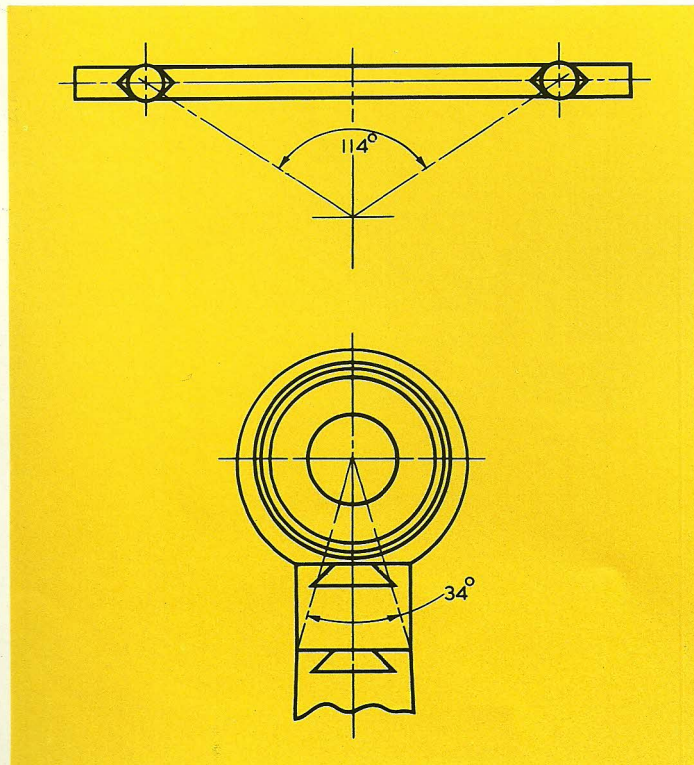


FOCUSING MECHANISM

The focusing mechanism is a great advance on the old rack and pinion, which experience has shown to be the part of a microscope which receives the most wear and needs the most frequent servicing.

The coarse focusing of the Metalette is a lever and scroll mechanism which has been tested in prototype instruments to over one million focusing movements without showing appreciable wear. This mechanism cannot run down under weight and requires the minimum of service maintenance. The fine adjustment is by fine screw and lever and is just as reliable as the coarse. Both controls are very smooth and precise in operation and allow very sensitive focusing of the instrument.



BALL BEARING FOCUSING SLIDES

Ball bearing slides are well known to give a much better response to the focusing mechanism of a microscope than the older dovetail slides, but unless the proportions of the slide are suitable, rigidity is not so good. The slides of the Metalette are exceptionally wide and close to the optical axis, and they employ balls of much greater diameter than is usual, so that the whole design gives a standard of rigidity not approached in older microscopes.

The illustration shows how the exceptionally wide slides of the Metalette subtend the wide angle of 114° at the optical axis, an important feature which gives rigidity to the microscope. In conventional microscopes with the usual bearings this angle is often only 34° .