

**BELL SYSTEM PRACTICES**  
**Outside Plant Construction**  
**and Maintenance**

**SECTION G51.120.2**  
**Issue 1, October, 1955**  
**AT&TCo Standard**

## **SUSPENSION STRAND**

### **DEAD ENDING—TYPICAL ARRANGEMENTS**

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#### **1. GENERAL**

1.01 This section covers typical arrangements for dead ending suspension strand. For conditions not covered in these arrangements, the same general principles as herein illustrated should be followed.

1.02 At corner poles where the strand is dead ended in each direction or at any location where the electrical continuity of the suspension strand is not maintained, a bond of No. 6 ground wire, bonding ribbon or suspension strand shall be connected across the strands.

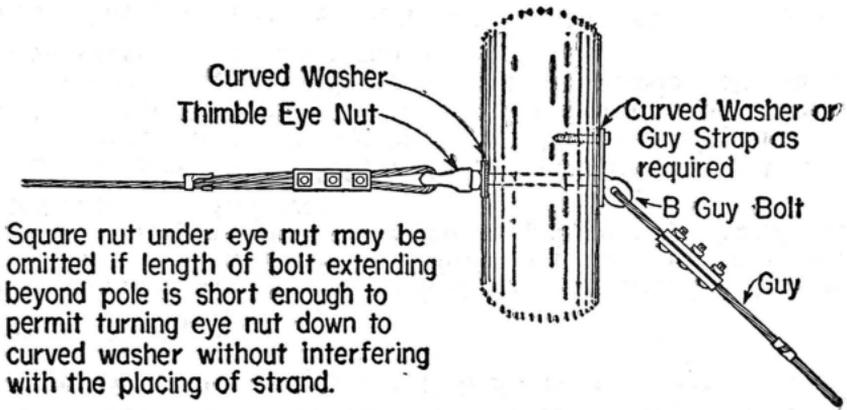
1.03 The use of the strandvise instead of the guy clamps is satisfactory for any of the arrangements illustrated. Available sizes of strandvises and installation methods are included in another section.

#### **2. DEAD ENDING STRAND**

2.01 When dead ending suspension strand, the hardware used is determined by the size of the guy strand or the suspension strand whichever is the larger.

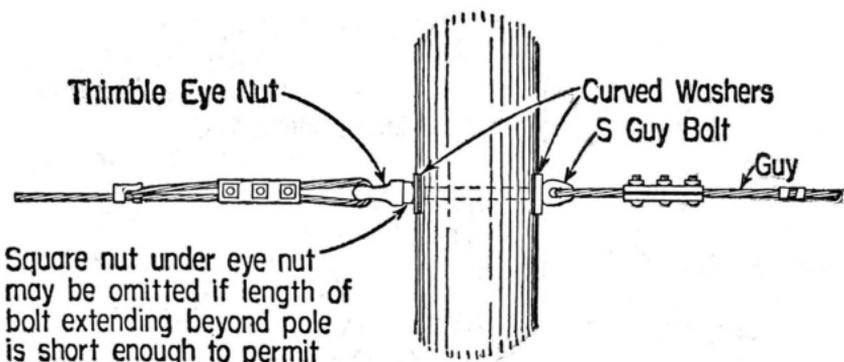
2.02 Where the lead/height of the guy is 1-1/4 or less, use a B guy bolt and the associated hardware as shown in the following table.

Size of Larger Strand (Pounds)	Size of B Guy Bolt (Inches)	Type of Washer or Guy Strap at Eye End of Bolt	Type of Curved Washer at Threaded End of Bolt
6,000	5/8	B Curved Washer	B
10,000	3/4	B Guy Strap	E
16,000	1	B Guy Strap	C
25,000	1	L Guy Strap	C



