

PLATE IV

The model turned sideways to the camera

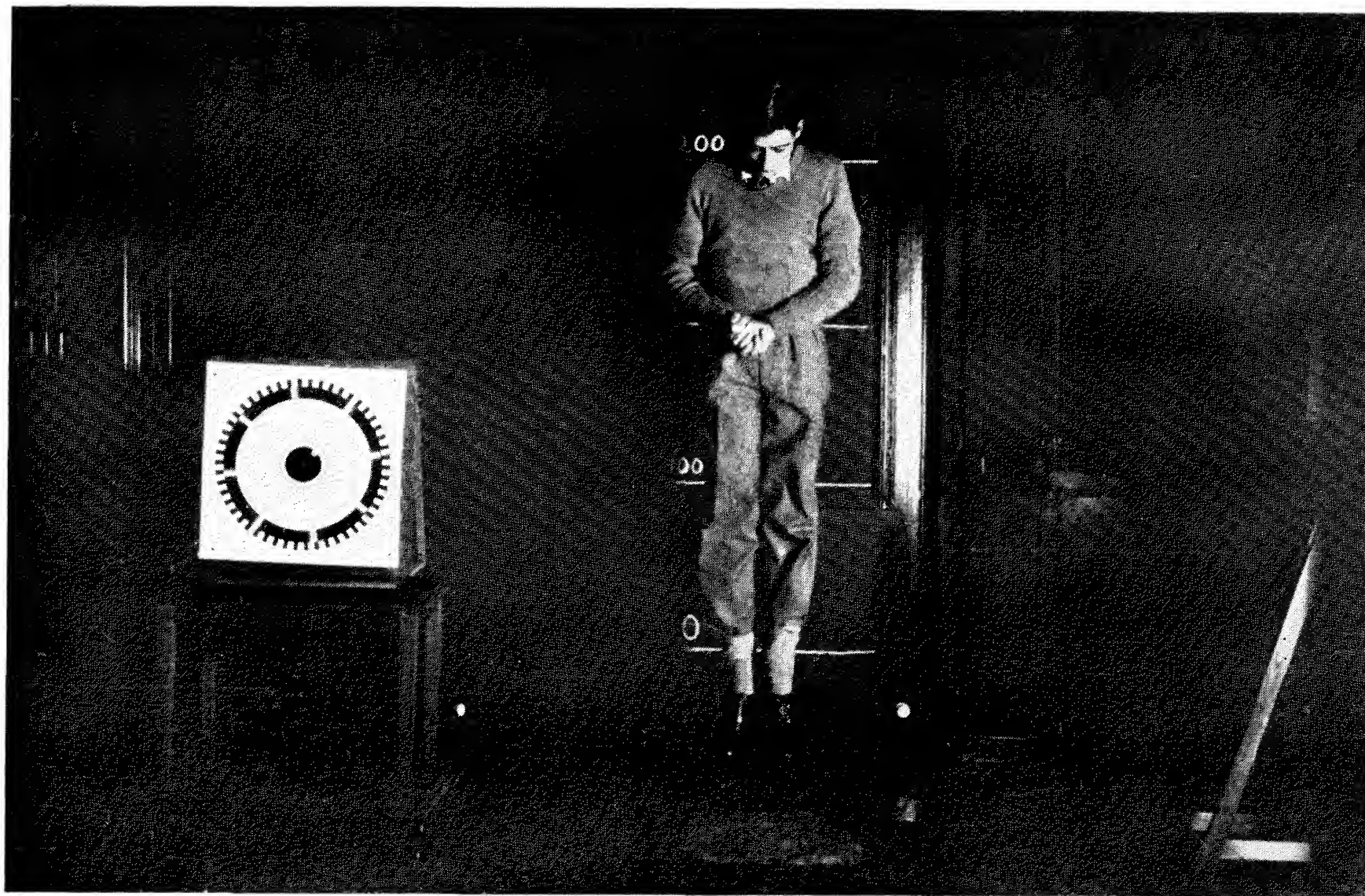


PLATE V

The model with hands clasped together

Plate III the model was asked to keep his toes well up during the jump, resulting in a very easy position in which he seems to be hanging in mid air with no trace of movement. The exposure here is slightly shorter than the average, being a little less than 0.01 second. In Plate IV the model is turned sideways to the camera, and Plate V shows him with his hands clasped together.

The photographs were all taken on the same day, the results not being seen until some days later. The operators had had no special experience in the photography of moving objects, nor was any special apparatus used, except for the timing disk, the flash bulbs being those commonly used at séances.

It is suggested that these photographs, especially Plate III, are freer of movement and more suggestive of genuine levitation than any of the published séance-room productions. It is therefore concluded that it would be quite *possible* to produce the published pictures by fraudulent means in any case where the flash was ignited by the medium himself or by an accomplice; though this is not, of course, in any way proof that they were so produced.

The thanks of the Society are due to Mr D. S. Robertson, who kindly consented to act as model, and to Miss J. Robertson, who was one of the operators.

Photographic details, and a description of the timing disk are given in the Appendix.

APPENDIX

Photographic Details :

Lens : Leitz "Elmar :", $f=50$ mm. Aperture $f/5.6$.

Distance, figure from Plate, 6 metres.

Distance, figure from background screen, 60 cms. (approx.).

The Plates are enlarged from the negatives $4\frac{1}{2}$ times linear. Negatives on 35-mm. film (two frames per picture); Coating, Ilford "Selochrome" special fine grain orthochromatic.

Exposure by single flash bulb, unscreened, in large white cardboard reflector. Bulbs, G.E.C. "Sashalite" photoflash, m.s. fitting, fired by 6-volt (mains transformer) A.C. circuit.

The Timing Disk :

The outer (fixed) scale comprises 100 equal sectors, alternately black and white. The inner (rotating) disk bears 8 radial arms, the width of each, where it cuts the scale, being exactly $1/100$ of the circumference. The disk is rotated by means of an electric motor controlled by a centrifugal governor, the speed adjusted to

1 revolution per second by means of a stroboscopic disk illuminated by a neon tube in the 50-cycle circuit. The speed was checked several times during the course of the work, and was found to be very constant.

If n be the number of sectors of the fixed scale covered by the image of one of the radial arms of the rotating scale, the time of exposure in seconds (E) is given by

$$E = \frac{(n - 1)}{100}.$$

By examining the image of the disk with the low power of a microscope, the exposure can be fairly accurately measured.