

point presses against a steel plug in the above-mentioned projecting arm of the prism table, itself flint-hard and *optically polished*.

The telescope and collimator are both rigidly fixed to the cast-iron base, and the whole is screwed to a strong cast-iron tripod. The object glasses of both telescope and collimator are of $11\frac{1}{4}$ inches (285 mm.) focal length, and $1\frac{1}{4}$ inches ($31\frac{1}{2}$ mm.) clear aperture.

It will be seen that the design is extremely strong and simple; and the accuracy is as great as that obtainable by the use of the very highest class of divided circle spectrometer (unless recourse is had to careful line-to-line measurements with a micrometer eyepiece or some similarly laborious process), whilst in point of ease, speed, and convenience the "Wavelength" form is vastly superior.

The focussing of the telescope is obtained by the milled ring, which can be seen in the figure on the body of the telescope. By the turning of this ring the object glass is made to move by a carefully protected helical mechanism, the eyepiece remaining always fixed. By this means a more accurate focussing adjustment is obtained, without the liability to a sideways shift of the lines due to the focussing, which it is impossible entirely to avoid in the older form.

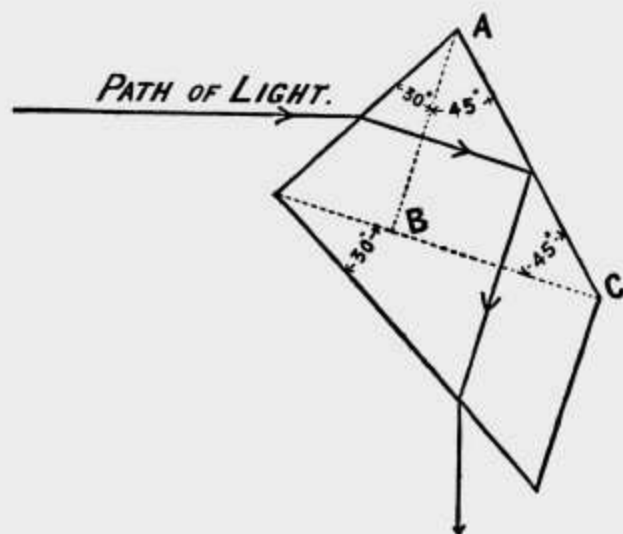


Fig. D 2.



Fig. D 3.

Prices:—

Wavelength Spectrometer, prism of 1.65 refractive index for D, accurately calibrated from 385 $\mu\mu$ to 800 $\mu\mu$ ¹	£25 0 0
With denser prism, 1.74 refractive index for D, and correspondingly increased accuracy of calibration, the calibration being from 390 $\mu\mu$ to 800 $\mu\mu$ ¹	27 15 0

¹ With the prism of 1.65 refractive index for D, the Helium line 3888.8 and the Lithium line 8127 can both be seen. With the prism of 1.74 refractive index for D, the Helium line is not visible, but the Calcium lines 3968.6 and 3933.8, and the Aluminium lines 3961.7 and 3944.2 are visible in the light of a carbon arc fed with lime and alumina; while at the red end the Lithium line is easily visible.

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