SIMPLE WOODWORK PROJECTS (JOINTS)

Woodwork joints are used in assembling and fastening two or more pieces of wood together. The art and skill of joining wood is called *joinery*. Common wood work joints include the following: butt joints, bridle joints, halving joints, mortise and tenon joints, and tongue and groove joints.

Butt Joints

This is the simplest joint and the easiest to use. Butt joint is used in roof, prefabricated house construction work and simple box construction. In butt joint, the squared-end of the member fits against the flag or edge of the other member. Butt joint is not a very strong joint because the end grain of timber is the weakest part of wood for joining.

Halving Joints

This is the joint where half of the wood to be joined is cut away to five a flush surface. There are variations of halving joints such as corner, cross and tee joints. Halving joints are used for frames of doors, tables, photograph frames, chairs, etc.

Mortise and Tenon Joints

These are made by forming a recess or mortise in one piece of wood, to receive a projection or tenon on another piece of wood. The mortise and tenon joint is one of the most common joints used in woodwork construction. It is the strongest form of joint in wood construction. There are many forms of mortise and tenon joints. These include common or through, haunched, and bareface mortise and tenon joints. They can be altered to meet the requirements of a particular job.

Mortise and tenon joints are used in general joinery work. They are found in the leg and rail construction such as in tables, chairs, benches, and doors.

Bridle Joints

Bridle joints are similar to mortise and tenon joints, but with an increased bearing surface. They are used in roof construction, especially for making tie beams.

Dovetail Joints

Dovetail joints are the strongest form of corner joints used in cabinet work and other box-like constructions. These joints are made of one or more dovetails cut in one piece and projections called pin on the other piece. The pin fits into the socket. The interlocking of the pins and sockets provide adequate gluing area. There are various forms of dovetail joint. These are single dovetail joint, common/through dovetail joint, and lap dovetail joint.

Tongue and Groove Joints

This is a joint usually used to join planks to increase the width. The surface of one plank provides a tongue and the other the groove into which the tongue fits. The tongue and groove joint is used in flooring boards, packing cases, table tops and wall cladding.

Classes of Joints

Generally, joints used in construction work are classified into three main groups, namely:

1. **Widening Joints.** These are joints used in joining wood edge-to-edge to produce wider boards.
2. **Angle or Box Joints.** These are joints used to fix together pieces of wood with faces to form right angles.
3. **Framing Joints.** These are joints used in construction of wood members joined end-to-end.