

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

**SECTION G21.145.1**  
**Issue 1, August, 1955**  
**AT&T Co Standard**

**PLACING POLES**  
**SOFT SOIL BRACES**

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**1. GENERAL**

1.01 This section and a new section entitled, Placing Poles—"H" Fixtures, replace Issue 1 of G21.145. This section has been revised to provide additional information on placing poles with platform supports, to make other minor changes and to remove the general information concerning "H" fixtures.

1.02 The fixtures and construction described in this section are for use where the soil conditions or the loads to be supported are such that the usual type of single pole construction will not afford the required stability.

**2. SOFT SOIL AND SWAMP CONSTRUCTION**

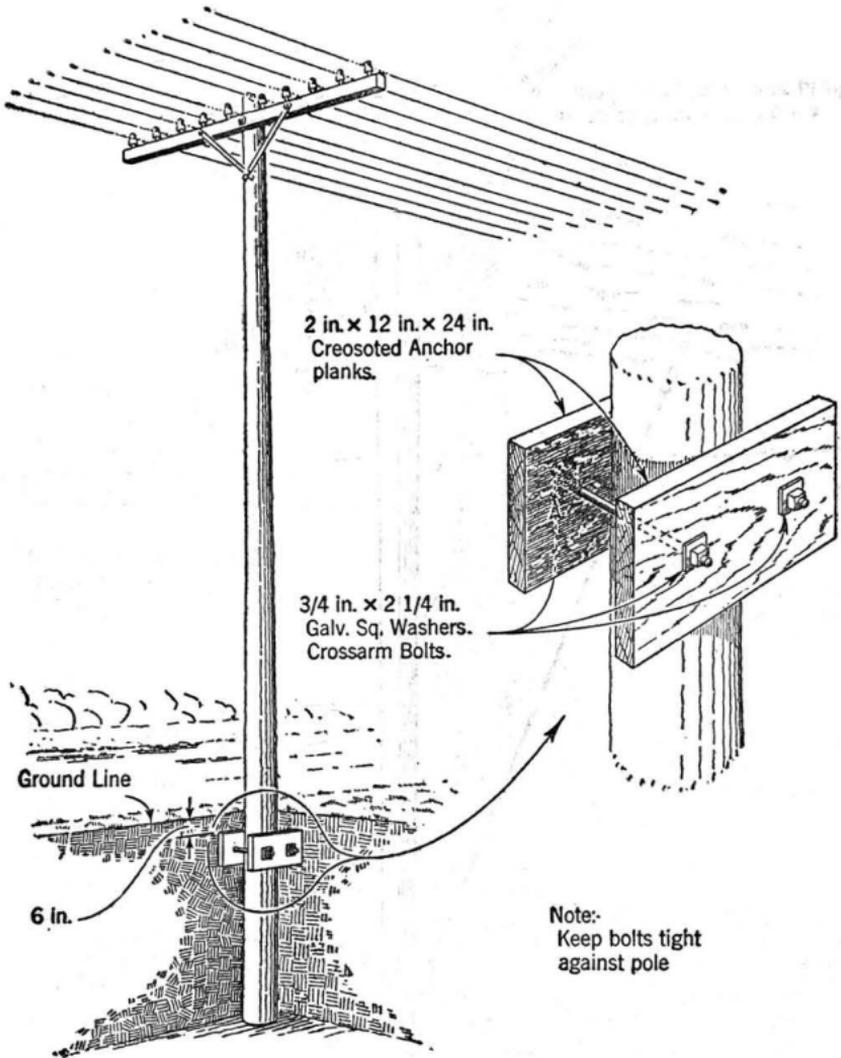
2.01 The type of construction to be employed in swampy locations or in unstable ground will vary with conditions. The following general description of types of fixtures will be of assistance in selecting the type to be employed.

