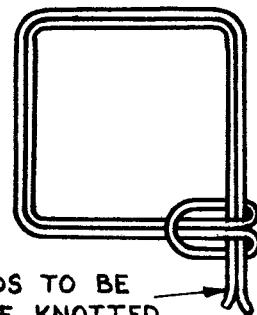


LACING FORMS.

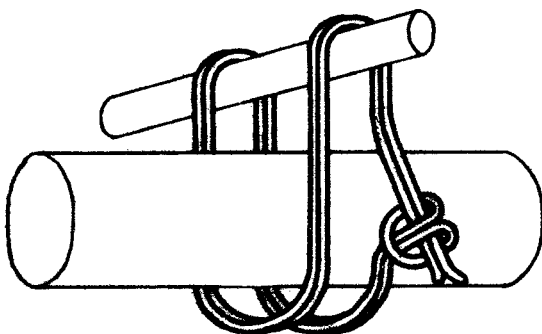
This E.I. covers the methods to be used when lacing and fixing forms to apparatus.

1. METHODS OF TYING FORMS TO BRACKETS.

1.1 When necessary cable forms are tied to brackets with a standard tie as shown in Fig. 1a. In tying the form the twine (Fig. 1b) is drawn tight and the two ends are taken in opposite directions between the cable form (Fig. 1c) and the bracket and knotted with a reef knot out of sight.

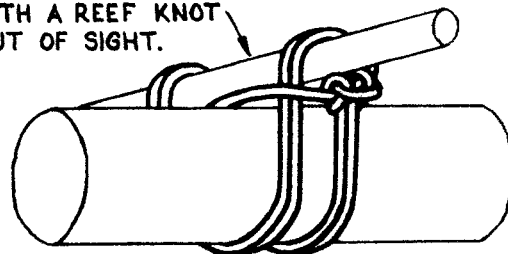


(a) Standard Tie.



(b) Tying Form.

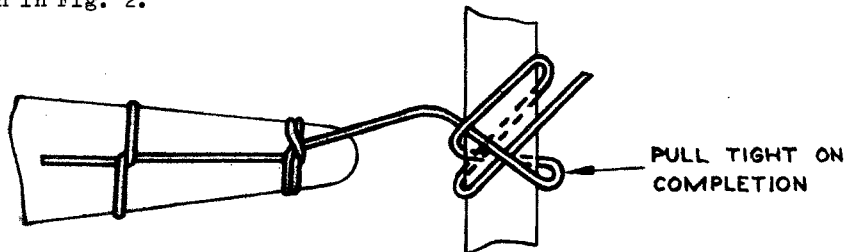
THE TIE FINISHED OFF WITH A REEF KNOT OUT OF SIGHT.



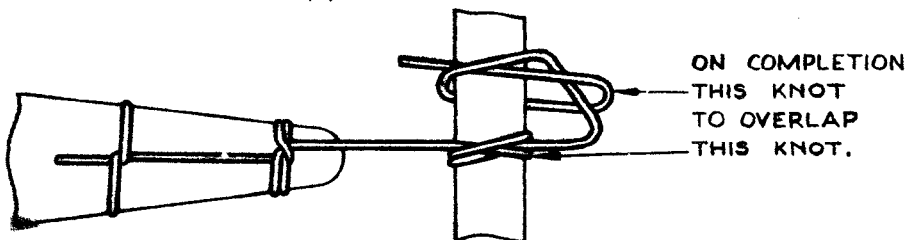
(c) Form Tied.

FIG. 1. TYING FORMS TO BRACKETS.

1.2 If the cable form end does not reach or pass over a bracket, it must be tied as shown in Fig. 2.



(a) Starting the Tie.



(b) Completing the Tie.

FIG. 2. TYING END OF FORMS TO BRACKETS.

2. METHOD OF LACING FORMS.

2.1 All forms must be neatly laced with a waxed twine unless otherwise specified. The following sizes of twine (or the nearest equivalent) shall be used:-

| | | | | | | | | | | | | | |
|-------|-----|-------|---|-------|----|----|--------|----------|----|-----|---|-----|--------|
| 11/12 | ply | twine | - | forms | up | to | 1 1/2" | diameter | or | 151 | - | 600 | wires. |
| 9 | " | " | - | " | " | " | 5/8" | " | " | 21 | - | 150 | " |
| 6 | " | " | - | " | " | " | 7/32" | " | " | 1 | - | 20 | " |

Where the correct ply is not available, multiples of the above sizes (or their equivalents) may be combined to obtain the nearest correct size.

