

AI-Generated Graded Readers

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About This Edition

This book is a simplified English adaptation created for extensive reading practice.

The text was translated from French into English and simplified using ChatGPT for intermediate English learners as part of an educational project.

Target reading level: CEFR A2-B1

This edition aims to support fluency development through accessible vocabulary, expanded narration, and improved readability while preserving the original story structure.

Source Text

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Jules Verne, *Journey to the Center of the Earth* [*Voyage au centre de la Terre*]
(Simplified Edition, Adapted and Simplified from French by ChatGPT)

Part 1

On Sunday, May 24, 1863, my uncle, Professor Otto Lidenbrock, came home much earlier than usual to our small house in Königstrasse, one of the oldest streets in the old part of Hamburg. Our servant Marthe was shocked when she heard the door, because dinner was still cooking in the kitchen. I was shocked too. My uncle was the most impatient man I had ever known, and if he was hungry, the whole house usually suffered with him. I thought at once that loud cries and angry words would soon fill the rooms.

Marthe opened the dining-room door a little and looked out with wide eyes. "Professor Lidenbrock already?" she cried. My uncle answered at once, "Yes, Marthe. But the dinner has every right not to be ready. It is not even half past one yet." Marthe turned to me in fear and said, "Mr. Axel, please make him listen to reason." Then she hurried back to the kitchen as if she were escaping from danger.

I stayed where I was, but I knew very well that I was not the person to calm such a man. My nature was softer and weaker than his, and I never felt brave in front of him. I thought it would be wiser to go quietly up to my room and stay out of sight. But before I could move, the front door had shut, heavy steps crossed the floor, and my uncle passed through the dining room with great speed. While hurrying to his study, he threw his stick into one corner, his wide hat onto the table, and shouted to me, "Axel, come with me!"

I had hardly time to stand when his voice came again, sharper than before. "Well! Are you not here yet?" I ran at once into the study of my terrible master. I do not say my uncle was a bad man. He was honest, learned, and strong in mind. But unless nature changed him before his death, he would remain one of the strangest men in the world. He was a professor at the Johannaem and taught mineralogy there, but during almost every lecture he grew angry at least once.

It was not because he cared whether his students understood him, or whether

they later succeeded in life. He taught for himself much more than for others. He was a selfish scholar, a deep well of knowledge, but a man from whom it was hard to pull up even a bucket of water. In short, he was like a miser, but his gold was science. To make matters worse, he did not speak easily in public. When he gave lectures, difficult words often stopped in his throat, swelled there, and finally came out as an oath instead of a scientific term. Then he became furious, and the students laughed.

Mineralogy is full of hard Greek and Latin names that can wound the tongue of any human being. My uncle had to speak of crystals, metals, salts, and stones with names that seemed made only to cause pain. In Hamburg everyone knew this weakness of his, and many people took pleasure in waiting for the moment when he would get stuck. Then they smiled, he lost his temper, and the lecture became a battle. It was not kind, but it was true that many came less to learn than to enjoy his anger.

Yet he was a real scholar. He had the eye of a mineralogist and the bold hand of a geologist. With his hammer, steel point, magnetized needle, blowpipe, and bottle of acid, he was a powerful judge of stones. By their look, their break, their hardness, their smell, or their taste, he could place them among the many known kinds without hesitation. So his name was respected in learned circles, and great scientists who passed through Hamburg often came to visit him. He had also written a large book on crystallography, though the world had not rewarded him with money for it.

My uncle was tall, thin, and very strong, with a face that still looked young because of his bright fair hair. Behind large glasses his eyes moved quickly and never seemed to rest. His nose was long and sharp like a knife. Some unkind people even said it was a magnet for iron, though in truth it drew only tobacco. He walked in long steps, kept his fists closed when he moved, and gave the clear sign of a man always ready to attack an idea, a stone, or a person. One did not seek his company for comfort.

He lived in his own house in Königstrasse, a crooked old building of brick and wood that leaned a little toward the street and stood beside one of the narrow

canals of old Hamburg. A large old tree held it almost in place, pushing branches toward the windows in spring. In that house lived my uncle, his ward Graüben, a young Virland girl of seventeen, the good Marthe, and I. As both his nephew and an orphan, I had become his helper in experiments and studies. I must confess that I liked geology very much. I felt I had a little of the mineralogist's blood in me, and I was never bored among stones.

So life in that old house could be pleasant enough, even with its master's impatience. My uncle cared for me, though in a rough way, and I knew it. Still, he was a man who could not wait even for nature. In April, if he planted seeds in flowerpots, he almost wanted to pull the leaves upward each morning to make them grow faster. Such a man had to be obeyed. So I entered his study, ready to hear what new storm had begun.

The room itself was like a museum. Samples from every part of the mineral world stood in perfect order, carefully labeled and divided into great classes. I knew them all well. Many times, instead of playing with boys my own age, I had dusted those pieces of graphite, coal, peat, resin, salt, iron, copper, silver, and gold. There were enough stones in that room to build another house beside ours, perhaps with one more bedroom that I would gladly have claimed for myself. Yet as I entered, I did not think of these treasures. My uncle alone filled my mind.

He sat deep in a wide armchair and held in his hands an old book, which he was admiring with wonderful joy. "What a book! What a book!" he cried. This reminded me that at quiet moments he also loved rare books, though to him a volume had real value only if it could not be found easily, or if it could not be read at all. "Well," he said to me, "do you not see? This is an extraordinary treasure. I found it this morning in the shop of the Jew Hevelius." I answered with false warmth, "Magnificent!" though I saw before me only a dirty old volume with a rough cover, yellow pages, and a faded strip of cloth hanging from it.

My uncle went on praising it. He opened and shut it several times and admired how well it held together after so many centuries. At last I asked what the book was called. "This," he answered proudly, "is the Heimskringla of Snorri Sturluson, the famous Icelandic writer of the twelfth century. It is the

chronicle of the Norwegian princes who ruled Iceland.” I tried to look impressed and asked whether it was a German translation. My uncle looked at me with sharp pity. “A translation? What would I do with a translation? This is the original work in Icelandic, that rich and simple language which allows great freedom in grammar and many changes in words.”

I murmured that German perhaps did the same, but he brushed the thought away. Then I asked if the letters were beautiful, which was another mistake. “Letters?” he cried. “Who is speaking of letters? You foolish boy, this is not a printed book. It is a manuscript, a runic manuscript!” I asked weakly, “Runic?” and he seemed ready to explain the whole history of writing whether I wished it or not. According to him, these letters had been used long ago in Iceland and were said to have been invented by Odin himself. He ordered me to admire them as if they had come from a god.

I might have bowed to end the lesson, but at that moment something slipped from the book and fell to the floor. It was an old, dirty piece of parchment. My uncle rushed upon it like a hungry man on bread. A document hidden for centuries inside an old manuscript could only seem precious to him. He opened it with trembling care and spread it flat on the table. It was about five inches long and three wide, and across it ran strange letters in lines that looked like magic signs.

My uncle stared at them for a few moments and then said, “These are runes. They are exactly like those in the manuscript of Snorri Sturluson. But what can they mean?” I was secretly pleased to see that even he did not understand them at first. To me, runes seemed almost made for scholars to confuse honest people, and it comforted me to find my uncle stopped by them. Still, he muttered that it was old Icelandic and bent over the parchment with all his strength of mind. Just then the little clock on the mantel struck two.

At once the door opened and Marthe said, “The soup is served.” My uncle turned like a man attacked. “To the devil with the soup,” he cried, “and with the one who made it, and with those who eat it!” Marthe fled, and I followed faster than she did, for I was very ready to obey such an order in the opposite direction. A moment later I found myself sitting in the dining room at my usual place. My

uncle did not come. For the first time in my life, he missed the solemn hour of dinner, and all because of that old scrap of parchment.

Part 2

The old paper cost my uncle a very good dinner. There was soup with parsley, an omelet with ham, veal with sweet fruit, and sugared shrimp for dessert, with a pleasant Moselle wine beside it. As a loyal nephew, I felt it was my duty to eat for him as well as for myself, and I did that duty seriously. Marthe could not stop shaking her head while she served me. "I have never seen such a thing," she said. "Professor Lidenbrock away from the table! This must mean something terrible."

I thought it meant only one thing: a great storm would come when my uncle learned that his dinner had disappeared. I had just finished my last shrimp when a loud voice shook the house and pulled me away from the joys of dessert. I jumped up at once and ran back to the study. There I found my uncle frowning over the parchment like a man at war. "It is clearly runic," he said, "but there is a secret in it, and I will discover it."

He struck the table with his fist and ordered me to sit down and write. I obeyed at once. Then he began to dictate, letter by letter, the sounds that matched the strange signs on the parchment. I wrote as carefully as I could, and soon the page in front of me was covered with a long line of ugly, broken words that meant nothing at all. My uncle seized the sheet from me and stared at it in silence for a long time.

"What can this mean?" he said again and again. I could not have told him, and he did not ask me. He began speaking to himself instead. He said it was a cryptogram, a message whose meaning had been hidden on purpose, and that perhaps some great discovery was buried inside it. I myself thought nothing at all was buried there except confusion, but I kept my opinion to myself.

Then he compared the parchment with the old Icelandic book and made an observation that seemed very clever to me. He said the two hands were not the same, and the secret message must be younger than the manuscript. He pointed

out that one letter in the message did not even belong to the oldest Icelandic alphabet. That meant the parchment had been written at least two hundred years after the book. From this he guessed that one of the later owners of the volume had hidden the paper inside it.

My uncle then searched the first pages with a magnifying glass. On the back of one page he found a faded mark that looked at first like a dirty stain, but he examined it stubbornly until faint characters appeared. At last he cried out in triumph, "Arne Saknussem!" It was the name of a learned Icelfander from the sixteenth century, an alchemist known to scholars. My uncle's imagination took fire at once. If this man had hidden a secret discovery, then surely that discovery must be extraordinary.

"But why hide it?" I asked. My uncle only lifted his shoulders and replied that many men of science had hidden things in earlier times. He swore he would neither eat nor sleep until he understood the document. Worse still, he declared that I would not eat or sleep either. I was thankful that I had already eaten enough for two. Then he turned to the problem again and said the first question was simple: they had to identify the language.

He counted the vowels and consonants and decided that the balance did not belong to a northern language, but to one from the south. Then he reasoned further. Since Saknussem was a learned man, and learned men of the sixteenth century often wrote in Latin, the message was probably Latin. I was deeply offended by this idea, because nothing on my page looked like the soft language of Virgil. My uncle answered my silent doubt by saying that it was Latin, yes, but Latin in disorder.

He studied the arrangement of the letters and soon had another idea. The sentence, he said, must first have been written in an ordinary way, and then turned or rearranged according to some rule. To test this, he told me to write any sentence I liked, but to place the letters in vertical groups instead of a normal line. Without thinking, I wrote words that were much too close to my heart. When he read them back by taking the first letter of each group, then the second, then the third, he suddenly cried out my secret: "I love you dearly, my little Graüben!"

I was almost as shocked as he was. I stammered and blushed like a fool. But the great man had already forgotten my confession. His mind had returned at once to the parchment. With shining eyes and trembling fingers, he applied the same method to the mysterious message. He dictated the new result slowly and solemnly, and when he was done, he expected a noble Latin sentence to appear. Instead, he struck the table with terrible force and shouted, "This is nothing! It has no sense at all!" Then he rushed from the room, down the stairs, and out into Königstrasse like a storm.

Marthe came running at the sound of the door. "He has gone?" she cried. I told her yes, and also told her that he would neither dine nor sup, and that no one else in the house would eat until the cryptogram was solved. The poor woman joined her hands and looked as if death itself had entered the kitchen. When she had gone away groaning, I remained alone in the study. For a moment I thought of running to Graüben and telling her everything, but I did not dare leave the house.

It seemed wiser to stay, so I tried to busy myself with a box of minerals that had arrived from France. I sorted, labeled, and placed the little stones into their proper places, but my mind never remained on the work. The old paper troubled me too much. My head felt hot, and I had the uneasy sense that some disaster was coming toward us. At last I threw myself into the great Utrecht chair and lit my long pipe.

From time to time I listened for steps on the stairs, but heard nothing. I pictured my uncle running along the road to Altona, waving his stick, cutting down weeds, and frightening birds in the fields. Then I began to look again at the sheet where I had written the strange letters. I tried grouping them in twos, in threes, and in fives, but nothing clear appeared. Here and there I noticed little fragments that looked like words from English, Latin, Hebrew, or French, but together they made no sense.

The more I looked, the worse it became. The letters seemed to dance before my eyes. My brain grew tired, and I fanned myself with the paper without thinking. Suddenly, as the page turned in the air, I thought I saw clear Latin words for an instant on the reverse side. I stopped breathing. Two or three recognizable words

had shown me the truth. In a flash I understood the law of the cryptogram.

It was not even necessary to hold the paper to the light. The message could be read exactly as it stood, if one began in the right way. My uncle had been right about the arrangement, and right about the language too. He had only missed the final step, and chance had just given that step to me. I walked around the room twice to calm myself, then came back and bent over the table. With my finger moving from letter to letter, I read the whole sentence aloud without stopping.

Terror seized me at once. A man had indeed gone down into the earth and come back again. If my uncle learned this fully, nothing in the world would stop him from trying the same journey. He would drag me with him, and we would both be lost forever. "No," I cried, "he must never know. I still have the power to stop this madness." There were still a few hot coals in the fireplace. I caught up both my written sheet and the parchment itself and moved toward the fire with a shaking hand.

At that very moment the study door opened, and my uncle entered. I had only enough time to throw the papers back on the table. He sat down at once and began a new attack on the problem. For three long hours he wrote figures, crossed them out, and began again. He seemed to have forgotten everything else in the world. I watched in silence, knowing that no clever arrangement would help him now, because the answer had already been found.

Night came, and the house became quiet. Marthe opened the door once to ask whether he wanted supper, but he did not hear her. At last I fell asleep on the sofa while he still worked. When I woke the next morning, he was there in the same place, with red eyes, pale skin, and hair pushed about by his restless hands. In spite of my fear, I felt pity for him. One word from me could end his struggle. Yet that one word might also send him to his death.

I swore again to remain silent. Then a new trouble began. When Marthe tried to go out to the market, she found the front door locked and the key gone. My uncle had taken it. It soon became clear that we were all prisoners in the house until the message was solved. By noon hunger had begun to trouble me badly. By two o'clock I started to think I had perhaps been foolish. Perhaps my uncle would

not believe the message fully. Perhaps he would be stopped somehow, even if he did believe it. At last my hunger won the battle.

I went to him just as he was putting on his hat to leave again. "Uncle," I said. He did not hear me at first. When I raised my voice, he looked at me sharply. "Well," I said, "the key." He thought I meant the key of the front door. "No," I answered, "the key to the document." He seized my arm and stared into my face without a word. I nodded. Then I gave him the paper and said, "Read it from the end."

Part 3

My uncle snatched the paper from my hand and stared at it as if a light had suddenly opened in his mind. Then he gave a cry louder than any I had heard from him before. "Ah, clever Saknussemm!" he shouted. "So you wrote the sentence backward!" He bent over the page with shining eyes and read the whole message from the last letter to the first. His voice shook as he spoke the strange Latin words.

The meaning was this: "Go down into the crater of Sneffels Yocul, which the shadow of Scartaris touches before the calends of July, brave traveler, and you will reach the center of the earth. I did it. Arne Saknussemm." When my uncle finished reading, he leaped up as if he had touched fire. Joy, pride, and wild certainty filled him all at once. He moved the chairs, struck the table, piled books in disorder, and even tossed his precious stones in the air.

At last he dropped into his chair again, tired by his own excitement. "What time is it?" he asked. I told him it was three o'clock. He looked surprised and answered, "My dinner has gone quickly. I am starving. To the table, and then afterward..." I repeated, "Afterward?" and he replied with cruel calm, "You will pack my trunk, and your own as well."

A cold shiver ran through me, but I held myself firm. I decided not to fight him at once with fear or tears, but with science. Surely there were strong arguments against such a journey. To go to the center of the earth was madness. I kept my objections ready and followed him to dinner.

It is useless to describe his anger when he saw the empty table and learned what had happened to the meal. When Marthe was allowed to go out again, she hurried to market, and within an hour food stood before us. My hunger grew quiet, and my thoughts returned to the danger ahead. During the meal my uncle was almost cheerful. He even made a few little jokes of the kind scholars think amusing.

After dessert he led me back to his study and sat down opposite me. "Axel," he said in an unusually gentle voice, "you are a clever boy. You have done me a great service today, and I will not forget it. We are going to win great glory, and you shall have your share." I thought this was the right moment to oppose him. His mood was good, and perhaps reason could still save me.

But first he warned me to keep absolute silence. He said many jealous men existed in the world of science, and if the document became known, a whole army of geologists would hurry to Iceland before us. I answered that I doubted whether so many people would rush to such an adventure. Then I added that the message itself proved nothing. Even if Saknussem had written it, how could anyone know whether he had really done what he claimed?

My uncle frowned at the word "trick," but he controlled himself. "We shall see," he said. He then offered to answer all my objections, and even called me not his nephew but his colleague. I began at once. I asked what those strange names meant, the names I had never heard before: Yocul, Sneffels, and Scartaris.

He told me to fetch an atlas and opened to a map of Iceland. Then, with great pleasure, he explained each point. A "Yocul," he said, was an Icelandic mountain covered with ice, and many volcanoes there had that name because they rose under glaciers. On the west coast he showed me a long peninsula, and on its far end stood a great mountain pushing out toward the sea. "That," he said, "is Sneffels."

I cried that such a crater must be blocked with lava and burned rock. He answered at once that Sneffels was an extinct volcano. It had not erupted since the year 1219, and since then it had become quiet. That reply left me little room, so I moved to the next difficulty. What did Scartaris mean, and why did the message

Speak of the end of June?

My uncle took a moment and then spoke as if the answer were perfectly clear. Sneffels had several craters, he said, so Saknussemm had needed to mark the right one. Near the last days of June, one peak of the mountain, called Scartaris, threw its shadow across only one opening. That was the true path. "Then the man left no room for mistake," my uncle said. "We have only to arrive before July and watch the shadow."

I still resisted. I said that the road to the center of the earth might well stop a little way down, and that no one could be sure of a passage. He answered that nature must decide that question, not fear. Then he launched into the theories of great geologists and the old argument about central heat. Before long he was proving, as he believed, that learned men had often been wrong and that facts alone mattered. I cannot deny that his force of mind troubled me.

In the end he reduced everything to one simple command. We must leave at once, reach Copenhagen as fast as possible, and then find a ship or boat to carry us to Iceland before the end of June. I pointed out that it was still only May 26. He cried that this was exactly why there was no time to lose. If we delayed, we would arrive too late to see the shadow of Scartaris touch the proper crater.

This memorable talk left me almost feverish. I went out into the streets of Hamburg like a man half stunned. I walked toward the Elbe, trying to decide whether my uncle was a madman or a genius. For a few moments his certainty carried me with it, and I almost believed in the journey myself. Then, little by little, the cold judgment of ordinary life returned, and the whole plan seemed impossible again.

While I was walking near the river road, I suddenly saw Graüben coming back toward Hamburg. I called her name and ran to meet her. One look at my face was enough; she saw at once that something serious had happened. In a few quick words I told her everything. We walked on together in silence for a while, my hand holding hers, my heart waiting for sympathy and help.

At last she spoke, but not as I expected. "Axel," she said, "this will be a fine journey." I stopped in amazement. She went on quietly and bravely, saying it was

right for a man to win honor by some great deed, and that my uncle was a bold scholar. She even said that if she were not a burden, she would gladly go with us herself.

I did not know what to say. This young girl, whom I loved, was encouraging me to enter the very danger that terrified me. I felt confused, almost ashamed. Yet in my secret heart I still hoped that time would save me. The end of June was not near, I told myself, and many things could happen before then.

Night had fallen when we reached Königstrasse. I expected quiet rooms, a sleeping household, and my uncle already in bed. Instead I found the house in complete disorder. Porters were carrying in ropes, flasks, iron spikes, tools, torches, and heavy travel goods of every kind, while my uncle shouted in the middle of them like a general before battle. The sight froze me.

“Come, Axel!” he cried the moment he saw me. “Your trunk is not packed, my papers are not ready, my travel bag is missing its key, and my boots have not arrived!” I could hardly form the words. “We are leaving, then?” I whispered. “Yes,” he answered. “The day after tomorrow, at the earliest hour of morning.” I fled to my room, and there was no longer any room for doubt.

The hallway was full of ladders of rope, climbing hooks, picks, staffs, and enough equipment for ten men. I passed a horrible night. At dawn I heard a soft voice outside my door saying, “My dear Axel.” It was Graüben, and I could not refuse her. I came out pale and tired, hoping my miserable face would make her change her brave opinion. Instead she told me she had spoken long with her guardian and believed fully in his plan, his courage, and his success.

Her words gave me strength, though I still tried once more. I led her into my uncle’s study and asked if it was truly decided. He answered that it was, and when I asked why we must hurry so much, he explained again that a ship from Copenhagen to Reykjavik did not leave every day. If we waited, we would miss the season and lose the shadow of Scartaris. “Go pack,” he said. That was the end of the discussion.

Graüben herself helped place my things in a small case. Her hands moved quietly, her voice remained calm, and she spoke as if we were preparing for a

simple visit to another town. I was almost angry with her for being so steady, but at the same time I admired her more than ever. When the last strap was closed, I went downstairs. Through the day more sellers and makers of instruments came to the house, until poor Marthe almost lost her mind.

“Is the master mad?” she whispered to me. I answered with a sad nod. “And you are going with him?” she asked. Again I nodded. “Where to?” said the old servant. I pointed downward with my finger and said, “Lower than the cellar.” That evening my uncle announced that we would leave at six the next morning, and I fell on my bed like a dead man. All night I dreamed of dark holes and endless falls.

At five o’clock I woke weak and broken. My uncle was already eating at the table with a terrible appetite. I could not swallow a mouthful. At half past five a large carriage rolled into the street outside. Soon it was loaded with all my uncle’s packages, and he called for my own trunk. I brought it down at last, for I could no longer fight my fate.

Then came the moment of parting. My uncle solemnly placed “the reins of the house” in Graüben’s hands. She kissed her guardian and kept her usual self-control, but when her lips touched my cheek, one tear escaped her. “Go, my dear Axel,” she said softly. “You leave your promised bride, but you will find your wife when you come back.” I held her close for one moment, then stepped into the carriage, and the horses carried us away toward Altona.

Part 4

Altona, which is almost part of Hamburg, was the starting point of the railway that would carry us toward Kiel and the sea. In less than twenty minutes we had crossed into Holstein. At half past six our carriage stopped at the station, and my uncle’s many packages were thrown down, weighed, labeled, and loaded again with great speed. By seven o’clock we were sitting face to face in the same railway compartment. The engine whistled, the train moved, and our journey had truly begun.

Was I resigned? Not yet. Still, the fresh air of the early morning and the quickly changing sights along the road distracted me a little from my fear. My uncle's thoughts were clearly far ahead of the train, for even this speed was too slow for his impatience. We were alone in the carriage, and he said almost nothing. He kept checking his pockets and travel bag with great care, as if he feared that some necessary paper or instrument might escape him.