(a) **Anchor Plank Ground Bracing**, as described in Paragraph 3.01, is intended for use where the poles are set in earth which may be soft or unstable at certain seasons and the pole itself would not provide sufficient bearing area against the earth to remain vertical when exposed to crosswinds. This type of bracing is not suitable for use in cases

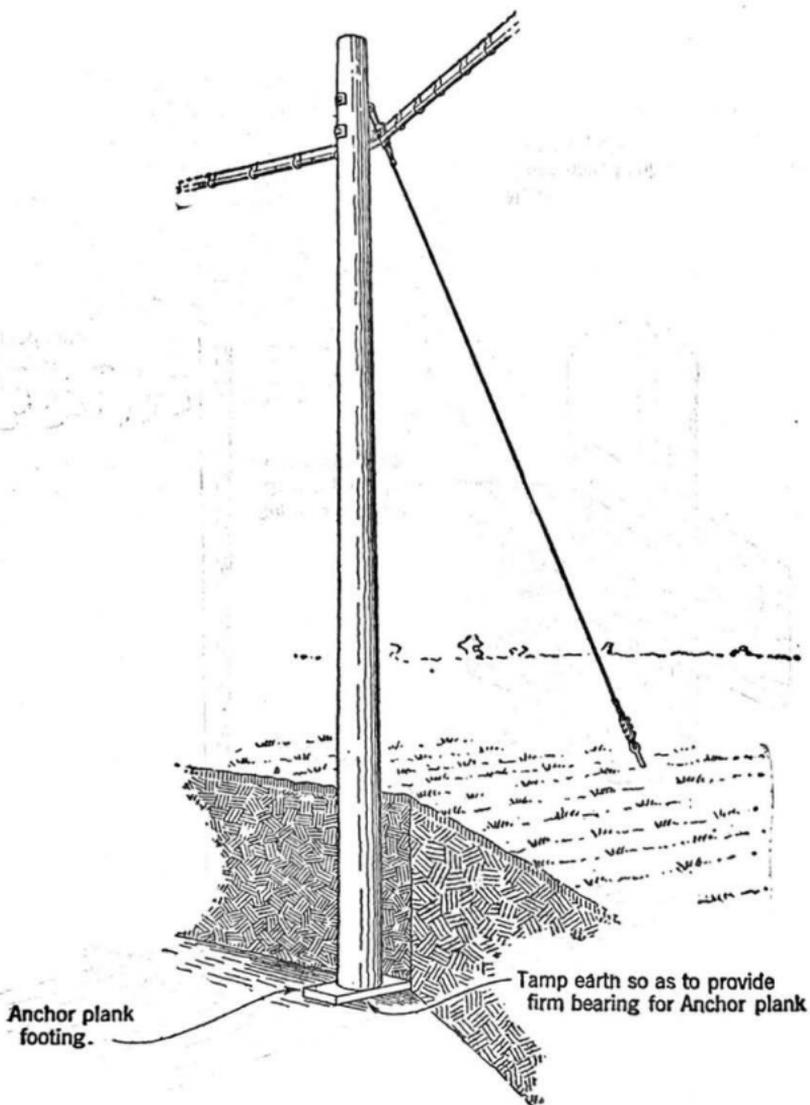


### 3. ANCHOR PLANK GROUND BRACED POLE

3.01 The method of using anchor planks for ground bracing is shown below:



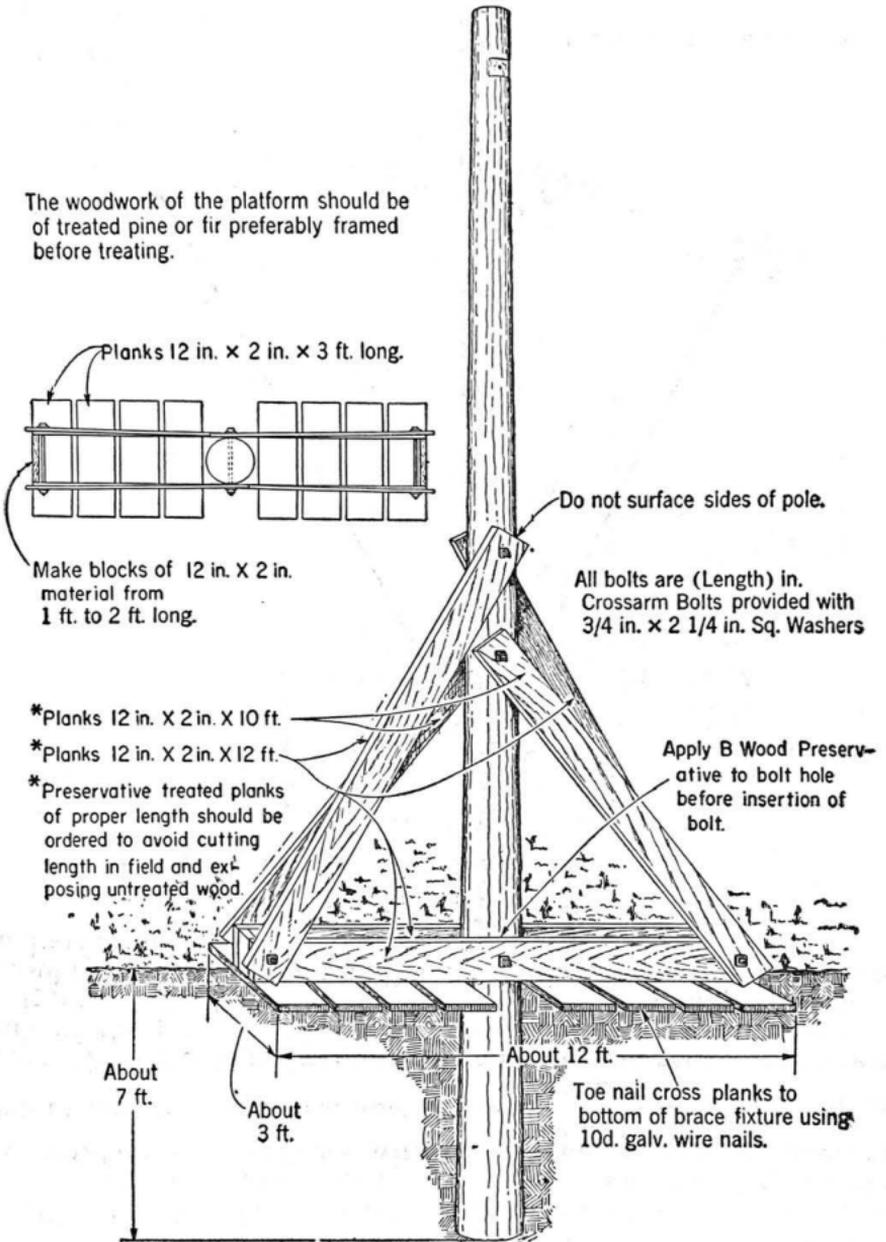
3.02 The use of an anchor plank under a pole to provide additional footing to prevent a pole from sinking is shown below:



