

## PATENT SPECIFICATION



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230,576

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### PROVISIONAL SPECIFICATION.

#### A System of Transmitting Views by Means of Telegraphy or Wireless Telegraphy.

We, JOHN LOGIE BAIRD, of The Lodge, Helensburgh, Scotland, a British subject, WILFRED ERNEST LYTTON DAY, of Hollydene, 15, Cholmeley Park, Highgate, N. 6, British subject, do hereby declare the nature of this invention to be as follows:—

This refers to a system for transmitting views by telegraphy or wireless telegraphy.

A number of lenses are arranged to form a single spiral round a disc behind which is a light sensitive cell with a small aperture.

The distance of the aperture from the disc is such that the image thrown by each lens in turn comes to a focus in the plane of the aperture.

As the disc revolves the first lens throws a line of light and shade, corresponding to the outside strip of the picture onto the cell then the next lens which is slightly nearer the centre of the disc throws another strip of light

and shade corresponding to another strip of the picture onto the cell. The next lens which is again slightly nearer the centre of the disc throws another strip and so on until the last lens which is nearest the centre of the disc is reached and the whole picture has been traversed.

The fluctuating current from the light sensitive cell is after amplification transmitted to the receiving station where it lights a lamp placed in a position corresponding to the light sensitive cell at the sending end behind another disc with a similar spiral of lenses revolving synchronously with the disc at the sending station. The varying light of the lamp is projected in a series of lines onto a screen and the lines of light and shade composing the picture are reproduced.

Dated the 28th day of December, 1923.  
JOHN LOGIE BAIRD.  
WILFRED ERNEST LYTTON DAY.

### COMPLETE SPECIFICATION.

#### A System of Transmitting Views by Means of Telegraphy or Wireless Telegraphy.

We, JOHN LOGIE BAIRD, The Lodge, Helensburgh, Scotland, a British subject, and WILFRED ERNEST LYTTON DAY, Hollydene, 15, Cholmeley Park, Highgate, N. 6, a British subject, 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:—

Relates to a system of transmitting views by means of telegraphy or wireless telegraphy of the kind in which the

view is explored and reproduced by means of spirally-arranged apertures in discs rotated synchronously at the two stations. According to our invention, such apertures are each fitted with a lens and a light sensitive cell is arranged with a small aperture in the plane of the image projected by the lenses at the transmitting station, and a source of light varied by the transmitted current is arranged in the corresponding position at the receiving station.

Price

In the drawing A is the object to be transmitted B is a disc, C1—C8 are lenses arranged to form a spiral round the disc. D is a light sensitive cell in line with the object A. As the disc revolves, the outside lens C1, throws a line of light and shade corresponding to the outer strip of the image on to the cell D which is in the focal plane of the image. C2 which is slightly nearer the centre now causes the next strip of the image to traverse the cell, C3, which is still nearer the centre, causes the third strip to traverse the cell, and so on until C8 is reached and the cell has been traversed by the whole image.

Only eight lenses are shown for convenience in drawing but there may be any number of them. The fluctuating current from the light sensitive cell is transmitted to the receiving station where it controls a source of light placed behind another disc rotated synchronously with the transmitting disc and with a spiral of lenses similarly placed to the lenses in the transmitting disc.

The source of light is in a position corresponding to that of the light sensi-

tiv cell at the transmitting station. As the disc revolves the varying light is thrown by the lenses onto a screen in a series of adjacent strips, thus reproducing the image transmitted.

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:—

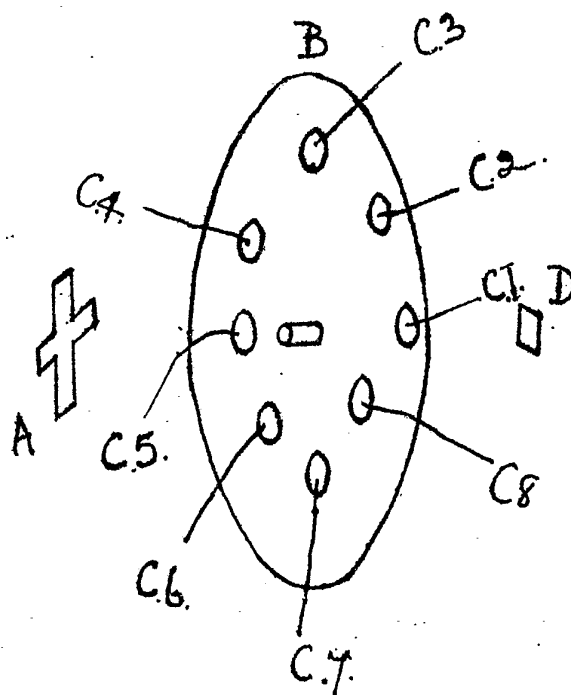
A method of the kind described for transmitting views by means of two discs, one at the transmitting station and the other at the receiving station, revolving in synchronism, characterised by each disc carrying a similar series of lenses arranged in a spiral the light sensitive cell at the transmitting station being so disposed as to receive the images formed by the lenses of successive parallel strips of the picture to be transmitted and the source of light at the receiving end being correspondingly disposed substantially as described.

Dated the 24th day of October, 1924.

JOHN LOGIE BAIRD.

WILFRED ERNEST LYTTON DAY.

2nd Edition



[This Drawing is a full-size reproduction of the Original.]