I saw among his things a folded letter with the head of the Danish government and the signature of a consul who was his friend in Hamburg. This, I understood, was to help us in Copenhagen. I also saw, hidden carefully in his wallet, the dreadful parchment of Arne Saknussemm. I hated it with all my heart. Then I turned away and looked through the window at the country. It was flat, dull, fertile land, the sort of wide plain that seems made for long rail lines and straight roads.

This sameness did not have time to tire me, because three hours after leaving Altona we reached Kiel, close to the sea. Our luggage was checked through to Copenhagen, so there was nothing for us to do with it. Even so, my uncle followed every piece with anxious eyes until it disappeared into the steamer. He had planned the railway and the ship so carefully that he had expected no delay. But the little steamer for Denmark, the Ellenora, was not to leave until night.

This lost day filled him with fever. For nine hours he sent the railway officers, the steamship company, and all governments that allowed such delays to the devil. I had to agree with him when he even attacked the captain of the Ellenora and tried to make him leave at once. The captain only sent him away. So we walked, waited, complained, and wandered around the pleasant bay of Kiel until ten o'clock at night. At last smoke rose from the steamer, the deck trembled under the engine, and we went on board.

We had two berths in the only cabin of the vessel. At a quarter past ten the ropes were thrown off, and the steamer moved quickly across the dark waters of the Belt. The night was black, the wind was good, and the sea was rough. From time to time a light on the shore shone through the darkness, and later a lighthouse flashed above the waves. That is almost all I remember of that first crossing. My

mind was too full of the larger journey still ahead.

At seven in the morning we landed at Korsør on the western coast of Zealand. There we left the boat and entered another train, which carried us across a land no less flat than the plains of Holstein. It was still three hours to Copenhagen. My uncle had not slept during the night, and in his impatience he seemed ready to push the wagon himself. At last he caught sight of a stretch of sea. "The Sound!" he cried, as if he had discovered it.

Soon we entered Copenhagen and were taken with our luggage to the Hotel Phoenix. My uncle changed his clothes quickly and pulled me out again at once. The hotel porter spoke German and English, but my uncle questioned him proudly in Danish, and in Danish received directions to the Museum of Northern Antiquities. The director, Professor Thomson, was a learned man and a friend of the Hamburg consul. Thanks to a warm letter of introduction, he welcomed my uncle kindly and even showed friendliness to me.

We did not tell him our true purpose. We simply said that we wished to visit Iceland as ordinary travelers. Professor Thomson at once offered us his help, and together we hurried to the quays to search for a ship. I secretly hoped we would find none. But fortune, which was serving my uncle much too well, was again on his side. A small Danish schooner, the *Valkyrie*, was to sail for Reykjavik on June 2, and the captain, Bjarne, was already on board.

My uncle shook the captain's hands with such violence that the poor man looked half frightened. To Captain Bjarne, the voyage to Iceland was a simple matter of business. To my uncle, it was the opening of a path toward glory. The captain quickly understood this and made us pay double price for our passage, but my uncle cared little. "Be on board Tuesday at seven in the morning," he said after taking a very respectable amount of money. My uncle thanked him as if he had given us a kingdom.

After that we returned to the hotel, and my uncle cried again and again, "Everything goes well! Everything goes very well!" Then he insisted that we should breakfast and see the city. I enjoyed that part of the day much more than he did. We went through public squares, past canals and fine buildings, and into

streets that were new and charming to my eyes. But my uncle saw almost nothing. His body walked in Copenhagen, while his mind was already climbing the side of Sneffels.

Only one building truly caught his attention. It was a church tower in another part of the city, a high spire with an outside stair winding around it in the open air. The moment he saw it, he ordered me to follow him there. We crossed by a small steamer through the canals and soon stood before the church. "We are going up," he said. I answered, "But I am subject to dizziness." He looked at me coldly and replied, "All the better. You must get used to it."

We entered and began the climb. As long as we were inside the tower, I managed fairly well. But after one hundred and fifty steps we reached the platform, and there the outer stair began, with only a slight rail between us and the air. The steps grew narrower as they rose. "I cannot do it," I cried. "Coward!" answered my uncle. "Climb!" I had to obey. Soon the wind struck my face, my head turned, and I felt the whole tower moving under me.

I climbed first on my feet, then almost on my knees, then nearly on my stomach. At last my uncle pulled me by the collar to the top. "Look," he said. "Look well. You must learn to face great depths." I opened my eyes and saw the city far below me, flattened like a map under a smoky sky. Beyond it lay green land on one side and shining sea on the other, with white sails moving like the wings of seabirds. Everything seemed to turn around me.

Yet I was forced to stand there and continue looking. That first lesson in dizziness lasted a full hour. When I was at last allowed to come down and put my feet again on solid stone, my body ached and my nerves were broken. "We shall begin again tomorrow," said my uncle. And indeed, for five days he made me repeat the same terrible exercise. Whether I wished it or not, I improved a little in what he called "the art of looking into the abyss."

At last the day of departure came. On the evening before, Professor Thomson had brought letters of introduction for important people in Iceland: the governor, an official of the church, and the mayor of Reykjavik. My uncle thanked him warmly, almost as warmly as he had thanked Captain Bjarne. On June 2, at six in

the morning, all our precious luggage was already on board the *_Valkyrie_*. The captain showed us to our narrow cabins below a small deckhouse, and my uncle asked at once, “Do we have a good wind?”

“An excellent one,” Captain Bjarne answered. “A southeast wind. We shall go out through the Sound with all sails open.” A little later the schooner moved away with all her sails spread, and within an hour Copenhagen seemed to sink into the sea behind us. We passed along the coast near Elsinore, and in my nervous state I almost expected to see Hamlet’s shadow walking there on the old walls. Nothing appeared, and soon both the Danish shore and the Swedish coast faded into the mist. Then the *_Valkyrie_* bent under the wind and moved into the northern sea.

Ours was a good sailing vessel, though with a sailing ship one can never be fully certain of time. She carried coal, tools, pottery, wool clothing, grain, and only five Danish sailors were needed to manage her. My uncle asked the captain how long the crossing would take. “About ten days,” said Bjarne, “unless strong northwest weather delays us near the Faroe Islands.” I listened carefully to every answer. My uncle accepted them with impatience, as if even the ocean ought to obey his plans.

The voyage itself brought no great event, though the sea was often rough enough. I endured it fairly well. My uncle, to his deep shame and my secret satisfaction, was seasick almost the whole way. He had to remain in his cabin when he most wished to stand on deck and question the captain about Iceland, Sneffels, roads, horses, guides, and every other practical matter. So the great conqueror of the center of the earth spent much of the crossing flat on his bed while the ship rolled heavily from side to side.

Day after day we moved northward. We passed the northern tip of Denmark, then the coasts of Scotland at a distance, then the seas near the Faroe Islands. At last, on June 11, land belonging to Iceland appeared. The weather had become clear enough for us to see a great ice mountain rising above the coast. Later we sailed past wild shores beaten by foam, among whales, sharks, black rocks, and islands thrown across the ocean like broken stone. My uncle missed much of this

because the sea still kept him prisoner below.

After another forty-eight hours, and after a storm that forced the schooner to run before the wind, we came at last within sight of the bay of Faxa. An Icelandic pilot came on board. Three hours later the *_Valkyrie_* dropped anchor before Reykjavik. My uncle finally came out from his cabin, pale and tired, but with the same bright fire in his eyes. We had reached Iceland. The real journey, the dangerous journey, was now about to begin.

Part 5

We went ashore at once. My uncle was so eager that he did not even seem to feel the weakness left by the sea. We first went down to the hotel of Mr. Petersen, where our luggage was carried, but we did not remain there long. The governor's letters quickly opened doors for us, and before long we were making our way to the house of Mr. Fridriksson, one of the most learned men in Iceland.

Reykjavik did not strike me as a great city. It was small, low, and quiet, more like a village than a capital. The houses seemed poor and simple, and many roofs were covered with earth and grass, so that they looked half like homes and half like pieces of the ground itself. Yet there was something strange and honest in that severe place, and I felt that we had truly come to the edge of the known world.

During a short walk through the streets, I saw only a small number of people. Most of them were busy with codfish, the great trade of the town, drying it, salting it, or carrying it toward the shore. The men looked strong, fair, and heavy, with serious eyes and faces almost without smiles. The women seemed patient and sad, dressed in dark wool, as if the hard land itself had given form to their lives.

When I returned from that walk, I found my uncle already with our host. Mr. Fridriksson received us with a kindness that touched me at once. He seemed to me more Icelandic than Danish, though he belonged to the learned world and could speak with ease about books and science. I felt immediately that we were safer in his house than we could ever be in an inn.

Dinner was ready, and my uncle, whose forced fast during the voyage had

turned his stomach into a deep hole, fell upon the meal with great energy. The food itself was not very remarkable, but the welcome was generous, old, and noble in spirit. The conversation was carried on in the language of the country, mixed with German from my uncle and Latin from our host so that I might follow at least part of it. It moved among scientific questions, but my uncle remained guarded and warned me with his eyes not to say a single word about our true purpose.

That caution was not wasted on me. I had no wish to help the mad plan that had dragged me from Hamburg. My uncle, however, had already begun to draw from our host all the practical information he could. He asked about roads, distances, local customs, the means of getting horses, and above all the best way to reach the western part of the island where Sneffels stood. Mr. Fridriksson answered with patience and without showing surprise at such restless curiosity.

The next day was given to business. Iceland was not a place where one could simply decide in the morning and depart in the afternoon. Food, tools, horses, and clothing all had to be found, checked, bought, and tied together with care. My uncle threw himself into this work like a man preparing an army. I followed behind him like a prisoner helping to build his own cage.

Yet I could not help being interested in the objects collected for the journey. We secured ropes, ladders of rope, iron hooks, picks, a spade, a hammer, flasks, and many smaller tools. We also obtained instruments on which my uncle placed almost as much trust as on Arne Saknussemm himself: a compass, a chronometer, thermometers, and other devices for measuring height, direction, and temperature. He checked each one with painful care, and if a seller showed the least uncertainty, he was made to regret it.

Provisions also had to be chosen for a long road through a country with little to offer on the way. Dried meat, biscuits, preserved food, and drink were laid aside in good amount. My uncle forgot nothing. He even remembered tobacco, hunting powder, and the materials needed to make fire, and he wore around his waist a leather belt filled with gold, silver, and paper money. There were six pairs of strong boots, made more resistant to wet by tar and elastic gum.

“Dressed like this, shod like this, and equipped like this,” he said, “there is

no reason why we should not go very far.” I did not answer. His words were meant to reassure me, but to me they sounded only like the firm closing of a trap. The more exact his preparations became, the less hope remained that chance would stop him.

One question still remained, and it was one of the most important of all. We needed a guide, not merely a man who knew the roads, but one who could be trusted in lonely country and rough conditions. Mr. Fridriksson found such a man for us. His name was Hans Bjelke.

Hans was an Icelander of calm and serious manner, a man who seemed made of patience, silence, and endurance. He had the look of one who wasted no words and no movements. He listened while my uncle explained what was needed, and he appeared no more surprised by the plan than if we had asked him to cross a field. When the question of payment was settled, he simply agreed to go with us.

This quiet acceptance made a stronger impression on me than all my uncle’s speeches. A wild plan can seem less wild when another man hears it without laughing. Still, I could not decide whether Hans had courage, indifference, or merely the deep obedience of someone who takes the road in front of him because it is there. In any case, I saw at once that he would not be easy to move either by fear or by enthusiasm.

The whole day of the 14th of June passed in arranging these many objects for travel. In the evening we dined with Baron Trampe, the governor, together with the mayor of Reykjavik and Doctor Hyaltalin, the most important physician of the country. Mr. Fridriksson was not present, because he and the governor were not on friendly terms in matters of administration. I understood almost nothing of the talk at that official dinner, but I observed one thing clearly: my uncle spoke almost all the time.

On the following day the preparations were finished. Our host gave my uncle a gift that delighted him deeply: a map of Iceland far better than the one he had used before, a map by Olaf Nikolas Olsen based on recent scientific work. To a mineralogist such a map was not paper but treasure. My uncle studied it with shining eyes and spread it out more than once on the table before folding it away

with great care.

That last evening in Reykjavik was passed in close talk with Mr. Fridriksson, for whom I had begun to feel real affection. He seemed to understand both science and men, and I believe he saw more in our faces than my uncle wished him to see. As for me, I slept badly that night. The thought of the next morning would not let me rest.

At five o'clock I was awakened by the sound of four horses stamping under my window. I dressed in haste and went down into the street. There I saw Hans already loading our baggage, almost without seeming to move, though everything was being placed with uncommon skill. My uncle made more noise than work, and the guide appeared to care very little for his repeated instructions.

By six o'clock all was ready. Mr. Fridriksson came to take leave of us, and my uncle thanked him warmly in Icelandic for his generous hospitality. For my part, I answered as best I could in my poor Latin. Then we mounted our horses, and as he gave me his last farewell, our host sent after us a line from Virgil fit for travelers uncertain of their road. At that moment we left Reykjavik, and the real land journey toward Sneffels began.

Part 6

We had set out under a sky that was cloudy but steady. There was no burning sun to trouble us and no hard rain to break the road. It was weather made for travelers. The fresh air, the wide unknown country, and the easy movement of the horse gave me, for a little while, the simple joy of a tourist. I began to tell myself that I was being foolish. After all, what did I truly risk at that moment except a ride across one of the strangest lands in the world and the climb of a remarkable mountain?

I even tried to reason with myself in a cheerful way. "At worst," I thought, "we shall go down into the crater of an extinct volcano, and there the adventure will end. Saknussemm may have imagined the rest, or he may have lied, or the road may stop after a short descent. There cannot be a real road to the center of

the earth.” Once I had said this to myself, my mind grew lighter. Since I was already on the journey, I decided to take from it whatever pleasure it offered.

Hans walked ahead with a step that never changed, neither too fast nor too slow, but always steady. His body hardly seemed to move, and yet he never lost ground. Looking at him, I could not have guessed that he was a hunter. He was too calm to frighten any living thing and too quiet to seem eager for pursuit. Later I had learned that he gathered the down of the eider duck, that soft treasure of Icelandic trade, and for such work patience is worth far more than violence.

My uncle and I followed him on horseback. The baggage went with us in good order, and every rope, box, and tool appeared as firmly fixed as if the guide had built them into the saddles. My uncle spoke little at first. He was too full of the future to waste words on the present. From time to time he looked ahead as if he hoped to see the cone of Sneffels already standing above the horizon.

We soon left behind the small houses of Reykjavik and entered open country. The ground near the town had some green on it, but that softness did not last long. The earth became darker and rougher. Low grass stretched over damp places, then broke into bare patches, then gave way to stony waste. Everywhere the mark of fire seemed to remain under the skin of the land. It was as though the island had been shaped in anger and only half calmed afterward.

Yet the country was not without life. We passed flocks of sheep, small Icelandic horses, and from time to time a poor farm with walls of turf and stone, so low that one might have mistaken it for part of the hillside. Smoke sometimes rose from a roof that seemed almost buried in the ground. The people who appeared at the doors looked at us gravely, without surprise and without welcome, like those who have learned from hard weather not to spend feeling carelessly.

The road itself was often no road at all. In Germany a traveler expects a marked way, fences, trees, bridges, and signs. In Iceland one follows the ground where it can be crossed. Our guide always seemed to know whether to turn a little to the right, to the left, or toward some distant height, but to me the whole country often looked the same. I understood then how helpless we would be without him. My uncle knew this too, though he was not a man who liked to depend on anyone.

Around us rose chains of low hills and old volcanic masses, broken into strange shapes. Some looked like ruined towers, others like heaps of black waves suddenly turned to stone. The streams were clear and cold, and when we halted near one of them at midday, I drank with true pleasure. Our meal was simple, but after the sea and the hurried days of preparation it tasted good. For a short hour I forgot the center of the earth and thought only of the wind, the horse, and the wide northern silence.

That silence was one of the strangest things in Iceland. In more settled lands one always hears something: wheels, voices, bells, dogs, birds, or running water near human homes. Here the land itself seemed to keep long thoughts and speak rarely. Even my uncle, who usually filled any space with explanation, anger, or theory, was quiet for whole stretches of the day. Only Hans remained exactly what he had been from morning: patient, silent, and impossible to disturb.

As we went farther, the green became rarer, and the signs of volcanic action grew stronger. We crossed old streams of lava, twisted and fixed into shapes so sharp and broken that they seemed to belong not to the earth but to a world after destruction. It was hard to believe that men or animals could ever have passed across such ground before us. In many places the rock was split, uneven, and black, as if the fire that had poured it out had only yesterday gone cold.

Still, that severe landscape had greatness. Nothing there was gentle, but much was grand. The sky hung low, the distant lines of the country widened, and the eye traveled over fields of stone toward mountains that seemed older than history. My uncle grew more alive each hour. He examined the ground whenever we stopped, looked at the shape of the hills, and from time to time gave little cries of satisfaction. Every sign of ancient fire delighted him. To me the same signs were warnings.

Toward evening we reached one of those poor country dwellings where a traveler may hope for shelter without comfort. It was a peasant's house, half hidden in the earth, dark within, close, smoky, and full of the smell of dried fish, sour milk, and damp wool. Yet I had ridden long enough to find it welcome. Our horses were cared for, food was placed before us, and there was a corner in which

we might rest our tired bodies. My uncle accepted these rough conditions without complaint, which proved how completely the expedition possessed him.

The night was short and not very restful. More than once I woke and heard the wind moving over the turf roof or the horses stamping outside. At other moments I thought of Hamburg, of Graüben, and of the peace I had left behind. Then the image of Sneffels rose before me again, and with it the dark opening into which my uncle meant to lead us. But morning came quickly, and once the horses were ready and the baggage tied, thought had to give way to movement.

We set out again across that wild country, and the day carried us farther toward the long peninsula where the famous volcano stood. Now and then the clouds opened enough for distant lines to become clearer, and every time my uncle searched the horizon with burning eyes. At last, far away in the west, there appeared a great form rising above the lesser heights, white on its upper part and dark below. My uncle stretched out his arm without speaking. I needed no explanation. I had seen Sneffels for the first time.

Part 7

After that first sight of Sneffels, our road continued westward. We had now gone around the great bay of Faxa, and the white double peak of the volcano rose through the clouds at a distance that no longer seemed impossible. It stood before us with a calm, cold power, as if it had been waiting there long before men began to cross Iceland. The horses kept moving well, though the ground was difficult and often broken. I, however, was beginning to feel very tired.

My uncle showed no sign of weakness. He sat upright on his horse as firmly as on the first day, and I could not help admiring him almost as much as I admired Hans. The guide treated the whole expedition as if it were nothing more than a country ride. My uncle, for his part, never took his eyes off the mountain for long. He seemed to challenge it already, and every gesture of his body said, "So you are the giant I shall defeat."

As we moved nearer, the country became harsher and more strongly marked

by the mountain. The roots of the granite seemed to come out of the earth like the roots of some enormous old tree. The ground was less soil than broken stone. The horses had to choose their footing carefully, and sometimes they slowed of their own will over the roughest parts. Yet even this severe road had a strange greatness, because every step brought us nearer to the dark purpose of the journey.

On Saturday, June 20, at six in the evening, we reached the little village of Būdir, which stood by the sea. Hans then asked for the payment that had been promised to him for this first part of the road, and my uncle settled the matter at once. We were received there by members of Hans's own family, his uncles and cousins, who showed us a kindness that touched me. They gave us shelter without ceremony and with the simple honesty of good people. If I had been allowed to choose, I would gladly have remained there for several days and let both body and mind recover from the journey.

But my uncle had nothing he wished to recover from. Fatigue did not seem to exist for him when it stood in the way of his purpose. So the next day we had to mount our good horses again and continue around the base of Sneffels. Every hour the mountain filled more of the sky. It no longer belonged to the distance. It was becoming a presence over us.

The land around it looked as if fire and stone had struggled there for ages. Huge masses of rock lay in confused forms, while other places showed hard lines and deep cuts that seemed almost deliberate. My uncle grew more excited as the mountain came closer. He pointed, he waved his arm, and more than once he spoke to Sneffels as if it were a living enemy. I could not answer him. My thoughts were turning darker as the road climbed nearer to the place from which there might be no return.

After another full day of travel, our horses stopped by themselves before the door of the parsonage at Stapi. The village was made up of only a few poor huts built in the middle of an old field of lava under the reflected heat of the volcano. It lay at the end of a small fjord closed in by walls of rock of the strangest appearance. I had never seen anything like it. The whole place looked half built by nature and half by some ancient race of silent stone-workers.

The basalt there had taken regular forms that seemed almost designed by a careful hand. In other places nature throws up hills and peaks in wild disorder, but here she had worked like an architect with square, straight, and measured forms. Dark columns rose in groups, one above another, and the rock seemed arranged by rule. I could well understand why men seeing such things might invent stories of giants, demons, or gods. Stapi did not look like a village at the edge of ordinary life. It looked like the doorway of another world.

Hans spoke to a blacksmith who was shoeing a horse, and my uncle learned that this rough worker was in fact the local pastor. The discovery did not increase his respect for the place. The pastor's wife, a huge and unwelcoming woman, led us into the room meant for strangers, and I found it narrow, dirty, and full of unpleasant smells. We had no choice but to accept it. Our host seemed to be much more blacksmith, fisherman, hunter, and carpenter than man of religion.

I do not wish to speak too harshly of these poor Icelandic priests. They are badly paid and must work with their hands to live. But a man who spends his time fishing, hunting, shoeing horses, and drinking strongly does not always gain the gentleness of a scholar or the grace of an old-fashioned host. My uncle quickly understood what sort of house this was. Instead of finding a learned and dignified clergyman, he had found a heavy peasant of rough manner. He therefore decided that we should remain there as little as possible.

That same evening he made up his mind to begin the real attack on the mountain without delay. Since he did not care about his own fatigue, he assumed no one else's could matter either. Preparations for departure were therefore arranged the very next day. Hans hired three Icelanders to replace the horses in carrying the baggage higher up the mountain. It was clearly agreed that once we had reached the bottom of the crater, those men would turn back and leave us alone.

During these arrangements, my uncle had to explain to Hans that he intended to continue the exploration of the volcano to its farthest limits. The guide only bent his head. To him, it seemed to make no difference whether a man crossed the island on the surface or disappeared into its depths. Until then I had been partly

distracted by the daily incidents of travel, but now my fear rose again with full force. At the foot of Sneffels, the future could no longer be hidden by movement.

One thought in particular would not leave me. It was a thought strong enough to shake nerves firmer than mine. "Very well," I said to myself, "we shall climb Sneffels. Many people have done that and lived. We shall visit its crater. That too may be survived. But if a path opens below us, if that unfortunate Saknussem spoke the truth, then we shall lose ourselves in underground passages from which no human guide can bring us back."

Nor was that the end of my fear. Nothing proved to me that Sneffels was truly dead forever. A sleeping monster is not a dead one. Because it had been quiet for centuries, did that mean it could never wake again? Suppose, after we had entered its depths, fire and smoke returned? Suppose the mountain closed behind us or threw us out broken and burned? I could not speak these thoughts aloud with any hope of changing my uncle. I kept them within me, and they grew heavier there.

So we passed our first evening at Stapi in discomfort, impatience, and secret dread. My uncle was already looking toward the mountain. Hans was as calm as ever. I alone seemed to hear, through the silence of the place, the danger that waited above us and perhaps far below us too. The next step would no longer be a journey across Iceland. It would be the beginning of the descent.

