

never seen concretions exposed from this wall of apparently pure clay excepting close to the water's edge, where there is no possible way of getting them but to stand in the river and dig, a trowel or stout carving-knife being the best implement for the work.

In collecting claystones it is better to row *up* the stream than down, for in the latter case the dislodged clay renders the water so turbid it is impossible to see the claystones which have been washed into it, and which often have a story to tell. The concretions of each clay bed should be kept separate, and when this is done the fact is proved that *each bed has a form of concretion peculiar to itself*. You would never find, for instance, a circular disk and a cylindrical claystone imbedded together, or a botryoidal mass and an animal form; these are four typical concretions of as many separate beds.

While each bed has its characteristic form, this is not attained with an unvarying degree of perfection. There seems to be an ideal and a struggle to attain it; the resulting concretion being more or less perfect as the conditions are favorable or adverse. When the conditions are favorable and constant, the typical form is repeated many times. One of the most striking examples of this fact we found in a bed nearly opposite Whitmore's ferry. Out of twenty-six concretions, twenty-four had the same peculiar markings. One of the two exceptions, I have little doubt, was the incipient form of the others, and would have developed like them had we let it remain. The other was not found imbedded, and therefore, I presume to say, came from some bed up the river. I have seen in a private collection, forty-eight specimens from one bed so similar one could not tell them apart.

Occasionally the typical form is doubled or trebled in the same specimen, as shown in those from Saw Mill River.

Very long concretions are seldom found, although we have one in our collection measuring twenty-two and a half inches. Imitative forms are abundant. We have spectacles,