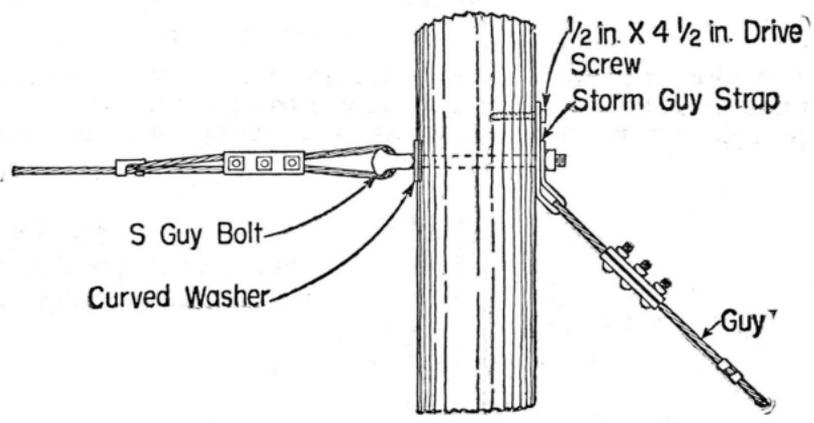
2.03 Where the lead/height of the guy is more than 1-1/4 use an S guy bolt and the associated hardware as shown in the following table.

Size of Larger Strand (Pounds)	Size of S Guy Bolt (Inches)	Type of Curved Washer at Each End of Bolt
6,000	5/8	B
10,000	3/4	E
16,000	1	C
25,000	1	C



Thimble Eye Nut  
 Curved Washers  
 S Guy Bolt  
 Guy  
 Square nut under eye nut may be omitted if length of bolt extending beyond pole is short enough to permit turning eye nut down to curved washer without interfering with the placing of strand.

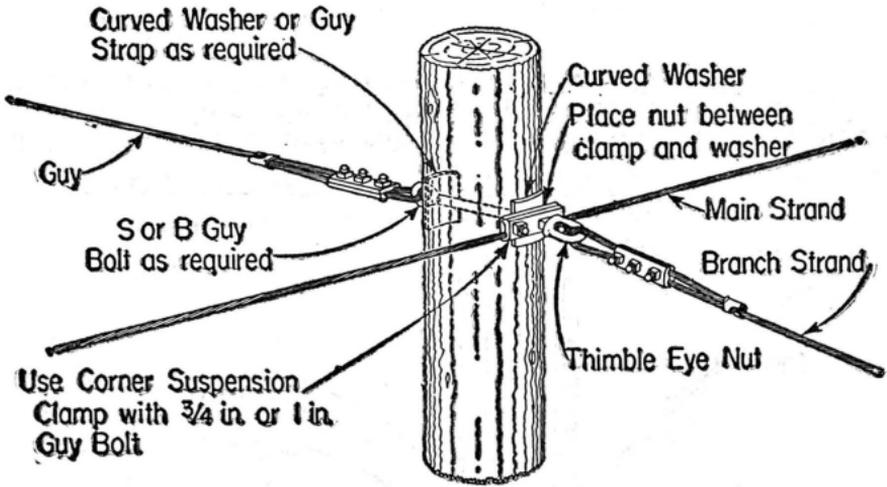
2.04 Where the lead/height of the guy is 1-1/4 or less and the size of the larger strand does not exceed 10,000 pound strand the following arrangement may be used.



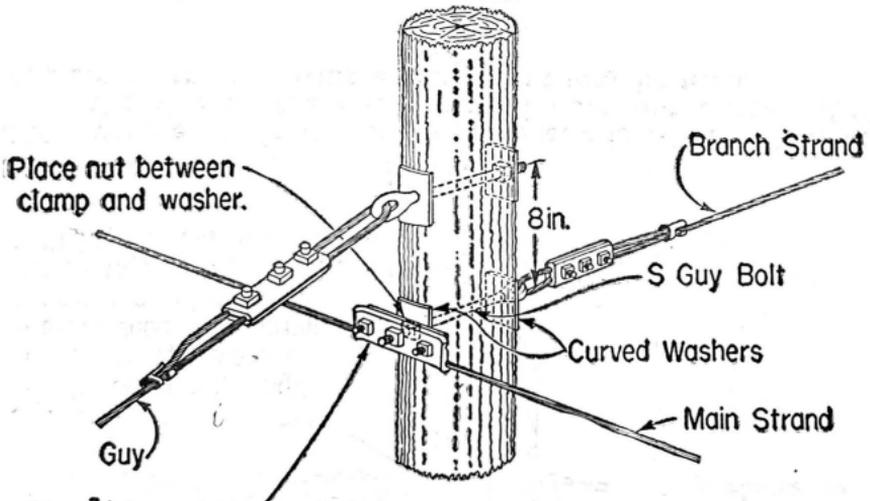
1/2 in. X 4 1/2 in. Drive Screw  
 Storm Guy Strap  
 S Guy Bolt  
 Curved Washer  
 Guy

