USEFUL HINTS.

IT is officially calculated in New York that the tall buildings erected in lower Broadway up to date, have added seventy-five acres to the business area of New York city above the sixth story.

Concrete sidewalks should be laid four inches thick, in two courses; first or bottom course three inches, second or finishing course one inch thick. The top should be laid before bottom is set. Prepare foundation on which to put concrete in good coarse gravel or chip stone, well rammed or levelled. Proportion for bottom, one part cement, four parts clean sharp gravel, mixing cement and gravel thoroughly in the dry state, and sufficient water from a sprinkler to make a dry mortar, place at once and thorougly ram down. For top mix one part cement and one part clean sharp sand; mix well before adding water, add water as above to the consistency of plastic mortar.

A STOPPING for wood, sometimes called beaumantique, can be made as follows: Put one tablespoonful of shellac, one teaspoonful powdered resin, a piece of bees-wax the size of a walnut, into a cup or iron pot, and set on the stove or in the oven until melted. For mahogany, add to it a little Venetian red, to match up the wood; for oak, add yellow ochre; for ebony or rosewood, add lampblack; mix it well up. It can be used while liquid, or it can be made into sticks like sealing wax, by pouring it on to a board, and rolling it with another board slightly warmed. If made up in sticks in this way, it is a good plan to have a variety of colors. When using, melt it over a lighted candle or gas-light, and run it into the place to be repaired; level off with chisel, and smooth down with glass-paper.

MICROSCOPICAL investigation has proved that the pores of wood invite the passage of moisture in the direction of the timber's growth, but repel it in the opposite direction. This accounts for a phenomenon which is often noticed, and which puzzles a good many people, namely, why two pieces of timber sawn from the same section of a tree sometimes appear to possess very variable degrees of durability. If the wood, say of a gate post, is placed right end up, the moisture in the soil will affect it, but the rain falling on the top will do little harm; if, on the other hand, the butt end of the tree is uppermost, the top of the post will decay, because the moisture of the atmosphere will penetrate the pores of the wood more rapidly in this position. Many people have noticed that the staves of a wooden tub appear to absorb moisture irregularly, some getting quite sodden while others remain comparatively dry, and apparently almost impervious to moisture. In this case the dry staves are in the position in which the tree grew, while the saturated ones are reversed.