

THE LAST DAYS OF EARTH.

BEING THE STORY OF THE LAUNCHING OF THE "RED SPHERE."

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Illustrated by Victor Prout.

A MAN and a woman sat facing each other across a table in a large room. They were talking slowly, and eating—eating their last meal on earth. The end was near; the sun had ceased to warm, was but a red-hot cinder outwardly; and these two, to the best of their belief, were the last people left alive in a world-wilderness of ice and snow and unbearable cold.

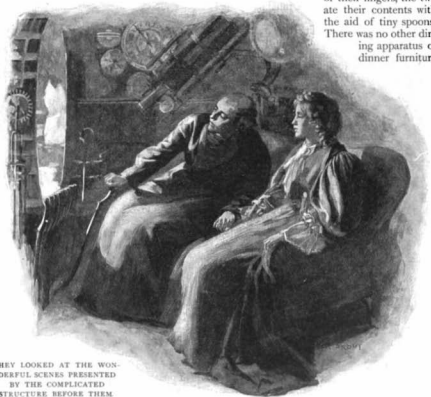
The woman was beautiful—very fair and slight, but with the tinge of health upon her delicate skin and the fire of intellect in her eyes. The man was of medium height,

broad-shouldered, with wide, bald head and resolute mien—a man of courage, dauntless purpose, strenuous life. Both were dressed in long robes of a thick, black material, held in at the waist by a girdle.

As they talked, their fingers were busy with a row of small white knobs let into the surface of the table, and marked with various signs. At the pressure of each knob a flap in the middle of the table opened, and a small glass vessel, with a dark, semi-liquid compound steaming in it, was pushed up. As these came, in obedience to the tapping

of their fingers, the two ate their contents with the aid of tiny spoons.

There was no other dining apparatus or dinner furniture



THEY LOOKED AT THE WONDERFUL SCENES PRESENTED BY THE COMPLICATED STRUCTURE BEFORE THEM

upon the table, which stood upon a single but massive pedestal of grey metal.

The meal over, the glasses and spoons replaced, the table surface clean and clear, a silence fell between them. The man rested his elbows upon his knees and his chin upon his upturned palms. He did not look at his fair companion, but beyond her, at a complicated structure projecting from the wall. This was the Time Indicator, and gave, on its various discs, the year, the month, the day, the hour and the instant, all corrected to mean astronomical time and to the exact latitude and longitude of the place. He read the well-known symbols with defiant eyes. He saw that it was just a quarter to thirteen in the afternoon of Thursday, July 18th, 13,000,085 A.D. He reflected that the long association of the place with time-recording had been labour spent in vain. The room was in a great building on the site of ancient Greenwich. In fact, the last name given to the locality by its now dead and cold inhabitants had been Grenjija.

From the time machine, the man's gaze went round the room. He noted, with apparently keen interest, all the things that were so familiar to him—the severely plain walls, transparent on one side, but without window-frame or visible door in their continuity; the chilling prospect of a faintly-lit expanse of snow outside; the big telescope that moved in an airtight slide across the ceiling, and the little motor that controlled its motions; the electric radiators that heated the place, forming an almost unbroken dado round the walls; the globe of pale brilliance that hung in the middle of the room and assisted the twilight glimmer of the day; the neat library of books and photo-phono cylinders, and the tier of speaking machines beneath it; the bed in the further corner, surrounded by yet more radiators; the two ventilating valves; the great dull disc of the Pictorial Telegraph; and the thermometer let into a vacant space of floor. On this last his glance rested for some time, and the woman's also. It registered the degrees from absolute zero, and stood at a figure equivalent to 42° Fahrenheit. From this tell-tale instrument the eyes of the two turned to each other, a common knowledge shining in each face. The man was the first to speak again.

"A whole degree, Celia, since yesterday. And the dynamos are giving out a current

at a pressure of 6,000 volts. I can't run them at any higher efficiency. That means that any further fall of temperature will close the drama of this planet. Shall we go to-night?"

There was no quiver of fear nor hint of resentment in his voice, nor in the voice that answered him. Long ages of mental evolution had weeded all the petty vices and unreasoning passions out of the mind of man.

"I am ready any time, Alwyn. I do not like to go; I do not like the risk of going; but it is our last duty to the humanity behind us—and I must be with you to the end."

