

I

TOWARD THE ETERNAL FIRES

I was born in Connecticut about thirty years ago. My name is David Innes. My father was a wealthy mine owner. When I was nineteen he died. All his property was to be mine when I had attained my majority--provided that I had devoted the two years intervening in close application to the great business I was to inherit.

I did my best to fulfil the last wishes of my parent--not because of the inheritance, but because I loved and honored my father. For six months I toiled in the mines and in the counting-rooms, for I wished to know every minute detail of the business.

Then Perry interested me in his invention. He was an old fellow who had devoted the better part of a long life to the perfection of a mechanical subterranean prospector. As relaxation he studied paleontology. I looked over his plans, listened to his arguments, inspected his working model--and then, convinced, I advanced the funds necessary to construct a full-sized, practical prospector.

I shall not go into the details of its construction--it lies out there in the desert now--about two miles from here. Tomorrow you may care to ride out and see it. Roughly, it is a steel cylinder a hundred feet

long, and jointed so that it may turn and twist through solid rock if need be. At one end is a mighty revolving drill operated by an engine which Perry said generated more power to the cubic inch than any other engine did to the cubic foot. I remember that he used to claim that that invention alone would make us fabulously wealthy--we were going to make the whole thing public after the successful issue of our first secret trial--but Perry never returned from that trial trip, and I only after ten years.

I recall as it were but yesterday the night of that momentous occasion upon which we were to test the practicality of that wondrous invention. It was near midnight when we repaired to the lofty tower in which Perry had constructed his "iron mole" as he was wont to call the thing. The great nose rested upon the bare earth of the floor. We passed through the doors into the outer jacket, secured them, and then passing on into the cabin, which contained the controlling mechanism within the inner tube, switched on the electric lights.

Perry looked to his generator; to the great tanks that held the life-giving chemicals with which he was to manufacture fresh air to replace that which we consumed in breathing; to his instruments for recording temperatures, speed, distance, and for examining the materials through which we were to pass.

He tested the steering device, and overlooked the mighty cogs which transmitted its marvelous velocity to the giant drill at the nose of

his strange craft.

Our seats, into which we strapped ourselves, were so arranged upon transverse bars that we would be upright whether the craft were ploughing her way downward into the bowels of the earth, or running horizontally along some great seam of coal, or rising vertically toward the surface again.

At length all was ready. Perry bowed his head in prayer. For a moment we were silent, and then the old man's hand grasped the starting lever. There was a frightful roaring beneath us--the giant frame trembled and vibrated--there was a rush of sound as the loose earth passed up through the hollow space between the inner and outer jackets to be deposited in our wake. We were off!

The noise was deafening. The sensation was frightful. For a full minute neither of us could do aught but cling with the proverbial desperation of the drowning man to the handrails of our swinging seats. Then Perry glanced at the thermometer.

"Gad!" he cried, "it cannot be possible--quick! What does the distance meter read?"

That and the speedometer were both on my side of the cabin, and as I turned to take a reading from the former I could see Perry muttering.

"Ten degrees rise--it cannot be possible!" and then I saw him tug frantically upon the steering wheel.

As I finally found the tiny needle in the dim light I translated Perry's evident excitement, and my heart sank within me. But when I spoke I hid the fear which haunted me. "It will be seven hundred feet, Perry," I said, "by the time you can turn her into the horizontal."

"You'd better lend me a hand then, my boy," he replied, "for I cannot budge her out of the vertical alone. God give that our combined strength may be equal to the task, for else we are lost."

I wormed my way to the old man's side with never a doubt but that the great wheel would yield on the instant to the power of my young and vigorous muscles. Nor was my belief mere vanity, for always had my physique been the envy and despair of my fellows. And for that very reason it had waxed even greater than nature had intended, since my natural pride in my great strength had led me to care for and develop my body and my muscles by every means within my power. What with boxing, football, and baseball, I had been in training since childhood.

And so it was with the utmost confidence that I laid hold of the huge iron rim; but though I threw every ounce of my strength into it, my best effort was as unavailing as Perry's had been--the thing would not budge--the grim, insensate, horrible thing that was holding us upon the straight road to death!

At length I gave up the useless struggle, and without a word returned to my seat. There was no need for words--at least none that I could imagine, unless Perry desired to pray. And I was quite sure that he would, for he never left an opportunity neglected where he might sandwich in a prayer. He prayed when he arose in the morning, he prayed before he ate, he prayed when he had finished eating, and before he went to bed at night he prayed again. In between he often found excuses to pray even when the provocation seemed far-fetched to my worldly eyes--now that he was about to die I felt positive that I should witness a perfect orgy of prayer--if one may allude with such a simile to so solemn an act.

But to my astonishment I discovered that with death staring him in the face Abner Perry was transformed into a new being. From his lips there flowed--not prayer--but a clear and limpid stream of undiluted profanity, and it was all directed at that quietly stubborn piece of unyielding mechanism.

