

NOTES ON THE EFFECTS OF THE ATMOSPHERE
ON THE SHELLS OF MOLLUSCA.

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I think it is well for the benefit of conchologists to put down some observations on this point. I have frequently noticed the fading of colour so observable in some specimens. I have some *Cyprea* which some years ago were found alive at Portland, Vic., crawling over the rocks there, at one time so abundant. Such specimens as I still have are now of a light grey colour, which when first procured were so dark as to be almost black. This I had attributed, along with most others with whom I had any conversation on the subject, to the effects of the sunlight; however, this in my experience has proved to be an error, as it is the results are evidently due to the atmosphere and not the light, as heretofore supposed. While on a visit to Tasmania I had the opportunity of visiting a collection on which the near vicinity of the sea had the effect of partially destroying the enamel of the dorsal surface, by streaks or clouds of a whitish or lime-like substance, the saline particles held in solution in the atmosphere evidently exerting a corroding effect in this instance; though on my return from my four weeks' stay in Tasmania I had an unexpected instance of a still stranger effect brought under my notice. I have had in my possession for the last six or seven years a matchless specimen of a young Orange Cowrie (*Cy. aurantium*) of a lovely deep orange red colour; unfortunately before leaving home I had happened to remove it to the lowest drawer in a cabinet placed next the outer wall of the dining-room. The cabinet had a plinth about 2in. high, having a wooden bottom, and the drawer had also a wooden bottom lined with domestic cotton. The shell, being a young shell and very thin, was for greater security placed in a glass-topped box, and the doors of the cabinet were not unlocked during my absence, yet on my return, owing to some excessive rains having engendered dampness, the beautiful red colour (so rare) had all faded out, leaving only a small patch in the centre of the dorsal surface. The polished enamel is still perfect, and is in all other respects the same but the fading of the colour.