There was another silence between them: a silence in which the humming of the dynamos in the room below seemed to pervade the whole place, thrilling through everything with annoying audibility. Suddenly the man leaned forward, regarding his companion with a puzzled expression.

"Your eyelashes are damp, Celia. You are not crying? That is too archaic."

"I must plead guilty," she said, banishing the sad look with an effort. "We are not yet so thoroughly adjusted to our surroundings as to be able to crush down every weak impulse. Wasn't it the day before yesterday that you said the sun had begun to cool about five million years too soon for man? But I will not give way again. Shall we start at once?"

"That is better; that sounds like Celia. Yes, if you wish, at once; but I had thought of taking a last look round the world—at least, as far as the telegraph system is in order. We have three hours' daylight yet."

For answer, Celia came and sat beside him on the couch facing the disc of the Pictorial Telegraph. His left hand clasped her right; both were cold. With his right hand he pulled over and held down a small lever under the disc—one of many, each bearing a distinctive name and numeral.

The side wall became opaque; the globe above ceased to be luminous. A moving scene grew out of the dulness of the disc, and a low, moaning sound stole into the room. They looked upon a telegraphically-transmitted view of a place near which had once been Santiago, Chili. There were the ruins of an immense white city there now, high on the left of the picture. Down on the right, far below the well-defined marks of six successive beach-lines, a cold sea

moaned over an icy bar, and dashed in semi-frozen spray under the bluff of an overhanging glacier's edge.

Out to sea great bergs drifted slowly, and the distant horizon was pale with the ice-blink from vast floes. The view had scarcely lasted a moment, when a great crack appeared on the top of the ice-front, and a huge fragment fell forward into the sea. It overturned on the bar, churning up a chaos of foam, and began to drift away. At the same instant came the deafening report of the breakage. There was no sign of life, neither of man nor beast, nor bird nor fish, in that cold scene. Polar bears and Arctic foxes, blubber-eating savages and hardy seals, had all long since passed away, even from the tropic zone.

Another lever pressed down, and the Rock of Gibraltar appeared on the disc. It rose vast and grim from the ice-arched waters of a shallow strait, with a vista of plain and mountain and glacier stretching behind it to the hazy distance—a vista of such an intolerable whiteness that the two watchers put on green spectacles to look at it. On the flat top of the Rock—which ages ago had been levelled to make it an alighting station for the Continental aerial machines—rose, gaunt and frost-encrusted, the huge skeleton framework of one of the last flying conveyances used by man.

Another lever, and Colombo, Ceylon, glared lifeless on the disc. Another, and Nagasaki, Japan, the terminal front of a vast glacier, frowned out over a

black, ice-filling sea. Yet more levers, and yet more scenes; and everywhere ice and snow, and shallow, slowly-freezing seas, or countries here black and plantless, and there covered with glaciers from the crumbling hills. No sign of life, save the vestiges of man's now-ended reign, and of his long fight with the relentless cold—here ruins, on the ice-free levels, of his Cities of Heat; here gigantic moats, excavated to retard the glaciers; here canals, to connect the warmer seas; here the skeletons of huge metallic floating palaces jettisoned on some ice-bound coast; and everywhere that the ice had not overcome, the tall masts of the Pictorial Telegraph,



"THEY STOOD BEFORE A SPHERE OF BRIGHT RED METAL THAT FILLED THE GREATER PART OF THE ROOM."

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sending to the watchers at Greenwich, by reflected Marconi waves, a presentment of each sight and sound impinging on the speculums and drums at their summits. And in every daylight scene, the pale ghost of a dim, red sun hung in a clear sky.

In the more northern and southern views the magnetic lights were as brilliant as ever, but there were no views of the extreme Polar Regions. These were more inaccessible than in the remote past, for there cakes and patches of liquid and semi-solid air were slowly settling and spreading on land and sea.

Yet more levers, and yet more; and the two turned away from the disc; and the room grew light again.

"It appears just as we have seen it these last two years," said the man, "yet to-day the tragedy of it appals me as it has never done before. I did not think, after all the years of expectation and mental schooling, that it would seem like this at the last. I feel tempted to do as our parents did—to seek the safety of the Ultimate Silence."

