## Building a stone wall using lime mortar



You can get some idea of how stone walls were built long ago, by looking at the way these three men are constructing a stone garden wall at the back of Rothe House in Kilkenny.

The wheelbarrow is full of lime mortar, made by mixing sand, lime and water. It will stay workable for some time, and as it is needed, some will be put on a board, worked with a trowel and used to bed the stones.





The stones are of odd sizes, some small, some large. You can see the mason splitting a large

stone with a cold chisel and a club hammer. Another man is bedding a smaller stone in mortar. Stones of unequal size like these are called rubble.





You can see a line which the men have stretched to mark a horizontal level on the wall, so that the stones can be laid in courses. This gives a coursed rubble wall. In the top courses, the mortar can still be seen on the surface of the stone, but lower down the joints have been pointed, so that the stones seem to stand out a bit.

The scaffolding nowadays is made of steel, and is easily and quickly assembled. It gives the men a platform to stand on which can be raised as the wall gets higher. Long ago the scaffolding would have been made of timber. The opening in the wall here is covered by a lintel. In the past this would have been a single long stone, or sometimes a baulk of timber. The stones on either side of the opening have been squared.



This piece of finished wall shows the pleasing appearance of a newly built stone wall, but give it a few hundred years and it will be covered with plants just like the old walls you see around the city.





The final picture shows a cross section of a stone wall under construction. The space between the two faces of the wall is filled with mortar. When the wall is finished, this mortar will not be seen.