## CHAPTER 42

## THE VOLCANIC SHAFT

Man's constitution is so peculiar that his health is purely a negative matter. No sooner is the rage of hunger appeased than it becomes difficult to comprehend the meaning of starvation. It is only when you suffer that you really understand.

As to anyone who has not endured privation having any notion of the matter, it is simply absurd.

With us, after a long fast, some mouthfuls of bread and meat, a little moldy biscuit and salt beef triumphed over all our previous gloomy and saturnine thoughts.

Nevertheless, after this repast each gave way to his own reflections. I wondered what were those of Hans--the man of the extreme north, who was yet gifted with the fatalistic resignation of Oriental character. But the utmost stretch of the imagination would not allow me to realize the truth. As for my individual self, my thoughts had ceased to be anything but memories of the past, and were all connected with that upper world which I never should have left. I saw it all now, the beautiful house in the Konigstrasse, my poor Gretchen, the good Martha; they all passed before my mind like visions of the past. Every time any of the

lugubrious groanings which were to be distinguished in the hollows around fell upon my ears, I fancied I heard the distant murmur of the great cities above my head.

As for my uncle, always thinking of his science, he examined the nature of the shaft by means of a torch. He closely examined the different strata one above the other, in order to recognize his situation by geological theory. This calculation, or rather this estimation, could by no means be anything but approximate. But a learned man, a philosopher, is nothing if not a philosopher, when he keeps his ideas calm and collected; and certainly the Professor possessed this quality to perfection.

I heard him, as I sat in silence, murmuring words of geological science.

As I understood his object and his meaning, I could not but interest

myself despite my preoccupation in that terrible hour.

"Eruptive granite," he said to himself, "we are still in the primitive epoch. But we are going up--going up, still going up. But who knows? Who knows?"

Then he still hoped. He felt along the vertical sides of the shaft with his hand, and some few minutes later, he would go on again in the following style:

"This is gneiss. This is mica schist--siliceous mineral. Good again;

this is the epoch of transition, at all events, we are close to them--and then, and then--"

What could the Professor mean? Could he, by any conceivable means, measure the thickness of the crust of the earth suspended above our heads? Did he possess any possible means of making any approximation to this calculation? No.

The manometer was wanting, and no summary estimation could take the place of it.

And yet, as we progressed, the temperature increased in the most extraordinary degree, and I began to feel as if I were bathed in a hot and burning atmosphere. Never before had I felt anything like it. I could only compare it to the hot vapor from an iron foundry, when the liquid iron is in a state of ebullition and runs over. By degrees, and one after the other, Hans, my uncle, and myself had taken off our coats and waistcoats. They were unbearable. Even the slightest garment was not only uncomfortable, but the cause of extreme suffering.

"Are we ascending to a living fire?" I cried; when, to my horror and astonishment, the heat became greater than before.

"No, no," said my uncle, "it is simply impossible, quite impossible."

"And yet," said I, touching the side of the shaft with my naked hand,

"this wall is literally burning."

At this moment, feeling as I did that the sides of this extraordinary wall were red hot, I plunged my hands into the water to cool them. I drew them back with a cry of despair.

"The water is boiling!" I cried.

My uncle, the Professor, made no reply other than a gesture of rage and despair.

Something very like the truth had probably struck his imagination.

But I could take no share in either what was going on, or in his speculations. An invincible dread had taken possession of my brain and soul. I could only look forward to an immediate catastrophe, such a catastrophe as not even the most vivid imagination could have thought of. An idea, at first vague and uncertain, was gradually being changed into certainty.

I tremulously rejected it at first, but it forced itself upon me by degrees with extreme obstinacy. It was so terrible an idea that I scarcely dared to whisper it to myself.

And yet all the while certain, and as it were, involuntary observations determined my convictions. By the doubtful glare of the torch, I could

make out some singular changes in the granitic strata; a strange and terrible phenomenon was about to be produced, in which electricity played a part.

Then this boiling water, this terrible and excessive heat? I determined as a last resource to examine the compass.

The compass had gone mad!

Yes, wholly stark staring mad. The needle jumped from pole to pole with sudden and surprising jerks, ran round, or as it is said, boxed the compass, and then ran suddenly back again as if it had the vertigo.

I was aware that, according to the best acknowledged theories, it was a received notion that the mineral crust of the globe is never, and never has been, in a state of complete repose.

It is perpetually undergoing the modifications caused by the decomposition of internal matter, the agitation consequent on the flowing of extensive liquid currents, the excessive action of magnetism which tends to shake it incessantly, at a time when even the multitudinous beings on its surface do not suspect the seething process to be going on.

Still this phenomenon would not have alarmed me alone; it would not have aroused in my mind a terrible, an awful idea.

But other facts could not allow my self-delusion to last.