Part 8

At last I could bear my thoughts no longer, and I went to my uncle with what I believed was one strong objection. "Suppose," I said, "that Sneffels is not truly dead. Suppose an eruption is preparing. What will become of us then?" To my surprise, he did not laugh at once. "I have been thinking of that," he answered. For one second hope returned to me. But that hope did not live long.

He explained his view like a man proving a lesson. For several days, he said, he had watched the mountain carefully. If an eruption were near, the little steam openings on its sides would show unusual activity. Instead, they remained in their

ordinary state. He added that during an eruption the elastic forces choose the main crater rather than small cracks in the ground, so those side vapors often disappear instead of growing stronger. "If the smoke changes in no dangerous way," he said, "and if heavy, still air does not replace wind and weather, then there is no reason to fear an immediate eruption."

I tried to interrupt, but he cut me short. "Enough," he said. "When science has spoken, one must be silent." I returned to the parsonage with my ears down like a beaten dog. He had defeated me with scientific arguments, and there seemed to be no answer left. Even so, I kept one poor hope. Perhaps we would reach the crater and find no passage downward. Then all his plans, and all Saksussemm's boasting, would end against solid stone.

That night I slept badly. I dreamed of fire, abysses, and the inside of the earth. In my dream I was thrown into the sky in the form of volcanic ash. The next morning, June 23, Hans was waiting for us with his three Icelanders, who now carried the food, the tools, and the scientific instruments. Two iron-tipped staffs, two guns, and two pouches of powder were reserved for my uncle and me. Hans, always careful, had also added a large skin full of water. With that and our flasks, we had enough to last eight days.

It was nine in the morning. The pastor and his huge wife stood before the door to say goodbye, though their farewell came in the form of a very large bill in which even, it seemed to me, the bad air of the house had been counted. My uncle paid without protest. A man who intended to travel to the center of the earth was not likely to stop over a few coins. Once that business was done, Hans gave the signal, and a few moments later we had left Stapi behind us.

From our point of departure, the two peaks of Sneffels could not yet be clearly seen against the gray sky. I saw only a vast snow cap resting upon the brow of the giant. We walked in single file behind Hans, for the paths were so narrow that two persons could hardly have moved side by side. Real conversation was almost impossible, and I was left to my own thoughts. That was not always a comfort.

Beyond the basalt wall of the Stapi fjord, the first ground we crossed was a

wide stretch of peat, the remains of ancient marsh plants piled and pressed through long ages. Even in my uneasy state, I could not help observing the country with real interest. It seemed to me like a giant natural museum spread open beneath the sky. At the same time I reviewed in my own mind the geological history of Iceland, and every conclusion I reached appeared to fight against my uncle's hopes.

Everywhere the island showed the work of subterranean fires. Great masses of dark basalt lay around us, many of them shaped into strange regular forms by cooling. Flat volcanic cones stood here and there at a distance, the dead mouths of ancient eruptions. Then came long streams of old lava and fields of ash and broken stone spread over the lower slopes of the mountain. Looking at all this, I told myself once more that my uncle's theory and Sagnussemm's message must surely end in smoke.

Yet the mountain rose before us, and we continued toward it. The road grew harder with every hour. Loose stones shifted under our feet, and great blocks of rock often hid Hans from view. When he disappeared, he would let out a sharp whistle to guide us. From time to time he also stopped to place small signs of stone along the way, marks that would help us find our road again. It was a wise precaution, though later events were to make such care useless.

Three tiring hours brought us only to the foot of the mountain itself. There Hans gave the signal to stop, and we shared a simple meal. My uncle ate twice as fast as the rest of us because he wanted the rest to end quickly. But even he had to wait until Hans was ready to move again, and that did not happen for a full hour. The three Icelanders, like Hans himself, said almost nothing and ate with great calm.

We then began the true ascent of Sneffels. By one of those mountain illusions that deceive the eye, the snowy summit seemed close, almost ready to be touched. In reality it was still terribly far away. The slope was steep, the stones were loose, and no soil or grass held them together. At many points, they slipped under our feet and ran downward into the plain with the speed of a small avalanche.

In some places, the side of the mountain rose at such an angle that it could not be climbed directly. Then we had to turn, cross, and climb by difficult side

paths. We helped one another with our staffs, and I must say my uncle kept near me as much as he could. More than once his arm gave me real support. For his own part, he seemed to possess a natural sense of balance. He never stumbled. As for the Icelanders, though burdened with loads, they climbed with the quick ease of born mountain men.

Toward evening we reached a sort of stone staircase made by one of the ancient torrents of rock thrown out during eruptions. The Icelanders had a name for this kind of stony stream. Whatever its name, it was useful to us. Had it continued its whole descent, it might have rushed into the sea and formed new islands there. As it was, the frozen torrent served us like a road. Step by step, rapidly and almost too rapidly for me, we climbed those natural stairs cut in old volcanic ruin.

At seven in the evening we had climbed what seemed to me no fewer than two thousand steps, and we reached a kind of ledge or broad shoulder of the mountain on which the cone of the crater itself rested. The sea lay far below us, more than three thousand feet down, and we had passed above the line of permanent snow. The cold was violent there, and the wind blew with great force. I was exhausted and could hardly stand.

My uncle saw my condition and agreed to halt, but when he made a sign to Hans, the guide shook his head and said only one word. My uncle translated the sense of it: we had to go higher. I asked why, and Hans gave another word, which one of the Icelanders repeated in a frightened voice: "mistour." My uncle told me to look toward the plain. There I saw a giant column of powdered pumice, sand, and dust rising in a twisting storm. The wind was driving it toward the flank of Sneffels where we stood.

That dark curtain already threw a great shadow across the mountain. If it struck us directly, it would wrap us in its violent spinning dust and hurl stones about us like an eruption. "Quickly!" cried Hans, and though I did not know the Danish word, I understood him well enough. He began to lead us around the cone on a slant, choosing the easiest line. Soon the whirlwind struck the mountain with a force that made the whole slope seem to tremble. Stones flew through the air,

but we were on the safer side and escaped unharmed.

Hans judged, however, that it would be unwise to pass the night on those outer slopes. So we continued to climb in zigzags. The last fifteen hundred feet cost us nearly five more hours. The turns and side movements made the distance far greater than it looked. I was dying from cold, hunger, and weariness, and the thinner air did not easily fill my lungs. At last, about eleven o'clock at night, in full darkness, we reached the summit of Sneffels.

Before taking shelter within the crater, I had time to cast one look outward. There, low in the northern sky, I saw the midnight sun at the lowest point of its course, throwing pale light over the sleeping island at our feet. It was one of those strange northern sights that remain in the memory forever. Then we turned inward, ate our supper quickly, and lay down as best we could. The bed was hard, the shelter poor, and the place one of the most uncomfortable in the world. Yet I slept deeply and without dreams.

The next morning I awoke half frozen, but under a beautiful sun. I rose from my granite bed and went at once to enjoy the magnificent view. I stood upon the southern of the two peaks of Sneffels, and from there I could see over most of Iceland. The coastlines seemed lifted upward by the height, while the middle of the island looked sunk like the center of a relief map. Valleys crossed one another in every direction, ravines opened like wells, lakes became tiny pools, and rivers seemed no more than thin lines.

On one side stretched glaciers and peaks without number, some crowned by light smoke. To the west the ocean spread itself like a continuation of the mountain waves, and the eye could scarcely decide where land ended and water began. I remained there in a kind of bright dream and, for once, without dizziness. I had at last become used to high places. My uncle and Hans joined me. My uncle pointed toward a faint appearance of land far off above the sea and said it was Greenland. Then he asked Hans the name of the peak on which we stood. "Scartaris," answered the guide.

My uncle shot me a triumphant look. "To the crater!" he said. The crater of Sneffels was like an upside-down cone whose opening might have measured half

a mile across. At noon we had reached its bottom. I raised my head and saw above me a round piece of sky, almost perfect in shape, and at one edge the sharp point of Scartaris cut into it. At the bottom of the crater opened three dark chimneys, through which the volcano had once driven out its fire and vapor.

I did not even have the courage to look deeply into those three black mouths. My uncle, on the contrary, ran from one to another, examining them with quick and eager steps. Hans and the Icelanders sat quietly on blocks of lava and watched him. They plainly thought him mad. Suddenly my uncle cried out, and I thought he had fallen into one of the holes. But no. He stood with arms spread before a great granite block in the center of the crater, staring at it with amazement that quickly turned to wild joy.

“Axel! Axel! Come!” he shouted. I ran to him. On the western face of the rock, half eaten away by time, I read letters cut in runes. It was the terrible name that had driven us from Hamburg and across Iceland: Arne Saknussemm. My uncle cried, “Will you doubt now?” I could not answer. The proof was too strong. I went back and sat down upon a block of lava in complete despair. When I next lifted my head, the three Icelanders had been dismissed and were already going down the outer slopes toward Stapi. We were alone now with Hans, my uncle, and the crater. That first night at the bottom of Sneffels began in silence and dread.

Part 9

That first night at the bottom of the crater passed in a kind of dark suffering. Hans slept peacefully in a hollow of lava as if he were resting at home after an ordinary day’s work. My uncle walked up and down like a trapped animal, stopping now and then to look upward through the round opening of the cone. As for me, I lay in a painful half-sleep and thought I heard trembling sounds moving through the sides of the mountain. Even in rest, Sneffels did not seem like a place meant for human sleep.

The next morning a heavy gray sky covered the summit of the cone. I understood at once why this weather filled my uncle with silent anger. Of the three

open shafts before us, only one had been used by Arne Saknussemm, and according to the message it could be recognized by the shadow of Scartaris during the last days of June. If the sun did not appear, there could be no shadow, and if there was no shadow, there could be no certain choice. We were already at June 25.

I confess that this gave me a secret and shameful hope. If the clouds remained for six days, we would have no guide, and the journey must be put off for another year. My uncle did not speak to me once that whole day. He kept his eyes fixed on the pale opening above us as if he meant to force the sun out by strength of will. Hans did not move from his place unless there was some simple task to do. If he asked himself what we were waiting for, he showed no sign of it.

June 26 passed no better. Rain mixed with snow fell into the crater and ran down the inner slopes in a thousand sudden little streams. Hans built us a rough shelter from blocks of lava, and under other circumstances I might have admired his skill more calmly. The falling water made a loud and endless murmur around us, and each rock seemed to add its own voice to the sound. My uncle's impatience grew almost unbearable. To fail at such a moment, after coming so far, seemed to him worse than any common misfortune.

The next day remained covered too, and every hour that passed made the danger of delay more real. Yet on Sunday, June 28, the sky changed with the moon. Morning light entered the crater with sudden richness, and every point, every stone, every rough edge of lava threw a shadow on the ground. Among all these dark lines, one alone mattered. The sharp shadow of Scartaris drew itself cleanly across the crater floor and began to move, slow and certain, with the sun.

My uncle followed that shadow as if his own life were tied to it. He turned with it, bent over it, watched it pass rock after rock, and held his breath when it neared the three black openings. I watched him, then the ground, then the chimneys, scarcely daring to think. Noon came. At the moment when the shadow was shortest, it touched the edge of the central shaft with a clear, quiet exactness that left no room for doubt. "There!" cried my uncle. "There is the road to the center of the earth!"

Hans answered with a calm word meaning only, "Forward." That quiet answer struck me more strongly than my uncle's triumph. The true journey was beginning. Until then, we had known only travel, fatigue, cold, and climbing. From that moment onward, difficulty itself would live under our feet. I knew that I could still refuse, but I was ashamed to draw back before a guide who accepted the unknown with such complete calm.

Thinking of Graüben gave me the last strength I needed. I walked to the edge of the central shaft and forced myself to look down. The opening was enormous, and the walls, though nearly vertical, showed many projections and broken points that might help a careful descent. But when my eyes tried to follow the depth below, my whole body turned weak. The pull of the abyss rose into my head like wine. My balance left me, and I was already falling forward when a hand seized me strongly. It was Hans.

I stepped back trembling. Those lessons in dizziness on the church tower at Copenhagen had not cured me enough for such a place. My uncle, who noticed only the practical side of danger, had already begun to prepare our descent. He used a thick rope about four hundred feet long. One half was lowered into the shaft, the rope was then passed around a projecting block of lava, and the other half was also let down. In that way, each of us could descend by holding both strands, and once two hundred feet had been gained, the rope could be drawn down and used again.

This seemed simple to my uncle, and therefore sufficient. He then divided the baggage. Hans was to take the tools and part of the food. I was to carry another part of the food and the weapons. My uncle reserved for himself the rest of the provisions and the more delicate instruments. When I asked how our clothes, ladders, and the mass of remaining ropes would be carried down, he answered with perfect calm that they would go by themselves.

On his order, Hans tied the less fragile objects into one strong bundle. Then, without ceremony, the whole mass was pushed over the edge and dropped into the shaft. I heard the rushing sound made by the air as the package fell. Then for a few moments there was nothing. At last, far below, a dull crash returned from the

depth. That single sound told me better than any speech how far from the surface we were about to place ourselves.

Once these arrangements were finished, there was no longer any excuse for delay. We fastened our loads, took up the rope, and began. I no longer remember in what exact order we entered the chimney. What remains in my memory is the feeling itself: the rock against my knees, the rope cutting my hands, the cold wall against my shoulder, and the opening above growing smaller each time I dared to look up. For long stretches no one spoke. Only the rubbing of boots on stone and the slight striking of hanging tools disturbed the silence.

The descent was not one steady line. Often we had to pause on narrow ledges, find a safer hold, or shift our bodies around a projecting wall. At some points the shaft widened, and the darkness below looked almost like an open night. At others it narrowed so that the rock seemed ready to close upon us. More than once I stopped because my breath failed me, and each time I felt that strange mixture of fear and obedience which had carried me so far already. My uncle's voice, brief and hard, always drove me on again.

Hours passed in this labor. Little by little, the light from above lost its power. What had first been a great round opening became a pale circle, then a small star-like patch far over our heads. The air around us changed too. The outer cold disappeared, and a deeper, stiller warmth began to rise from below. I could no longer say whether we were entering the body of the mountain or whether the mountain was closing over us like the lid of a tomb.

At last, after a long day of effort, we reached a place where we could rest for some hours in relative safety. It was no comfortable shelter, only a rough stopping point in the dark way down, but to me it seemed almost like deliverance. We took a little food and drink, more from necessity than desire. My limbs shook from exhaustion, and my hands were sore from the rope. Yet in spite of everything, my uncle was satisfied. The path had opened. Saknussem had not lied. We were below Sneffels now, and the earth had received us.

When I lay down to sleep, if that state deserves such a name, I no longer thought of Iceland, or even of the mountain above. I thought only of distance. The

world of men, of daylight, of streets, houses, and living trees, was already above us like another life. We had begun the descent for real, and every hour from now on would carry us farther from all ordinary hope.

Part 10

The next morning we resumed our hard descent. The shaft down which we had come from the crater did not continue straight forever, and after a time it broke into slanting passages, rough ledges, and narrow openings through which we had to pass with increasing care. My uncle was delighted by every fresh difficulty because each one meant that the way still went on. I was less delighted. To me, every step downward seemed to close another door behind us.

Still, I could not deny that the journey had a strange power over the mind. As the daylight above weakened more and more, the earth began to show itself to us in layers like the pages of a great buried book. My uncle, even while descending, found time to point out the character of the rocks. Granite gave way to other formations; the walls changed in color, hardness, and structure. I listened because I had to, but also because the science itself began to make the depths more real.

We descended by means of our rope, always using the same careful method. At one ledge we gathered the lowered rope, passed it again around a projecting mass of stone, and let ourselves farther down. Hans never hurried, never lost his balance, and never wasted a movement. My uncle trusted him completely now, though he would sooner have trusted himself. As for me, I followed because there was nothing else to do.

In that world, time became difficult to measure. Only the chronometer and my uncle's habits told us when to eat or sleep. We could no longer judge morning from evening by the sky. Above us, the distant opening of Sneffels had shrunk into a faint circle, and then into something so small that it no longer seemed possible it could ever have held the sun. I often raised my eyes toward it and felt that the surface of the earth belonged already to memory.

For several days we went on in this way. We passed through regions of the

mountain where the walls were formed of primitive rocks, twisted by forces older than human thought. My uncle was in ecstasy before this living lesson in geology. More than once he forgot the danger of our position in the joy of explaining what he believed had happened in the youth of the globe. I could not share his happiness fully, but his voice, strong and confident in that darkness, gave me some support.

Then the nature of the ground changed again. We left the ancient crystalline depths and entered regions formed later, where schists, limestones, and beds full of clear signs of former life appeared around us. Shell shapes and impressions could be seen in the rock itself. My uncle spoke of ages when the waters of the world had covered what was now above us, and of the long burial of living things under sediment, pressure, and time. In such moments, even fear had to make room for wonder.

Lower still, the walls began to show signs of the great coal-bearing formations. Dark matter appeared in abundance, and my uncle cried out with triumph that we were crossing one of the rich buried storehouses of the world. Whole masses of carbonized vegetation seemed to lie untouched in those inaccessible depths. He forgot for a time the center of the earth itself and spoke instead as a professor, a geologist, and a man half mad with scientific pleasure. It was curious to hear such thoughts in a place where a single misstep could end all theory forever.

Yet our road itself gave him less satisfaction than the rocks. The farther we went, the less steep the passage became. At first this change seemed like mercy to me, because the descent had been exhausting and dangerous. But I soon saw that my uncle did not welcome it. He wanted the road to plunge always downward. Instead, little by little, the angle softened until the gallery was no longer a descent, but nearly a level way.

This tunnel, as I began to think of it, stretched before us into darkness beyond the reach of our lamps. We followed it because it was the path chosen by my uncle after one important decision. At a certain depth below the crater, the road had divided into two galleries. One opened toward the east, the other toward the west. Since Saknussem had left no sign there, my uncle was forced to judge for

himself, and after examining the slope of the ground, he chose the eastern passage.

I obeyed, though without confidence. In truth, once we had entered it, I began to hope that this choice would prove wrong. A mistake underground might be our salvation if it forced us back before matters had gone too far. My uncle, however, walked on with all the determination of a man who cannot imagine defeat. Hans, as usual, accepted the chosen road without question. It seemed to matter little to him whether east or west led us onward, as long as there was ground under his feet.

For a long time the gallery ran almost horizontally. My uncle could barely contain his irritation. He had come to penetrate the globe, not to cross it like a mole digging under a road. The darkness around us deepened because there was nothing now to break the monotony of the tunnel. The same walls, the same floor, the same black roof, and the same measured steps repeated themselves hour after hour, until I began to think that we might walk forever without seeing either an end or a true descent.

Yet the passage was not without danger. The air contained a strong smell of fire-damp, that dreaded gas which destroys so many miners. Had we used open torches, the whole gallery might have become our grave in a single explosion. We owed our safety to the ingenious lamps we carried. Even so, the thought that hidden death floated with the air we breathed did not make the road more cheerful. My uncle, however, noticed danger only when it blocked progress.

Day after day we advanced. I cannot speak of those days without remembering the growing weakness in our water supply. Food still remained, but drink did not. The flasks grew lighter, and every measured swallow became a matter of argument between necessity and fear of tomorrow. My uncle tried to conceal his concern, yet I saw him looking more than once at the small remaining quantity. Hans drank less than either of us, though he had done the hardest work. That calm self-command of his began to seem almost superhuman to me.

At last, toward evening on one of those dreadful days, the gallery came to an abrupt end. A wall stood before us. We examined it to the right and to the left, above and below, but there was no opening anywhere. We had reached a complete

dead end. For one second joy leaped in my heart so strongly that I nearly cried aloud. Then I remembered where we were, and joy gave way at once to another fear.

My uncle was the first to speak. "So much the better," he said. "At least now we know where we stand. This is not Saknussemm's road. There is nothing left but to go back." His courage remained, but I heard in his voice the shock of a man forced to admit a mistake. We would have to return to the point where the two galleries divided and try the western path. Under ordinary conditions that would have been only a delay. Under ours, it threatened much worse.

I answered, "Yes, if we still have the strength." He turned sharply and asked why not. I then said what had been growing heavier in all our minds. On the next day, our water would be gone. Food alone could not save us in those depths. A dry throat, burning lips, and the slow torture of thirst were already before us. My uncle fixed his severe eyes on me and asked whether courage too would fail with the water. I did not answer him.

In truth, I had no answer to give. Courage may resist many things, but thirst is one of the masters of man. Even before the return began, I felt a dryness on my tongue that no self-respect could drive away. The thought of retracing five days' march through that suffocating tunnel, with empty flasks and no hope except a distant junction, settled on me like a sentence. Still, there was nothing else to do. The eastern road had betrayed us, and the mountain had given no pitying sign.

So we prepared to sleep before that blind wall, at the very bottom of our error. My uncle still hoped to save the expedition by returning quickly. Hans lay down without complaint, as though a dead end and a full road were of equal value in his eyes. I alone felt the full cruelty of our position. We had gone far enough to suffer, but not far enough to succeed, and now the thirst that had until then followed us silently was ready to come and stand before us face to face.

Part 11

We set out again very early the next morning, and from the first step the

return became a torture. Five days had brought us from the junction to the dead end, and now those same five days had to be crossed once more, but under far worse conditions. On the outward road we had still possessed hope, water, and strength. Now we had none of these in full measure. We were walking back through error itself, and thirst came with us like an enemy that no courage could strike down.

I will not dwell on every suffering of that retreat, though I still remember it too well. My tongue became dry and rough. My lips burned, and the air of the gallery seemed to take from me the little moisture still left in my body. The dark walls no longer interested me as geological formations. They looked only like stone barriers set there to keep us from water, from light, and from life.

My uncle endured the same pain, but he fought it in his own way, by force of will and by anger against weakness. He said little, because speech itself cost too much. Yet now and then he turned and urged me forward with his eyes, as if he thought determination could replace drink. Hans continued to walk as he always did, steady, silent, and self-contained. But even he, I thought, had become more grave than before.

Each pause was dangerous, because to sit down was to want never to rise again. Still, our legs could not move forever without rest, and more than once we stopped on the rough floor of the gallery and leaned against the wall like wounded men. During one of those halts my uncle looked into our flasks and found only a few drops remaining. He gave them all to me. I drank them with gratitude and shame, for the water touched my throat only to make the need worse.

After that, time lost its shape. There were only steps, pain, and the endless tunnel. I remember that at one point I felt my brain growing strange and uncertain. Angry thoughts rose in me against my uncle, against Saknussem, against science, and even against Hans, because his calm face seemed almost an insult to my misery. Then those thoughts passed, and there remained only one wish, the wish to lie down and be still.

At last that wish defeated me. I sank upon the ground and declared that I could go no farther. My uncle tried to lift me with hard words first and then with

a tone that was almost tender. He said that if we stopped, we were dead, and that a few hours more might save us. I heard him, but his voice seemed far away. All the blood in my body appeared to be beating in my head, and I could no longer control either despair or reason.

“Leave me,” I said. “I would rather die here than go on.” My uncle stepped back and folded his arms. In his face I saw both pity and terrible resolution. He was ready, I think, to go on even if I remained behind. Perhaps that very thought forced my strength to return a little, because I rose again after a time and staggered forward. We resumed our march, but now each step felt like the movement of a man already half buried.