"Not that, Alwyn—not that. From generation to generation this day has been foreseen and prepared for, and we promised, after we were chosen to remain, that we would not die until all the devices of our science failed. Let us go down and get ready to leave at once."

Celia's face had a glow upon it, a glow that Alwyn's caught.

"I only said 'tempted,' Celia. Were I alone, I do not think I should break my word. And I am also curious. And the old, strange desire for life has come to me. And you are here. Let me kiss you, Celia. That . . . at least, is not archaic."

They walked hand-in-hand to a square space marked out on the floor in a corner of the room, and one of them pressed a button on the wall. The square sank with them, lowering them into a dimmer room, where the ceaseless humming of the dynamos became a throbbing roar. They saw, with eyes long used to faint light, the four great alternators spinning round the armatures; felt the fanning of the rapid revolutions upon their faces. By the side of each machine they saw the large, queer-shaped chemical engines that drove them, that were fed from dripping vats, and from many actions and re-actions supplied the power that stood between their owners and the cold that meant the end. Coal had long been exhausted,

along with peat and wood and all inflammable oils and gases; no turbines could be worked from frozen streams and seas; no air wheels would revolve in an atmosphere but slightly stirred by a faded sun. The power in chemical actions and re-actions, in transmutations and compoundings of the elements, was the last great source of power left to man in the latter days.

After a brief glance round the room, they pressed another button, and the lift went down to a still lower floor. Here a small glow-lamp was turned on, and they stood before a sphere of bright red metal that filled the greater part of the room. They had not seen this many times in their lives. Its meaning was too forcible a reminder of a provision for the time that had at last arrived.

The Red Sphere was made of a manufactured element, unknown except within the last million years, and so costly and troublesome to produce that only two Red Spheres had ever been built. It had been made 500 years before Alwyn and Celia were born. It was made for the purpose of affording the chosen survivors of humanity a means of escaping from the earth when the chemical power proved incapable of resisting the increasing cold. In the Red Sphere Alwyn and Celia intended to leave the earth, to plunge into space—not to seek warmth and light on any other member of the Solar System, for that would be useless—but to gain the neighbourhood of some yet young and fiery star. It was a terrible undertaking—as much more terrible than mere interplanetary voyages as the attempt of a savage to cross the Atlantic in his dugout after having learned to navigate his own narrow creek. It had been left undared until the last, when, however slight the chance of life in it, the earth could only offer instead the choice of soon and certain death.

"It appears just as it did the day I first saw it and was told its purpose," said Celia, with a shudder she could not repress. "Are you sure, Alwyn, that it will carry us safely?—that you can follow out the Instructions?"

For generations the Red Sphere and all appertaining to it had been mentioned with a certain degree of awe.

"Don't trouble yourself on that point. The Instructions are simple. The necessary apparatus, and the ten years' supply of imperishable nutriment, are already inside

and fixed. We have only to subject the Red Metal to our 6,000 volt current for an hour, get inside, screw up the inlet, and cut ourselves adrift. The Red Metal, thus electrified, becomes, as you know, repulsive to gravitation, and will so continue for a year and a half. By that time, as we shall travel, according to calculation, at twice the speed of light, we should be more than half-way to one of the nearer stars, and so become subject to its gravitation. With the earth in its present position, if we start in a couple of hours, we should make F. 188, mag. 2, of the third order of spectra. Our sun, according to the records, belonged to the same order. And we know that it has at least two planets."

"But if we fall right into F. 188, instead of just missing it, as we hope? Or if we miss, but so closely as to be fused by its heat? Or if we miss it too widely and are thrown back into space on a parabolic or hyperbolic orbit? Or if we should manage the happy medium and find there be no life, nor any chance of life, upon the planets of that system? Or if there be life, but it be hostile to us?"

"Those are the inevitable dangers of our plunge, Celia. The balance of probabilities is in favour of either the first or second of those things befalling us. But that is not the same as absolute certainty, and the improbable *may* happen."

"Quite so, Alwyn; but—do you recollect

if the Instructions make any reference to these possibilities?"

"To—? Yes. There is enough fulminate of sterarium packed in the Sphere to shiver it and us to fine dust in the thousandth part of a second—if we wish. We shall always have that resource. Now I'll attach the dynamo leads to the Sphere. Get your little



"THE SPHERE ROSE THROUGH THE FALLING RUINS OF THE HOUSE AND SOARED UP INTO THE NIGHT."

items of personal property together, and we shall be ready."