2.2 Starting Lacing. Lacing must start with a clovehitch as shown in Fig. 3 and a running stitch must hold the wires firmly in position. Take care with the running stitch to see that it is done correctly and that it is always in the same direction.

The loose end of the twine must pass underneath the vertical loops as shown in Fig. 3. Normally the stitches will be 1 1/2" apart.

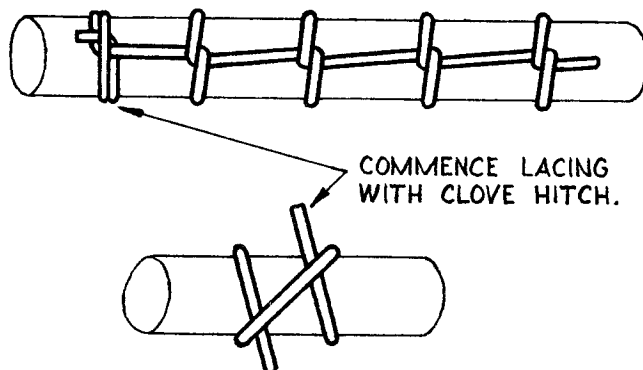


FIG. 3. START OF LACING.

2.3 Joining Twine. Twine is joined during lacing as shown in Fig. 4.

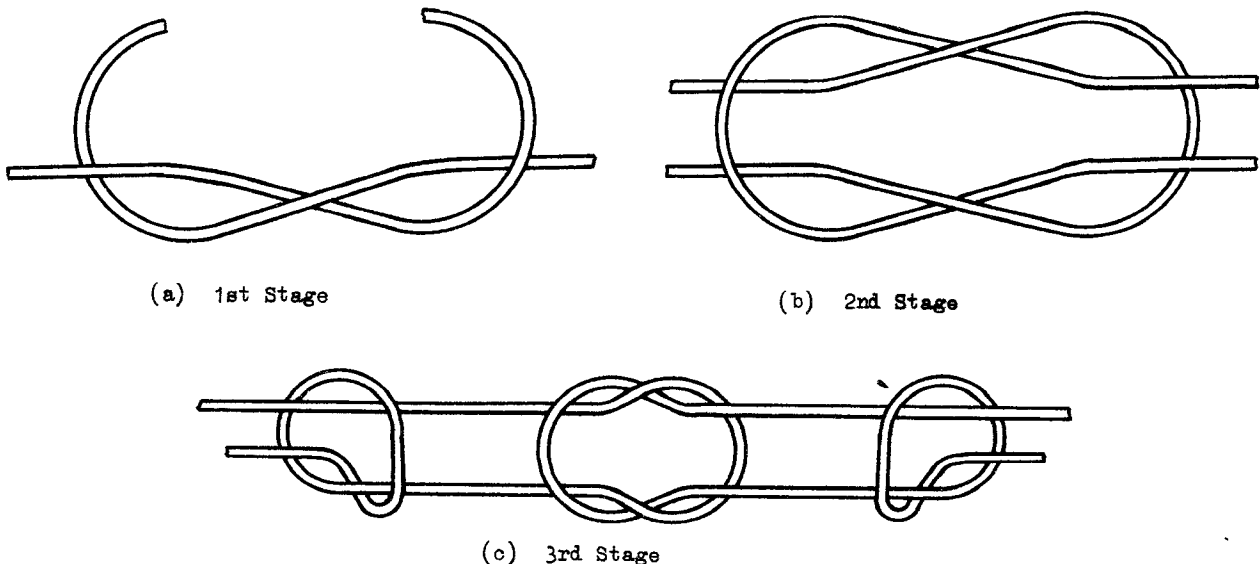


FIG. 4. JOINING LACING TWINE.

2.4 Lacing Precautions. Under no circumstance will lacing twine be drawn so tight that the insulation of the wires is damaged or impaired.

The longitudinal stitches must be in a straight line and out of sight after the form has been installed. The method of finishing off a running stitch is in Fig. 5.