"I should think, Perry," I chided, "that a man of your professed religiousness would rather be at his prayers than cursing in the presence of imminent death."

"Death!" he cried. "Death is it that appalls you? That is nothing by comparison with the loss the world must suffer. Why, David within this iron cylinder we have demonstrated possibilities that science has

scarce dreamed. We have harnessed a new principle, and with it animated a piece of steel with the power of ten thousand men. That two lives will be snuffed out is nothing to the world calamity that entombs in the bowels of the earth the discoveries that I have made and proved in the successful construction of the thing that is now carrying us farther and farther toward the eternal central fires."

I am frank to admit that for myself I was much more concerned with our own immediate future than with any problematic loss which the world might be about to suffer. The world was at least ignorant of its bereavement, while to me it was a real and terrible actuality.

"What can we do?" I asked, hiding my perturbation beneath the mask of a low and level voice.

"We may stop here, and die of asphyxiation when our atmosphere tanks are empty," replied Perry, "or we may continue on with the slight hope that we may later sufficiently deflect the prospector from the vertical to carry us along the arc of a great circle which must eventually return us to the surface. If we succeed in so doing before we reach the higher internal temperature we may even yet survive. There would seem to me to be about one chance in several million that we shall succeed--otherwise we shall die more quickly but no more surely than as though we sat supinely waiting for the torture of a slow and horrible death."

I glanced at the thermometer. It registered 110 degrees. While we were talking the mighty iron mole had bored its way over a mile into the rock of the earth's crust.

"Let us continue on, then," I replied. "It should soon be over at this rate. You never intimated that the speed of this thing would be so high, Perry. Didn't you know it?"

"No," he answered. "I could not figure the speed exactly, for I had no instrument for measuring the mighty power of my generator. I reasoned, however, that we should make about five hundred yards an hour."

"And we are making seven miles an hour," I concluded for him, as I sat with my eyes upon the distance meter. "How thick is the Earth's crust, Perry?" I asked.

"There are almost as many conjectures as to that as there are geologists," was his answer. "One estimates it thirty miles, because the internal heat, increasing at the rate of about one degree to each sixty to seventy feet depth, would be sufficient to fuse the most refractory substances at that distance beneath the surface. Another finds that the phenomena of precession and nutation require that the earth, if not entirely solid, must at least have a shell not less than eight hundred to a thousand miles in thickness. So there you are. You may take your choice."

"And if it should prove solid?" I asked.

"It will be all the same to us in the end, David," replied Perry. "At the best our fuel will suffice to carry us but three or four days, while our atmosphere cannot last to exceed three. Neither, then, is sufficient to bear us in the safety through eight thousand miles of rock to the antipodes."

"If the crust is of sufficient thickness we shall come to a final stop between six and seven hundred miles beneath the earth's surface; but during the last hundred and fifty miles of our journey we shall be corpses. Am I correct?" I asked.

"Quite correct, David. Are you frightened?"

"I do not know. It all has come so suddenly that I scarce believe that either of us realizes the real terrors of our position. I feel that I should be reduced to panic; but yet I am not. I imagine that the shock has been so great as to partially stun our sensibilities."

Again I turned to the thermometer. The mercury was rising with less rapidity. It was now but 140 degrees, although we had penetrated to a depth of nearly four miles. I told Perry, and he smiled.

"We have shattered one theory at least," was his only comment, and then he returned to his self-assumed occupation of fluently cursing the

steering wheel. I once heard a pirate swear, but his best efforts would have seemed like those of a tyro alongside of Perry's masterful and scientific imprecations.

Once more I tried my hand at the wheel, but I might as well have essayed to swing the earth itself. At my suggestion Perry stopped the generator, and as we came to rest I again threw all my strength into a supreme effort to move the thing even a hair's breadth--but the results were as barren as when we had been traveling at top speed.

I shook my head sadly, and motioned to the starting lever. Perry pulled it toward him, and once again we were plunging downward toward eternity at the rate of seven miles an hour. I sat with my eyes glued to the thermometer and the distance meter. The mercury was rising very slowly now, though even at 145 degrees it was almost unbearable within the narrow confines of our metal prison.

About noon, or twelve hours after our start upon this unfortunate journey, we had bored to a depth of eighty-four miles, at which point the mercury registered 153 degrees F.

Perry was becoming more hopeful, although upon what meager food he sustained his optimism I could not conjecture. From cursing he had turned to singing--I felt that the strain had at last affected his mind. For several hours we had not spoken except as he asked me for the readings of the instruments from time to time, and I announced

them. My thoughts were filled with vain regrets. I recalled numerous acts of my past life which I should have been glad to have had a few more years to live down. There was the affair in the Latin Commons at Andover when Calhoun and I had put gunpowder in the stove--and nearly killed one of the masters. And then--but what was the use, I was about to die and atone for all these things and several more. Already the heat was sufficient to give me a foretaste of the hereafter. A few more degrees and I felt that I should lose consciousness.