## 4. POLE WITH PLATFORM SUPPORT

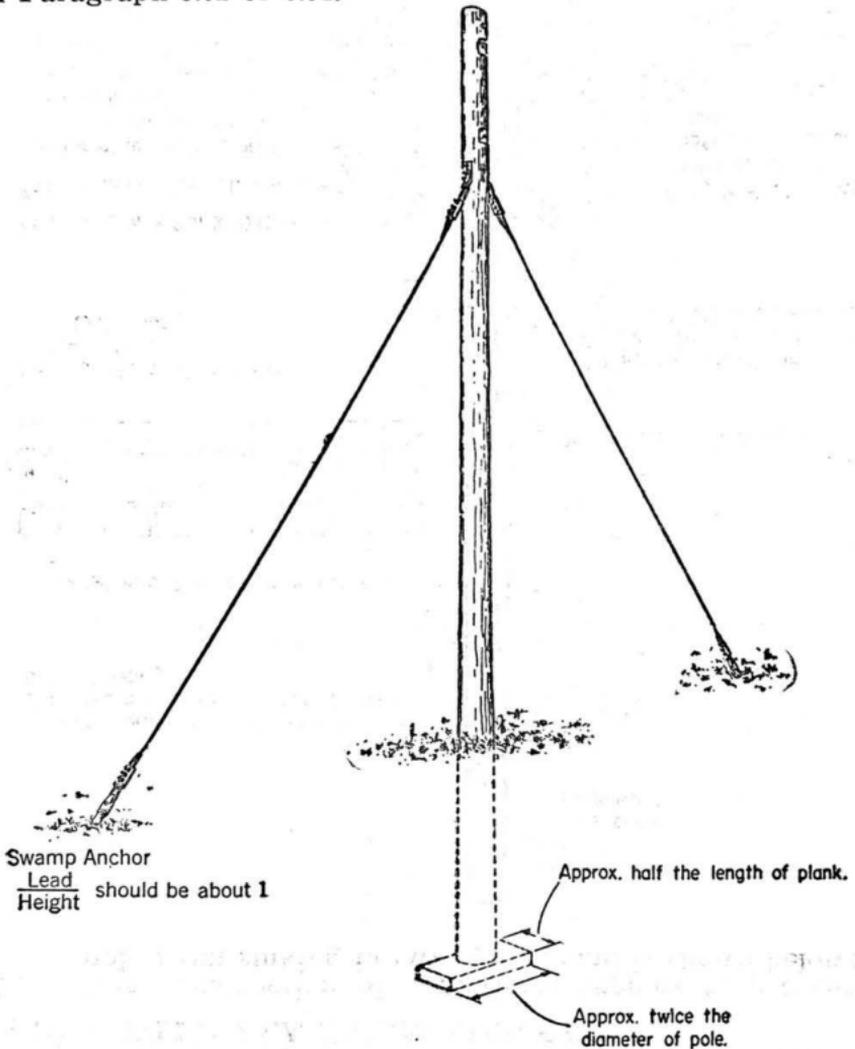
4.01 The construction of a platform support to prevent a pole from sinking in swampy ground is shown below:

The woodwork of the platform should be of treated pine or fir preferably framed before treating.



## 5. POLE GUYED WITH SWAMP ANCHORS

5.01 The 10", 12", and 15" screw type anchors are generally the most practical type of swamp anchor. They should be installed in accordance with the Section on guying covering patent anchors. It is desirable that the  $\frac{\text{Lead}}{\text{Height}}$  of the guy be at least 1 in order to facilitate the installation and reduce the down pull of the guys on the pole. The following illustration shows a typical installation of swamp anchors. Generally, the pole should be provided with additional footing, such as is described in Paragraph 3.02 or 6.01.



## 5. POLES WITH PLATFORM SUPPORT AND SWAMP ANCHORS

6.01 This type of construction is a combination of the platform support shown in Paragraph 4.01 and swamp anchors shown in Paragraph 5.01. A typical installation is shown in the following illustration.

The woodwork of the platform should be of treated pine or fir preferably framed before treating.

All bolts are (Length) in.  
Crossarm Bolts provided with  
 $\frac{3}{4}$  in.  $\times$  2  $\frac{1}{4}$  in. Sq. Washers

Make blocks of 12 in.  $\times$  2 in.  
material from  
1 ft. to 2 ft. long.

12 in.  $\times$  2 in.  $\times$  10 ft.

Apply B Wood Preservative to bolt hole before insertion of bolt

Swamp Anchor  
 $\frac{\text{Lead}}{\text{Height}}$  should be 1 or more

About 3 ft.

About 10 ft.

Planks 12 in.  $\times$  2 in.  $\times$  3 ft. long  
Toe nail cross planks to bottom of  
brace fixture using 10d. galv.  
wire nails.

## 7. "H" FIXTURE WITH PLATFORM SUPPORT

7.01 "H" fixtures set in unstable ground may require ground bracing in order to prevent the fixture from sinking in the ground. The type of support to be provided will usually be of

the platform type described in Paragraph 4.01. A typical installation of an "H" fixture provided with a plank platform is shown in the following illustration.