Celia went up the lift again, and Alwyn, after fixing the connections to several small switches on the surface of the Sphere, followed her. They sat together in the darkening twilight of the dim room above, waiting for the first hour to pass. They spoke at intervals, and in fragmentary phrases.

"It will be cold while the Sphere is being prepared," said Alwyn.

"Yes, but we shall be together, dear, as we have been so long now. I remember how miserable I felt when I first knew my destiny; but when I learned that you were chosen to share it with me, I was glad. But you were not, Alwyn—you loved Amy?"

"Yes."

"And you love her still, but you love me, too? Do you know why she was not chosen?"

"Yes; I love you, Celia, though not so much as I loved Amy. They chose you instead of her, they said, because you had a stronger will and greater physical vigour. The slight curve we shall describe on rising will bring us over the Heat-house she and her other lover retired to after the Decision, and we shall perhaps see whether they are really dead, as we believe. Amy, I remember, had an heretical turn of mind."

"If they are not dead, it is strange that they should not have answered our Marconi and telepathic messages after the first year—unless, of course, as you have so often suggested, they have retired to the interior of the other Red Sphere. How strange that it should have been left there! If they have only enough food, they may live in it till old Age intervenes, secure from all the rigours that approach, but what a tame end—what a prisonment!"

"Terrible. I could not endure the Red Sphere except as we shall endure it—travelling."

So the hour passed. They switched the electric current into the framework of the vehicle that was to bear them into space. All the radiators ceased to glow and all the lights went out, leaving them, in that lower room, in absolute darkness and intense cold. They sat huddled together against the wall, where they could feel the thrill of the humming dynamo, embracing each other, silent and resolute; waiting for the end of the cold hour. They could find few words to speak now, but their thoughts were the busier.

They thought of the glorious, yet now futile past, with all its promises shattered, its ideals valueless, its hopes unfulfilled; and seemed to feel in themselves the concentration and culmination of the woes and fears of the ages. They saw, as in one long vista, the history of the millions of vanished years—"from earth's nebulous origin to its final ruin;" from its days of four hours to

its days of twenty-six and a half; from its germinating specks of primal protoplasm to its last and greatest, and yet most evil creature, Man. They saw, in mental perspective, the uneven periods of human progress; the long stages of advance and retrogression, of failure and success. They saw the whole long struggle between the tendencies of Egoism and Altruism, and knew how these had merged at last into an automatic equilibration of Duty and Desire. They saw the climax of this equilibration, the Millennium of Man—and they knew how the inevitable decay had followed.

They saw how the knowledge of the sureness and nature of life's end had come to Man; slowly at first, and not influencing him much, but gaining ever more and more power as the time grew nearer and sympathy and intellect more far-sighted and acute; how, when the cold itself began, and the temperate zone grew frigid, and the tropic temperate, and Man was compelled to migrate, and his sources of heat and power failed one after the other, the knowledge of the end reacted on all forms of mental activity, throwing all thought and invention into one groove. They saw the whole course of the long fight; the ebb and flow of the struggle against the cold, in which, after each long period, it was seen that Man was the loser; how men, armed with powers that to their ancestors would have made them seem as gods, had migrated to the other planets of the system, only to find that there, even on Mercury himself, the dying sun had made all life a fore-known lost battle; how many men, whole nations, had sought a premature refuge from the Fear in the Ultimate Silence called Death. They saw how all the old beliefs, down to the tiniest shreds of mysticism, had fallen from Man as a worn-out garment, leaving him spiritually naked to face the terrors of a relentless Cosmos; how, in the slow dissolving of the ideal Future, man's duties and thoughts were once more moulded with awe and reverence to the wishes of the Past.

They saw the closing centuries of the struggle; the discovery of the Red Metal; the building of the Spheres that none dare venture to use, but which each succeeding and lessening generation handed down to the next as a sacred heritage only to be put to test in the last resort; they remembered, in their own childhood, the Conference of the Decision,

when they two had been chosen, as the only pair of sufficient vigour and health and animal courage to accept the dread legacy and dare the dread adventure of seeking a fresh home in the outer vastness, so that haply the days of Man might not be ended; and they remembered, only too well, how the rest of humanity, retiring to their last few houses, had one and all pledged each other to seek the Silence and trouble the chilly earth no more. They knew how well that pledge had been kept, and in the darkness and silence of the room clutched each other closer and closer.