Suddenly Hans stopped. He bent his head and listened with his whole body, as a hunter listens for something that others cannot yet hear. My uncle and I stood still at once. At first I noticed nothing but the ringing in my own ears. Then, very faintly, I thought I caught a murmur, a distant and uncertain sound, as though water were moving behind the stone. My uncle seized Hans by the arm. “You hear it?” he asked.

Hans simply nodded. He walked toward one point of the wall and listened again, then another, then returned to the first. There he struck the rock lightly with the iron point of his staff. The sound was not dead and full, but thinner, more hollow. My uncle’s face changed in an instant. “Water!” he cried. “There is water on the other side of this wall!” In that moment I felt life return to me even before the water itself had appeared.

Hans lost no time. He took up his pick and began to work upon the chosen place with strong, exact blows. The rock was hard, but not impossible. My uncle helped him, though his impatience made him less useful than the guide. I watched in feverish silence. Every strike seemed too slow, and every small fragment that fell away looked like a promise not yet fulfilled.

At last a sharper sound answered the blow of the pick, and a fine spray burst from the wall. Then the opening widened, and a strong jet of water rushed out with force enough to strike the opposite side of the gallery. It was hot, almost burning, because it had come from deep within the earth under great pressure. But

within a few moments it cooled enough to be drunk, and we bent over it like men restored from death itself.

Never has any drink seemed sweeter to me. It had a taste of iron and minerals, and my uncle laughed even while drinking, saying it would cure the stomach as well as thirst. I did not care whether it was a medicine, a miracle, or merely a stream. It was water, and that was enough. I drank again and again until my strength and my mind returned together. Hans took only what he needed and then leaned quietly against the wall as if such rescues happened every day.

My uncle was now full of energy once more. He proposed that the stream should bear the name of the man who had found it, and so it became the Hansbach. I agreed with pleasure, and this little act of naming seemed to mark a victory over the terrible hours behind us. We filled our flasks and the skin, and then I suggested that we should try to stop the opening in the wall so the water would not be lost. My uncle listened, then shook his head.

“Why close it?” he said. “When our flasks are empty again, shall we be sure of finding another spring?” I saw at once that he was right. The stream crossed our road, and if we kept near it, it might serve as our guide as well as our salvation. So we left the opening free. The water ran away through the lower part of the gallery, murmuring over the stones, and in that sound there was comfort more beautiful than music.

We rested there for some hours, and when we rose to continue the retreat toward the junction, we were no longer the same men. The road was still long, but thirst had lost its power to rule us. The stream accompanied us, sometimes near, sometimes hidden under stone, but never far enough to make us fear its loss. My uncle became cheerful again, spoke of success, and even allowed that Providence had shown itself favorable to us through Hans. The guide received this praise without the smallest sign of pride.

At last we reached the place where the two galleries divided. Nothing forced us now toward the surface. The false eastern road had been abandoned. Before us opened the western passage, the one my uncle believed Saknussem must have taken three centuries earlier. He lifted his lamp and looked into it with an

expression I had learned to fear, because it meant that his whole will had found its object again.

“Now, Axel,” he said, “the real journey begins.” He was not wrong. We put the lamps of Ruhmkorff in order, fastened our loads again, and entered the western gallery. Before stepping inside, I turned and looked upward through the immense tube of the crater, far, far above us. I saw a last small patch of the Icelandic sky, pale and distant, and I felt, with a certainty deeper than any I had known before, that I was leaving it for a world that had no place for daylight.

The new passage descended steeply, very steeply, along a smooth bed of lava slanting at almost forty-five degrees. We could hardly walk there; we had almost to slide, holding ourselves back while our baggage went down in front of us at the end of a long rope. Yet this difficult road was strangely beautiful. The walls shone where old volcanic matter had hardened into dark, smooth surfaces, and our electric lamps multiplied their light in red, brown, yellow, and glass-like reflections.

In many places the lava had formed bubbles, swelling shapes, and hanging points that looked like stone lamps or frozen drops of fire. Crystals shone in the roof like little stars caught in black rock. For the first time since our descent had begun, I cried out in real admiration. My uncle answered at once, delighted that I was finally seeing beauty where he had always seen it. “Forward!” he said. “You will see greater things still.”

So we went on, not walking now so much as gliding downward into the interior of the globe. The Hansbach remained behind us, but the memory of it gave courage to our steps. We had found the true road, and whatever waited ahead would not be the slow death of thirst in a blind tunnel. It would be something larger, darker, and perhaps more terrible. But at least we were moving toward it.

Part 12

The new gallery soon proved that my uncle had been right about one thing at least: it led us downward in earnest. Hans went first, as always, holding the

lamp with his usual quiet care. We had not gone a hundred steps before my uncle cried out with joy that we had entered the primitive rocks. To him, this was the surest sign that we were in the true path. To me, it meant only that the earth had become older, harder, and more terrible around us.

As we went on, my uncle explained that in the first cooling days of the world, the shrinking of the crust must have opened great cracks and broken passages like this one. The gallery through which we were moving had once given passage to fiery granite and molten matter from below. Now it remained as a winding road through the oldest parts of the globe. I could not deny that the idea was grand. We were walking where the young earth itself had once burned and broken open.

The walls changed little by little as we descended. First came schists, colored in green shades and crossed by veins of metal. My uncle pointed out signs of copper, manganese, and even traces of gold and platinum hidden in the rock. I thought of all those riches buried forever where no human greed could reach them. The earth had hidden its treasures too well for picks, mines, or kings.

After the schists came gneiss, laid in regular bands and shining faintly under the light of our lamps. Then appeared great plates of mica-schist, glittering everywhere with the small bright faces of white mica. The light of our lamps was thrown back at us from a hundred little surfaces at once. It seemed to me that we were moving through the inside of some vast broken jewel. At moments I almost forgot the danger in the beauty of the scene.

My uncle was in complete happiness. Never had a mineralogist, he said, been given such a chance to study the earth with his own eyes and hands. What boring tools and drills could never bring back to the surface, we were touching directly in its place of birth. He stopped again and again to examine a wall, break off a piece, or explain some grand fact of geology to me. Even Hans seemed to understand that the professor had entered one of his great moments and would not easily be hurried.

Yet the road itself did not allow us to stand still for long. The descent remained steep and often difficult, and our baggage had to be lowered with care. Sometimes we advanced on our feet, sometimes almost sliding, and at other times

we had to brace ourselves against both walls at once. The gallery narrowed, widened, turned, and bent in darkness beyond our lamps. There was no sound but our breathing, our steps, and the slight striking of metal against rock.

After some hours we stopped for a meal. It was a poor meal enough, but water from the Hansbach still filled our flasks, and that alone made it feel rich. While we ate, I found my thoughts rising to the surface world again. The house in Königstrasse, dear Graüben, and even the good Marthe came before me like dreams from another life. I almost thought I could hear distant city sounds in the murmurs that passed through the stony mass around us.

My uncle did not dream. While the food was still in his hand, he examined the superposed layers and tried to judge where we stood by the character of the rock. His calculations could only be uncertain, since no exact measure of such a descent was possible there, but a true scholar remains a scholar even in the depth of the earth. I heard him naming the rocks to himself and marking the order in which they appeared. That calm concentration, in such a place, was one of the strangest things about him.

As the hours passed, the heat increased. At first it was only a heavy warmth, then a real discomfort, and at last something close to suffering. We had already taken off our jackets and vests, and even then the air pressed on us like the breath of a furnace. I remember touching one part of the wall and drawing back my hand at once, because the stone itself had become hot. For a moment I believed we were approaching a hidden mass of living fire.

My uncle refused that idea. He said it was impossible that we were nearing some burning core in the simple way I imagined. Yet he could not deny the facts of the heat, and so he turned again to science for an answer. He took out his instruments and examined them carefully. The thermometer gave a high reading, and the manometer showed that the pressure of the air had increased greatly with our descent. According to him, we were now breathing a denser atmosphere, though by going down little by little we had learned to bear it.

I said that this thick air carried sound with strange force, and that even a deaf man might perhaps hear well in it. My uncle, delighted to find me observing

instead of resisting, answered that I was right. He even went further and explained how pressure would continue to change as we descended, while weight itself would one day grow less near the center of the globe. I listened, half interested and half uneasy. It seemed to me that whenever I raised a difficulty, he always had an answer ready, even if the answer led us only deeper into danger.

For the rest of that day we walked, calculated, observed, and spoke. Hans remained what fate had made him, a man who asked neither causes nor effects, but went where the road lay before him. I confess that I envied him. My uncle believed, reasoned, and pushed forward. I doubted, feared, and still followed. Yet one thing was plain now: the western gallery was no false road. We were truly descending once more into the deep body of the earth, and each hour carried us farther from ordinary life and farther into a world where science and dread walked side by side.

Part 13

For many hours after that, we went on through the primitive rocks. The gallery still seemed to lead us deeper into the globe, and my uncle's confidence remained unshaken. He touched the walls, studied the shining layers, and from time to time spoke with real happiness of schists, gneiss, and mica-schist, as though the earth had opened itself only to please a mineralogist. I listened, walked, and endured. In those depths, one learns to accept even science as a kind of company.

Yet the heat was becoming more serious with every stage of the descent. The air did not merely warm us now. It pressed upon us like the breath from the mouth of an oven. Our jackets and vests had long since been removed, and still the sweat ran over our faces and hands. More than once I touched the wall and drew back quickly, for the stone itself felt hot. I asked my uncle whether we were not approaching some living source of underground fire.

He rejected that idea at once, because he could not bear any explanation that suggested the earth might be truly molten below us. But the facts remained. The

air was heavy, our lungs worked harder in it, and every movement cost more. My uncle took out the instruments and examined them. The thermometer rose high, and the manometer showed that the pressure around us had increased greatly. According to him, it was only the natural result of our depth, and our bodies would grow used to it little by little.

I answered that perhaps our bodies would get used to it, but I did not see why our patience should. Even so, I cannot deny that the deeper atmosphere had curious effects. Sounds seemed stronger in it, and the least blow of iron on stone rang far away along the gallery. I began to feel that we were moving through a world where every ordinary law of life had been altered, but not abolished. The earth, even in its depths, still had its own order.

We rested at intervals, and after one such halt my thoughts turned again toward the world above. I remembered Hamburg, Königstrasse, Graüben, and even the common noises of the city. They came into my mind like things from another age. My uncle, however, was still entirely occupied with the structure of the ground. Torch in hand, he went from one wall to another, examining the superposed layers and trying to judge our position by their order and appearance.

“Granite,” he murmured at one point, “we are still in the primitive age. But we are rising. We are rising. Who knows?” That last phrase struck me sharply. Rising? I had begun to suspect the same thing myself. The gallery had become easier to travel, but not because the road was growing kind. Its slope had changed. We were no longer gliding downward with difficulty. We were climbing.

At first I said nothing. I feared to be mistaken, and I also feared to be right. But after three full hours of this new labor, I could remain silent no longer. “Well, Axel?” my uncle said impatiently, because I had fallen behind. “Well,” I answered, “I can go on, but I am tired.” He gave a short laugh and told me that this was strange after such an easy road. “Easy enough,” I said, “but tiring all the same.”

“How can a descent tire you so much?” he asked. “Because,” I answered, “with respect, we are not descending now. We are going up.” My uncle lifted his shoulders in disbelief. I insisted. The slope had changed for at least half an hour, and if we continued in that direction, I said, we would one day find ourselves back

in Iceland. He gave the signal to move on again, but his silence showed that he was no longer entirely sure of himself.

Toward noon the proof became harder to deny. The reflected light from our lamps no longer had the same character upon the walls. The smooth volcanic lining disappeared, and in its place came living rock arranged in inclined and sometimes even vertical beds. The gallery was no longer cutting through the primitive masses alone. We had entered an older world of water-laid deposits, a different age of the earth written in schists, limestones, sandstones, and the first signs of slate.

I could not hold back my cry of triumph. "It is clear!" I said. "These rocks were formed by water. We have turned our backs upon the granite. We are no longer following the true downward road." My uncle looked where I pointed, but he did not answer at once. I forced him to let the lamp travel along the walls. I expected a burst of anger, or a quick refusal, but he said nothing. He simply continued forward with that same hard step which meant he would not surrender until the passage itself forced him to do so.

Even then, I wondered whether I was overrating the change. Could I myself be mistaken? Were we really passing through beds laid above the granite? The question lasted only a little while. "If I am right," I thought, "I shall soon find the remains of primitive life." I had not gone a hundred paces before the proof appeared clearly under my feet.

The hard volcanic floor gave way to a fine dust made of crushed shells and old plant remains. On the walls, under the whitish shine of our lamps, I could distinguish impressions left by sea plants and ancient growths. There was no longer room for doubt. The earth around us had once been the floor of old waters. I bent quickly, searching among the fragments, and soon I found a shell perfectly preserved, the armor of one of those vanished creatures which belonged to the earliest ages of marine life.

I ran after my uncle and put it before his eyes. He looked at it calmly and said, "Yes. It is the shell of one of the extinct crustaceans, one of the trilobites." I stared at him. "And from that, do you not conclude—?" He stopped me. "Exactly

what you conclude,” he said. “We have left the granite and the true volcanic route. It is possible that this gallery misleads us. But I shall not be certain until I have reached its end.”

There was something almost terrible in that reply. He admitted the truth and still refused to stop. Science, pride, courage, and stubbornness were mixed in him so deeply that not even proof could bend him at once. I wanted to protest further, but I held back. We had already learned too much about useless argument in the depths of the earth. So we continued through that rising passage, though every step seemed now to prove that the road was betraying us.

As we advanced, the remains around us increased. There were more shell fragments, more marks of ancient vegetation, and signs everywhere that the earth through which we moved belonged to an age when the earliest plants and animals had begun to appear. To a geologist, it was a wonderful lesson. To me, it was also a warning. We were no longer descending by the path of old fire. We were crossing back into the history of life, and life had belonged to the surface world, not to the center of the globe.

Yet my uncle still pressed on. Hans, who had no theory to defend and no argument to win, walked in front as steadily as before. He looked neither disappointed nor pleased. The passage, whether right or wrong, existed, and that was enough for him. There are moments when such simplicity seems greater than science. I followed behind them both, carrying my load and wondering whether the earth was trying to turn us back by reason, just as it had already tried to stop us by thirst.

The farther we went, the more the gallery seemed to open itself only in order to mock our purpose. It did not collapse. It did not close. It simply continued in a direction that could never satisfy my uncle’s dream. I saw in him a man fighting not a wall but a truth he disliked. He would not yet say that the path had failed us, but in his silence I could feel the struggle beginning.

So we marched on through those fossil-bearing beds, between walls that spoke of ancient seas and vanished creatures, while the center of the earth seemed to recede from us instead of drawing near. Our lamps lit the past, but not the future.

And for the first time since entering the true descent, I began to believe that the earth itself might defeat us, not by violence, but by simply refusing to lead us where we wished to go.

Part 14

We had no choice now but to divide our water with the greatest care. When we checked our supply that evening, we saw that it could not last more than three days. That discovery fell upon me like a sentence. In those beds of stone laid down by ancient seas, there was little reason to hope for a fresh spring. Water had once been there in ages long past, but not for us.

The next day the gallery went on before us in one endless line of arches and turns. We walked almost without speaking. Hans's silence had spread to us both, and even my uncle, who usually explained everything he saw, seemed too fixed on his thought to waste words. The passage did not rise clearly now. At moments it even seemed to slope a little downward, but not enough to give real comfort. The rocks around us still belonged to that middle age of the earth, and that fact alone was enough to trouble me.

Under the strong white light of our lamps, the walls shone with unusual beauty. There were bands of gray stone crossed by pale veins, red and yellow layers stained with darker marks, and marbles of deep color that looked almost polished. In another place such sights would have held me in admiration for hours. But beauty becomes cruel when thirst begins to speak. Even so, I could not fail to notice that the fossils around us were no longer as simple as before. Life itself seemed to be climbing upward through the stone.

Since the day before, creation had clearly made progress. I saw not only the old shell remains, but signs of more developed creatures, ancient fish and early forms that seemed already to point toward reptiles. The old seas of those distant ages had been rich with living things, and the rocks had kept their images faithfully. We were, it seemed, rising through the ladder of animal life, step by step, toward more complete beings. Yet my uncle did not appear to care about that

great sign. He was waiting only for one of two things: either a deep shaft that would take us down again, or some wall that would force him to admit defeat.

But neither came. Evening arrived, and the gallery still offered only its endless continuation. We lay down for the night with our thirst already worse than our hunger. When I woke again and swallowed the small share of water allowed to me, I understood that the time of true suffering had begun. My tongue was swollen, and the little moisture I drank seemed to vanish at once into my body without leaving relief behind.

Still we set out again. After ten more hours of walking, I noticed that the light of our lamps no longer came back from the walls with the same brightness. The marble and limestone had disappeared. The stone around us had grown dark, dull, and almost dead in appearance. At one point, where the tunnel narrowed, I put my hand against the wall to steady myself. When I drew it back, it was black.

I looked closer and gave a cry. "Coal!" I said. My uncle came quickly and examined the wall himself. He could not deny it. We had entered one of the great coal-bearing regions of the globe. Long before men existed, whole forests of enormous plants had grown, fallen, sunk, and been buried there under mud and pressure until they had turned into that black mineral treasure which the industries of the earth now burn so greedily. We were walking through one of those buried storehouses that no miner had ever touched.

I began to see marks of ancient vegetation everywhere. Impressions of trunks and crushed plants lay in the rock around us. It was as if the dead forests of a vanished world had been pressed flat into the sides of the tunnel. Even in my weakness, I felt wonder before such evidence. The earth through which we moved had once been warm, wet, green, and alive with giant growth. Now it had become only darkness, dust, and black stone around three thirsty men.

My uncle, though always a scholar, was at that moment less interested in these signs than in the road itself. The coal beds meant progress through geological time, yes, but not progress toward the center of the earth. We still lacked the one thing that mattered most. No sudden drop opened before us. No spring broke from the wall. The gallery remained what it had been for too long

already: a road that went on and on without giving either success or escape.

By the next day my suffering had become hard to bear. Our water was almost gone. We measured drops. We moistened our lips more than we drank. Speech came with pain. My uncle's face had grown sharp and severe, and even he, for all his strength, could not hide the strain. Only Hans remained nearly unchanged. He walked with the same measured step as before and accepted his reduced share without complaint or visible desire for more.

At last my strength failed me. My legs bent under me, and I fell against the wall of the gallery. I said that I could go no farther. There are moments when the body no longer listens to pride, obedience, or fear. My uncle looked at me in silence for some seconds. I thought at first that he would command me to rise, and I knew I could not. But when he spoke, his voice had changed.

He reminded me that the surface was still far away behind us and that death could wait for us as well on the road back as on the road forward. Then, gathering all his will into a strange gentleness, he made me a proposal. "Listen to me, Axel," he said. "While you lay there yesterday without moving, I went to examine the western tunnel. It goes straight into the depths of the globe. In a few hours it must bring us back to the granite. There, by the very nature of the rock, we should find abundant springs. Logic says so, and instinct agrees with it."

I was too weak to answer at once. He went on, and now there was real feeling in his voice. He said that when Columbus had begged his sailors for three more days on the unknown sea, those sailors had been sick, terrified, and nearly broken, yet they had granted his request, and a new world had been found. "I," he said, "the Columbus of these underground lands, ask you for only one more day. If, when that day is over, I have not found the water we need, then I swear to you that we shall return to the surface of the earth."

In spite of my pain, I was moved. My uncle had bent as far as his nature allowed, and in that moment I saw both the greatness and the danger in him more clearly than ever before. He was asking not from doubt, but from faith so strong that it could almost create its own future. I felt anger, pity, admiration, and despair all at once. Then, because I had no strength left for resistance, and because some

last spark in me still answered his courage, I lifted my head.

“Very well,” I said. “Let it be as you wish. You have one day more.” My uncle seized my hand with surprising warmth. Hans, who had listened without speaking, simply prepared the loads again. So it was decided. We would not turn back. We would risk one more day in that dark world, with almost no water left and no certainty except my uncle’s fierce belief that the western road would save us.

Part 15

We set out again very early the next morning, and from the first step the return became a torture. Five days had brought us from the junction to the dead end, and now those same five days had to be crossed again under far worse conditions. On the outward road we had still possessed hope, water, and strength. Now hope was weak, our flasks were nearly empty, and every movement cost us pain. We were walking back through our own mistake, and thirst came with us like an enemy that could not be driven off.

I shall not try to describe every suffering of that retreat. My tongue grew dry and rough, my lips burned, and the air of the gallery seemed to take from me the last little moisture still left in my body. The walls no longer interested me as geological formations, nor did I care whether they belonged to one age of the earth or another. They were only stone barriers standing between us and water, between us and life. The darkness ahead looked endless, and the road behind seemed just as hopeless.

My uncle endured the same pain, but he fought it in his own way, by force of will and anger against weakness. He spoke little, because speech itself cost too much, yet from time to time he turned and urged me forward with a sharp look. Hans continued to walk as he always did, steady, silent, and self-contained. I thought even he had become graver than before, though with such a man it was hard to be sure. He never wasted a complaint, and so one never knew how much he suffered.

Each halt was dangerous, because to sit down was to want never to rise again. Still, our legs could not move without rest, and more than once we sank against the wall like wounded men. During one of those halts my uncle looked into our flasks and found only a few drops remaining. He gave them all to me. I drank them with gratitude and shame, for the water touched my throat only to make the need worse. It was like showing a dying man a spring in a dream.

After that, time lost all shape. There were only steps, pain, and the same black road. At one point I felt my brain growing weak and uncertain, and angry thoughts rose in me against my uncle, against Saknussem, and against the whole mad journey. Then those thoughts passed too, and there remained only one wish, the wish to lie down and be still forever. At last that wish defeated me. I fell upon the rocky floor and declared that I could go no farther.

My uncle tried first to move me by hard words and then by reasons. He said that if we stopped, we were dead, and that every step backward still brought us nearer to the junction and the hope of life. But I heard him as though from a distance. My head rang, and the blood seemed to beat only in my temples. "Leave me," I said. "I would rather die here than go on." He stepped back, folded his arms, and looked at me with a mixture of pity and terrible resolve.

It seemed to me that he was ready to go on even if I remained behind. Perhaps that very thought forced me to rise again after a time and stagger forward. We had not gone much farther when Hans suddenly stopped. He bent his head and listened with his whole body, as a hunter listens for some far cry in the wind. My uncle and I stood still at once. At first I heard nothing but the beating in my own ears. Then, very faintly, I caught a murmur, a dull and uncertain sound, as though water were moving behind the stone.

My uncle seized Hans by the arm and asked, "You hear it?" The guide simply nodded. He listened again in different places, then chose one point on the wall and struck it lightly with the iron end of his staff. The sound was not thick and dead, but thinner and more hollow. My uncle's face changed at once. "Water!" he cried. "There is water on the other side of this wall!" In that instant I felt life return to me even before the water itself had appeared.

Hans lost no time. He took up his pick and attacked the rock with strong, exact blows. The granite was hard, but not impossible. My uncle helped him, though his impatience made him less useful than the guide. I watched in feverish silence. Every strike seemed too slow, and every fragment that fell away looked like a promise not yet fulfilled. More than once I drew back in fear, for I thought that the torrent might burst through with terrible force and sweep us all away.

At last a sharper sound answered the blow of the pick, and a fine spray burst through the wall. Then the opening widened, and a powerful jet rushed out with such violence that it struck the opposite side of the gallery. The water was hot at first, almost burning, because it came from deep within the earth under pressure. But after running over the stone for a few moments, it cooled enough to be drunk. We bent over it like men restored from death itself.

