negative.

Documents accompanying the 'manuscript' throw some light on the spool's history and have led to the discovery of further spools. The spool was donated to the Library in 1972 by Dr. A. J. Croft, the grandson of Sir Alexander Kaye Butterworth, George Butterworth's father. When Butterworth was killed in 1916 a Miss Wigan (Wigan was the maiden name of Butterworth's mother) apparently wrote to the English Folk Dance Society asking for photographs or mementoes of Butterworth. Some still photographs were sent; these may be the ones incorporated into the album compiled by Butterworth's father, containing letters of condolence and other items relating to his son. The album is now in the

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Bodleian.⁵ The Society's reply of 15 September 1916 mentions the Kinora spool, and refers Miss Wigan to the Kinora company should she wish to order a second copy. Miss Wigan apparently wrote again, for on 20 September the Society sent her the Kinora spool with an accompanying letter. The spool remained in the family until 1972.

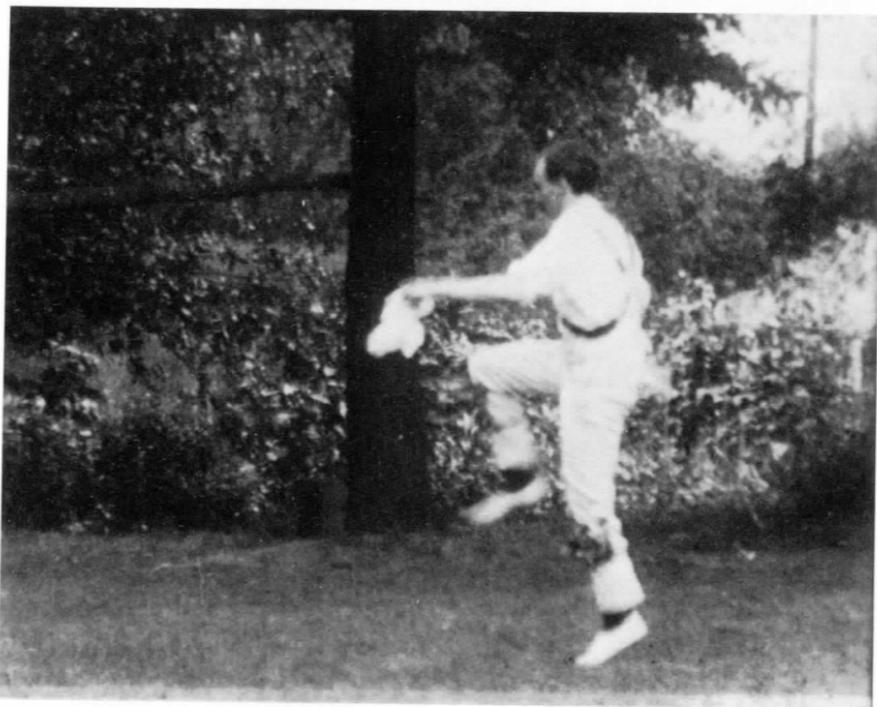


FIG. 2. Butterworth dancing, frame 99 of the original Kinora. He is performing the step known as a Sherborne 'gallery'.

One of the Society's letters mentions the existence of another spool. Investigation at the Vaughan Williams Memorial Library has revealed that at least seven Kinora spools were made on the same occasion:

- Spool no. 933 Butterworth dancing (side view).
- 934 Maud Karpeles dancing.
- 935 Maud Karpeles and Helen Kennedy dancing.
- 936 Missing.
- 937 Cecil Sharp, Butterworth, Karpeles and Kennedy dancing a country dance.
- 938 Butterworth (the Bodleian's film).
- 939 Maud Karpeles dancing.

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Spools 933-5, 937, and 939 are in the Vaughan Williams Memorial Library. All were taken by Gilman of Oxford, probably in 1912. All the people depicted were senior members of the English Folk Dance Society, and the occasion was obviously a major meeting in the Oxford area. Butterworth is wearing the costume of the Demonstration Team in the film, not of the local Oxford team, from which one may infer that the whole Demonstration Team was present at the occasion. A strong possibility is the meeting at Kelmscott on 20 June 1912, which Sharp and the Demonstration Team attended;⁶ if the film was as late as 1913, then Somerville College on 24 May is a possible date. Although it is very probable that only the Oxford team danced on that occasion, Gilman the photographer is known to have attended.⁷

A true ciné-film showing the Demonstration Team dancing was made at Stratford-upon-Avon in August 1912 for the Pathé Frères' *Animated Gazette*.⁸ All trace of this film has gone, leaving the Butterworth film and its fellow spools as the only records of their time.⁹

¹ C. J. Sharp, *The Morris book*, pt. iv (1911), p. 10.

² *British Journal Almanac* (1912), p. 1193.

³ A. Brown, 'Archival filming', *English dance and song*, vol. 38, no. 1 (1976), 28-9.

⁴ *British Journal Almanac* (1912), p. 1205.

⁵ MS. Eng. misc. c. 453.

⁶ *Witney Gazette* (29 June 1912), p. 5.

⁷ [English Folk Dance Society, Oxford branch], *Secretary's annual report for local branch* (1913).

⁸ 'Notes', *Journal of the English Folk Dance Society*, vol. 1, no. 1 (1914), 27.

⁹ The other Kinora spools mentioned have since been filmed using the technique described here.