"What are the readings now, David?" Perry's voice broke in upon my somber reflections.

"Ninety miles and 153 degrees," I replied.

"Gad, but we've knocked that thirty-mile-crust theory into a cocked hat!" he cried gleefully.

"Precious lot of good it will do us," I growled back.

"But my boy," he continued, "doesn't that temperature reading mean anything to you? Why it hasn't gone up in six miles. Think of it, son!"

"Yes, I'm thinking of it," I answered; "but what difference will it make when our air supply is exhausted whether the temperature is 153 degrees or 153,000? We'll be just as dead, and no one will know the

difference, anyhow." But I must admit that for some unaccountable reason the stationary temperature did renew my waning hope. What I hoped for I could not have explained, nor did I try. The very fact, as Perry took pains to explain, of the blasting of several very exact and learned scientific hypotheses made it apparent that we could not know what lay before us within the bowels of the earth, and so we might continue to hope for the best, at least until we were dead--when hope would no longer be essential to our happiness. It was very good, and logical reasoning, and so I embraced it.

At one hundred miles the temperature had DROPPED TO 152 1/2 DEGREES! When I announced it Perry reached over and hugged me.

From then on until noon of the second day, it continued to drop until it became as uncomfortably cold as it had been unbearably hot before. At the depth of two hundred and forty miles our nostrils were assailed by almost overpowering ammonia fumes, and the temperature had dropped to TEN BELOW ZERO! We suffered nearly two hours of this intense and bitter cold, until at about two hundred and forty-five miles from the surface of the earth we entered a stratum of solid ice, when the mercury quickly rose to 32 degrees. During the next three hours we passed through ten miles of ice, eventually emerging into another series of ammonia-impregnated strata, where the mercury again fell to ten degrees below zero.

Slowly it rose once more until we were convinced that at last we were

nearing the molten interior of the earth. At four hundred miles the temperature had reached 153 degrees. Feverishly I watched the thermometer. Slowly it rose. Perry had ceased singing and was at last praying.

Our hopes had received such a deathblow that the gradually increasing heat seemed to our distorted imaginations much greater than it really was. For another hour I saw that pitiless column of mercury rise and rise until at four hundred and ten miles it stood at 153 degrees. Now it was that we began to hang upon those readings in almost breathless anxiety.

One hundred and fifty-three degrees had been the maximum temperature above the ice stratum. Would it stop at this point again, or would it continue its merciless climb? We knew that there was no hope, and yet with the persistence of life itself we continued to hope against practical certainty.

Already the air tanks were at low ebb--there was barely enough of the precious gases to sustain us for another twelve hours. But would we be alive to know or care? It seemed incredible.

At four hundred and twenty miles I took another reading.

"Perry!" I shouted. "Perry, man! She's going down! She's going down! She's 152 degrees again."

"Gad!" he cried. "What can it mean? Can the earth be cold at the center?"

"I do not know, Perry," I answered; "but thank God, if I am to die it shall not be by fire--that is all that I have feared. I can face the thought of any death but that."

Down, down went the mercury until it stood as low as it had seven miles from the surface of the earth, and then of a sudden the realization broke upon us that death was very near. Perry was the first to discover it. I saw him fussing with the valves that regulate the air supply. And at the same time I experienced difficulty in breathing. My head felt dizzy--my limbs heavy.

I saw Perry crumple in his seat. He gave himself a shake and sat erect again. Then he turned toward me.

"Good-bye, David," he said. "I guess this is the end," and then he smiled and closed his eyes.

"Good-bye, Perry, and good luck to you," I answered, smiling back at him. But I fought off that awful lethargy. I was very young--I did not want to die.

For an hour I battled against the cruelly enveloping death that

surrounded me upon all sides. At first I found that by climbing high into the framework above me I could find more of the precious life-giving elements, and for a while these sustained me. It must have been an hour after Perry had succumbed that I at last came to the realization that I could no longer carry on this unequal struggle against the inevitable.

With my last flickering ray of consciousness I turned mechanically toward the distance meter. It stood at exactly five hundred miles from the earth's surface--and then of a sudden the huge thing that bore us came to a stop. The rattle of hurtling rock through the hollow jacket ceased. The wild racing of the giant drill betokened that it was running loose in AIR--and then another truth flashed upon me. The point of the prospector was ABOVE us. Slowly it dawned on me that since passing through the ice strata it had been above. We had turned in the ice and sped upward toward the earth's crust. Thank God! We were safe!

I put my nose to the intake pipe through which samples were to have been taken during the passage of the prospector through the earth, and my fondest hopes were realized--a flood of fresh air was pouring into the iron cabin. The reaction left me in a state of collapse, and I lost consciousness.