Never has any drink seemed sweeter to me. It had a strong mineral taste, full of iron, but that only made it seem more precious. My uncle laughed while drinking and declared that it was not merely water, but health itself. I did not care whether it cured or poisoned. It was water, and that was enough. I drank until my strength and my mind returned together. Hans took only what he needed and then leaned quietly against the wall as if such rescues were common events.

My uncle was now full of energy again. He proposed that the stream should bear the name of the man who had found it, and so it became the Hansbach. We filled our flasks and the skin, and for the first time in many hours I could breathe without feeling death at my throat. I suggested that we might close the opening after taking enough water, but my uncle quickly rejected the idea. "When our flasks are empty again," he said, "shall we be sure of finding another spring?" He was right, and so we left the stream to run freely.

We rested there for some time, listening with relief to that bright murmur over the stones. It was more comforting than music. When at last we rose to continue our retreat, we were no longer the same men. The road remained long, but thirst had lost its power to rule us. The Hansbach accompanied us for a while, sometimes near, sometimes hidden under rock, but never far enough to make us fear its loss. My uncle became almost cheerful again and even admitted that

Providence had shown itself favorable to us through Hans.

At last we regained the point where the two galleries divided. Nothing now forced us toward the surface. The false eastern road was abandoned, and before us opened the western passage, the one my uncle believed Saknussem must have taken three centuries earlier. He lifted his lamp and looked into it with that expression I had learned to fear, because it meant that all his will had found its object again. "Now, Axel," he said, "the real journey begins." He was not wrong.

We arranged our loads once more, put the lamps in order, and entered the western gallery. Before stepping into it, I turned and looked back along the road we had just escaped, and I felt as though I had left one death behind only to go forward toward another. This new passage descended steeply, very steeply, along a smooth bed of lava slanting so sharply that we could hardly walk. We almost had to slide, holding ourselves back while our baggage went down before us at the end of a long rope. Yet terrible as it was, the road was strangely beautiful.

Under the strong white light of our lamps, the walls shone in red, brown, yellow, and black reflections. Bubbles frozen in ancient lava, hanging points, and dark glass-like surfaces glittered around us like the inside of a giant furnace turned to stone. In many places crystals sparkled overhead like stars caught in rock. For the first time since our descent had begun, I cried out in real admiration. My uncle answered at once, delighted that I was finally seeing beauty where he had always seen it. "Forward," he said. "You will see greater things still."

So we went on, not walking now so much as gliding downward into the interior of the globe. The Hansbach remained behind us, but the memory of it gave courage to our steps. We had found the true road at last, and whatever waited ahead would not be the slow death of thirst in a blind tunnel. It would be something larger, darker, and perhaps more terrible. But at least we were moving toward it.

Part 16

The next morning I woke without the usual fear of an immediate departure,

and that alone felt pleasant, even in the depth of the earth. We had become used, in a strange way, to this underground life. I was no longer thinking much of the sun, the moon, the stars, trees, houses, or cities. All those things that seem necessary on the surface had begun to look almost like luxuries to a man living in the world below. Our cave was wide and calm, and the faithful stream ran gently across the granite floor beside us.

After breakfast, my uncle decided to spend part of the day putting his observations into order. He wanted to record our exact position and make, after our return, a vertical section of the globe that would show the line of our expedition. I asked whether measurements taken in such conditions could really be accurate enough, but he replied with complete confidence that he had noted every slope and turn with care. He handed me the compass and told me to read the direction. I examined it and answered, "East-south-east."

"Good," he said, writing quickly and making several calculations at once. From these he concluded that we had already traveled eighty-five leagues from our point of departure. I asked whether that meant we were now under the Atlantic Ocean. "Exactly," he replied. I said that perhaps, at that very moment, a storm was shaking ships above our heads, and he answered that this was entirely possible and entirely unimportant.

The thought that the ocean lay over us disturbed me more than he expected. It is one thing to walk under mountains and plains, and another to imagine the weight of the sea itself suspended above one's head. Still, if the granite held firm, then Iceland and the Atlantic were much the same to a man buried deep below the surface. I forced myself to become used to that idea, and after a time I did. The gallery went on toward the south-east, sometimes straight, sometimes winding, but always carrying us deeper.

Four days later, on the evening of Saturday, July 18, we reached a rather wide cave and decided to use the next day as one of rest. That morning I woke with real pleasure. Rest in such a place had become a luxury. The water of the Hansbach, which had now cooled to the temperature around us, was excellent to drink, and after breakfast my strength and good humor returned. I even began to think as my

uncle thought, which was perhaps the strangest effect of all.

“Why should we not succeed?” I asked myself. “My uncle is fully convinced, Hans is resourceful, and I myself have grown stronger.” If anyone had at that moment proposed that I return to the summit of Sneffels instead of going deeper, I believe I would almost have refused in anger. Fortunately, the only road before us was downward. At eight o’clock on Thursday morning we resumed our march, and the granite corridor, twisting like a labyrinth, continued in the same general direction.

It sloped only slightly, scarcely more than a few inches in many yards, and my uncle was not pleased by this. He called himself a man of vertical lines and hated to see the road stretch away by a long diagonal instead of dropping quickly toward the center of the earth. I tried to comfort myself with the thought that any movement downward was still progress. From time to time the slope became steeper, the Hansbach fell noisily over rock, and we descended more rapidly. But in general, those two days brought more horizontal distance than vertical gain.

On Friday evening, by my uncle’s estimate, we were already about thirty leagues south-east of Reykjavik and two and a half leagues below the surface. Then, at last, a new feature appeared before us. A rather frightening shaft opened at our feet. My uncle clapped his hands with delight when he saw how steep it was, and he cried that such a passage would take us down quickly and easily, since the rock itself formed a kind of staircase.

Hans arranged the ropes with his usual skill, and we began to descend. I no longer dared call this sort of thing dangerous, because I had become too used to it. The shaft was a narrow crack in the mass of the earth, one of those faults made long ago when the crust cooled and broke. I could not understand why old volcanic matter had not clearly marked it, if it had once served as a road for molten rock. Yet down we went, turning as if along a giant spiral stair built by no human hand.

Every quarter of an hour or so, we had to stop and rest. Then we would sit on some projecting rock with our legs hanging into the darkness, eat a little, talk a little, and drink from the stream. The Hansbach had turned into a small waterfall

and lost some of its volume, but it was still more than enough for our needs. I began to compare it in my mind to my uncle himself. In its steeper falls it was impatient and noisy like him, and where the path softened it became calm like Hans.

On July 6 and 7 we followed the windings of that fault and descended nearly two more leagues, which meant that we were now close to five leagues below sea level. On July 8, about noon, the shaft changed again and took a gentler downward line, perhaps forty-five degrees toward the south-east. After that, the way became easier, though terribly monotonous. There is little variety possible in such a road. The journey could not be broken by any changes of ordinary landscape.

At last, on Wednesday the 15th, we were about seven leagues below the surface and some fifty leagues from Sneffels itself. Though we were tired, our health remained reasonably good, and our medical supplies were still untouched. My uncle kept careful note of everything shown by the compass, chronometer, manometer, and thermometer. When he told me how far we had moved horizontally, I could not help crying out. He asked at once what troubled me, and I answered that his own figures proved we were no longer under Iceland at all.

I took the map and compared our route to it. "I was right," I said. "We have gone beyond Cape Portland, and these fifty leagues to the south-east place us under the open sea." "Under the open sea," my uncle replied, rubbing his hands with great satisfaction. I exclaimed that the Atlantic stretched over our heads, but he answered with complete calm that there were coal mines at Newcastle reaching out under the sea, and that our situation was therefore nothing extraordinary. He always had a practical answer, even where my imagination saw only danger.

The next day, during our halt, he made further calculations and announced that we were sixteen leagues below the surface. I cried out that this was the very limit assigned by science to the thickness of the earth's crust. He asked me what the thermometer showed. It marked only a moderate heat, and he took great pleasure in pointing out that this did not agree at all with the theories that expected enormous temperatures at such a depth. I admitted the fact, though in my heart I still believed that the earth must keep great heat below and that our volcanic

chimney simply prevented it from reaching us fully.

I then made a calculation of my own and told him that if we had gone only about sixteen leagues downward after so much diagonal travel, then at that rate it would take years to reach the center of the globe. Worse still, our horizontal movement might carry us out through some other point of the earth's crust long before we arrived at the center. My uncle lost patience at once. He told my calculations to go to the devil, declared that my hypotheses were worthless, and ended, as always, by calling upon the example of Saknussemm, who had done what we were doing now.

After that I held my peace. The rest of the day passed in talk, measurements, and reflections. During the days that followed, the slopes grew steeper again, some of them almost terribly vertical, and we went down very rapidly. Hans's skill and cold blood saved us from more than one bad fall. Yet his silence increased, and I believe it began to spread to us. Those underground spaces had a strange power over the mind. When a man lives too long shut between stone walls, his thoughts themselves become quieter and heavier.

Then, after two weeks during which nothing happened that deserves special notice, the one great event came. On August 7 we had reached a depth of thirty leagues, with thirty leagues of rock, sea, land, and cities above our heads. We were then about two hundred leagues from Iceland. That day the tunnel sloped only gently, and I was walking in front. My uncle carried one of the Ruhmkorff lamps, and I carried the other, while I examined the granite walls as I went.

Suddenly I turned round and saw that I was alone. "Good," I thought at first, "I have walked a little too fast, or perhaps Hans and my uncle have stopped behind." I began to retrace my steps, certain that I would find them within moments. I walked for a quarter of an hour and saw no one. I called out, but no answer came back. My voice was swallowed by the great hollow echoes of the passage, and then a terrible silence fell again.

A cold shiver ran through my whole body. I tried to calm myself by reasoning. There was only one road, I told myself. If I had gone ahead, I had only to go back. If they had turned, I would meet them soon. Then I remembered with relief that I

had one sure guide through the labyrinth, a thread that could not break, my faithful stream. I would only have to follow the Hansbach upward, and it would lead me surely back to my companions.

Strengthened by that thought, I bent down to wash my burning face in the water before beginning my return. But when I put my hands toward the ground, they met only dry, rough granite. I stared in disbelief. The stream no longer ran at my feet.

Part 17

I cannot describe the despair that seized me. No words of human language could fully express what I felt in that moment. I was buried alive, and before me stood the slow and certain death of hunger, thirst, darkness, and solitude. I passed my burning hands over the rough granite floor again and again, as if the stream might return under my fingers by some miracle. But the stone remained dry, hard, and merciless.

After the first shock, I began to understand what had happened. At the moment when I had walked on without looking back, a branch of the gallery must have opened before me. The Hansbach, obedient to another slope, had followed my companions, while I had taken the empty road. That was why I had no longer heard the murmur of the stream, and why no call from behind had reached me. I had gone the wrong way at the one point where the earth had chosen to divide us.

I tried to think clearly. I still had food for three days, and my flask was full enough for the moment. So long as reason remained, I told myself, I was not lost beyond all hope. The first need was simple: I must go back, find the branch where I had left the stream, and from there return either to my uncle or to the upper regions of Sneffels. It was a poor hope, but it was still a hope, and that made it precious.

I rose, leaned on my iron-tipped staff, and began to climb the gallery by which I had come. Since I had no choice of direction, I moved with a certain courage. The slope was steep enough to convince me that I was going upward,

and for a time that comforted me. I tried to recognize the road by the shape of the passage, the projections in the rock, and the small bends in the tunnel, but every part of that underground way looked like every other. The earth had not troubled itself to give signs to the lost.

For half an hour, perhaps more, I met with no obstacle. Then suddenly the gallery ended. A wall of granite stood before me. My hand, my staff, and my whole body were forced to admit the truth. This was no road back to the branch, but another blind way, a passage with no issue, a simple trap in stone. My last hope had brought me only to a dead wall.

I remained there crushed by horror. In that labyrinth, where galleries crossed and turned without mercy, I could now attempt nothing useful. I understood at last that I might die there in one of the most dreadful ways imaginable, not by a sudden fall or a quick wound, but by abandonment. A strange thought even crossed my mind that if my body were found there one day, fossilized in those depths, its discovery would excite the learned world and give rise to serious scientific questions. Such is the madness of the human mind when it stands near death.

I tried to speak, but only hoarse sounds passed my dry lips. My breath came hard and broken. Then a new terror joined the others. My lamp had been damaged in my fall against the wall, and I had no means of repairing it. Its light, already weak, began to fade visibly. I watched the trembling brightness shrink within the coiled tube of the apparatus, and a procession of moving shadows seemed to advance from the dark corners of the gallery.

I no longer dared close my eyes, because I feared losing even one instant of that dying light. Each second seemed the last. At every moment I expected the flame to vanish and the full blackness to fall upon me. At last one final shiver passed through the lamp. I followed that last pale thread of brightness with all the force of my eyes, as a drowning man might follow the last star above the sea. Then it disappeared, and I was buried in complete darkness.

A terrible cry escaped me. On the surface of the earth, even in the deepest night, some faint light always remains. It is weak and spread thinly through the air, but the eye still receives something. Here there was nothing. Absolute

darkness made me truly blind. I can still feel that moment in my whole body.

My mind then gave way. I rose with my arms stretched out before me and began to flee blindly through the passage. I no longer walked. I rushed forward like a madman, falling, rising, striking myself against sharp rocks, covering my face with blood, and expecting every second that some unseen wall would stop me by breaking my skull. I do not know where this frantic race carried me. I only know that after several hours, perhaps when all strength was gone, I fell heavily beside the wall and lost consciousness completely.

When I returned to life, my face was wet with tears. How long that state of insensibility had lasted, I could not say. I had no measure of time left. Never had any solitude resembled mine, and never had abandonment been so complete. My fall had cost me blood, and I felt it drying on my face. I almost wished then that I had died outright, since the work of dying still remained to be done.

I had pushed all thought away and was lying near the wall in a kind of dull misery when a violent noise struck my ear. It sounded like prolonged thunder rolling through the depths of the earth. I listened with all the attention I could gather. The sound slowly faded into the far distance. I thought at first it must come from some natural event in the mass of the globe, perhaps a burst of gas or the collapse of rock far below us.

Silence followed again. Then, by chance, because my ear touched the wall, I thought I caught vague, distant words. I trembled at once. At first I took them for a hallucination, the echo of some cry of my own. To test that fear, I pressed my lips shut and listened again with full attention. This time there could be no mistake. Voices were speaking beyond the wall or along it, low, broken, and far away.

I moved a little and listened again. The sounds grew clearer at one point than another, and soon I distinguished one word repeated several times with an accent of sorrow: "förlorad." I did not understand it at first, but I knew with certainty that only my companions could be there in those depths. What other human beings could possibly be buried thirty leagues under the earth? That thought gave me back both reason and strength.

I cried with all the force left in me, "Help! Help!" Then I listened. Nothing

answered. Several minutes passed. I realized then that my weakened voice might not reach them. So I moved my ear carefully along the wall and found a precise point where the sounds reached their greatest power. Again the word “förlorad” came to me, and I understood at last that it was my uncle or Hans speaking together. The wall itself, or the form of the passage, must be carrying the sound.

Then suddenly I heard my own name distinctly. It was my uncle calling me. In that instant the whole mystery became clear. If I wished to answer him, I had only to speak close to the same wall, which served as a conductor of sound almost like a metal wire carries force. I lost no time. Pressing my mouth near the stone, I cried, “Uncle Lidenbrock!” and then waited in breathless anxiety.

A few moments later his voice reached me again. “Axel, Axel, is that you?” I shouted yes. What followed was one of the strangest conversations ever held by men, spoken through the very mass of the earth at a distance of more than a league. He asked where I was. I answered that I was lost in complete darkness. He asked about my lamp. I told him it was out. He asked about the stream. I told him it had disappeared.

His voice, though broken by distance, still carried feeling. He begged me not to despair. They had searched for me both upward and downward in the gallery, and he told me that he had wept for me. I confess that those words moved me deeply. Then he proposed a practical test. With his chronometer, we measured the time between his calling my name and my replying, and from this he calculated the distance between us. The result was about a league and a half.

That was enough for him. He explained that he and Hans had reached a wide cavern into which many galleries opened. The one I had followed, he believed, must also lead there. If so, I must keep descending, not climbing. The passage of sound proved that no solid mass entirely blocked the way between us. I had only to follow the same line that carried his voice. He told me to crawl if I had to, to slide if necessary, and that at the end of the road I would find their arms ready to receive me.

Those words filled me with gratitude and fresh courage. I thanked God, who in those immense darknesses had allowed my uncle’s voice to reach me at perhaps

the only point where such a thing was possible. The whole phenomenon, though astonishing, could be explained by the form of the passage and the conducting power of the granite. I even remembered that similar effects had been observed in certain great domes and caverns on the surface of the earth. Science, which had helped to bury me, now helped to guide me.

I rose at once and began to move in the direction he had given. The slope was steep, and at first I dragged myself rather than walked. Then the descent grew faster. Soon I was no longer in control of it. My feet slipped, the ground dropped more sharply beneath me, and I was carried downward in what was almost a fall. I tried to stop myself, but I no longer had the strength.

Suddenly the floor vanished altogether. I felt myself rolling, striking against projections in a vertical shaft, a true well in the earth. My head crashed against a pointed rock, and once more I lost consciousness. When I awoke again, I was lying in half-darkness on thick blankets. My uncle was watching my face. At my first breath he seized my hand, and at my first glance he cried out with joy, "He lives! He lives!" Then, in a voice I had never heard from him before, he held me to his chest and whispered, "My child, you are saved."

Part 18

For some moments I could do nothing but look at my uncle and feel his hand around mine. His rough nature had truly opened for me, and that touched me more deeply than I could say. Hans soon entered and saw my hand in the professor's. I am certain that his usually unreadable face showed real pleasure. "Good day," he said simply, and I answered as warmly as my weakness allowed.

Of course I wished to ask a hundred questions at once, but my uncle refused firmly. He told me that I was still too weak, that my head had been carefully bandaged, and that rest was part of the cure. He would tell me everything the next day, not before. Even then I managed to make him answer one question. It was eleven o'clock at night on Sunday, August 9, which meant that I had been separated from them for four full days.

I slept again, and when I woke the next morning, I felt greatly improved. My bed had been arranged in a charming grotto whose floor was covered with fine sand and whose walls were decorated with beautiful stalactites and mineral formations. A half-light filled the cave, though no lamp or torch was burning. At the same time I heard a vague murmur like waves breaking on a shore, and from time to time what seemed to be the whistling of wind.

For a moment I honestly believed I was still dreaming. I asked myself whether my wounded head had begun to invent sights and sounds. But neither my eyes nor my ears could have been so completely deceived. There really was a clear light entering through a narrow opening in the rocks, there really was a sea-like murmur, and there really was moving air. I began to wonder in complete confusion whether we had somehow returned to the surface of the earth.

My uncle came in while I was still struggling with these thoughts. He was cheerful and, I must admit, even affectionate in his way. Hans and he, he told me, had watched beside me in turns, and the fever had now left me. Hans had also treated my wounds with some Icelandic ointment known to hunters and country people, and they were healing very well. My appetite returned while he spoke, and I did full honor to the food he set before me.

At last I learned what had happened. My fall, though terrible, had saved me. I had been carried downward by a rush of stones through an almost vertical passage, and the same slide of broken rock that might easily have killed me had instead delivered me to the very place where my uncle and Hans were resting. I had reached them half-dead, bleeding, and senseless, but still alive. It was indeed a miracle that I had not been broken a hundred times over.

Then a new thought struck me. If I had not returned to the surface, and if the expedition had not been abandoned, what kind of place were we in now? I asked my uncle whether I was truly safe, whether all my limbs were still mine, and whether my head sat properly on my shoulders. He answered yes to everything, rather impatiently. Then I told him I feared my brain had been disordered, because I could see daylight and hear wind and waves. My uncle answered, "You are not mad. You simply see and hear something that geology has not yet fully explained."

“Then let us go out at once,” I cried, rising quickly. He tried to stop me and said the air might be too strong for me, that the wind was sharp, and that I must be careful of a relapse. But curiosity had become stronger than weakness. At last he gave in. I dressed, wrapped myself in a blanket for safety, and stepped out of the grotto.

At first I could see nothing. My eyes, unused to any light beyond our lamps, shut themselves at once. When they opened again, I stood more amazed than delighted. “The sea!” I cried. My uncle answered proudly, “Yes, the Lidenbrock Sea. I believe no navigator will dispute my right to name it.”

Before me stretched an immense sheet of water, more like an ocean than a lake, and extending beyond the limits of sight. The shore at our feet was made of fine golden sand mixed with little shells, the same kind in which the earliest creatures of creation had once lived. The waves broke there with the full murmur of a real sea, though enclosed within the earth, and a fresh spray rose in the breath of a moderate wind. Farther off, great masses of rock rose from the shore and spread upward to an immeasurable height, their outlines dark and sharp against the misty horizon.

It was a true ocean with all the wild caprice of earthly coasts, but empty, silent, and terrible in its loneliness. And yet I could see it clearly, because a special light filled the whole vast space. This was not sunlight, nor moonlight, nor anything with warmth in it. It had the pale whiteness, trembling spread, and cold brilliance of electricity. It was like a permanent aurora, a continuous cosmic glow filling an underground world large enough to hold a sea.

Above me there seemed to hang a sky of cloud, great moving masses of vapor which must, from time to time, fall again in rain. Electrical light played over them in strange changing reflections. Their height must have been enormous, far above the limit of ordinary earthly clouds, perhaps because the dense atmosphere of that place could support them so high. Yet even while I admired them, I felt their sadness. Instead of a free sky full of stars, there hung over us a roof of granite and cloud pressing down with overwhelming weight.

For one wild moment I remembered the theory of an English captain who

had imagined the earth as a great hollow sphere filled with luminous air and lighted within by hidden heavenly bodies. Standing there, I could almost believe him. We were clearly enclosed in an immense cavity, one so large that the word “cave” seemed far too small. Human language is poor when one tries to describe the interior of the globe.

My mind ran through all the famous caverns known on the surface of the earth. I thought of vast grottoes in South America and the great cave systems of Kentucky. Yet what were those beside the enormous world spread before me, with its sea, its sky of vapor, and its cold electrical light? I felt as if I had been carried to some far planet where the laws of familiar life were still present, yet changed into another form. I could only stand there, thinking and admiring, with wonder mixed with real fear.

That very wonder helped to cure me. After forty-seven days in narrow galleries, it was a deep joy simply to breathe that moist, salt air and to feel wind upon my face. My uncle, already accustomed to the place, asked whether I felt strong enough to walk. I answered eagerly that nothing could please me more. So I took his arm, and together we followed the curves of the shore.

On our left rose enormous cliffs, one above another in wild piles. Down their sides ran countless little cascades, clear and lively, while vapors marked the places of hot springs. Streams made their way gently down toward the common basin. Among them I recognized with pleasure our faithful companion, the Hansbach, which entered the sea as peacefully as if it had flowed there from the beginning of time.

Then, beyond a high promontory, another astonishing sight appeared. A forest stood there, thick, high, and dark. At first I could not name the trees, for their shapes were regular and strange, like gigantic parasols, and the moving air seemed powerless to stir their tops. I hurried forward in amazement. When we came under their shadow, my surprise changed completely. They were not trees at all. They were mushrooms.

