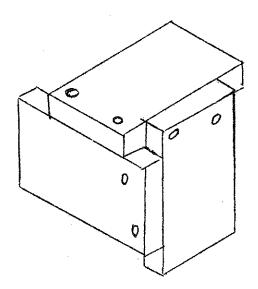
### WOODWORK

THE JOB: To Make a Three-way joint

Tools: Try square, cross cut saw, smooth or jack plane, claw hammer

Materials: Lumber: 1 pc. 1" x  $3\frac{1}{2}$ " x 1'-7" No. 1 Com., D.F., S4S Nails: 6 7d box.



## Procedure:

- 1. Secure materials from stockroom.
- 2. Square up the stock if necessary.
- 3. Layout three pieces  $l'' \times l'' \times 6"$  on the stock allowing for the thickness of the saw kerfs and a little extra to allow for planing.
- 4. Saw the three pieces to size and plane ends.
- 5. Mark location of nails. See that nails are staggered and take precautions to avoid splitting the wood.
- 6. Nail the three pieces together. Make sure the assembly is square.
- 7. Write your name and laboratory hour on the exercise.
- 8. Present the job to your instructor for grading.

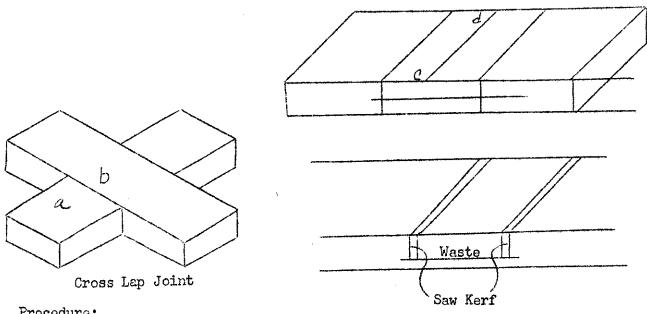
# WOODWORK

The Job: To make a Cross Lap Joint

Tools: Try square, marking gauge, cross cut saw, wood chisel, mallet,

pocket knife.

Materials: Two 1" x 1 5/8" x 5" Douglas Fir



#### Procedure:

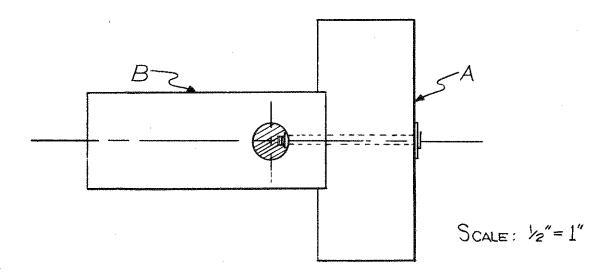
- Secure materials from the stockroom.
- Square up the stock if necessary.
- 3. Mark the face side of each piece of stock.
- Scribe line c-d across the face of piece "a" and across the reverse side of piece "b".
- 5. Lay out one-half the width of piece "b" on each side of line c-d on piece "a".
- Lay out one-half the width of piece "a" on each side of line c-d on piece "b".
- Square the lines a little more than one-half way across the edges of 7. each piece.
- Set the marking gauge at half the thickness of the stock and scribe lines along each edge indicating the depth of dado.
- Make saw kerfs just inside the lines marked, so as to cut in the waste stock.
- 10. Remove the waste material with a chisel and mallet. Chip a little at a time. Use a paring motion to true up the surface.
- Press the two pieces together. They should fit securely without nails or glue.
- 12. Have your instructor check and grade the job.

#### WOODWORK

The Job: To make a drawbolt joint

Tools: Try square, marking gauge, back saw, wood chisel, brace, auger bit, crescent wrench, pocket knife.

Materials: Two 2" x 2" x 5", Douglas Fir; one 1/4 x 3 1/2 in., machine bolt; one washer to fit.



#### Procedure:

- 1. Secure materials from stock room.
- 2. Square up the stock if necessary.
- 3. Lay out a dado midway between the ends, across one side of piece A, making the depth 3/16 of an inch, and the width equal to that of the stock.
- 4. Make saw kerfs just inside of the lines marked so as to cut in the waste stock.
- 5. Remove the waste material with a chisel. Chip off a little at a time. Use a paring motion for truing up the surface.
- 6. Press the two pieces together.
- 7. Locate a point on piece A opposite the center of the rabbet. Bore a 5/16 inch hole through piece A and into piece B.
- 8. Locate the center for the hole on the side of piece B by laying the bolt along line C-D and marking at the end of the bolt. Bore the hole. Use an auger bit large enough for the nut. Bore just deep enough to permit placing the nut on the bolt. Do not run the auger bit entirely through the block.
- 9. Place the nut and bolt in position with a washer under the head and tighten.
- 10. Have your instructor check and grade the job at this stage.
- 11. Dissemble the job. Return the bolt, washer and the two pieces of material to the instructor.