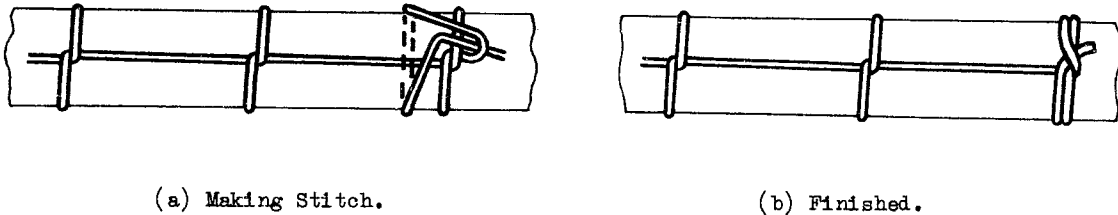


FIG. 5. FINISHING OFF RUNNING STITCH.

The ties around the form must be at right angles to the form and, in the case of large bulky forms, the twine must not be used to pull the form into shape. The form must be either worked into shape with the hands or it may be gently "hammered" with a round piece of wood.

The forms must not be hammered at the bends, but all bends must be definitely determined by three stitches as shown in Fig. 6.

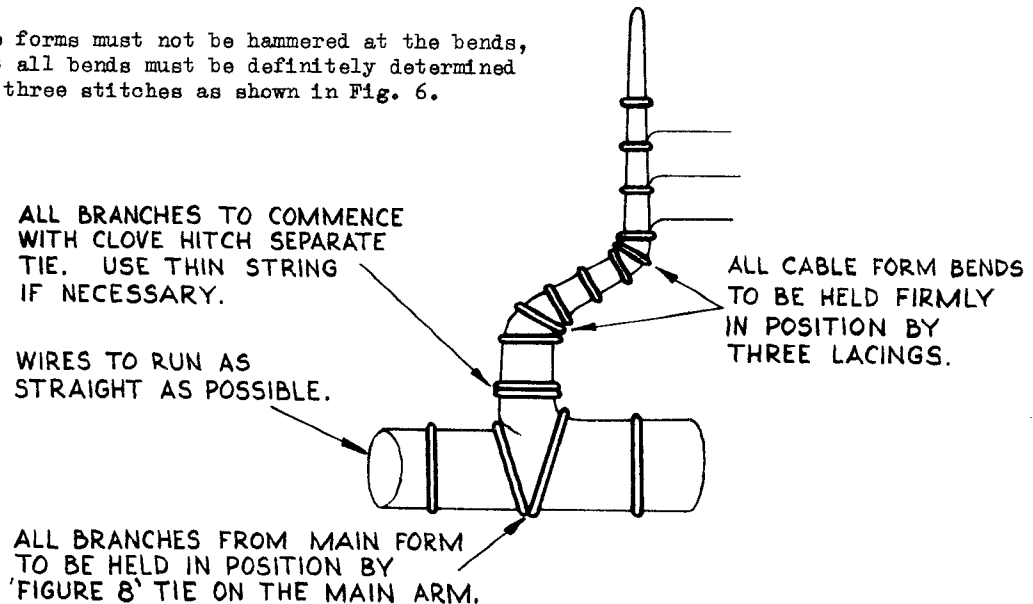


FIG. 6. BRANCH LEAVING MAIN FORM.

All branches from the main form are to start with a separate tie; sometimes it will be necessary to use thinner string on the branches when they are composed of a few wires.

Branches from the main form must be laced as shown in Figs. 7 and 8 according to the particular type of form which is being laced.