These monstrous fungi rose thirty and forty feet high, with caps vast enough to form roofs over our heads. They stood by the thousands, and because their thick

crowns shut out the light, a deep darkness lay beneath them like that under the domes of some dead city. A deadly chill fell from those fleshy vaults. We wandered there for half an hour, and I was truly glad when we came out again into the open air by the sea.

But the vegetation of that subterranean land did not end there. Farther on grew whole groups of giant plants that I could at last recognize, though they had taken on impossible size. There were enormous club-mosses a hundred feet high, giant sigillaria, tree ferns as tall as northern pines, and lepidodendrons with thick divided stems crowned by long rough leaves. My uncle was full of delight. He cried that all the flora of the second age of the world stood before us alive again, preserved in that vast natural greenhouse.

Then he corrected himself and said it was perhaps not only a greenhouse, but a menagerie. I followed his hand and saw what he meant. The ground at our feet was scattered with ancient bones, mineralized but still clearly shaped. I bent over them at once and began naming them almost without thought: the lower jaw of a mastodon, the teeth of a dinotherium, the bones of a megatherium, and the remains of other giant animals from the earliest ages of life.

It seemed to me impossible that such creatures could have been washed there by some accident. They must have lived and died on those underground shores, under the shadow of those gigantic plants. For a moment a terrible thought rose in me. If their bones were there, who could swear that one of those ancient monsters did not still wander somewhere among those dark forests or behind those rocky promontories? I searched the horizon with real fear. But nothing living appeared on those silent shores.

At last, tired by emotion as much as by weakness, I sat down at the end of a promontory from which I could see the whole bay. A little natural harbor lay there between pyramid-shaped rocks, calm enough to shelter a ship. I almost expected, in my excited imagination, to see a vessel appear under full sail and move out across that strange underground sea. But the illusion quickly passed. We were alone there, the only living beings in that buried world.

Sometimes, when the wind fell, a silence deeper than any desert silence

descended over the rocks and the sea. I found myself staring toward the misty horizon and wondering where that sea ended, what coast it might reach, and whether we would ever know the farther shore. My uncle had no doubt that we would. I both wished and feared it. After an hour spent in contemplation of that marvelous scene, we returned at last to the grotto, and I fell asleep under the power of the strangest thoughts that had ever entered my mind.

Part 19

The next day I woke with my mind still full of the wonders of that subterranean world. I could hardly believe that the sea, the clouds, the electrical light, and the giant plants had not been the work of fever. Yet the murmur of the shore, the freshness of the moving air, and the grave satisfaction on my uncle's face were enough to prove that all had been real. After a simple meal, we went out again to explore the coast more carefully.

My uncle wished to examine the region like a man entering a newly discovered country, while I followed with a mixture of eagerness and uneasiness. The farther we walked from the grotto, the more the ground changed under our feet. Fine sand gave way to stretches of stone, then to places where the earth seemed covered with broken remains of ancient life. Soon I saw bones lying everywhere, scattered so thickly that one might have thought the shore itself had once been a cemetery for worlds long dead.

We bent over them again and again. There were jaws armed with enormous teeth, ribs like curved beams, vertebrae larger than a man's head, and whole limbs from creatures I had known only through books and museum cases. I named them as best I could: mastodon, dinotherium, megatherium, and many others from the earliest ages of animal life. My uncle corrected me when needed, agreed when I was right, and moved among those remains with growing excitement.

The place was a true ossuary, a field of the dead from the ancient earth. Each step seemed to bring a new proof that enormous animals had once lived on those underground shores. The professor was carried away by scientific joy. He

explained what such a discovery meant, how it changed old theories, and how learned men on the surface would receive it if they could ever stand where we stood. I listened, but my eyes were already traveling farther ahead.

About twenty paces beyond the richest part of that field of bones, we came upon a new and far more astonishing sight. There, on the ground before us, lay the body of a man. It was not a skeleton, nor a few scattered remains, but a whole human form, preserved in such a way that its features could still be recognized. The skin was drawn tight and dry, the limbs kept their shape, the nails still clung to fingers and toes, and the hair remained upon the head in abundance.

I stopped as if struck by lightning. My uncle himself, usually so ready with speech, became silent. Together we raised that body, supported it, and looked into the empty hollows where the eyes had once lived. The dead man seemed to watch us from another age. If the earth had ever wished to place an answer directly before the eyes of science, it could hardly have done so more clearly.

After a few moments, the professor in my uncle overcame the man. He forgot our danger, the sea, the buried world around us, and even the strange circumstances of the discovery itself. He took on his lecture-room voice and began to speak as if an audience of students stood before him. He declared that here, before our eyes, was a man of the quaternary age, a direct answer to those who had denied such remains or doubted the evidence brought forward by science. In his excitement, he cited scholars, old reports, false giants, true fossils, and all the errors and debates of paleontology.

I hardly heard half his words. My attention had been caught by something beyond him, farther out across the plain. At first I thought I was deceived by the uncertain light of that underground world. Then I rubbed my eyes and looked again. No, my sight had not betrayed me. A living being, gigantic in size and wholly unlike ordinary men, stood on the far shore among a herd of mastodons.

I seized my uncle's arm so violently that he stopped speaking at once. Then he followed the line of my gaze. There, under the strange electrical sky, near the edge of a forest of giant plants, the enormous figure remained motionless. It was a man, or something with the form of a man, but far taller than any human being

I had ever imagined. He leaned upon a long staff, and around him moved great animals of the ancient world, peaceful under his watch like cattle under a shepherd.

For several seconds neither of us spoke. It seemed impossible, and yet it stood before us. The giant head was half hidden in shadow. The being's hair fell wildly, and its motionless attitude gave it an air at once savage and calm. The mastodons grazed or moved slowly around it. Never had any apparition struck me with such force. It was as if one of the earliest masters of the earth still remained there, preserving in the depths what the surface world had long lost forever.

My uncle, who had faced volcanoes, abysses, thirst, and darkness, now felt the same terror that seized me. We both understood at once that if such a being noticed us, we could neither fight it nor escape it. Hans himself, who had come close behind us without noise, stopped when he saw what held us motionless. The three of us remained hidden among the rocks and watched in breathless silence.

Then the giant lifted his staff and seemed to take a step. That single movement broke the spell. My uncle drew back first, and I needed no second warning. We retreated with all the care fear could teach us, taking advantage of every rock, every shadow, and every uneven place in the ground. Once hidden by a rise of stone, we no longer waited. We fled toward the grotto as quickly as prudence allowed, and even when the shore disappeared behind us, I still felt that dreadful herdsman might appear above the rocks in pursuit.

Only when we had reached the shelter of our cave did we stop and breathe fully again. My uncle said little. Such an encounter left no easy place for theory. If we had truly seen what we believed we had seen, then the buried world below us held not only the remains of earlier creation, but some surviving fragment of it still alive. I did not attempt to discuss the matter calmly. My imagination was too strongly shaken.

For the rest of that day we remained near the grotto and spoke of other things when we could. Yet the image would not leave me: the mastodons moving under the pale underground light, and that huge solitary man, half shepherd and half ancient king, watching over them in silence. It seemed to me that we had crossed a line beyond which human exploration had no natural right to pass. My uncle,

however, recovered sooner than I did, and I could see in his eyes that terror itself had not destroyed his purpose.

Toward evening he returned to the practical question that had to be faced sooner or later. A sea lay before us. If the road onward did not continue by land, then we must cross that sea. Whatever beings or wonders the farther shore might contain, the expedition could not stop where it stood. So even after what we had seen, the professor's will turned again toward movement, discovery, and advance. The subterranean world had frightened us, but it had not stopped him.

Part 20

After our return from that terrible meeting with the giant shepherd, we remained for some time near the shore, speaking little and trying to recover command over our thoughts. I could not free my mind from the image of that enormous figure standing among the mastodons under the pale underground light. My uncle himself, though he soon recovered more firmness than I did, no longer treated the question of our surroundings with the calm confidence of a mere scholar. The buried world had shown us that it was not only ancient, but perhaps still alive. Yet once the first fear had passed, his mind returned, as always, to the road ahead.

We had a sea before us, and the farther shore was still unknown. If Saksussemm had indeed gone on, then he must either have crossed those waters or found some way around them. My uncle chose the bolder answer at once. He declared that we must build a raft and trust ourselves to the Lidenbrock Sea. I did not welcome the idea, but after what we had already endured, a voyage upon water seemed less dreadful than another blind march through stone. Hans heard the order and accepted it as if he had expected it from the beginning.

We began by examining the coast carefully. In several places the ground was strewn with enormous masses of old wood, thrown together as if by long-vanished tides. These trunks and branches had once belonged to northern trees, pines, firs, and birches from the ancient earth, but time and mineral action had changed them

strangely. They were no longer fresh wood, yet not fully turned to stone either. My uncle explained that this was fossil wood, the sort known in Iceland under a special name, and that some pieces might still float.

I found that hard to believe, because they looked almost like blackened rock. But my uncle took one heavy piece in his hands and threw it into the sea. It disappeared for a moment, then rose again and moved on the little waves like ordinary timber. That proof settled the matter. If the shore held enough of such wood, then we had the means to make a vessel. There was enough there, in fact, to build not one raft, but a small fleet.

Hans set to work at once, and I must say that in such tasks he always seemed to know exactly what to do before any other man had formed the thought clearly in his own mind. He chose the soundest beams, cut and arranged them, and tied them together with our strongest ropes. My uncle and I helped him as best we could, though he did the real work. The labor lasted through the day and into the next. By the evening after we had begun, the raft stood ready on the shore.

It was about ten feet long and five feet wide, broad enough to carry us, our instruments, our weapons, our food, and a good quantity of fresh water. The beams, firmly fastened side by side, formed a steady surface. A mast was made from two staffs joined together, a yard from a third, and our blankets served as sail. All was plain, rough, and improvised, but strong enough for the use we meant to make of it. When it was pushed out into the water, it floated quietly and gave no sign of weakness.

On the morning of August 13 we rose very early, for my uncle was impatient to begin this new stage of the expedition. The provisions and baggage were placed on board with care. Our instruments were protected as well as possible, the guns laid safely within reach, and the water made secure. Hans added a rudder arrangement of his own invention, simple but effective, by which he could guide the raft. At six o'clock, when all was ready, my uncle gave the signal to embark.

Hans took his place at the rudder. I loosened the rope that held us to the shore. The sail was raised, the wind filled it at once, and we moved rapidly away from the little natural harbor in which the raft had been made ready. Just before we left,

my uncle said that such a place deserved a name on the map we would one day bring back to the surface. He proposed at first to give it my name. I answered that another name would please me better, and so the harbor became Port Graüben, in memory of the dear girl whose thought still followed me even into the depths of the earth.

A good wind from the north-east carried us forward at once. The surface of that strange sea broke against the sides of our little craft with a clear sound, and the waves threw up a fresh spray. I could not help admiring the beauty of the voyage, even in such a place. The electric light spread over the waters with the same pale brilliance as before, and the shore from which we had left slowly sank behind us into mist. The farther we moved from land, the more complete became the illusion of a true ocean journey.

During the first hours my uncle was in excellent humor. Movement always pleased him when it was movement toward his goal, and our raft ran fast enough to satisfy him for the moment. He looked often through his glass at the receding coast and then toward the south, where he hoped another shore would soon appear. I, for my part, sat watching the waves and listening to their steady sound. If I had forgotten where I was, I might almost have thought myself aboard some simple boat on a northern lake, except that no sky of the real world ever looked like the roof of cloud above our heads.

Before long, however, the coast had wholly vanished. There remained around us only the sea, the dim vault above it, and the endless reflection of the electric light upon the water. The silence, once broken only by the sail and the waves, became solemn and almost oppressive. I then understood for the first time how large that underground sea truly was. My uncle had earlier judged it to be no more than thirty leagues wide. But as the hours passed and still no southern shore appeared, that estimate began to seem far too small.

By evening he had already grown less cheerful. He took out his glass again and again, turned it toward every point of the horizon, and crossed his arms with a look of displeasure. I asked whether he was uneasy. He answered no. Then I asked whether he was impatient. "Any man would be," he replied. I observed that

we were moving with admirable speed, but that only sharpened his irritation. “What do I care for speed,” he answered, “if the sea itself is too large?”

I remembered then that he had never come so far merely to enjoy a boat ride, even on such marvelous waters. He wanted descent, not delay, and the flat voyage across an immeasurable sea seemed to him almost an insult from nature. I said that if we were following Saknussem’s road, we could hardly complain. He replied that this was the very question. Had Saknussem truly found this sea? Had he crossed it? Had the Hansbach, which we had trusted as a guide, perhaps led us entirely away from the proper path? These doubts, once spoken aloud, remained in the air between us.

I tried to answer that whatever the future might be, we had at least reached a world of extraordinary beauty. The sea, the strange sky, and the electrical light formed a spectacle beyond anything known to ordinary travelers. My uncle cut me short at once. “I did not come here to admire,” he said. “I came to reach a certain point, and I intend to reach it.” I accepted the rebuke in silence and left him to struggle with his own impatience.

At six o’clock in the evening, Hans, who never forgot the practical side of life, quietly asked for the day’s wages due to him, and my uncle counted out the proper coins. That little act, so exact and ordinary in the middle of a buried sea, struck me as almost comic. Yet perhaps it was one reason why Hans remained always so calm. To him, even the greatest adventure was still made up of daily tasks rightly done.

The next morning brought no change. The same pale light covered the waters, the same good wind filled our blanket-sail, and the same empty horizon surrounded us. My first thought on waking was to make sure that the electrical brightness had not weakened during the night. It had not. The shadow of our raft still fell sharply upon the surface of the sea. And still, as far as the eye could reach, that subterranean ocean appeared without end.

To make the story of that crossing as exact as possible, I will follow the notes I wrote from day to day on the raft itself. On Friday, August 14, a steady north-west wind carried us forward in a straight line. The coast remained far behind us, and nothing showed itself on the horizon. The strange electrical light did not change at all. The weather, if I may use that word in such a place, was fine, with high clouds floating in a white and shining atmosphere.

By noon, Hans decided to try fishing. He tied a hook to the end of a line, fixed a small piece of meat to it, and threw it into the sea. For two full hours nothing came. I began to wonder whether those deep waters were empty. Then the line shook sharply, Hans pulled it in, and a fish appeared, struggling hard in the air.

“A fish!” cried my uncle. “A sturgeon!” I answered at once, for that was what it seemed to me at first. But the professor took it in his hands and examined it carefully. Its head was flat and round, the front of its body was covered with bony plates, and its mouth had no teeth. It belonged to the same larger order as the sturgeon, but in several important ways it was different.

My uncle soon declared that it belonged to a family believed to have died out centuries ago and known only through fossils found in old Devonian rocks. I looked at him in amazement. To hold in our hands a living creature from one of the ancient seas seemed almost beyond belief. He named it as best he could, calling it a *Pterychtis*, and then pointed out its strangest feature. The fish was blind, not merely unable to see, but without eyes at all.

I looked closely and found that he was right. Still, I wondered whether it might be only a special case. So Hans baited the line again and cast it out once more. This time the sea answered richly. In a short time we caught many more of the same blind fish, together with others from another extinct family, the *Dipterides*, though my uncle could not say exactly to which kind they belonged. All were without eyes. This unexpected fishing improved our food supply and strengthened the feeling that our underground sea held only the old creatures of the earliest ages.

That thought carried my imagination farther and farther. Perhaps, I told

myself, if these ancient fish still lived there, then one day we might also see some of those great reptiles which science has rebuilt from a few bones and fragments of cartilage. I took the glass and searched the water carefully. It remained empty. Then I raised my eyes to the heavy air above us and wondered whether some enormous bird from the earliest world might not one day beat its wings across that buried sky. But the air, like the shore, remained silent and deserted.

Little by little, my thoughts left the present world entirely. I began dreaming while fully awake. I thought I saw the great ancient turtles of the first ages floating upon the sea like living islands. Then the centuries seemed to pass backward before me. The later creatures disappeared, then the great reptiles, then even the earlier life of the world. All the life of the earth was gathered into me alone. I walked in my mind through forests of giant ferns and tree-like plants, while the heat of the globe rose and the outer sun lost its power.

That strange dream carried me still farther. Plants themselves disappeared. The rocks softened. The solid earth returned to a liquid state under increasing heat. The waters boiled, rose, and vanished into vapor. The whole planet became a glowing cloud, a white-hot nebula as bright as the sun itself, and I felt my own body becoming lighter, thinner, and almost lost in that immense burning space. My hand had even begun to write down the details of this wild vision when a real voice broke into it.

“What is wrong with you?” my uncle cried. My eyes were fixed on him, but I did not truly see him. Then he shouted, “Take care, Axel! You are falling into the sea!” At the same instant Hans seized me strongly by the arm. Without him, under the power of that hallucination, I would have thrown myself into the waves. My uncle asked whether I was ill, and I answered, after a few moments, that the vision had passed. He said the breeze was good, the sea was fine, and, if his estimate was right, we could not be far from land. But when I searched the horizon, the line of the water still mixed itself completely with the line of the clouds.

The next day, August 15, the sea kept the same monotonous uniformity. If a great body of water could exist inside the earth, I told myself, why should it not also have islands, shores, rivers, and changing signs of weather? Yet none of these

appeared. The same pale light fell on the same empty waves, and our raft moved onward between two unchanging lines, the sea below and the cloud-filled roof above. My uncle grew more and more impatient, because speed mattered nothing to him if the sea itself had no end.

Another day passed in the same way, and then the great monotony was broken. The surface of the water, empty until then, began suddenly to move in a strange and violent manner. At first I thought a whole crowd of sea creatures was rushing toward us. I believed I saw the shapes of a porpoise, a whale, a great lizard, and a turtle. The water boiled, curved, and opened around them. Our little raft seemed horribly weak in the middle of such forces.

Hans watched more calmly than I did. He made a sign and said that only two animals were there, not many. My uncle, with the glass still at his eyes, cried that Hans was right. What I had taken for several creatures were only the different parts of two gigantic monsters. One had the nose of a porpoise, the head of a lizard, and the teeth of a crocodile. This, he said, was the terrible Ichthyosaurus, the whale of the old saurians, swift, powerful, and nearly one hundred feet long. The other was the Plesiosaurus, a serpent-like reptile hidden in a turtle-like body, with a short tail, broad feet like oars, and a neck of fearful length.

There was no escaping them. They rushed around the raft with astonishing speed and traced circles around us faster than any train on the surface of the earth. I took up my rifle, but what could a bullet do against creatures whose bodies were covered with such scales and armor? We stood silent with fear as they came nearer. Then, when they had reached a distance of perhaps fifty yards, they suddenly turned away from us and threw themselves at one another in fury.

The fight began not far from the raft, and we could follow every movement. More than once I thought other monsters had joined the struggle, because I seemed to see again the shapes of whale, lizard, porpoise, and turtle. But my uncle repeated that there were only two. The forms were so strange and so mixed that the eye itself was deceived by them. Soon the two enemies were so closely locked together that it was impossible to separate one from the other. Every instant I feared that the rage of the winner would next turn upon us.

The sea rose into mountains of water. Huge waves reached the raft, and twenty times I thought we were about to be overturned. Terrible whistling cries came from the monsters as they struck, twisted, and attacked without rest. For one hour, then another, the combat continued with the same violence. Sometimes the animals came nearer to us, then moved away again. We remained motionless, ready to fire if they touched the raft.

At last both creatures disappeared together, sinking into the sea and cutting a true whirlpool into the water. I thought the battle had ended in the depths. But a moment later an enormous head rose again above the surface, the head of the Plesiosaurus. The monster had received a deadly wound. I could no longer see its great body, only its long neck rising, falling, twisting, lashing the sea like a giant whip, and turning like a cut worm in its final pain.

Water flew outward in great sprays and blinded us. Then, little by little, the movements weakened. The terrible neck stretched itself out at last like a lifeless mass upon the calming waves. As for the Ichthyosaurus, we did not know whether it had gone back to some undersea cave or whether it would appear again. But the fight was over, and we were still alive upon our little raft in the middle of that ancient sea.

Part 22

On the day after that fearful battle, the wind remained strong enough to carry us quickly away from the place where the sea monsters had fought. I was grateful for that. I had no wish to see the ichthyosaurus rise again from its black home below the waves, nor to watch the last struggles of the wounded plesiosaurus any longer. My uncle, once drawn out of his thoughts by the danger, soon fell back into his impatient habit of staring at the sea as though he could force land to appear by will alone.

The voyage became monotonous again, and I confess I preferred that monotony to the terrible wonders of the day before. I began once more to keep brief notes, partly to calm my mind and partly because it seemed right to record

so strange a journey. The same pale electrical light spread itself over the water without change, and the same merciless absence of true night tired our eyes. Sleep came not because darkness invited it, but because our bodies could no longer resist. Under such a sky, even rest felt unnatural.

Still, I could not forget the monsters we had seen. I tried to recall what science had taught about those ancient reptiles that had ruled the secondary seas before the age of mammals. They had been masters of the world in their time, and the reptiles now living on the earth seemed only weak reductions of those first giants. I shivered at the thought that I, an ordinary man of the surface world, had looked upon living representatives of a race known to science only through fossil bones.

That fear became sharper when my eye fell upon the iron point of the sounding rod we had used. It still bore the marks of powerful teeth, and from the shape of those marks I felt sure that some great marine creature had struck it. I said nothing aloud, but I checked our weapons and made certain they were ready. My uncle saw what I was doing and approved with a movement of the head. The sea around us showed broad agitations from time to time, as though the deeper waters had been disturbed and had not yet grown calm again.

Toward the following evening, when sleep was pressing on our eyelids under that never-ending light, Hans remained at the rudder during his watch, and I gave myself up to uneasy rest. My uncle, however, did not sleep. When he woke me, I saw at once that he was in a bad humor, and I set it down in my journal as a sign that the old impatient man of Hamburg was returning. My dangers and sufferings had drawn some tenderness from him, but now that I was stronger, nature was taking back her rights.

I asked him whether he was anxious. He answered no. I then asked whether he was impatient, and he replied that any man would be so in his place. I reminded him that the raft was moving with excellent speed, but he cut me short by saying that the speed was not too small, only the sea too large. In truth, he had once supposed this underground sea to be far narrower than it now seemed. He declared bitterly that he had not come so far merely to sail across a pond.

I answered that if we had followed Saknussem's route, we could hardly complain of the road. But that, he said, was exactly the question. Had Saknussem truly crossed this sea, or had our stream perhaps misled us entirely? Had we mistaken a guide for a trap? I tried to point out that whatever the future might be, the spectacle itself was magnificent. He told me sharply that he had not come down into the earth to admire, but to reach a goal.

On the next day, a new sound broke the long sameness of the voyage. Around noon there came to my ears a distant and continuous roaring. I could not explain it. At first I supposed that some hidden rock or small island lay ahead and that the sea was breaking upon it. Hans climbed the mast to look, but he signaled no reef. The ocean remained level and empty to the horizon, and even so the strange roaring continued.

Three hours passed, and the noise grew stronger. I began to imagine a distant waterfall, and I asked myself whether the whole sea might be rushing toward some lower abyss into which it would plunge, carrying us with it. If that way of descending pleased my uncle because of its vertical character, it certainly did not please me. Yet when I threw an empty bottle into the sea to judge the current, it did not show any forward pull at all. The water beneath us seemed calm, though the roaring had become almost violent.

