



# "THE GUARDSMAN™"

MM122GI  
Version 06/04

## Ornamental Iron Picket Fencing

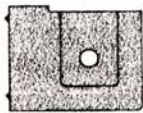
## Installation Instructions with Covered Bracket

### How the Covered Bracket works:

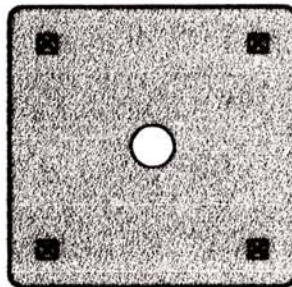
**NOTE:** *There are TWO types of Covered Brackets.*

#### Type 1\*

- Has a 5/16" hole.  
(Use with a 1/4" bolt)



side view



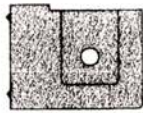
rear view

**Type 1** is used in all cases where the fence runs 90° to the post.

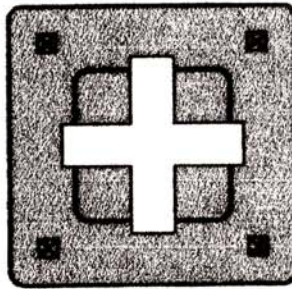
**NO grades or directional changes.**

#### Type 2\*

- Has a hollow back bracket & a cross slot.

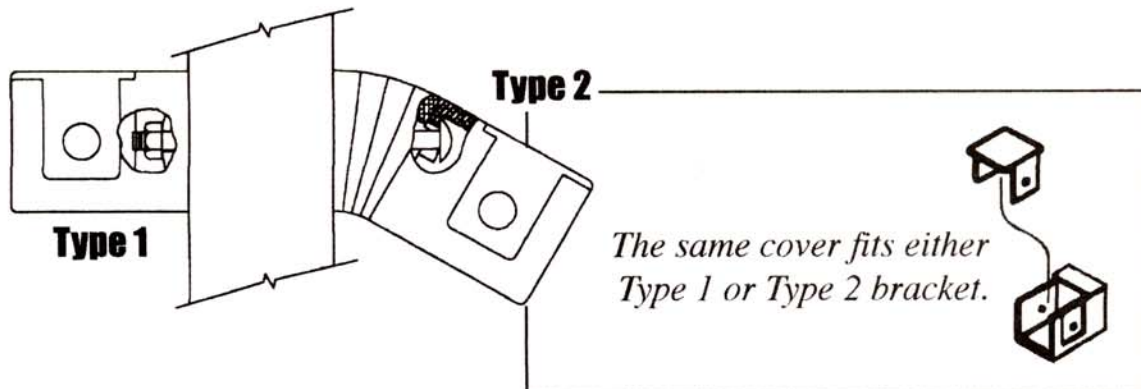


side view



rear view

**Type 2** is used if there is a change of grade OR of directional change.

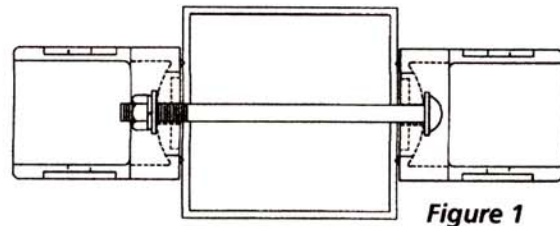


*\*Patent Pending. For Covered Brackets, Spacers and Methods of Connecting to Post.*

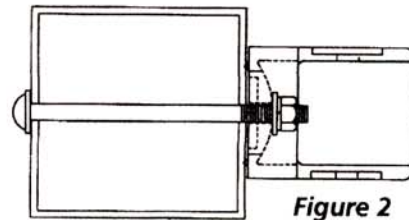
## Step 1 Installing Covered Brackets to Posts

Attach all brackets to your posts. Holes are provided in the posts for this purpose. When your ground is fairly level and when the sections are 90° to the posts you will accomplish bracket attachment by doing as follows. Use Type 1 bracket:

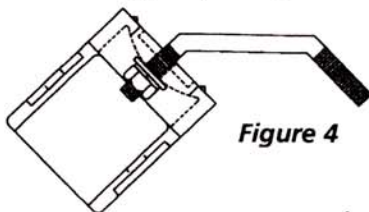
- Place the 1/4" carriage bolt through the bracket. Next place the bolt through the hole in your post. If this is a line post one bracket should be on each side of the post and attached by a single bolt.\* (Figure 1)