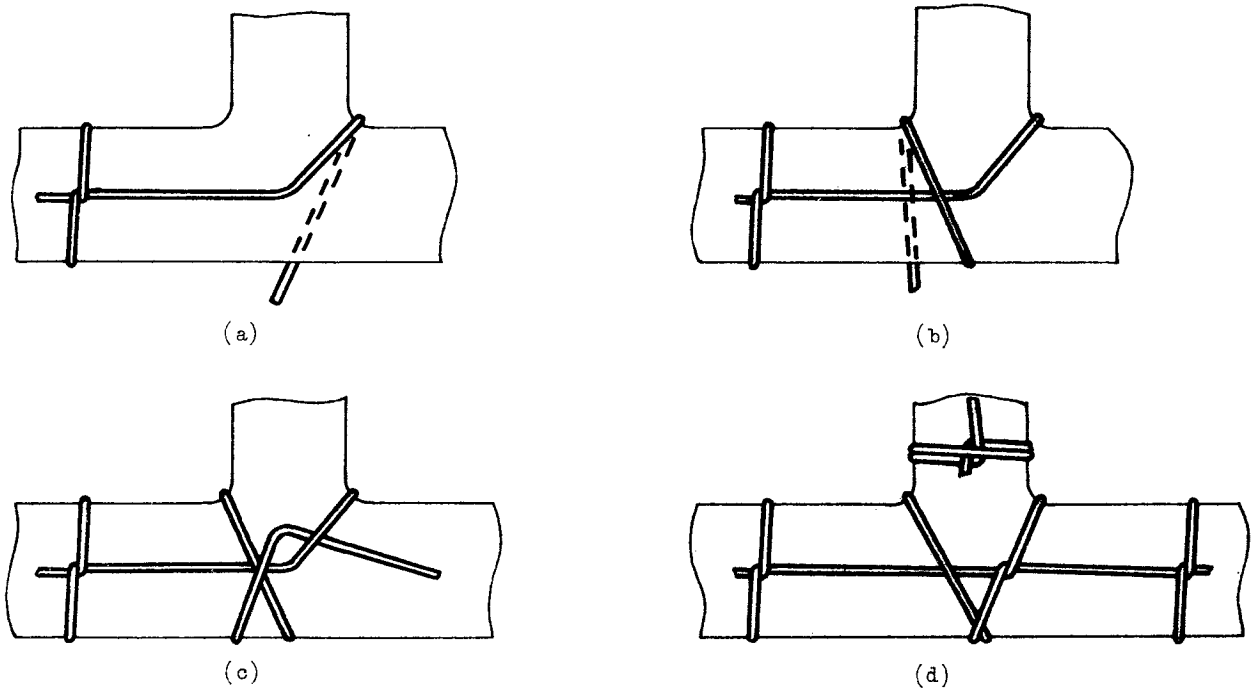


FIG. 7. LACING BRANCHES - ALTERNATIVE METHODS OF TYING OFF.

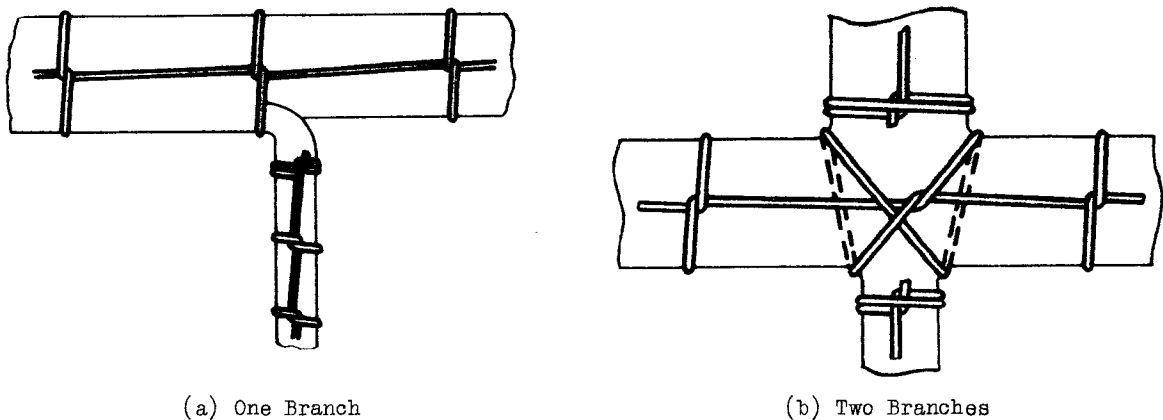


FIG. 8. LACING BRANCHES.

The wire groups of a cable form must run as straight as possible, and care taken to avoid lacing kinked wires into the form. The twist in pairs, etc., shall be maintained and the groupings left undisturbed.

Cable forms or wiring forms must NOT BE SHELLAC VARNISHED.

3. LACING SPECIAL FORMS.

3.1 Shelf Lacing. Lacing of a formed cable feeding a shelf must be suitably spaced to coincide with the "Take Off" points of stringers. The whipping on the triples must be retained to the point where the stringer leaves the form and the laced form must be tied to the insulated posts provided along the rear of each shelf. See Fig. 9.