Then Hans climbed to the top of the mast once more. From there he searched the great curve of the sea and fixed his gaze on one point far to the south. He climbed down and stretched out his arm. My uncle seized the glass and looked so long that each second felt like a minute. At last he cried that he saw a vast column of water rising above the waves. I shuddered at once and begged that we turn westward, for after the dangers of the monsters I had no wish to run straight toward another ancient beast.

But my uncle would not hear of caution, and Hans kept the raft on its line with complete steadiness. The farther we advanced, the greater the column appeared. At two leagues' distance, I thought I saw the body of some monstrous black whale or sleeping sea animal, so immense that no naturalist had ever imagined its equal. The water spout rose to a height that seemed impossible, and

the dark mass beneath it looked like the back of a living island. I was ready to cut the halyard and turn us away by force.

Then Hans stood up, pointed calmly, and uttered a single word meaning "island." My uncle burst into laughter, and I felt both foolish and relieved. The terrible monster was only an islet, and the great water column was a geyser, solitary and magnificent, like those of Iceland. As we came nearer, the illusion disappeared fully. The rocky mass truly did resemble an enormous whale, with its head lifted above the water, while from one end the geyser rose in majesty, shaking a shining crown of vapor and flinging its drops high enough to strike the lower clouds.

No other hot spring surrounded it. All the underground volcanic force of that place seemed gathered into that one furious jet. The electric light mingled itself with the rising water, and every drop shone with colors like those of a prism. My uncle, delighted by so grand a natural wonder, ordered Hans to bring the raft alongside with all care. We had to avoid the falling torrent itself, which would have crushed our poor craft at once, but Hans guided us skillfully to the outer edge of the island.

I jumped ashore first, and my uncle followed me lightly, while Hans remained at his post with the calm of a man above surprise. The ground was a mixture of granite and siliceous stone. It trembled under our feet like the side of an iron boiler filled with overheated steam, and it was hot enough to make us walk carefully. When we reached the little central basin from which the geyser rose, I plunged the thermometer into the boiling overflow and drew it out again. It showed an enormous heat.

I could not help pointing out to my uncle that such a fountain, fed from so fiery a source, seemed to speak rather strongly against his theories of a cool interior. He only answered, in his usual way, that it proved nothing at all against his doctrine. Seeing that argument would be wasted there as elsewhere, I said nothing more. Yet whether it proved much or little, the island itself remained before us as one more sign that the underground world was richer, stranger, and more alive than even my uncle had imagined when he first read Saksussemm's

message in Hamburg.

Part 23

We left the little volcanic island after only a short halt. My uncle had named it after me, and I confess that under other circumstances I might have felt some pride in that honor. But the heat of the geyser, the trembling rock under our feet, and the endless sea around us left little room for vanity. Before we pushed away, I made a few observations and calculated that we had already crossed two hundred and seventy leagues of sea since leaving Port Graüben. By my reckoning, we were now buried under England itself, six hundred and twenty leagues from Iceland.

On the following day the magnificent geyser disappeared entirely behind us. The sea returned to its old monotony, and once more we sailed between an empty horizon of water and a roof of vapor bright with cold electrical light. Yet some change had come over the air. The weather, if one may use that word in such a world, seemed uncertain. A heavy stillness sometimes broke the motion of the higher clouds, and the light itself appeared harsher and whiter than before.

By Friday, August 21, signs of coming trouble had grown clearer. A strong south-west wind drove the raft rapidly forward, which pleased my uncle in one way, because movement always pleased him, but not in another, because he still saw no shore ahead. I, however, watched the state of the air more than the empty horizon. The heat was oppressive, and in the upper regions of the cavern-sky there floated a long, dense bank of vapor, thick, dark, and threatening. It had the look of a storm cloud, though no sun shone there to form one as on the surface of the earth.

I asked myself whether thunder and lightning could truly exist in that enclosed atmosphere, under a granite vault and above a buried sea. My uncle thought so at once. He said that where there were clouds, electricity might appear, and where great masses of vapor met under unequal temperatures, violent disturbances could follow. Yet even while he spoke, he did not order Hans to change course, and the guide held the rudder with his usual untroubled hand. To

them both, danger had become only another fact of travel.

That day I set down my observations more carefully than before, perhaps because the air itself filled me with uneasiness. The sea remained empty. No monster broke its surface, no island rose to comfort the eye, and no coast relieved the mind. Even the memory of the giant shepherd seemed almost less frightening than this growing uncertainty of the sky. A visible enemy at least has shape. But a storm, especially in the depths of the earth, belongs to forces that do not negotiate with man.

Toward noon a strange roaring reached us from far away. At first it came so faintly that I thought I had imagined it. Then it returned, prolonged and continuous, like the sound of a vast cataract or the breaking of an ocean upon hidden cliffs. I told my uncle, and he said perhaps some distant rock or little island stood in our path. Hans climbed the mast and looked carefully around, but he signaled nothing. The whole circle of the sea remained level and empty.

Three hours passed, and the roaring increased. I became convinced that some great body of water was falling into a lower abyss. The thought shook me. If the entire sea toward which we sailed poured itself into some deeper chasm, then our raft was lost already, and all our reasoning, courage, and skill would mean nothing. To test the current, I threw an empty bottle into the water, but it did not rush forward. It stayed almost where it had fallen, moving only with the wind. That calmed me a little, though not enough.

Around four o'clock Hans climbed the mast once more. This time his face, usually so unreadable, became fixed as he looked toward one point in the south. My uncle seized the glass and followed the same line. Long seconds passed. At last he cried that he saw a great cloud, a huge mass of vapor gathering low over the sea. It was advancing rapidly, and in its lower part I thought I saw some strange twisting forms, as though wind itself had already taken visible shape.

My fear rose at once. "Can we not turn westward?" I asked. "Need we sail directly into this?" But my uncle would not hear of retreat. He had either too much courage or too much stubbornness to avoid a danger not yet fully upon us. Hans, without arguing for or against, simply kept the raft on its line. The cloud grew

larger every minute, spreading its heavy darkness across the horizon until it seemed to join sea and sky in one threatening wall.

Soon the condition of the atmosphere changed with astonishing speed. The air became charged in a way I could almost feel on my skin. My hair rose slightly, and little crackling sounds came from the metal parts of our tools and weapons. The sea darkened. Above us, the cloud no longer resembled an ordinary vapor bank. It seemed alive with concealed fire. In that pale underground world, where light usually fell soft and cold, this approaching mass looked like an invading force from another element.

The wind freshened, then shifted with violence, then struck us in unequal bursts. Our little blanket-sail swelled enormously and pulled at the mast as though it wished to tear it out of the raft. Still Hans held the rudder. Still my uncle refused to shorten sail. The raft rushed forward with frightening speed, though even then it moved less rapidly than the great drops of water thrown aside beneath its front, which shot away in straight shining lines. I made urgent signs that the sail should be lowered, but my uncle answered no, and Hans quietly repeated the refusal.

Then the rain appeared ahead of us, not as an ordinary shower, but as a true cataract hanging between sea and cloud. We were running straight toward it. Before it reached us, however, the curtain of vapor tore open with sudden violence, and at once the whole ocean around us seemed to boil. A vast electrical action had begun in the upper layers of that dense atmosphere. Lightning burst out in every direction. Thunder no longer came as separate blows, but as one continuous crashing sound.

Flashes crossed, returned, struck downward, struck upward, and darted sideways in fiery lines. Some of them seemed to rebound from the granite roof itself. Others split into branches or expanded into balls of fire which burst like shells. The mass of vapor became incandescent. Hail fell upon us, and when it struck our metal instruments or the guns, every blow gave out light. The lifted waves looked like volcanic hills, each crowned with flame, as though fire slept below them and broke out at their crests.

The brightness was so fierce that my eyes could scarcely bear it. The noise

was beyond anything I had known before. My ears felt broken by it, and no human voice could have crossed such a storm. I had to cling to the mast, which bent like a reed under the force of the wind. The rain at last reached us and fell over the raft in sheets. In a few moments we were soaked, blinded, and almost driven from our places.

What followed I can tell only imperfectly, because my notes from that point became confused and broken. The storm passed beyond the power of memory to arrange it clearly. I know only that we were carried on with incredible speed. The night, if that word can be used where there is no true day, was frightful beyond description. The thunder never ceased. The lightning ran in returning zigzags, sometimes seeming to spring from below as well as above, and more than once I feared that the granite vault itself might crack and fall upon us.

By Sunday, August 23, the tempest still raged. Columns of water leaped into the air and fell back in foam. The atmosphere appeared chemically altered, if I may say so, as though the very substances of the air had been stirred into a new and violent state. We could not exchange a word. Even if we put our mouths to one another's ears, no clear sound could be heard. My uncle lay stretched at the far end of the raft, more helpless than I had ever seen him, though not more frightened.

The heat grew worse rather than better. I looked at the thermometer at one moment, but the figure I wrote down later was blurred and lost. On Monday, August 24, the storm still had not ended. I began to wonder whether the condition of that dense atmosphere, once disturbed, might continue forever. We were broken with fatigue. Hans alone remained nearly the same as always. The raft ran invariable toward the south-east, and by my uncle's estimate we had crossed more than two hundred leagues since leaving the island.

By noon that day the violence of the hurricane increased again. Everything belonging to the cargo had to be tied down more securely, and we ourselves had to lash our bodies to the raft. The waves passed over our heads. For three days we had lived in that noise, that light, and that blind rush through the buried sea. I saw my uncle move his lips toward me. I believe he meant to say, "We are lost," though

I cannot be certain. At last, despairing of speech, I took out my notebook and wrote one request upon it: "Let us lower the sail."

He read the words, looked at me for a moment through the lightning and rain, and gave a sign that he agreed.

Part 24

My uncle read my written plea by the light of the storm, looked at me for one hard second, and at last gave a sign that he agreed. The sail was lowered. I hoped for relief at once, but the violence of the hurricane had already gone too far for such a measure to save us quickly. The raft, though now less exposed, still rushed forward over waves that seemed to rise out of fire. We were no longer masters of anything. The elements had taken full control.

The storm did not weaken with the coming hours. On the contrary, it seemed to grow stronger by feeding on its own fury. The sea rose under us in boiling ridges, and the air remained one uninterrupted mixture of thunder, lightning, hail, and rain. Even with the sail down, the raft was flung onward as if some invisible hand wished to drive us to a fixed point. Our bodies were lashed to the timbers, and only Hans remained sufficiently calm to hold himself ready for whatever might come next.

At one moment I thought the granite vault itself would fall upon us. Great flashes struck upward and downward together, some seeming to rebound from the stony roof, others bursting into balls of fire in the middle of the air. The whole sea around us shone and roared. Water, flame, and electricity had become one element. Had all the powder magazines on the earth exploded together, I do not think they could have produced a more terrible noise.

The heat was almost as dreadful as the violence. The air seemed chemically changed, full of sharp and burning force. Hailstones struck our tools and weapons and burst into light upon them. More than once I saw our very baggage shine as if it had taken fire, though it remained unconsumed. My uncle later believed that extraordinary reactions were taking place all through the upper layers of that

dense underground atmosphere, and at the time I could believe anything.

By the following day the tempest still had not spent itself. We no longer knew where we were. We only knew that we were being driven with frightful speed. The raft climbed, fell, and twisted, yet did not break. Hans held on with the same cold strength as always. My uncle, though he had refused prudence when prudence was still possible, now looked less like the master of the expedition than one more helpless passenger under the rule of natural forces.

Our ears were past ordinary pain. The noise had gone beyond what hearing can separate or judge. Speech between us had become useless long before. I could no longer tell whether my uncle spoke or whether his lips only moved by habit. Lightning still crossed above us in returning lines and exploding globes. The sea remained alive with light, and every crest rose like a black hill crowned with fire. No man could have seen such a scene and believed the world below the earth to be dead.

Then came the moment that remains brightest and most terrible in my memory. A globe of fire appeared near the raft, perhaps thrown off by the great electrical struggle in the air, perhaps formed by it. I cannot say. It moved above us, around us, and with us, like a living thing made of light. Its brightness was unbearable, and yet I could not take my eyes from it. It was as if the storm had gathered one part of itself into visible form.

That ball of fire came and played around the mast, our iron tools, and the metal objects on board, all of which seemed to attract it. Suddenly the whole raft was filled with luminous effects. A smell of burning matter passed through the air. The iron point of the mast shone, the guns glittered strangely, and sparks moved along the wet ropes and timbers. In the middle of all that fearful splendor, I understood for one second that electricity had taken possession of our raft itself.

Then, with a violence beyond all words, the globe burst. A shock threw me down, and for some time I knew nothing more clearly. Whether the mast was struck, whether the wood itself was partly consumed, whether the tools became magnetized at that instant, I did not learn until much later. I remember only the feeling of being beaten, blinded, burned, and then abandoned again to the blind

rush of the tempest. After that, memory itself becomes broken.

When clear impressions return, they come only as scattered images. I see the raft still racing onward, but now with the mast gone or shattered. I see my uncle stretched along the timbers, gripping them with exhausted hands. I see Hans still holding what remained of the rudder arrangement as if even then he expected obedience from it. I see the sea no longer merely rising, but hurling us in long leaps. I think also that the storm, after the electrical explosion, began at last to lose a little of its first violence, though not its danger.

At length, after what may have been days or only hours beyond proper counting, a new sound reached us through the lesser but still terrible roar of the sea. It was the sound of breakers. Then came a grinding shock under the raft, followed at once by another, stronger one. We had struck ground. The waves lifted us and threw us again, not gently upon sand, but violently against rock. Our raft, already wounded by storm and fire, could bear no more.

The next great wave broke it. I felt myself flung with the wreck against hard ground and then dragged back half into the water before another wave threw me farther inland. When I opened my eyes again, I lay bruised, wet, and almost senseless among broken timbers, baggage, and dark stones. For some moments I could only breathe and thank God that solid earth existed again under my body. Whether that earth was a new shore or only some final stage of destruction, I did not yet know.

My first thought after life returned was for my companions. I called, though my voice was weak, and soon I heard my uncle answer. Hans too was safe. The baggage had suffered, the raft was ruined, and we ourselves were terribly shaken, but none of us had been swallowed by the sea. That fact alone seemed at first enough to fill me with gratitude. After so many hours of storm, fire, and blind rushing, survival itself felt like a miracle.

When we had gathered ourselves a little, I looked around. A shore stretched near us, dark, uneven, and lined with rocks. Beyond it rose masses of stone and the same vast vault of clouded brightness under which we had been sailing before. Nothing in the scene immediately told us where we were. My uncle, however, no

longer spoke of danger. Once he knew that land had received us and not destroyed us, his first thought was again of the journey forward.

We dragged what could be saved from the wreck above the reach of the waves. Some provisions remained. Some instruments also remained, though not all in good condition. The raft itself had become no more than broken beams and scattered ropes. My uncle looked at the wreck with annoyance, but not despair. He believed that the sea had merely carried us, by a violent road, to the farther coast which he had long sought. I was too tired to argue, and too grateful to be alive to care much in that first hour whether he was right.

Still, a strange uneasiness remained in me. The shore on which we stood, though new to my eye in the confusion of the storm, did not give me the feeling of complete novelty. Something in the rocks, the air, and even the shape of the coast troubled me like a half-remembered dream. But I put the thought aside. We needed shelter, rest, and some knowledge of our position before any judgment could be made. So, leaving behind the remains of our poor raft, we prepared to examine the land to which the sea had thrown us.

Part 25

My uncle and I left Hans with the saved baggage and went to examine the coast. Even after the storm had thrown us ashore, I still believed we must be on a new land, perhaps the southern side of the underground sea at last. Yet as we walked between the water and the rocky slopes beyond it, a strange uncertainty grew in me. More than once I thought I recognized the shape of certain stones, the fall of certain little streams, even the general line of the cliffs. Then, a few steps later, some new turn of the coast or new arrangement of the rocks seemed to destroy that idea.

“Clearly,” I said to my uncle, “we have not landed at our first point of departure. But if we follow the shore, we may come nearer to Port Graüben.” He answered that if this were true, it would be useless to continue a long exploration, and that we might do better to go back toward the raft. Then he added, with

unusual hesitation, “But are you certain, Axel?” I could not answer with certainty. All those rocks resembled one another so strongly that the whole coast seemed built from repetitions of the same shapes.

Still, a half memory would not leave me. One narrow inlet seemed familiar. A low point of rock reminded me of the place where Hans had built our raft. I was about to say that I believed we stood near our little harbor, perhaps even in it, when something shining on the sand caught my eye. I ran forward, stooped, and picked up a dagger.

My uncle asked whether it belonged to me. I answered that it certainly did not. He then asked whether I believed it might be his, but at once rejected the idea himself. He had never owned such a weapon. We both looked at it carefully. It was not a tool of our own day. The handle, the guard, and the whole shape spoke of an older time. My first thought was that Hans had dropped it, since Icelanders often carry arms of a practical kind. But my uncle shook his head gravely.

“No,” he said, “this is not a hunter’s knife. It is a true dagger from the sixteenth century, the sort a gentleman might wear at his belt to give the final blow. It is Spanish in origin.” Then he lifted his head and fixed me with a look that made my heart stop. Neither he nor I named the thought at first, because once named, it would become almost too strong to bear. At last he said it aloud. “This weapon belonged to Arne Saknussem.”

I answered by asking whether he truly dared believe it. But even before he replied, I knew that he did. The old dagger in my hand seemed to unite all our journey at once: the manuscript, the cryptogram, the signs, the sea, the storm, and now this coast. If Saknussem had held that blade, then he had walked where we were walking. If he had walked there, then we were still on his road. My uncle’s eyes shone again with that dangerous triumph I knew too well.

He spoke of fate, of providence, of how circumstances had served us from the beginning of the journey. I could not help agreeing, though perhaps not in the same spirit. So many chances had indeed favored us, or driven us, that the whole expedition seemed at times less like a human plan than like a chain of events prepared long before we entered it. My uncle took this as proof that nothing should

stop us. I took it rather as proof that we had gone too far to return by ordinary means.

We continued along the shore with greater eagerness. My uncle now searched every rock with the hope of finding another sign from the old Icelandic alchemist. I was myself so moved by the dagger that I no longer laughed at his expectation. We had not gone far when the coast ended in a rocky cape that pushed into the sea. The professor climbed over the stones quickly, almost running. I followed him with a beating heart.

There, on the face of the rock, cut by a sharp point long ago, we saw two letters: A. S. At that sight, my uncle gave a cry of triumph. Arne Saknussemm had passed there. He had stood on that cape and marked it with his own hand. The Spanish dagger, which I still held, must indeed have been his. The whole thing was too clear now to deny. Even my last doubts had to fall silent before such evidence.

My uncle burst into one of those speeches in which his imagination and his pride always ran ahead of him together. He praised Saknussemm as a marvelous genius who had forgotten nothing needed to guide later men along the roads of the earth's crust. Step by step, the old traveler had left his name upon the granite so that another bold man might follow. My uncle even declared that when he reached the center of the earth, he too would sign the last page of that immense stony book with his own name.

In that moment, I confess, his enthusiasm carried me with it. A fire awoke in me again. I forgot the dangers of the past journey, the terrors of the sea, and even the risk of return. If another man had done such things three hundred years earlier, why should we stop short now? I cried that we must go forward at once, and I was already moving toward the dark opening inland when my uncle, in one of those rare moments when prudence mastered impatience, held me back.

"First," he said, "we must return to Hans and bring the raft to this place." I obeyed, though not without reluctance. On the way back I said again that circumstances had served us strangely well. He answered that they had indeed, but that we must not trust to chance when clear action was possible. Even then his

mind was already arranging the next movement. Once a path opened before him, he could think of nothing else.

Hans heard our news with his usual calm and said nothing remarkable, though I showed him the dagger and pointed toward the cape with its carved letters. My uncle gave a few orders, and the guide at once prepared everything needed for departure. The air had become fairly pure again, and a good north-west wind still held steady. Under other conditions I might have resisted. But against two such wills, one burning and one silent, I could do nothing. I was about to take my usual place on the raft when my uncle stopped me.

“We shall not leave until tomorrow,” he said. I made the gesture of a man ready for anything. Then he added that since fate had thrown us upon this part of the coast, he would not leave it without examining it more carefully. That decision, I must admit, was reasonable. We had indeed come back to the northern shore, but not to the exact place from which we had first sailed. Port Graüben lay farther west. So we left Hans by the raft and once more set out on foot.

The space between the sea and the cliffs was wide enough for a long walk. Shells of all sizes were crushed under our feet. I saw also the huge round coverings of ancient animals, larger than anything living now, and pebbles worn smooth by waves that had once covered ground now dry. From all this I concluded that the sea had earlier stood higher over that shore and had slowly drawn back. My uncle agreed. Even in those depths, the old action of tides and waters had left its mark.

Yet nothing we saw there moved me as strongly as the thought that we had not crossed to a new coast at all. The storm had not carried us onward, but back. We had suffered through fire and hurricane only to be thrown once more upon the northern side of the same sea. That fact seemed almost cruel. But my uncle did not read it as defeat. The dagger, the initials, and the cape had restored his confidence too completely. If Saknussem had gone on from there, then so would he.

So the day ended not in despair, but in a strange mixture of disappointment and renewed purpose. We had lost our raft, our easy confidence, and the belief that the farther shore was already in our hands. But we had gained something

stronger in my uncle's eyes: fresh proof that the old traveler's route still lay before us. We would rest that night on land, study the coast at dawn, and then move again. The sea had thrown us back, but the journey itself had not ended.

Part 26

We went back to Hans at once, and while walking beside my uncle over the rocky shore, I said that fortune had served us strangely well from the beginning of the journey. He asked what I meant, and I answered that each danger, even the worst of them, had in the end pushed us forward again. The manuscript had led us to Sneffels, thirst had given us the Hansbach, the storm had thrown us back to the very coast marked by Saknussem, and now the old dagger and the letters on the cape had restored the true path just when we might have believed ourselves defeated. My uncle listened with satisfaction, though he answered that one should not praise fortune too early.

When we reached Hans, my uncle explained in a few words that we must bring the raft round to the point now named Cape Saknussem. The guide obeyed without surprise, as if old alchemists, buried seas, and carved initials were all of equal value to him. The shore itself helped us, for the sea remained calm enough after the great storm, and the raft, though damaged, could still be drawn along near the coast. We worked together and soon brought what remained of our little vessel to the place my uncle had chosen.

"Now," he said, "before deciding anything further, let us examine the opening more carefully and see whether ladders will be needed." He set one of the Ruhmkorff lamps in order, and we left the raft tied safely at the shore. The entrance to the passage was not twenty steps away, and our little party went to it without delay. I walked first, because impatience had again mastered me completely.

The opening was almost circular and perhaps five feet across. The tunnel had clearly been cut through the solid rock long ago by eruptive matter that had once passed there in freedom. Its lower edge stood level with the ground, so that one

could enter without climbing. To my excited mind, this was already a good sign. Such a passage seemed made not for hesitation, but for advance.

We had scarcely gone six steps inside when our march ended. An enormous block of granite stood across the gallery and closed it from side to side. I cried out with anger as much as disappointment. We searched to the right and left, below and above, but there was no break anywhere, no crack wide enough for a hand, no side opening, no hidden turn. Hans lifted the lamp toward every part of the wall, but the light showed only one unbroken barrier.

