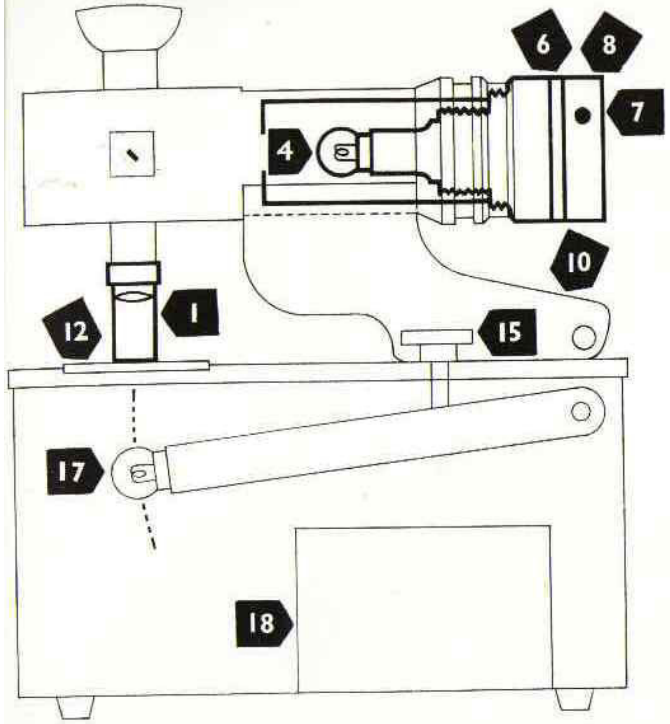
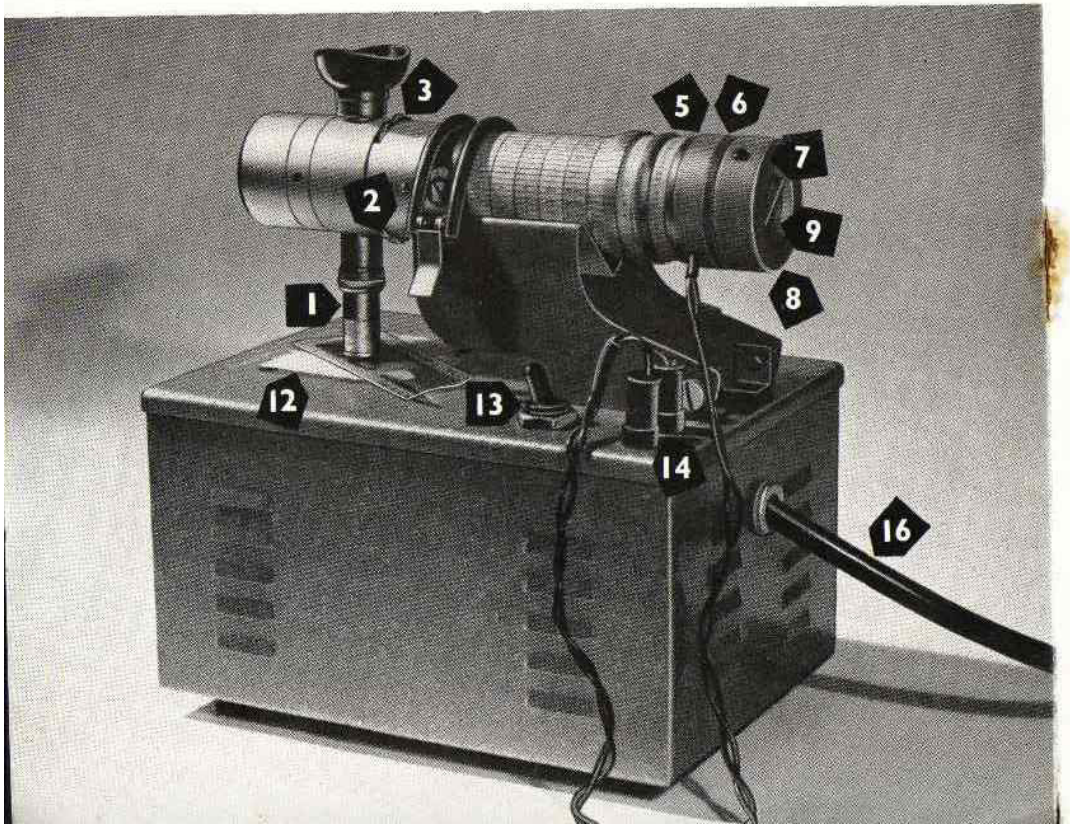


Figs. 1 and 2. *General arrangement*

Key to numbers :

1. *Supplementary lens attachment*
2. *Range shift disc*
3. *Colour matching disc*
4. *External supply adaptor*
5. *Base ring of external supply adaptor*
6. *Locking ring*
7. *Button switch*
8. *Operating ring*
9. *Rheostat control*
10. *Cradle*
12. *Diffuser*
13. *Switch for illuminator lamp*
14. *Plugs for photometer lamp supply*
15. *Zero adjusting screw*
16. *Mains lead*
17. *Illuminator lamp*
18. *Transformer*



the base of the illuminator. Any variations in mains voltage thus produce equal relative variations of output from the lamps; it is thus unnecessary to read and adjust the galvanometer in the photometer during the progress of densitometric work.

To set up the S.E.I. Photometer to measure densities of transparencies

1. Make sure that your electricity supply is A.C. 50 cycles/sec. Find out the nominal mains voltage. If the mains voltage is not 240 volts the connections to the illuminator transformer should be altered as described on page 9.

2. Mount and clamp the S.E.I. Photometer in the cradle of the illuminator so that the telescope points vertically downwards at about the centre of the diffuser. In this position the cradle should just occupy the scale space between the rotating end and the metal housing at the other end of the Photometer (Figs. 2 and 3).

3. Slip the supplementary lens attachment over the telescope. Note that the telescope lens itself should be pushed in as far as it will go and, for measuring the density of a transparency, the aperture in the side of the attachment must be closed by the sleeve provided (Fig. 2).

4. Set the knurled cradle stop screw so that the end of the supplementary attachment cannot accidently break the negative or diffuser window (Fig. 5).

5. Unscrew the operating ring at the end of the photometer (Fig. 2) and withdraw the battery container and lamp.

6. Insert the external supply adaptor to take the place of the battery container which you have just removed, and screw this adaptor into place (Fig. 6).

7. Screw the operating ring into the end of the adaptor, locking it with the ring provided (Fig. 2) so that the switch button is in a comfortable operating position.

8. Connect the two plugs from the adaptor to the sockets provided on the illuminator platform (Fig. 2).

9. Connect the illuminator mains lead (Fig. 2) to the supply point via a suitable earthing type (3-pin) plug.

The instrument is now ready for adjusting the zero.