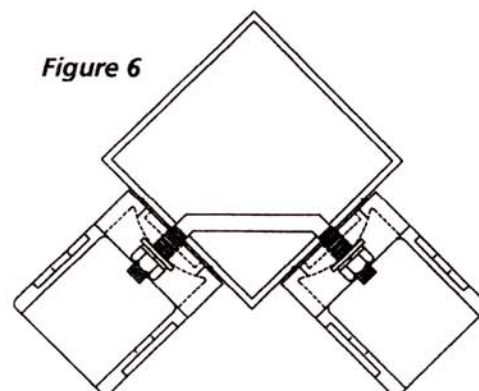
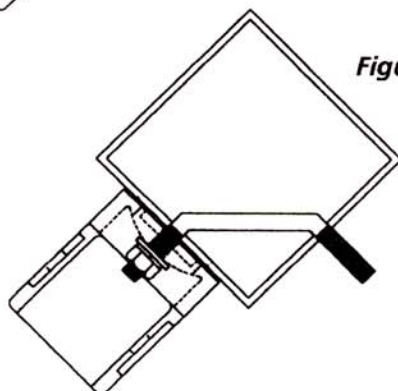
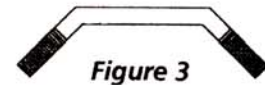
- If it this an end post the head of the carriage bolt should be on opposite side from the bracket. This way the nut will be inside the bracket and therefore tamper proof and safer.\* (Figure 2)



- For the corner posts there is a special bolt (Figure 3) that goes through adjoining sides of the post. Place one bracket on the bolt.

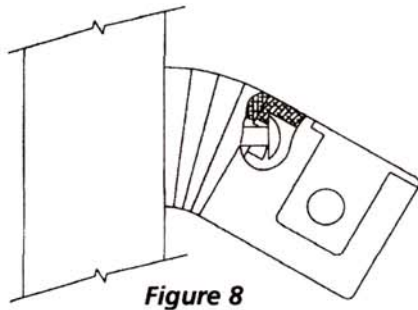
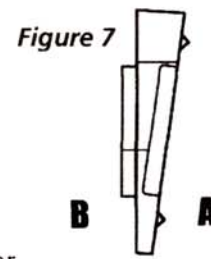


(Figure 4) Start one nut onto the bolt to secure that bracket. Feed the bolt through the post (Figure 5) and attach a second bracket to the opposite end of the bolt. (Figure 6) Attach a second nut to the bolt. Tighten both nuts securely.



**\*WARNING:** Do not use Type 2 (Hollow Back Bracket) for direct 90° runs. To do so could cause damage to the bracket and also void your warranty. Use Type 1 in these cases.

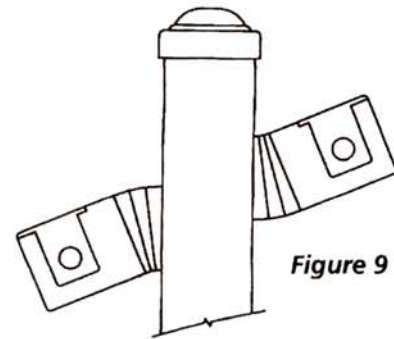
- When sections are at an angle other than 90° to the posts or when rails will not be level between the posts you will use spacers (each allows 7.5° change of direction). You may use up to four spacers with Type 2 brackets for up to 30° change of direction. (Figure 7)



These spacers are tapered. One or more spacers when combined with a Type 2 bracket will create the desired angle to any post. Each spacer has one side that is substantially flat (A) except for four protruding points that are intended to grip the post surface, or to seat inside a neighboring spacer. (Figure 8)

A square center portion of the opposite side of the spacer is raised to form a boss (B) which seats into a corresponding shaped recess in the back of the bracket or the neighboring spacer. This configuration when properly assembled prevents slippage or rotation of the spacers.

When using spacers on adjacent brackets such as continuing down grade you may use up to three spacers on each side of the post. This will give you a continuous 22-1/2° grade. (Figure 9)



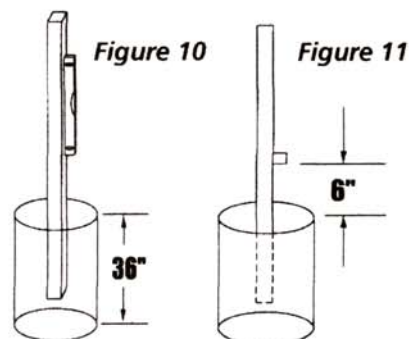
**NOTE:** When using spacer you must use Type 2 (Hollow Back Bracket). The base on the the spacer will interlock with the hollow back of this bracket.

## Step 2 Installing Posts

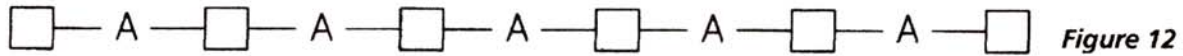
Install all corner, end and gate posts. Post holes should be 36" deep. The diameter should be in proportions to the post size, (ASTM recommends that the diameter of the hole be 4 times the diameter of the post. Example: a 2-1/2" post would require a 10" hole. A 3" would require a 12" hole and so on. (Figure 10)

The bottom of the lowest bracket should be about 6" above the ground level. (Figure 11)

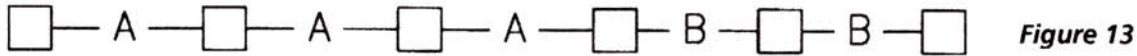
Before installing any line posts you must determine the best layout for your job. Basically there are three different options.