### 3. BRANCH STRAND TERMINATIONS

3.01 Where the main cable is located on the same side of the pole as the branch cable termination, dead end the suspension strand for the branch cable as follows:

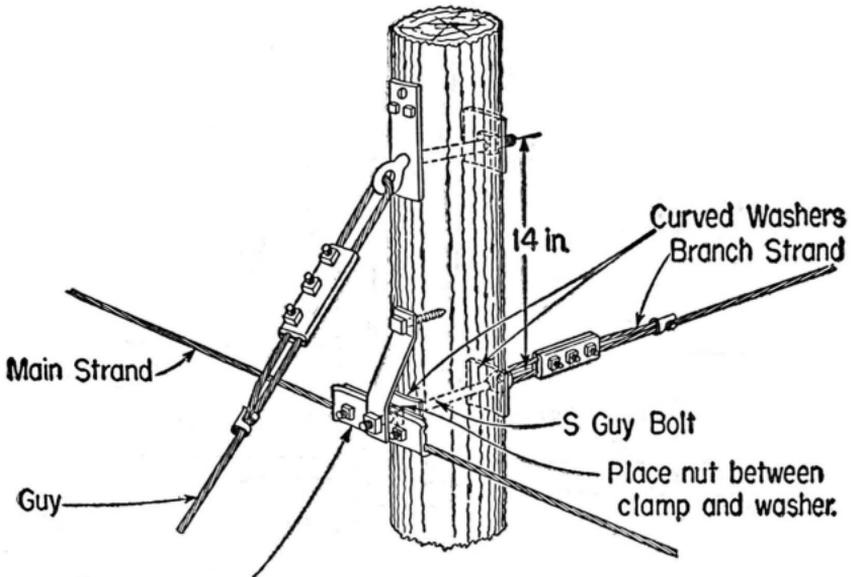


3.02 Where the main strand is located on the side of the pole opposite to the branch cable termination, dead end the suspension strand for the branch cable as shown.



For  $\frac{3}{4}$  in. and 1 in. guy bolts use Corner Suspension Clamp as illustrated.

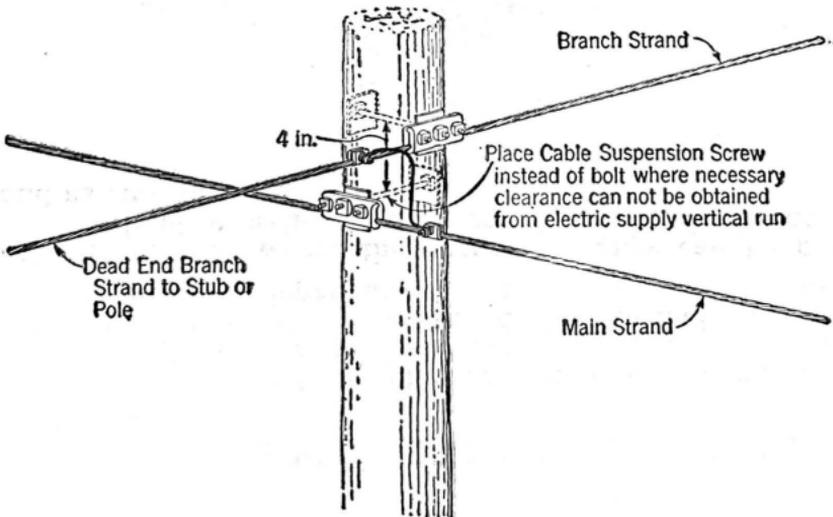
For  $\frac{5}{8}$  in. guy bolts, use 3-Bolt Cable Suspension Clamp



For  $\frac{3}{4}$  in. and 1 in. guy bolts,  
use Corner Suspension Clamp  
as illustrated.

For  $\frac{5}{8}$  in. guy bolts, use  
3-Bolt Cable Suspension Clamp.

