

Manilla Hemp in Plaster.

A well-known firm of architects has for several years ordered the use of Manilla hair in all plastering work done for its clients. In order to satisfy the doubt of some of its contractors, they made the following experiment: The test was made with four plates of equal size, one containing Manilla hemp, a second Sisal hemp, and third jute, and a fourth plasterer's hair (goat's) of the finest quality. The test was made by suspending weights from the middle of each plate, the ends of which were properly supported. The result was that the plaster mixed with goat's hair broke at 144½ pounds weight, that with jute at 145 pounds, the Sisal at 150 pounds, and the Manilla at 195 pounds. It should be added that the plaster containing the Manilla hemp did not break, it only cracked. Though cracked in the center, the lower half of the plate containing the Manilla when it was suspended, held on to the upper half, and the Manilla held it fast, though the observer would almost feel confident that the hairs would break under the strain. The three other plates were broken—that is, the two parts of each plate had severed entirely, in contrast with the Manilla plastering. The architects felt that their theory had been proven correct.

Another experiment, made two years ago by a member of the same firm of architects, consisted of mixing two barrelfuls of mortar, each containing equal portions, by measure, of sharp sand and Thomaston lime, one of the barrelfuls, however, being mixed with the proper quantity, by measure, of Manilla hemp, cut in lengths of 1½ to 2 inches, and the other of goat's hair, the best that could be procured. After mixing thoroughly with the usual quantity of water, the respective mixtures were put in the barrels and stored away in a dry cellar, where they were locked up. They were allowed to remain there for nine months, at the end of which time they were opened and examined. The hair mortar crumbled and broke apart, very little of the hair being visible, showing that the lime had consumed the hair. The other containing the hemp, however, showed great cohesion, it being with considerable effort that it was pulled apart, the fibers of the hemp permeating the mass and giving little or no evidence of injury done to it by the lime.