Terrible detonations, like Heaven's artillery, began to multiply themselves with fearful intensity. I could only compare them with the noise made by hundreds of heavily laden chariots being madly driven over a stone pavement. It was a continuous roll of heavy thunder.

And then the mad compass, shaken by the wild electric phenomena, confirmed me in my rapidly formed opinion. The mineral crust was about to burst, the heavy granite masses were about to rejoin, the fissure was about to close, the void was about to be filled up, and we poor atoms to be crushed in its awful embrace!

"Uncle, Uncle!" I cried, "we are wholly, irretrievably lost!"

"What, then, my young friend, is your new cause of terror and alarm?" he said in his calmest manner. "What fear you now?"

"What do I fear now!" I cried in fierce and angry tones. "Do you not see that the walls of the shaft are in motion? Do you not see that the solid granite masses are cracking? Do you not feel the terrible, torrid heat? Do you not observe the awful boiling water on which we float? Do you not remark this mad needle? Every sign and portent of an awful earthquake!"

My uncle coolly shook his head.

"An earthquake," he replied in the most calm and provoking tone.

"Yes."

"My nephew, I tell you that you are utterly mistaken," he continued.

"Do you not, can you not, recognize all the well-known symtons--"

"Of an earthquake? By no means. I am expecting something far more important."

"My brain is strained beyond endurance--what, what do you mean?" I cried.

"An eruption, Harry."

"An eruption," I gasped. "We are, then, in the volcanic shaft of a crater in full action and vigor."

"I have every reason to think so," said the Professor in a smiling tone, "and I beg to tell you that it is the most fortunate thing that could happen to us."

The most fortunate thing! Had my uncle really and truly gone mad? What did he mean by these awful words--what did he mean by this terrible

calm, this solemn smile?

"What!" cried I, in the height of my exasperation, "we are on the way to an eruption, are we? Fatality has cast us into a well of burning and boiling lava, of rocks on fire, of boiling water, in a word, filled with every kind of eruptive matter? We are about to be expelled, thrown up, vomited, spit out of the interior of the earth, in common with huge blocks of granite, with showers of cinders and scoriae, in a wild whirlwind of flame, and you say--the most fortunate thing which could happen to us."

"Yes," replied the Professor, looking at me calmly from under his spectacles, "it is the only chance which remains to us of ever escaping from the interior of the earth to the light of day."

It is quite impossible that I can put on paper the thousand strange, wild thoughts which followed this extraordinary announcement.

But my uncle was right, quite right, and never had he appeared to me so audacious and so convinced as when he looked me calmly in the face and spoke of the chances of an eruption--of our being cast upon Mother Earth once more through the gaping crater of a volcano!

Nevertheless, while we were speaking we were still ascending; we passed the whole night going up, or to speak more scientifically, in an ascensional motion. The fearful noise redoubled; I was ready to suffocate. I seriously believed that my last hour was approaching, and yet, so strange is imagination, all I thought of was some childish hypothesis or other. In such circumstances you do not choose your own thoughts. They overcome you.

It was quite evident that we were being cast upwards by eruptive matter; under the raft there was a mass of boiling water, and under this was a heavier mass of lava, and an aggregate of rocks which, on reaching the summit of the water, would be dispersed in every direction.

That we were inside the chimney of a volcano there could no longer be the shadow of a doubt. Nothing more terrible could be conceived!

But on this occasion, instead of Sneffels, an old and extinct volcano, we were inside a mountain of fire in full activity. Several times I found myself asking, what mountain was it, and on what part of the world we should be shot out. As if it were of any consequence!

In the northern regions, there could be no reasonable doubt about that. Before it went decidedly mad, the compass had never made the slightest mistake. From the cape of Saknussemm, we had been swept away to the northward many hundreds of leagues. Now the question was, were we once more under Iceland--should we be belched forth on to the earth through the crater of Mount Hecla, or should we reappear through one of the other seven fire funnels of the island? Taking in my mental vision a radius of five hundred leagues to the westward, I could see under this

parallel only the little-known volcanoes of the northwest coast of America.

To the east one only existed somewhere about the eightieth degree of latitude, the Esk, upon the island of Jan Mayen, not far from the frozen regions of Spitsbergen.

It was not craters that were wanting, and many of them were big enough to vomit a whole army; all I wished to know was the particular one towards which we were making with such fearful velocity.

I often think now of my folly: as if I should ever have expected to escape!

Towards morning, the ascending motion became greater and greater. If the degree of heat increased instead of decreasing, as we approached the surface of the earth, it was simply because the causes were local and wholly due to volcanic influence. Our very style of locomotion left in my mind no doubt upon the subject. An enormous force, a force of several hundreds of atmospheres produced by the vapors accumulated and long compressed in the interior of the earth, was hoisting us upwards with irresistible power.

