

## MANUFACTURING PRINCIPLES AND PROCESSES

Stanley theodolites and levels and other instruments, are made throughout at the Eltham Factory passing through the following departments :—

**FOUNDRY**, where considerable importance is attached to the composition of the castings that are used. The alloys are the result of many years of experiment and experience to determine the best mixtures for each particular purpose. Every precaution is taken to avoid inclusion of impure metal, and porous or defective castings are never used.

**MACHINE SHOP**, where processes of milling, turning and drilling by modern machine tools are carried out. Tubing has been discarded wherever possible in favour of castings ; for instance, in telescopes, which are cast bored and broached to assure perfect alignment of the optics. As many components as possible are cast in one piece to ensure simplicity, stability and reliability.

**DIVIDING DEPARTMENT.** Here the most precise machines are employed. Machines which are used in dividing, from the simplest ring of the Prismatic Compass to the glass circle for the most expensive Theodolite.

**ASSEMBLY DEPARTMENT.** In this Department instruments are assembled by highly skilled male labour, and components receive a second examination to guard against assembly of defective parts.

**ADJUSTING AND TESTING DEPARTMENT.** Here are employed craftsmen of great skill, adjusting and testing to the highest standards of perfection.

**INSPECTION.** Before leaving the Works all instruments undergo a very thorough and systematic examination in this Department which, for this purpose, is equipped with special testing apparatus, to ensure that "Stanley" instruments are second to none in quality and performance.