I sat down upon the ground in deep frustration, while my uncle paced the tunnel in quick and violent steps. "Then what of Saknussem?" I cried at last. "Was he too stopped by this stone door?" My uncle repeated my question bitterly, and for a moment even he seemed struck motionless by the obstacle. But I had now gone too far in my inward change to accept defeat easily. A thought came to me with great force, and I leaped up again.

"No," I cried. "No, this cannot have stopped him. This block is not part of the original passage. It must have fallen later." I pointed to the ceiling and to the great masses around us. The whole roof, I said, was made of enormous stones placed one against another like the work of some giant hand. Fissures, still visible and comparatively fresh, ran across the granite. It was plain to me that the passage had once been open and that some violent shock, some movement of the earth's crust, had loosened this one block and dropped it into place like the missing stone of an arch.

My uncle stopped and listened. The more I spoke, the more my own excitement rose. I said that this tunnel had clearly once been a free road for lava. The molten matter had shaped and polished it on its way through the mountain. Saknussem, therefore, must have found it open, passed through it, and gone on. Only later had this accident of the earth closed the way. "It is an obstacle he did not meet," I said, "and if we do not throw it down, then we are not worthy to follow him to the center of the world."

I do not know what power had entered me. My uncle's very soul seemed to have passed into mine. In that moment I forgot everything: the dangers of the

descent, the fear of the sea, the pain already suffered, the thought of return, even Hamburg and Graüben. There remained only one idea, to go forward. My uncle, hearing me speak so, seemed delighted to hear his own bold spirit come back from my lips. He struck the wall with his fist as if he would already break it by anger alone.

“Very well,” he cried, “we shall go through. Let us take the pick and the spade and make our road by force.” I answered at once that the granite was too hard for the pick. He replied, “Then the spade!” I answered again that the spade would take too long. He threw out his hands with impatience and demanded what else remained. The answer came to me at once. “The mine,” I said. “Gunpowder! No, better still, the fulmicotton. Let us blow the obstacle apart.”

My uncle’s eyes flashed. “The mine!” he repeated, and then, turning at once to Hans, he gave the order to begin. The guide went back to the raft and returned with the tools and the explosive material that we had brought down through so many dangers without yet having full need of it. I saw then that no man is truly prepared for an expedition of discovery unless he brings with him the means not only of observing nature, but of attacking her when she bars the way.

Hans began by cutting a chamber in the lower part of the blocked passage, close against the foot of the great stone. It was difficult work, and by no means small in scale. The opening had to be large enough to receive a heavy charge, one strong enough to break a granite mass that might have stood there for centuries. My uncle had decided that we should use some fifty pounds of fulmicotton, whose force is far greater than that of ordinary powder. To me, every blow of Hans’s tool sounded like the beginning of victory.

I helped my uncle with feverish energy. Together we prepared the long fuse from damp powder enclosed within a cloth tube so that the fire might travel surely and with delay enough to let us escape the blast. We worked like miners, engineers, and madmen at once. My uncle repeated again and again that we would pass, and I answered him each time that we would. The hard rock, the underground sea, the storm, the whole earth itself seemed now only enemies to be mastered.

Hour after hour passed in that labor. Hans, steady as ever, cut the chamber

with exact blows and no wasted effort. My uncle and I filled it at last with the formidable charge and settled it carefully in place. Then the fuse was drawn back out of the gallery, laid safely along the passage, and brought far enough from the blocked opening to allow us a retreat. I examined it myself more than once, because in such a place one does not willingly trust life to carelessness.

By midnight all was ready. The fulmicotton slept in its stony chamber. The long fuse lay stretched behind us through the tunnel and out toward the shore. A single spark would now be enough to set the whole engine of destruction to work. My uncle looked at the barrier one last time with folded arms and burning eyes. I think he already saw it shattered and the road beyond it opened at his feet.

“Tomorrow,” he said at last.

That word, after so much fever, fell strangely on my ears. We had to wait still six more hours, and those six hours seemed almost harder to bear than many days of travel. Yet there was nothing to do now except leave the gallery, return to the shore, and try to rest. I obeyed, but with impatience in every step. The obstacle stood behind us in darkness, silent and motionless, while under it the explosive charge waited like a hidden thought of violence inside the earth itself.

We lay down at last, though sleep came badly to me. The date, Thursday, August 27, fixed itself in my memory and has never left it. Even then I felt, without fully understanding why, that the next day would mark a turning point more terrible than any that had come before. Up to that moment, our courage, our skill, and our judgment had still guided the expedition. After that, I sensed dimly, we might become only the playthings of the powers buried under the globe.

Part 27

The next morning, Thursday, August 27, became one of the most terrible dates of my life. Even now, when I think of it, fear returns to my heart. Up to that point, our courage, our judgment, and our skill had still played some part in the journey. After that day, I felt that human reason no longer ruled events. We were about to place ourselves in the hands of forces far greater than ourselves, and I

did not yet understand how completely.

We were all on our feet by six o'clock. The charge had been prepared, the fuse laid, and the way of retreat measured carefully. I asked my uncle for the honor of lighting the mine myself. The plan was simple enough. I would fire the fuse, run back to the shore, leap onto the raft, and then we would all push out from land before the explosion came. According to our calculations, the fuse would burn for ten full minutes before the fire reached the chamber of fulmicotton.

In ordinary life, ten minutes is a small piece of time. That morning it felt enormous and yet dangerously short. I remember trying to eat a little, though excitement had taken away all appetite. My uncle and Hans got onto the raft first and left it loaded, because we intended to move out quickly as soon as I returned. I remained alone on the shore with a lighted lantern in my hand. The sea lay beside me, quiet and dark under the strange underground light, while behind me the gallery waited in silence with its hidden violence already prepared.

My uncle called out to me from the raft. "Go, my boy, and come back to us at once." I answered that he need not fear delay, because I did not intend to amuse myself on the way. Even in that moment, he could not help speaking like a commander giving orders, and I could not help answering like the nephew who had long since learned obedience in danger. Then I turned, ran to the mouth of the gallery, and bent toward the end of the fuse.

I opened my lantern and held the flame to it. The fuse caught at once with a sharp, lively sputter, and for one instant I watched the little fire begin its hidden race into the earth. Then I ran back with all the speed I could command. My boots struck the ground hard, my breath came quickly, and every second seemed to press against my back like a hand. When I reached the shore, my uncle cried, "Get on board!" and Hans, with one powerful shove, sent the raft outward into the sea.

We moved away perhaps twenty yards from land. No one spoke then except my uncle, who held his chronometer and counted the minutes in a strained voice. "Five more minutes," he said. Then, after a pause that seemed far too long, "Four." The needle moved, and my own pulse seemed to beat with it. "Three." I could hear the sea against the raft, my own breathing, and nothing else. "Two." It was

impossible not to imagine the fire moving farther and farther inward, drawing ever nearer to the great charge.

At last my uncle shouted, "One!" Then, with all the violence of his nature suddenly breaking free, he cried, "Fall, mountains of granite!" I do not think I truly heard the explosion itself. What I saw first was more terrible than sound. The whole form of the rocky coast changed before my eyes in one instant. It opened as if a curtain had been torn apart. Where solid shore had stood, a black and bottomless gulf now appeared.

The sea seemed to lose its own reason at the sight. It gathered itself into one enormous wave, and our raft rose almost upright upon its back. The three of us were thrown down together. In less than a second, the pale light vanished, and a darkness deeper than any night rushed over us. At the same time, I felt the raft lose all steady support beneath it. I thought at first that it was sinking straight down into the abyss, and for a moment I believed death had already taken us.

But the raft was not sinking like a stone. It was being carried, seized, dragged, and driven with unimaginable force. I wanted to call to my uncle, but the roaring of the waters made all speech useless. Even so, in the middle of that confusion, I understood what had happened. Beyond the blasted rock, there had existed a great abyss. Our explosion had not merely opened a passage. It had shaken the fractured ground around it, widened the hidden chasm, and given the sea a road into it. We had not only opened the way. We had sent an entire ocean through it, and we were being carried with the torrent.

Time lost all form in that descent. An hour may have passed, or two. I cannot say. We held one another by the arms and hands to avoid being thrown from the raft. From time to time it struck the rocky walls with frightful force, though less often than I first expected, and from that I concluded that the passage must be widening greatly as it descended. There could be no doubt that this was the road of Saknussem. But instead of descending it like careful explorers, we had, through our own rashness, turned the buried sea into a rushing river and made ourselves part of its fall.

My thoughts moved slowly and with difficulty through all this. The rush of

air against my face was so violent that it seemed greater than the speed of the fastest trains on the surface. In such conditions, it was impossible to relight any torch, and our last electric lamp had been broken in the violence of the explosion. For that reason I was deeply surprised when a light suddenly appeared near me. It was only a lantern, but in those depths it seemed almost miraculous. Hans, with that same calm skill which had saved us so often before, had managed to light it.

Its unsteady flame threw a few trembling rays into the darkness and showed us something of the passage through which we were being carried. The gallery was broad, far broader than I had first imagined. Even with that weak light, I could not see both walls clearly at the same time. The torrent on which we rode ran down a slope greater than the fiercest rapids in the wildest rivers of America. The water beneath us did not seem like ordinary waves. It looked more like a thousand liquid arrows shot downward with one terrible purpose.

At times the raft spun in violent circles when it met some hidden whirl of the current. When it came near one side of the passage, I held up the lantern and tried to judge our speed by the rocks. Their projections no longer seemed like separate shapes. They had become long unbroken lines, and we appeared to be trapped inside a cage of moving threads. I judged then that we were traveling at a speed of at least thirty leagues an hour, perhaps more, and the thought itself made me cold in spite of the violence around us.

My uncle and I clung with wild eyes to the broken stump of the mast, which had snapped clean in the disaster. We turned our backs as much as possible against the rush of air, fearing that its force alone might suffocate us. So the hours passed. The situation itself did not change, but a new danger appeared. When I began, as best I could, to put some order into the cargo, I saw that much of it had disappeared in the first assault of the sea. The great wave that had lifted and struck us had also torn away a terrible part of what we carried.

I took the lantern and examined every space between the beams and planks of the raft. One by one, the facts became clear. Most of our instruments were gone. Of all that scientific equipment on which my uncle had once relied so proudly, only the compass and the chronometer remained. Our ladders and ropes had been

reduced to one length of cable still wound around the broken mast. We had no pick, no spade, no hammer. Worst of all, we had almost no food left.

I searched again because I refused to believe it. But it was true. What remained of our provisions was only a little dried meat and a few biscuits, not enough for even one day of ordinary need. I stared at the poor fragments as if they belonged to someone else. Yet even in that moment, reason showed me the strange cruelty of our position. Why fear hunger when death already surrounded us in so many nearer forms? Why count biscuits while an irresistible torrent carried us through the depths of the earth?

Still, the human mind does not always choose its fears wisely. I found myself thinking less of the immediate danger than of the future misery waiting beyond it. If by some impossible chance we escaped the torrent and reached land again, what would become of us without tools, without proper supplies, and almost without food? I nearly spoke then and told my uncle the full truth of our poverty. But I forced myself to remain silent. I wanted, at least for a little longer, to leave him his composure.

While I was still struggling with these thoughts, the lantern began to burn more weakly. The flame grew small, trembled, and slowly died down. At last it went out completely. The wick had burned to its end. Once more an absolute darkness closed over us. There was no longer even the smallest hope of breaking it. One torch still remained somewhere among our things, but no flame could live in that furious rush of air. Like a child, I closed my eyes, as though that could save me from seeing the darkness.

Part 28

Like a child, I closed my eyes against the darkness. I do not know how long that state lasted. When clear thought returned, I understood that the terrible fall of the sea had changed its nature. We were no longer being carried only by water. We had entered a volcanic chimney, and the broken raft was being driven upward by eruptive force.

The compass gave the first warning. Its needle no longer stood firm, but leaped wildly from one side to the other, crossed the whole circle, and shook as if it had lost its mind. I knew well that the crust of the earth is never perfectly still, and that hidden movements are always at work below us. But this was no ordinary trembling. The signs around us were too violent, too many, and too clear.

The noise grew stronger every moment. It was like the sound of many heavy wagons rolling over stone, but multiplied until it became one endless thunder. The boiling water, the thickening steam, the burning heat, and the mad compass all told the same story. The rocky walls were shuddering around us. The passage itself seemed ready to close, and I believed we were about to be crushed between moving masses of granite.

“Uncle, uncle!” I cried. “We are lost!” He answered with a calm that shocked me. When I told him that everything showed the coming of an earthquake, he shook his head and said that I was mistaken. What I took for an earthquake, he said, was something else. Then he gave the answer that froze me with terror. “An eruption, Axel,” he said. “We are inside a volcano in action.”

I stared at him and could hardly believe my ears. We were no longer in an ordinary underground passage. We were in the throat of a living mountain, among boiling waters, burning rocks, and eruptive matter. I cried that we would be thrown out with ash, fire, and broken stone into the air. My uncle replied, to my amazement, that this was the best thing that could happen to us. It was our only chance to reach the surface of the earth again.

He was right. I saw it almost at once. If the volcanic force continued to drive us upward, then it might indeed carry us back into the world of men. From that moment, my terror remained, but it changed its form. I no longer feared only death in the depths. I feared the wild violence of the ascent itself, and above all I tried to guess through what mountain, and in what part of the earth, we would finally be thrown out.

We rose through that frightful chimney all night long. The burning heat became harder to bear with every hour, and from time to time red light entered the widening passage. I saw deep side tunnels from which thick vapors rushed, while

long tongues of fire licked the walls and crackled there. I cried out to my uncle that the flames would reach us, but he answered that they would not. He even told me that if the passage widened enough, we might leave the raft and take shelter in some side crack, though he soon admitted that the raft itself was still our safest support.

The boiling water under us had now become a thick, eruptive paste. The temperature was almost impossible to endure, and sweat ran down my whole body. Without the speed of our upward movement, we would have suffocated. Yet my uncle did not abandon the raft, and in this he was wise. Those poor beams, half broken and badly joined, were still better than anything else in that furnace.

Toward eight o'clock in the morning, the movement stopped suddenly. The raft became still, and the eruptive column itself seemed to rest. I thought the eruption had ended and cried out in fear, but my uncle checked his watch and answered that this was only a pause. Ten minutes later, exactly as he had said, we were launched upward again. Then came another halt, then another upward rush. The volcano, he decided, was erupting in broken pulses, and we had entered not the main throat, but some side channel where each shock reached us in repeated blows.

I cannot give a clear account of the hours that followed. Each new upward thrust was stronger than the last. During the pauses we almost choked. During the violent launches, the burning air cut my breath away. My head, already shaken by many blows, could no longer hold its thoughts in order. Without Hans, who more than once kept me from smashing my skull against the granite wall, I think I would not have survived that part of the ascent.

After that, memory becomes broken. I remember only continuous explosions, the shaking of the mountain, the raft rolling on waves of lava, and ash falling all around us. Flames roared beside us, and a violent wind seemed to come from some enormous hidden machine driving the underground fires. Once more I saw Hans's face in the red light, and then I had only one feeling left: the dread of a man tied to the mouth of a cannon at the moment before it fires.

When I opened my eyes again, I felt the strong hand of Hans around my

waist. With his other hand he was holding my uncle. I was not badly wounded, but my whole body ached as though I had been beaten from head to foot. I found myself lying on the side of a mountain, only a few steps from a deep drop into which the least movement might have thrown me. Hans had saved me while I rolled down the outer slope of the crater.

“Where are we?” my uncle asked at once, and he sounded almost annoyed to be back on the earth. Hans lifted his shoulders to show that he did not know. “In Iceland?” I asked. “No,” he answered. My uncle cried out in surprise, and even I at first wanted to believe that Hans was mistaken. But my own body soon forced me to accept the truth.

I had expected snow, cold wind, gray northern skies, and some bleak mountain in the far north. Instead, the sun was burning us with full force. We had come out half naked from the crater, and after two months without sunlight, the sudden flood of heat and brightness was almost painful. When my eyes grew used to the light, I looked around and understood that we were in no northern land at all.

Above us, no more than five hundred feet higher, opened the mouth of the volcano, and every quarter of an hour it threw out a tall column of flame mixed with ash, lava, and stones. The whole mountain shook each time it breathed. Below us, green trees covered the lower slopes, and among them I saw olive trees, fig trees, and vines heavy with red grapes. Farther still lay a beautiful sea or great lake, blue under the sun, surrounding the land so that it looked like an island.

To the east I saw a small port with a few houses and ships of an unusual shape moving on the water. Beyond them, many little islands rose from the sea. To the west, distant coasts curved softly along the horizon, and farther away another great cone lifted smoke into the air. To the north the shining water spread out in a wide field of light. The whole scene was so lovely and so unexpected that it seemed like a reward after the horrors below the earth.

“Where are we?” I whispered again and again. My uncle at last broke the silence, but only to say that wherever we were, we should do better to get down before some stone from the volcano fell on our heads. He was hungry and thirsty,

and that practical truth ended the moment of wonder. We slid down the steep slopes through ash and past streams of hot lava. While descending, I spoke wildly of India, the Malay islands, and lands in the far south, because my mind still could not accept any simpler answer.

My uncle asked what such guesses meant for the compass, which had always shown north. I had no answer. Yet before long hunger and thirst drove away those questions. After two hours we came to a pleasant countryside full of olives, pomegranates, and vines. In our poor state, we did not trouble ourselves over ownership. We drank deeply from a spring of fresh water, washed our faces and hands, and ate fruit with a joy that almost made me forget all the dangers we had passed through.

Then a child appeared between two olive trees. He was poorly dressed and looked frightened by our strange half-naked appearance and our long rough beards. When he tried to run, Hans caught him gently and brought him back. My uncle tried German, then English, then French, and then Italian, but the boy answered nothing. The professor's anger began to return at this silence, and he caught the child by the ears and repeated the question in louder Italian.

At last the little shepherd answered with one word: "Stromboli." Then he slipped from Hans's hands and ran away across the fields. We hardly noticed him go. That one name had already changed everything. Stromboli! We were in the Mediterranean, in the Aeolian Islands, not in the far north at all. The blue mountains to the east were the mountains of Calabria, and the great smoking cone on the southern horizon was Etna.

What a journey it had been. We had gone into the earth through one volcano and come out through another, more than twelve hundred leagues from Sneffels and the frozen land of Iceland. We had left the world of snow and returned to the world of green trees, blue sky, and the warm sea of Sicily. After a good meal of fruit and water, we continued toward the port of Stromboli. We thought it wiser not to tell the truth about our arrival, since the people there might have taken us for beings thrown up from hell itself. It was safer, if less glorious, to pass for poor shipwrecked men.

Even while walking, my uncle kept murmuring about the compass and how it could have shown north if we had in fact gone south. In spite of everything, he was again becoming the strict professor of the Johannaem. An hour later we reached the port of San Vincenzo. There Hans asked for the wages due to him for his thirteenth week of service, and my uncle paid him with warm thanks and many strong handshakes. For once, the guide allowed himself a small smile.

Part 29

The people of Stromboli received us kindly, as men saved from shipwreck. They gave us clothes, food, and the simple care that tired bodies need more than words. After forty-eight hours of rest, on August 31, a small boat carried us to Messina. There we stayed a few more days, and little by little the pains of our terrible journey left our bodies, though not our minds.

On Friday, September 4, we went on board the *_Volturne_*, one of the French mail steamers, and three days later we reached Marseille. From there the road home was short enough, but one trouble still remained in my uncle's mind. He could not stop thinking about the compass. That unhappy instrument, which had seemed to guide us and then had betrayed us, tormented him more than any wound, storm, or hunger. On the evening of September 9, we arrived at last in Hamburg.

I need hardly say what joy waited for us there. Graüben was still faithful, still brave, and more beautiful to me than ever. She met me with tears and smiles together and told me that now I was truly a hero, I would never need to leave her again. I looked at her and felt that all the dangers of the journey were paid for in that one moment. Even my uncle, who understood stones better than hearts, could not fail to see our happiness then.

Our return caused a great sensation in Hamburg. Because good Marthe had spoken too freely, the news of my uncle's departure for the center of the earth had spread everywhere long before we came back. At first people had laughed at the story, and even when they saw us again, many still found it easier to doubt than to believe. Yet Hans's presence, together with reports that came later from Iceland

and Sicily, slowly changed public opinion. At last my uncle became a famous man, and I had the honor of being the nephew of a famous man, which is already something in this world.

A public celebration was held in our honor, and at the Johannaem my uncle gave an account of the expedition. He left out only one matter, the strange business of the compass, because that question was still dark to him and therefore painful. On the same day he placed the document of Arne Saknussemm in the archives of the city and expressed his deep regret that circumstances stronger than his own will had prevented him from following the Icelandic traveler all the way to the center of the earth. He was modest in his glory, and that modesty only increased his reputation. Great honor, however, always creates envy, and so it happened here as well.

Because his theories, supported by real facts, stood against older scientific opinions on the question of central heat, my uncle was forced into many discussions with learned men from every country. Some praised him, some attacked him, and some tried to explain away what they could not deny. For my own part, I still cannot fully accept his theory of a cooling earth. In spite of what I saw, I continue to believe that great heat rules below us, though I willingly admit that certain natural conditions may hide or change its effects in ways not yet understood. Science may argue as it likes, but memory remains powerful.

While all these debates were still alive, my uncle suffered one real sorrow. Hans, in spite of all our requests, would not remain in Hamburg. The man to whom we owed so much refused to let us pay our debt in the way we wished. One day he simply said goodbye in his quiet fashion and left for Reykjavik. We remained deeply attached to that brave eider hunter, and I am sure that neither my uncle nor I will ever forget the man who saved our lives more than once in the darkness below the earth.

The story of our journey spread widely. It was printed, translated, and discussed in many languages. The most respected newspapers took its chief episodes, argued over them, attacked them, defended them, and turned them into public debate among believers and unbelievers alike. My uncle had the rare

pleasure of enjoying his fame while still alive, and even the famous showman Barnum wished to exhibit him in the United States for a great price. Yet one trouble continued to sting him in the middle of all this honor: the unexplained behavior of the compass.

For a scholar like him, an unknown fact is not a small annoyance. It is a true pain of the mind. Then, one day, heaven chose to make him completely happy. I was arranging minerals in my uncle's study when I happened to look at the famous compass, which had been lying quietly in its corner for six months, as if innocent of all the trouble it had caused. Suddenly I cried out. The professor rushed in and asked what was wrong.

I pointed to the compass and said that its needle was showing south instead of north. My uncle stared, compared, checked again, and then gave such a leap of joy that the whole house shook. In one instant the truth became clear to both of us. After our arrival at Cape Saknussemm, that cursed compass had been showing south where it should have shown north. Our error was explained at last. The only thing left was to understand what had caused the poles to reverse.

The answer came to me at once. During the great storm on the Lidenbrock Sea, that ball of fire which had played around the raft must have magnetized the iron and changed the direction of the needle. Electricity had simply turned our compass into a false guide. My uncle burst into laughter. For him, the whole expedition was now complete. Nothing remained unexplained. No shadow remained upon his triumph.

From that day onward, my uncle was the happiest of scholars, and I was the happiest of men. My dear Virland girl gave up her place as a ward in the house of Königstrasse and took her new place there as both niece and wife. It is hardly necessary to add that her uncle became the celebrated Professor Otto Lidenbrock, corresponding member of scientific, geographical, and mineralogical societies in every part of the world.