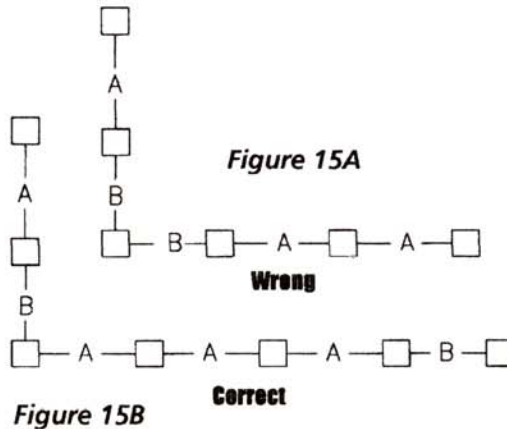
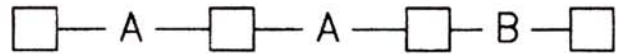
**1. Equal spaces.** This will most likely mean that you must cut every section to make them identical in length. (Figure 12)



**2. Mostly equal spaces.** The majority of sections will be full size. The last 20' or so in a line will be divided into equal spaces making the differences only slightly noticeable. (Figure 13)



**3. All but one section will be equal.** The last section will be shorter. (Figure 14) If this is your choice you may wish to place the short section in the least conspicuous spot in the line but in an area away from the gates. Also do not put two short sections adjacent to each other a corner. (Figure 15A & 15B)



**NOTES:**

1. Make sure that every post is set plumb (Figure 16) in all directions and that intermediate posts are square to a string that is stretched between end, corner or gate posts. (Figure 17)



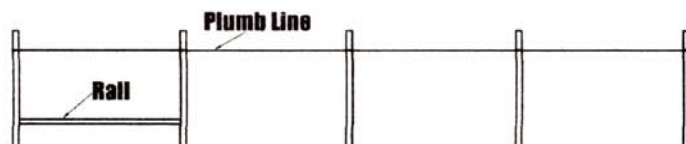
**Figure 16**



**Figure 17**

2. Assure that the tops of posts are the proper distance from the ground. This distance may vary from post to post to accommodate ground conditions. The important thing in most cases is that the top line of all post and sections creates a pleasing top line to the fence.

3. In order to minimize work you may wish to use a rail as your template to assure proper setting of posts. (Figure 18)



**Figure 18**

### Step 3 Install Sections

After the pre-assembled section rails are placed within the brackets, place the covers on the brackets. The bracket and the cover will have matching holes that will line up with the slot in the rails. Through these holes place one of the rivets. With a hammer, drive the rivet pin into the rivet. There are two rivets supplied for each bracket, one for each side of the bracket. (Figure 19 & 20)

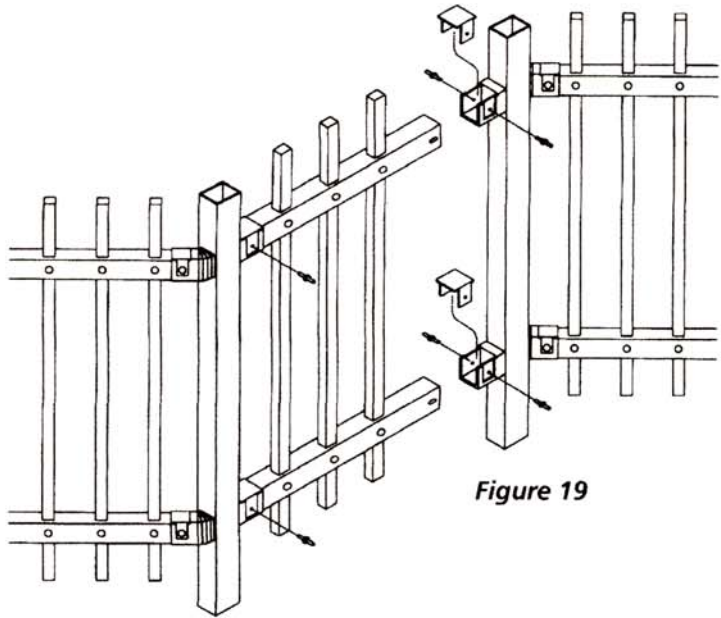


Figure 19

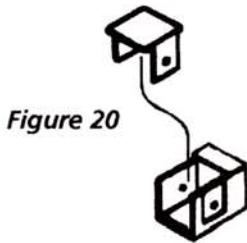


Figure 20

When properly installed per these instructions the Guardsman's™ Covered Bracket is the most secure bracket available anywhere.

### Step 4 Finishing

Install post tops. Hang gates and your job is complete

**NOTE:** *Touch up any scars or scrapes as you go.  
For the best job do not leave this until the end.*

## Spacing Face to Face of Post

(any post size)

<u>Picket Size</u>	<u>Nominal Section Size</u>	<u>Rail Length</u>	<u>Posts Face to Face</u>
1"	8'	92-1/2"	94"
1"	6'	67-1/2"	69"
3/4"	8'	92-1/2"	94"
3/4"	6'	68-1/2"	70"

**NOTE:** *When using spacers you must add 3/8" per space used to the face to face measurement of your posts. Example: If you use 4 spacers at one end of the rail add 1-1/2". If you use 4 spacers on each end of a rail, you would add 3" to your face to face measurement.*