### TREATMENT OF LIME.

Lime ought to be, to the painter, a universal material, and yet many don't know how to handle it, and to use it in the proper place, says Ald. Korbler, in our Vienna contemporary, the Dekorator.

Lime is especially useful for facades, churches, gateways, open halls and verandas, and particularly on damp walls. In all these places size paint would not be suitable, as the size would quickly putrify, owing to the influence of changes of temperature and dampness, thus losing its building power, while the permanency of the lime is enhanced by the action of the oxygen in the air. Especial durability is obtained by roughening old walls with coarse pumice stone before painting, subsequently washing off the walls, or at least removing the dust. Peeling of lime coating is due to too thick an application or putting on a fresh coat before the first is dry.

In order to enhance the durability of the lime various binders may be added to it, as follows: If more earth colors are to be added to the lime than it is capable of binding caseine size should be employed. The caseine is rubbed up, together with milk water, with unslaked lime and thinned with milk. In Switzerland lime slaked with caseine water is used, thinned with milk, and the durability is excellent. Frequently kitchen salt or rock salt is also added, but this is only advisble for white work, as the salt some-

times effloresces, and the colored coating shows white spots after a few weeks.

Varnish and linseed oil also contribute largely to increase the permanency of the lime, but it is best to add these binding agents during the slaking.

Blood is likewise a good binding material. It must be allowed to stand a few days, after hot water has heen poured on it. Before use it has to be stirred up and well sifted. Besides, it is necessary to add, on account of foul odor, one kilo (two and one-fourth pounds) of boraic acid to every one hundred kilos (two hundred and twenty-five pounds) of lime for disinfecting purposes.

Green vitriol imparts to lime a yellow color similar to other; copper sulphate in lime gives a handsome blue green; green vitriol, copper sulphate and lime give a nice sap-green; and to obtain a fine blue take a sulphuric solution of cobalt. Such coatings adhere excellently to damp walls as the substances admixed are much better than earth colors. At the same time they are much cheaper, for one kilo (two and one-hilf pounds) of vitriol is sufficient for a room of considerable size.

All these chemical coloring substances are dissolved, if to be used at once, in hot

water, but the solution can also be made with cold water if one waits a few hours, It still deserves mention that these vitriols are not injurious to the skin, the floors or the brushes, that they are not caustic and do not burn.

For smoky cafe ceilings it is well to force the thick lime, to dilute with water and to spread out rather compact. But green vitriol is also a medium for such ceilings. Coat the ceiling previously with lime and green vitriol, let this dry thoroughly, and only then coat with strong soap. It will be found that green vitriol will appear olive green in the receptacle and draws together into a thick paste. This should not cause one any misgivings; it can, after all, be flowed on like thin paint, and turns a handsome ochre yellow.

By some experiments with the above chemicals in the employment of the quantity, the necessary experience in mixing and tinting will soon be required.—Scientific American.

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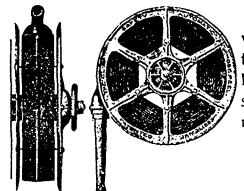
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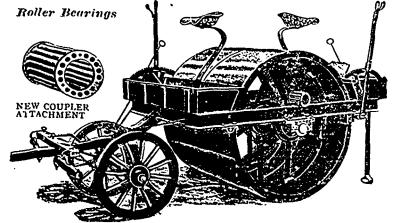
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