But though we were approaching the light of day, to what fearful dangers were we about to be exposed?

Instant death appeared the only fate which we could expect or contemplate.

Soon a dim, sepulchral light penetrated the vertical gallery, which became wider and wider. I could make out to the right and left long dark corridors like immense tunnels, from which awful and horrid vapors poured out. Tongues of fire, sparkling and crackling, appeared about to lick us up.

The hour had come!

"Look, Uncle, look!" I cried.

"Well, what you see are the great sulphurous flames. Nothing more common in connection with an eruption."

"But if they lap us round!" I angrily replied.

"They will not lap us round," was his quiet and serene answer.

"But it will be all the same in the end if they stifle us," I cried.

"We shall not be stifled. The gallery is rapidly becoming wider and wider, and if it be necessary, we will presently leave the raft and take refuge in some fissure in the rock."

"But the water, the water, which is continually ascending?" I despairingly replied.

"There is no longer any water, Harry," he answered, "but a kind of lava paste, which is heaving us up, in company with itself, to the mouth of the crater."

In truth, the liquid column of water had wholly disappeared to give place to dense masses of boiling eruptive matter. The temperature was becoming utterly insupportable, and a thermometer exposed to this atmosphere would have marked between one hundred and eighty-nine and one hundred ninety degrees Fahrenheit.

Perspiration rushed from every pore. But for the extraordinary rapidity of our ascent we should have been stifled.

Nevertheless, the Professor did not carry out his proposition of abandoning the raft; and he did quite wisely. Those few ill-joined beams offered, anyway, a solid surface--a support which elsewhere must have utterly failed us.

Towards eight o'clock in the morning a new incident startled us. The ascensional movement suddenly ceased. The raft became still and motionless.

"What is the matter now?" I said, querulously, very much startled by

this change.

"A simple halt," replied my uncle.

"Is the eruption about to fail?" I asked.

"I hope not."

Without making any reply, I rose. I tried to look around me. Perhaps the raft, checked by some projecting rock, opposed a momentary resistance to the eruptive mass. In this case, it was absolutely necessary to release it as quickly as possible.

Nothing of the kind had occurred. The column of cinders, of scoriae, of broken rocks and earth, had wholly ceased to ascend.

"I tell you, Uncle, that the eruption has stopped," was my oracular decision.

"Ah," said my uncle, "you think so, my boy. You are wrong. Do not be in the least alarmed; this sudden moment of calm will not last long, be assured. It has already endured five minutes, and before we are many minutes older we shall be continuing our journey to the mouth of the crater."

All the time he was speaking the Professor continued to consult his

chronometer, and he was probably right in his prognostics. Soon the raft resumed its motion, in a very rapid and disorderly way, which lasted two minutes or thereabout; and then again it stopped as suddenly as before.

"Good," said my uncle, observing the hour, "in ten we shall start again."

"In ten minutes?"

"Yes--precisely. We have to do with a volcano, the eruption of which is intermittent. We are compelled to breathe just as it does."

Nothing could be more true. At the exact minute he had indicated, we were again launched on high with extreme rapidity. Not to be cast off the raft, it was necessary to hold on to the beams. Then the hoist again ceased.

Many times since have I thought of this singular phenomenon without being able to find for it any satisfactory explanation. Nevertheless, it appeared quite clear to me, that we were not in the principal chimney of the volcano, but in an accessory conduit, where we felt the counter shock of the great and principal tunnel filled by burning lava.

It is impossible for me to say how many times this maneuver was repeated. All that I can remember is, that on every ascensional motion, we were hoisted up with ever increasing velocity, as if we had been launched from a huge projectile. During the sudden halts we were nearly stifled; during the moments of projection the hot air took away our breath.

I thought for a moment of the voluptuous joy of suddenly finding myself in the hyperborean regions with the cold thirty degrees below zero!

My exalted imagination pictured to itself the vast snowy plains of the arctic regions, and I was impatient to roll myself on the icy carpet of the North Pole.

By degrees my head, utterly overcome by a series of violent emotions, began to give way to hallucination. I was delirious. Had it not been for the powerful arms of Hans, the guide, I should have broken my head against the granite masses of the shaft.

I have, in consequence, kept no account of what followed for many hours. I have a vague and confused remembrance of continual detonations, of the shaking of the huge granitic mass, and of the raft going round like a spinning top. It floated on the stream of hot lava, amidst a falling cloud of cinders. The huge flames roaring, wrapped us around.

A storm of wind which appeared to be cast forth from an immense ventilator roused up the interior fires of the earth. It was a hot, incandescent blast! At last I saw the figure of Hans as if enveloped in the huge halo of burning blaze, and no other sense remained to me but that sinister dread which the condemned victim may be supposed to feel when led to the mouth of a cannon, at the supreme moment when the shot is fired and his limbs are dispersed into empty space.