CHAPTER XXXVII.

THE LIEDENBROCK MUSEUM OF GEOLOGY

How shall I describe the strange series of passions which in succession shook the breast of Professor Liedenbrock? First stupefaction, then incredulity, lastly a downright burst of rage.

Never had I seen the man so put out of countenance and so disturbed. The fatigues of our passage across, the dangers met, had all to be begun over again. We had gone backwards instead of forwards!

But my uncle rapidly recovered himself.

"Aha! will fate play tricks upon me? Will the elements lay plots against me? Shall fire, air, and water make a combined attack against me? Well, they shall know what a determined man can do. I will not yield. I will not stir a single foot backwards, and it will be seen whether man or nature is to have the upper hand!"

Erect upon the rock, angry and threatening, Otto Liedenbrock was a rather grotesque fierce parody upon the fierce Achilles defying the lightning. But I thought it my duty to interpose and attempt to lay some restraint upon this unmeasured fanaticism.

"Just listen to me," I said firmly. "Ambition must have a limit

somewhere; we cannot perform impossibilities; we are not at all fit for another sea voyage; who would dream of undertaking a voyage of five hundred leagues upon a heap of rotten planks, with a blanket in rags for a sail, a stick for a mast, and fierce winds in our teeth? We cannot steer; we shall be buffeted by the tempests, and we should be fools and madmen to attempt to cross a second time."

I was able to develop this series of unanswerable reasons for ten minutes without interruption; not that the Professor was paying any respectful attention to his nephew's arguments, but because he was deaf to all my eloquence.

"To the raft!" he shouted.

Such was his only reply. It was no use for me to entreat, supplicate, get angry, or do anything else in the way of opposition; it would only have been opposing a will harder than the granite rock.

Hans was finishing the repairs of the raft. One would have thought that this strange being was guessing at my uncle's intentions. With a few more pieces of surturbrand he had refitted our vessel. A sail already hung from the new mast, and the wind was playing in its waving folds.

The Professor said a few words to the guide, and immediately he put everything on board and arranged every necessary for our departure. The air was clear--and the north-west wind blew steadily.

What could I do? Could I stand against the two? It was impossible? If Hans had but taken my side! But no, it was not to be. The Icelander seemed to have renounced all will of his own and made a vow to forget and deny himself. I could get nothing out of a servant so feudalised, as it were, to his master. My only course was to proceed.

I was therefore going with as much resignation as I could find to resume my accustomed place on the raft, when my uncle laid his hand upon my shoulder.

"We shall not sail until to-morrow," he said.

I made a movement intended to express resignation.

"I must neglect nothing," he said; "and since my fate has driven me on this part of the coast, I will not leave it until I have examined it."

To understand what followed, it must be borne in mind that, through circumstances hereafter to be explained, we were not really where the Professor supposed we were. In fact we were not upon the north shore of the sea.

"Now let us start upon fresh discoveries," I said.

And leaving Hans to his work we started off together. The space between the water and the foot of the cliffs was considerable. It took half an hour to bring us to the wall of rock. We trampled under our feet numberless shells of all the forms and sizes which existed in the earliest ages of the world. I also saw immense carapaces more than fifteen feet in diameter. They had been the coverings of those gigantic glyptodons or armadilloes of the pleiocene period, of which the modern tortoise is but a miniature representative. [1] The soil was besides this scattered with stony fragments, boulders rounded by water action, and ridged up in successive lines. I was therefore led to the conclusion that at one time the sea must have covered the ground on which we were treading. On the loose and scattered rocks, now out of the reach of the highest tides, the waves had left manifest traces of their power to wear their way in the hardest stone.

This might up to a certain point explain the existence of an ocean forty leagues beneath the surface of the globe. But in my opinion this liquid mass would be lost by degrees farther and farther within the interior of the earth, and it certainly had its origin in the waters of the ocean overhead, which had made their way hither through some fissure. Yet it must be believed that that fissure is now closed, and that all this cavern or immense reservoir was filled in a very short time. Perhaps even this water, subjected to the fierce action of central heat, had partly been resolved into vapour. This would explain the existence of those clouds suspended over our heads

and the development of that electricity which raised such tempests within the bowels of the earth.

This theory of the phenomena we had witnessed seemed satisfactory to me; for however great and stupendous the phenomena of nature, fixed physical laws will or may always explain them.

We were therefore walking upon sedimentary soil, the deposits of the waters of former ages. The Professor was carefully examining every little fissure in the rocks. Wherever he saw a hole he always wanted to know the depth of it. To him this was important.

We had traversed the shores of the Liedenbrock sea for a mile when we observed a sudden change in the appearance of the soil. It seemed upset, contorted, and convulsed by a violent upheaval of the lower strata. In many places depressions or elevations gave witness to some tremendous power effecting the dislocation of strata.

[1] The glyptodon and armadillo are mammalian; the tortoise is a chelonian, a reptile, distinct classes of the animal kingdom; therefore the latter cannot be a representative of the former.

(Trans.)

We moved with difficulty across these granite fissures and chasms mingled with silex, crystals of quartz, and alluvial deposits, when a field, nay, more than a field, a vast plain, of bleached bones lay spread before us. It seemed like an immense cemetery, where the remains of twenty ages mingled their dust together. Huge mounds of bony fragments rose stage after stage in the distance. They undulated away to the limits of the horizon, and melted in the distance in a faint haze. There within three square miles were accumulated the materials for a complete history of the animal life of ages, a history scarcely outlined in the too recent strata of the inhabited world.

But an impatient curiosity impelled our steps; crackling and rattling, our feet were trampling on the remains of prehistoric animals and interesting fossils, the possession of which is a matter of rivalry and contention between the museums of great cities. A thousand Cuviers could never have reconstructed the organic remains deposited in this magnificent and unparalleled collection.

I stood amazed. My uncle had uplifted his long arms to the vault which was our sky; his mouth gaping wide, his eyes flashing behind his shining spectacles, his head balancing with an up-and-down motion, his whole attitude denoted unlimited astonishment. Here he stood facing an immense collection of scattered leptotheria, mericotheria, lophiodia, anoplotheria, megatheria, mastodons, protopithecæ, pterodactyles, and all sorts of extinct monsters here assembled together for his special satisfaction. Fancy an enthusiastic bibliomaniac suddenly brought into the midst of the famous Alexandrian library burnt by Omar and restored by a miracle

from its ashes! just such a crazed enthusiast was my uncle, Professor Liedenbrock.

But more was to come, when, with a rush through clouds of bone dust, he laid his hand upon a bare skull, and cried with a voice trembling with excitement:

"Axel! Axel! a human head!"

"A human skull?" I cried, no less astonished.

"Yes, nephew. Aha! M. Milne-Edwards! Ah! M. de Quatrefages, how I wish you were standing here at the side of Otto Liedenbrock!"