

N° 10,150



A.D. 1912

Date of Application, 29th Apr., 1912
(Patent of Addition to No. 1642 of 21st Jan., 1911)
Complete Specification Left, 29th Oct., 1912
Complete Specification Accepted, 6th Feb., 1913

PROVISIONAL SPECIFICATION.

Improvements in Colour Kinematography and in Apparatus therefor.

I, COLIN NOEL BENNETT, of 9, Morrab Road, Penzance, Cornwall, Journalist, do hereby declare the nature of this invention to be follows:—

This invention relates to the method of taking kinematographic pictures for reproduction in colour, according to which two or more colour sensation records of the same movement phase are taken simultaneously one below another on a film at each exposure, the film being shifted a suitable distance for the purpose between the exposures. Such method is described in the Specification of my previous Patent No. 1642 of 1911, which the present invention represents an improvement in or modification of. In that specification it was further proposed to employ a battery of two or more lenses in conjunction with corresponding colour filters for the simultaneous taking of the colour sensation records constituting a set.

According to the present invention for the purpose of carrying out such a method I employ one lens for the simultaneous taking of two or more colour sensation records in conjunction with the colour filters, and I provide means whereby the separate images of the same movement phase to be impressed as colour sensation records on the film are transmitted through this lens on to the film and impressed thereon one above another. Such means may with advantage consist of a suitable arrangement of mirrors, adapted to catch the required number of separate images and to reflect the same through the lens and corresponding colour filters on to the film.

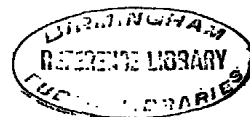
By way of example for two colour work I may employ in front of the lens a pair of mirrors set at an angle to each other and each adapted to receive an image of the subject, two other mirrors being suitably disposed to receive the respective images by reflection from the first mentioned mirrors and to reflect the same through the lens in such manner that the separate images are transmitted by the lens and impressed upon the film one above the other.

Or according to another arrangement I may employ a mirror set at a suitable angle to receive an image of the subject and to reflect the same on to two or more mirrors so arranged as to reflect a corresponding number of images of the subject through the lens on to the film in positions one above another.

It will be understood that these arrangements are only given by way of example and that any other suitable arrangement or means for the purpose may be employed.

As in the main patent, the film will be shifted between the exposures for a

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suitable distance or multiple of a single picture distance to enable the plurality of separate colour sensation records to be photographed upon it at each exposure.

Dated this 29th. day of April, 1912.

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COMPLETE SPECIFICATION.

Improvements in Colour Kinematography and in Apparatus therefor.

I, COLIN NOEL BENNETT, of 9, Morrab Road, Penzance, Cornwall, Journalist, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

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This invention relates to the method of taking kinematographic pictures for reproduction in colour, according to which two or more colour sensation records of the same movement phase are taken simultaneously one below another on a film at each exposure, the film being shifted a suitable distance for the purpose between the exposures. Such method is described in the Specification of my previous Patent No. 1642 of 1911, which the present invention represents an improvement in or modification of. In that specification it was further proposed to employ a battery of two or more lenses in conjunction with corresponding colour filters for the simultaneous taking of colour sensation records constituting a set.

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According to the present invention for the purpose of carrying out such a method I employ one lens for the simultaneous taking of two or more colour sensation records in conjunction with the colour filters, and I provide means whereby the separate similar images to be impressed as colour sensation records on the film are transmitted through this lens on to the film and impressed thereon one above another. Such means may consist of a suitable arrangement of mirrors, adapted to catch the required number of separate images and to reflect the same through the lens and corresponding colour filters on to the film.

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As in the main patent, the film will be shifted between the exposures for a suitable distance or multiple of a single picture distance to enable the plurality of separate colour sensation records to be photographed upon it at each exposure.

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According to one arrangement I may employ a device similar to that sometimes employed in stereoscopic cameras, consisting of a mirror set at a suitable angle to receive an image of the subject and to reflect the same on to two or more mirrors so arranged as to reflect a corresponding number of images of the subject through the lens on to the film in positions one above the other.

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The accompanying drawing illustrates diagrammatically an example of apparatus embodying the invention.

In this arrangement a mirror *c* is arranged in front of the lens *L* at a suitable angle to receive an image of the subject, and two mirrors *d* *d*¹ are arranged so as each to receive this image from *c* and to reflect these images through the lens on to the film in position one above another so that two pictures 1 and 2 are impressed upon the film at each exposure by means of one lens. *F* *F*¹ represent different colour filters, say red and green interposed in the paths of the rays of the respective images so that the simultaneous pictures represent different

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colour sensation records of the subject. It will be understood that the filters can be disposed at any desired part of the paths of the respective images.

The mirrors should be of the kind that is silvered on the front surface, in order to secure accurate definition.

- 5 It will be understood that the arrangement illustrated is only given by way of example and that any other suitable arrangement or means for the purpose of the invention may be employed.

10 Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. An improvement in or modification of the invention of the main Patent No. 1642 of 1911, consisting in the combination with a multiple film shift and one lens, of means for receiving two or more separate similar images to be
15 impressed as colour sensation records on the film, and for transmitting said images through the lens into positions one above another on the film, with interposition of colour filters in the path of the rays of the respective images, substantially as described.

2. Apparatus for the purpose specified in Claim 1, comprising mirrors adapted to receive the separate images and to reflect the same through the lens on to
20 the film in positions one above another in combination with corresponding colour filters substantially as described.

3. Apparatus for the purpose specified in Claim 1, arranged substantially as described with reference to the drawing.

Dated this 29th. day of October, 1912.

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MEWBURN, ELLIS & PRYOR,
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Chartered Patent Agents.

[This Drawing is a reproduction of the Original on a reduced scale.]