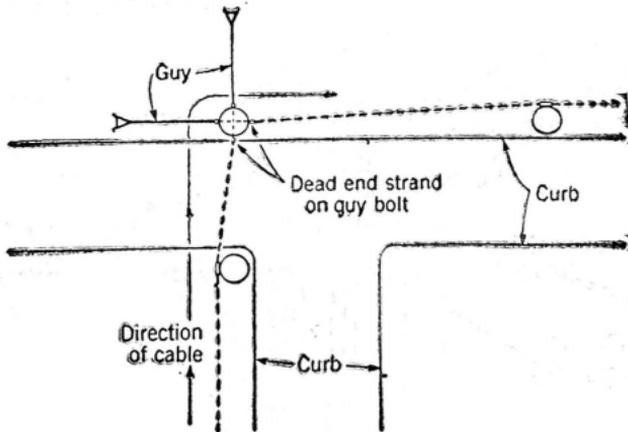
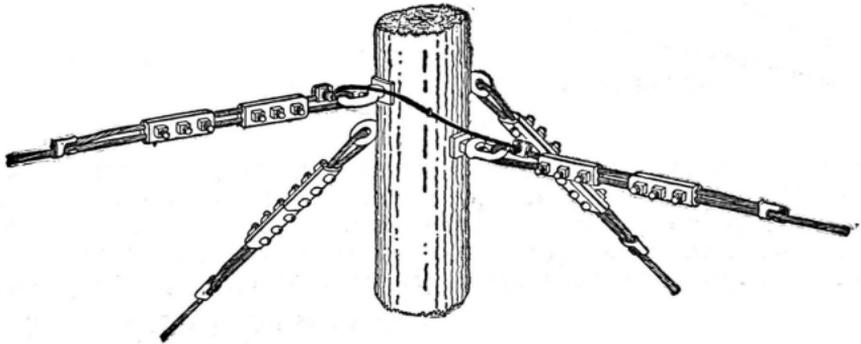
3.03 On poles where a branch cable is to be terminated and satisfactory clearances (on jointly used poles) or anchorages (on all poles) cannot otherwise be obtained, the suspension strand for the branch cable may be carried past the junction pole and dead ended on a stub or another pole as shown.



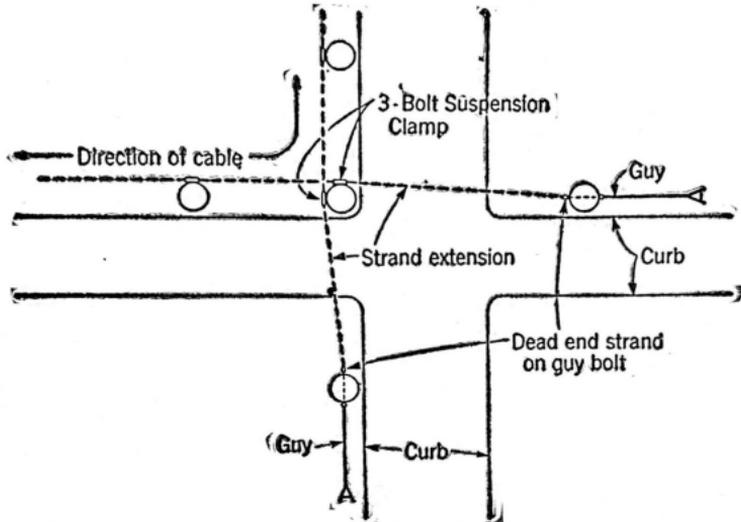
#### 4. CORNER POLES WHERE THE PULL EXCEEDS 50 FEET

4.01 Where the pull at a corner pole would be more than 50 feet, the strand from each direction may be dead ended at the corner pole or extended through and dead ended at an adjacent pole, depending on the conditions at the corner.

4.02 At corners where the supporting guys can be placed without crossing streets or highways, dead end the strand as shown.



4.03 At corners where supporting guys would have to cross streets or highways, extend the strand through in each direction.



4.04 At corners where an electric supply vertical lead on the pole extends to or below the level of the suspension strand attachments, the strand from one or both directions may be extended through, as shown in Paragraph 4.03, to obtain the necessary clearances.