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Living Fossils

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BRIEFER ARTICLES.

Living fossils.—The great flat slab on which we stood seemed built there to command a view of stoneworts.

In the clear lime water of Fall River, S. D., floated great streamers of *Chara*, fresh and green, yet fading insensibly, first into a dingy, then into a dead looking, and even into a stony mass, as the eye followed it up stream. It was a streamer of living, growing stoneworts that blended into the slabs of “petrified moss” strewn broadcast in the channel around us, and on one of which we stood.

But the eye could trace this so-called living fossil or petrification back still further to the banks overhead, where other stoneworts once floated in waters whose channel was higher than and broader than now. Yet higher still, in an earlier channel, the eye could see great slabs of it, upturned in a railroad cutting.

At our feet, where interposing boulders had reduced the transporting power of the current, a sand bar of broken stems, leaves, and whorls was lying, simply waiting for the “lapidifying juices” to cement it into limestone—a sort of puzzling *Chara* breccia.

Right here in reach then were all the terms of a botanico-geological stonewort series, a sort of climax, beginning with the perishable, growing plant, and capped by the same built into everlasting rocks and sands.

It only remained for the collector to make his choice, which was done, and the series exposed in a row to dry. The growing stonewort, so fresh and green, became stony, and crumbled at a touch, it was so incrustated with lime salts. So, too, the half-living, half-petrified form fell to pieces, being encrusted just enough to appear stiff and stone-like, yet not enough to last. However, slabs of the “petrified moss” of any desired linear dimensions could be had, and handled with impunity. These ever forming stonewort slabs consisted of a few inches of rigid lithified creek bed, as a stable sort of backing to the stony mat of weeds upon them.

By placing the growing stonewort immediately in glycerine it is easily preserved, and by patience, mixed with a pinch of ingenuity, the whole beautiful and interesting series of living petrifications can be kept.—
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