Building Trees (IX)

The last to see the light, the first to be built

Text and pictures by Legotron

Panzerbricks

This article presents a tree model that has the distinction of being the first model of a tree I had in my hands, but it has been the last to have its final design. The idea of this tree is based on the shape of a fig tree. This idea was completed by incorporating the possibility of modular construction so we could put different types of branches to the body and have it available in different configurations for a single tree trunk. Because of the numerous attempts that have been necessary to reach a satisfactory design, this will be the last to have its own article, despite having been the first I began to design for this series.

The original approach was to make a main trunk, with a structure that allows us to sculpt complex branches with different forms. This construction was horizontal, so that different parts are mated starting from the trunk horizontally, like a SNOT technique [1].With the idea of making it modular, the trunk became a structure divided into two parts, an inner part that would allow us to connect different parts of the tree, and a covering were the forms and visible elements of the tree are included. This last part could be formed by different combinations of coverings so that they were interchangeable, for creating different trees with no more than changing the covering or their position. It should be possible to make this change easily and without having to remove other parts of the tree. All these ideas, after many attempts, led to the design of the tree of this article

Parts required.

The part list is more complex than in the preceding articles, so it can be divided into two parts, structure and covering. As we have done in previous articles, we use the criterion used by the Web portal Bricklink [2]:

For the structure:

● 1 brown 2x2 brick.
● 2 brown 2 x2 round plates
● 1 brown 2 x2 round brick.
● 6 dark bluish gray 2x2 plates
● 8 dark bluish gray 1x2 technic brick with holes.
● 16 technic pin 1/2 (any colour)

For the base:

● 1 green 6x6 or 6x8 plate

For the trunk:

● A variable number of brown 2x2 bricks corner.
● brown bricks 1x1with headlight.
● 4 or more brown 2x10 plates.
● brown 1x2 plates
● brown 1x4 plates.
● brown 2x2 corner plates.
● brown slopes 33 3x1
● brown slopes 45 2x1
● brown slopes 30 1x1x2/3.
● brown slopes 75 2x1x3.
● brown 33 3x1 inverted slopes.
● brown 45 2x1 inverted slopes.
● brown 75 2x1x3 slopes inverted

To make the branches:

● About 25-40 green plant leaves

Construction.

The first part of this construction is quite simple; you have to build the main structure of the tree. We start joining the brown 2x2 round plates with the 2x2 round brick. Over these we place two 1x2 technic brick with holes, adding the four technic pin 1 / 2 in their holes with their heads pointing outward. Then we put 2 2x2 plates and 2 1x2 technic bricks with holes, over those, turned 90 degrees from the previous ones, so that the heads of the technic pin 1 / 2 point away on all four sides. Next we put 2 new 2x2 plates and 2 1x2 technic bricks with holes turned again 90° from the previous ones. We repeat the process again, so we can see on each side 2 pairs of pins at different heights. All this is crowned with the brown 2x2 brick. This is the structure on which we will mount the various elements that give shape to the tree.

For the next stage we take the 2x10 plates. At one end we place a 3x1 or 2x1 slope to represent the roots, and along the plate we put any combination of plates acting as roughness and irregularities of the trunk. The drawing has to be different in each of the plates to give it a non-symmetrical look. At the top we build the branches, starting from the slopes and 2x2 corner bricks, so that the shape of the branch is as irregular as possible. All terminations have to be finished with a 1x1 brick with headlight, which is where we start putting the leaves. The more irregular and more completions we place at a branch the more attachment points for the leaves we have. Finally we place a few 1x1x2 / 3 slopes 30 to round off the look of the branches. Four of these plates can be placed in a structure, so we can have a few plates to make different trees with the same structure. We can build some with leaves and others without, some almost flat and with very small branches and other with large bumps and very intricate branches. Since their placement on the structure is very simple we can change easily. In addition we can build them individually before putting them into the structure, and so avoid bumping against the rest of the tree. As shown in the photos, this technique allows many possibilities and you just have to change one of the side plates to make the tree look completely different. The finishing touch is to end the central part of the tree, which can be left clear or crowned with a few pieces to add more leaves. This type of trees (e.g. fig trees) are not very dense and stand out because of their irregular trunks and branches. It is not necessary to use a lot of leaves, enough to add 2 to 4 leaves on each end, above and below, to give it the desired look.
The bottom allows the tree to fit on a plate, although this connection is not too strong and should be reinforced with good roots. If used on a smooth surface it is desirable to remove one of the two 2x2 round plates from the bottom.

References:

[1] SNOT: Studs Not On Top.
[2] Unofficial LEGO® selling Portal on the Internet: http://www.bricklink.com
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