

It is bad enough to know that the pigment trade of Canada insists on highly adulterated goods, but if the trade must have such inferior colours at least let us do our own mixing. We have all the inert materials at hand—gypsum, silica, serpentine, soapstone, asbestine, etc.—all of which may be used judiciously in the light coloured paints but must be shunned in the darker or heavier ochres, if the depth of colour is to be sustained.

Not only, however, may the inert material be found in abundance in this country but the paint material itself is so frequently met with and is in general so easily mined that it is altogether surprising so little advantage is taken of the resources that nature has laid, so to speak, at our doors. Indeed, the quality of our ochres is so superior that there is no real reason why any inert material should be used at all. In the following pages are included the more important results of experiments on some hundreds of samples of our Canadian ochres. They are given in the hope that they may help the paint manufacturers of Canada to give the home produce a chance and they are written with a view to show that in almost every colour a paint of good body and permanent tone may be produced.

Over two hundred samples of clays collected between the Atlantic and Pacific oceans were tested for their colouring properties. Each sample was ground to a fine powder, a portion of which was used in its raw state, another portion being exposed for fifteen minutes to the heat of a blast lamp, the results of which will be found embodied in the following pages. Many of the crude clays were found to possess ample bodies and colours to constitute good paints, and though their durability may be safely predicted, it can only be determined by prolonged exposure. The same may be said of the burnt material, but it is reasonable to expect that their permanency may be regarded with less doubtful apprehension.—on account of the destruction of all organic matter.

The colours "yellow," "brown" and "brown yellow" referred to so often in the following pages are in tone similar to the raw sienna of commerce but vary very much in each case, although some good typical raw sienna colours were obtained from the burnt clays.

Numerous experiments have been made with such minerals as were thought to possess sufficient body for making paints. Each mineral was reduced to a fine powder, ground in oil on plate glass to the consistency of ordinary paint and then applied to the surface of academy board, which was allowed to stand for about two years exposed to sunlight and damp, but in the interior of a building. The results of this