3.2 Bank Multiple Form. The lacing of bank multiple forms is shown in Fig. 10.

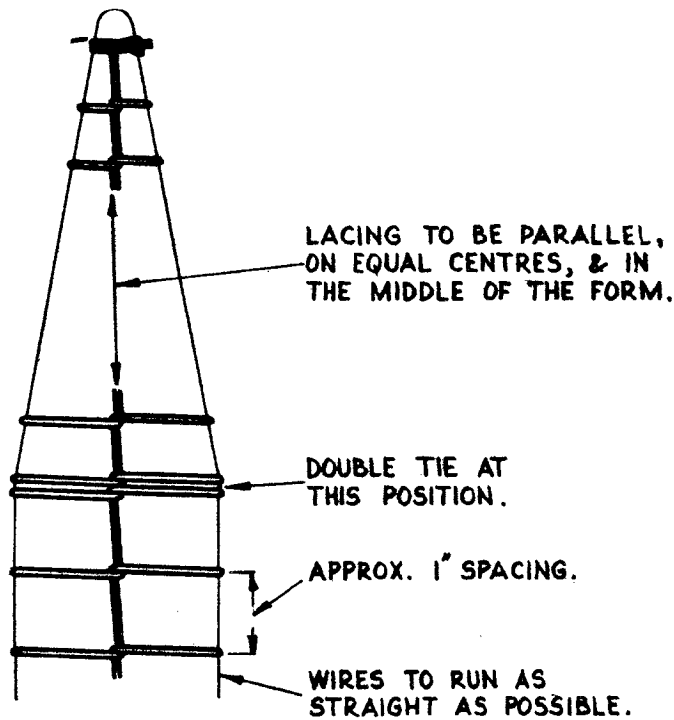


FIG. 9. SHELF LACING.

(Note:- (1) Stringer "take off" not shown.
(2) Spacing of stitches to suit "take off" points of stringers.)

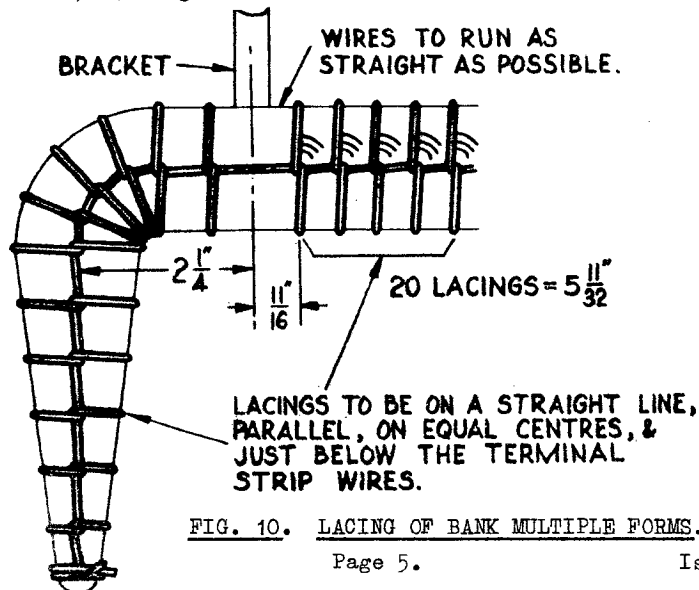


FIG. 10. LACING OF BANK MULTIPLE FORMS.

- 3.3 Key Shelves. The lacing of a form serving keys and lamps, etc., on key shelves must be made with two strands of the lacing twine indicated in para 2.1.

At any change of direction of the form, the stitches must be spaced at not more than half-inch centres.

All other stitches along straight sections of the form must be spaced at approximately $1\frac{1}{2}$ inches, a stitch being provided approximately at every stringer junction. Where stringers leave the form from opposite directions, a lacing stitch must be put through the centre line at the point where the stringers cross each other.

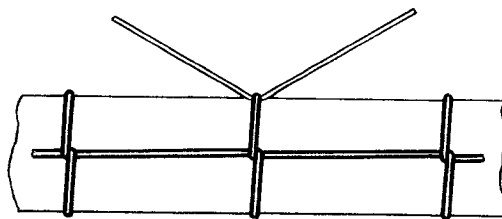


FIG. 11. LACING OF KEY SHELF FORM.

- 3.4 Jack Strips. The lacing of a form feeding to a jack or lamp strip must be made with 6 ply lacing twine of one strand. The stitches will be inserted at the centre line of each jack or lamp terminating point. Lacing stitch must be tied off with a clovehitch at the end of the form.

END.