

N° 24,873



A.D. 1912

(Under International Convention.)

Date claimed for Patent under Patents and Designs
Act, 1907, being date of first Foreign Appli- } 16th Nov., 1911
cation (in France),

Date of Application (in the United Kingdom), 30th Oct., 1912
(Patent of Addition to No. 3220 of 1912, dated 11th Feb., 1911)

At the expiration of twelve months from the date of the first Foreign Appli-
cation, the provision of Section 91 (3) (a) of the Patents and Designs Act,
1907, as to inspection of Specification, became operative

Complete Specification Accepted, 27th Mar., 1913

COMPLETE SPECIFICATION.

Improvements in and relating to Objectives of Three Colour Cinematographic Projection Apparatus.

We, SOCIÉTÉ DES ÉTABLISSEMENTS GAUMONT, of 57, rue St. Roch, Paris, in the Republic of France, 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;—

- 5 This invention relates to an improvement or a modification in the construction of objectives for three colour cinematographic apparatus forming the subject of our Application for Letters Patent No. 3220 dated February 8th 1912.
- The present invention has for its object the provision of improved means for regulating or adjusting the objectives.
- 10 The invention will now be described with reference to the accompanying drawings and afterwards fully pointed out in the appended claims.
- In the accompanying drawings;—
- Figure 1 is a general elevation of the device.
- Figure 2 is a horizontal section thereof, and
- 15 Figure 3 is a cross section.
- In a frame F connected with the kinematograph by an appropriate fitting which permits of its displacement along the axis S T (Figure 1) the objective B (Fig. 3) is rigidly fixed.
- Each of the objectives A and C is mounted in the frame F by means of the
- 20 pivots D and E (Figure 3) around which it is able to rotate.
- The nut G of the screw D is capable of slight displacement in its housing as indicated in Figure 2 in such a manner as to permit of a displacement of the objective along its optical axis.
- Screws H and J permit of locking this nut when once its position has been
- 25 determined.

The rear portion of the objective bears against a stop screw K under the influence of the snug M and of the spring L fixed upon the frame F. The other extremity of the spring bears against the point E which engages in a V-shaped

[Price 8d.]



Improvements in Objectives of Three Colour Cinematographic Projection Apparatus.

groove marked I (Figures 2 and 3) the extremities of the rod R which rotates in its central position in a bearing S fixed to the frame F are threaded, the thread of one extremity being right-handed and the other extremity left-handed; they are screwed into two bars O P jointed to the extremities of a rod N.

The bars O P carry two stop screws *t* which bear upon the rear parts of the objectives A and C and springs *r* arranged between them and the central objective B tend to apply the objectives A and C to these screws.

In order to regulate the objectives the whole of the optical system is displaced in such a manner that the image produced by the central objective B is in focus.

Then each of the objectives A and C is displaced along its axis by means of the movable nut G until the corresponding image is clear; at this moment the nuts D are locked.

The rear portions of the objectives A and C are then acted upon by means of the screws K in such a manner that the three images of one and the same point are located upon one and the same vertical line.

It is then sufficient to act upon the screws *t* in order to cause the objectives A and C to pivot in the proper direction around the pins D and E and thus cause the images to register perfectly.

This regulation should be effected once for all, the variable intervals between the images due to a variation in the pitch being compensated for exclusively by means of the button R which by means of the inversely threaded screws that it controls causes the intervals between A and B, and B and C, of the objectives to vary to an equal extent.

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

1. In the improved kinematograph for projections in natural colours by the three-colour process as described and claimed in Patent Specification No. 3220, dated 8th February 1912 constructional modifications in the means for regulating the objectives which render it possible when once the image of the central objective is in focus to displace along their axis the outer objectives until their images are clear, then to act upon their rear portion in such a manner as to bring the three images into a vertical line and finally to cause the outer objectives to pivot so that the images are absolutely in register.

2. Objectives for three colour cinematographic projection apparatus constructed arranged and adapted to operate substantially as described and shewn.

