

**GERMAN PILE DRIVING.**

Mr. H. C. Carpenter, United States Commercial Agent at Furth, Germany, writing of the method employed in driving piles at that place, says: A simple block-and-fall arrangement is rigged up over the pile and to the end of the rope, running through the pulley and fastened to the weight, are attached about twenty-five smaller ropes and hand pieces, and twenty-five men grab these, and, at a signal from one of their number, all pull together. The weight goes up about eighteen inches or two feet, when the men relax their hold and the weight drops. It is unnecessary to state how long it takes by such a method to drive a pile or how much more effectually a small dummy engine would do the work. In the erection of buildings the same tedious process is employed. Every stone to be raised requires the strength of a pair of horses and about fifteen men tugging away at the rope. The machinery manufactured and used in America for such purposes would do away with this clumsy method, but none of it seems to be in the market here.

**WATER PROOFING BRICKS.**

Experiments made to ascertain the length of time that brick and sandstone are rendered water-proof or protected, by oiling, show some valuable results. The oils used were linseed oil, boiled linseed, and the crude mineral oil, known as "blue oil," and the exposure was on a roof fairly exposed to the sun and weather, the bricks being good, sound, machine-made. It is stated that the amount of oil and water taken up by the sandstone was very much less than that absorbed by the bricks, although the area of the sandstone cubes was much the greater. Equal amounts of the raw and boiled oils were absorbed; the blue oil, however, was taken up in much greater quantity by both bricks and sandstone, but by the end of twelve months the whole of the thirteen and one half ounces of blue oil had evaporated, and the bricks had returned to their original state, but those treated

with raw and boiled oils were unchanged. Finally, it was seen that the sandstone cubes treated with raw and boiled oils returned to their original weights, but not appearing to have lost the good effects of the oils, being practically impervious.

A method of finishing a pine floor that gives unsatisfactory results is to well rub in, by means of a cloth, boiled linseed oil, to which has been added a little colour. When this is thoroughly dry the surface is either waxed or varnished; if waxed it needs rubbing occasionally with a little beeswax to bring up its lustre.

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