and an end view. Sometimes an idea can be conveyed more clearly if an object is shown as if it was cut in half, called a section drawing.

Paradoxically, as few lines as possible are made on the drawings. Only enough lines are drawn to give the necessary information, so that there can be no misinterpretations. However, the drawings must be complete so the mechanic doesn't lose time hunting information that should have been included.

Preliminary drawings are usually made in pencil on paper; in final form they appear in pencil or ink on transparent paper, so that they can be duplicated by a process known as "blueprinting". Just as any number of photographic prints can be made from one negative, so can any number of blueprints be made from one transparent drawing. This is done by exposing the drawing and the specially coated blueprint paper to light. Where the lines of the drawing prevent the light from affecting the coating, the coating washes off, leaving white lines with the background in blue.

The drawings never leave the drafting room—only the blueprint copies go out for use on the job. If the blueprints are lost or torn, they can be replaced without the necessity of redrawing. Since some of the more complicated drawings require weeks to prepare, the advantage of using

blueprints is obvious.

A man doesn't have to be a skilled artisan to realize that planning ahead of the actual work makes plenty of sense. Laymen are likely to be awed by the actual mechanics of engineering drafting—the complicated drawing instruments; the clean lines, perfect angles and precise lettering of the finished drawing. This display of skill and precision is not for "show"; the accuracy of the drawing is of vital interest to the engineer who must use it.



Fred Sentelle is shown in the blueprint room, preparing to expose the specially coated blueprint paper and the drawing to light.

Erwin Schranz and Fred Hoffman are checking over blueprints which are filed in this department.

John E. Fuller, Bryan Combs and John Van De Motter are shown making drawings for the Engineering Department.