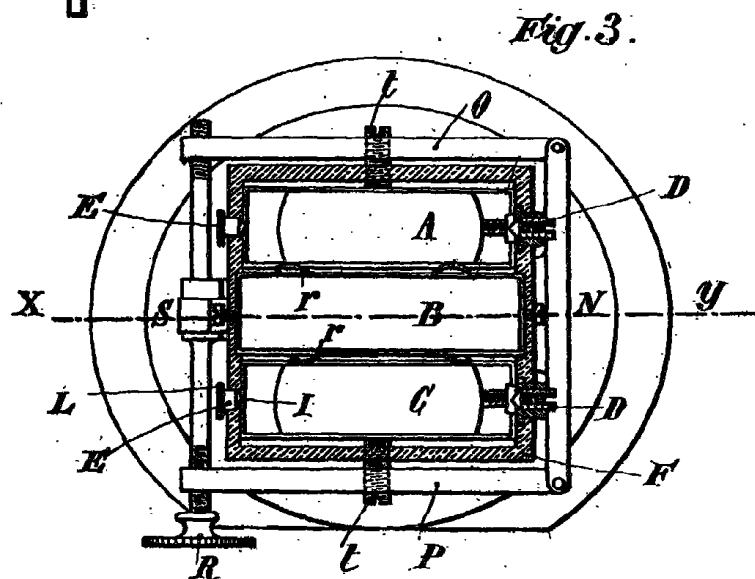
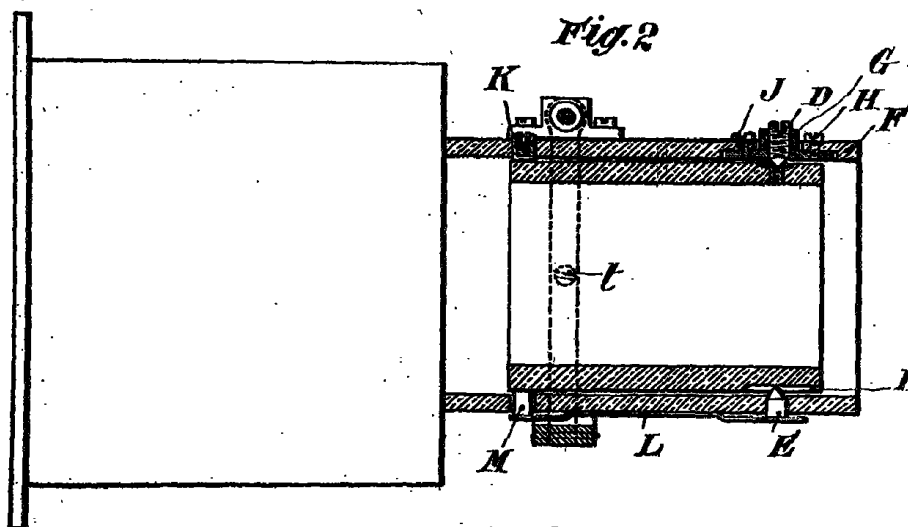
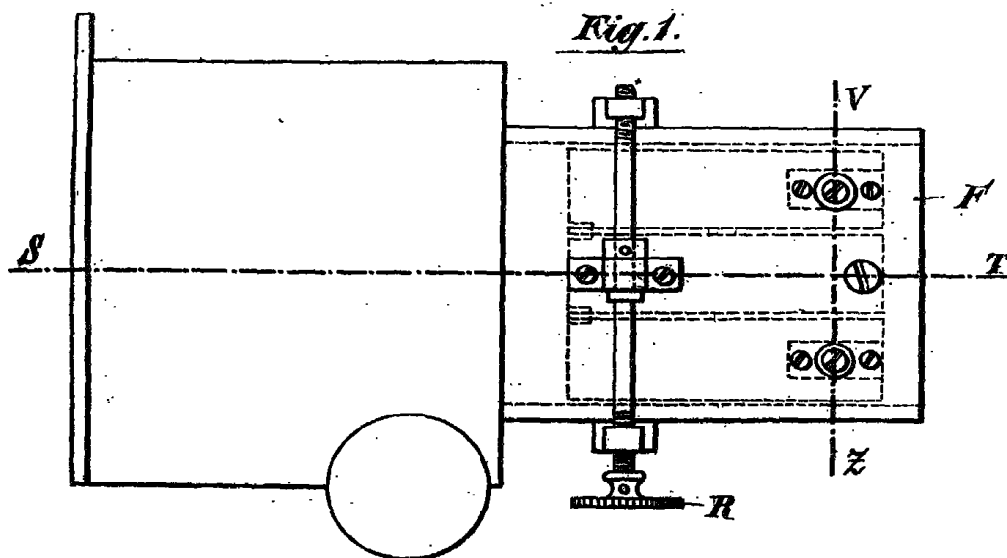
Dated this 30th day of October, 1912.

HASELTINE, LAKE & Co.,
7 & 8, Southampton Buildings, London, England, and
60, Wall Street, New York City, U.S.A.,
Agents for the Applicants.

A.D. 1912. OCT. 30. N^o. 24,873.

(1. SHEET)

THE COMPLETE SPECIFICATION OF SOC. DES ETABLISSEMENTS GAUMONT.



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