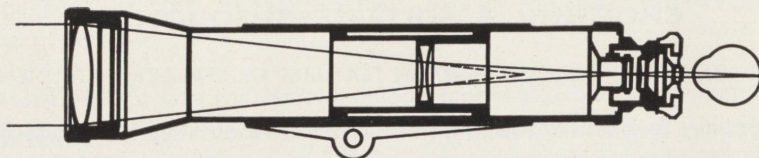


FEATURES OF SPECIAL INTEREST

Internal Focussing Telescope



INTERNAL FOCUSSED TELESCOPES are common to all our theodolites and levels, whereby focussing is effected by means of an auxiliary lens within the telescope. The advantages of this telescope are :—

1. The overall length of the telescope remains constant and the balance of the instrument is preserved.
2. The telescope is dust and damp proof.
3. Collimation errors are practically eliminated.
4. The telescope is anallatic, i.e., requires no constant for stadia work "distance measurement."
5. Compared with the external focussing telescope, the length of the telescope is reduced without loss of magnification.

THE RESOLVING POWER OF A TELESCOPE.

The distance at which the .01 ft. graduations on a Levelling Staff can just be detected is generally considered to be a measure of the resolving power of the telescope. The greater the distance, the better the resolution.

In so far as this criterion is affected by inherent optical characteristics, our telescopes give the maximum possible resolving distance due to the care taken both in optical design and in manufacture and assembly of the lenses.

High magnification is of no benefit if obtained at the expense of image brightness. Allowance has to be made for good luminosity in unfavourable light conditions. The following table gives the value for our surveying instruments under ideal conditions and with an average observer :—

Instrument Cat. No.	Resolving Distance
A. Optical Theodolite	950 feet
A. 21, 25, 26	1,100 feet
A. 68	800 feet
A. 352, 368, 510, 520, 530	1,000 feet
A. 500	750 feet

It should be pointed out that these are the distances at which the black and white divisions just merge into a uniform grey pattern. The distances at which the staff divisions may be read comfortably, may be taken as just less than half the tabulated values.

Quote Stanley's 'A' Catalogue