And at last they heard the Time Indicator in the uppermost room ring the peal of the completed hour, and knew that in their own lives they must act the final scene in the long life-tragedy of the earth.

Alwyn's hand reached out and touched the switch, and the glow-lamp sprang into radiance again. In silence he handed Celia into the Sphere — which shone a deeper red now and coruscated strangely in the light—and then followed her, drawing the screw section in after him and making it secure. Within, the Sphere was spacious and comfortable, and, save where thickly padded, transparent, even to the weak incandescence of the lamp. It was also pleasantly warm, for the Red Metal was impervious to heat. The man's hand went to the lever that worked through the shell, and pushed aside the strong jaws of the spring clamp that held the Sphere down; and as it went, he looked into the woman's eyes. He hesitated. There was a light in her eyes and his, a

feeling in her heart and his, that neither had seen nor experienced before.

"It's madness, Celia," he said, slowly. "It's not too late yet. The moment I pull this lever over the Sphere will tear its way up through the building like an air-bubble through water, but until then it is not too late."

This was not a question in phrase, but it was in fact. Celia did not answer.

"Isn't it a miserable folly — this deference to the past?"



"ALWYN'S HAND TOUCHED A TINY BUTTON THAT WAS EMBEDDED IN THE PADDING."

Don't we know perfectly well that death is as certain out there as here?" the man went on.

Then Celia answered: "Yes, Alwyn; Man, life, everything, is a most miserable folly. But we have nothing to do with that; we can't help it. We don't know, until we try, what fortune may yet meet us. We should be untrue to our ancestors, cowards and recreants to ourselves, if we drew back now. Even in face of the unconscious enmity of the

whole Universe of Matter, let us remember that we are living and conscious yet."

As so often in the past, the woman was the man's strengthener in the time of need. Alwyn pulled over the lever, and cried, with antique impulsiveness:—

"Forgive me, Celia! We will not give in, not even against a hostile universe! She moves!—we go!"

There was a sudden shock that threw them staggering against each other for a moment; a rending, tearing, rolling crash of masonry and metal, and the Red Sphere rose through the falling ruins of the house and soared up into the night, slanting slightly to the west as it rose. One brief glimpse they had of the dials of the Time Indicator falling across a gap of the ruin; and then their eyes were busy with the white face of earth beneath and the clear brilliance of the starry dome above.

They were still clinging to each other, when both caught sight of a small dark object approaching them from beneath. It came, apparently, from a black spot on the chill whiteness of the landscape to the west of their abandoned home, and it was travelling faster than themselves.

They gazed down at it with sudden interest, that, as they gazed, turned into acute apprehension, and then to a numb horror.

"The other Sphere!"

"Amy and her lover!"

While they spoke it grew definitely larger, and they saw that a collision was unavoidable. By what caprice of fate it had so fallen out that the helpless paths of the two Red Spheres should thus come to coincide in point of space and time, they could not imagine. The idea of leaving the earth might, by magnetic sympathy, have occurred to both couples at about the same time, but the rest of the unlucky coincidence was inexplicable. They turned from looking at the second Sphere and sought each other's eyes and hands, saying much by look and pressure that words could not convey.

"They did not mean to keep the pledge of the Decision," said Alwyn. "The desire for life must have come to them as it came to me to-day, and Amy must have remembered the Instructions. I can understand them coming up faster than us, because their Sphere was in a sheet-metal shed in the open, and so would start with less opposition and greater initial velocity. But it is strange

that their path should be so nearly ours. It can only be a matter of minutes, at the rate they are gaining, before the end comes for all of us. It will be before we get through the atmosphere and gather our full speed. And it will be the end of Humanity's troubled dream And Amy is in that."

The thought of possible malice, impulsive or premeditated, on the part of the occupants of the second Red Sphere, never entered into the minds of those of the first.

"The responsibility of action rests upon us," said Celia. "They evidently cannot see us, against the background of the black sky. They are coming up swiftly, dear."

"It will have to be that: there is no other way. Better one than both," said the man.

"Be what, Alwyn?"

"The fulminate of sterarium."

"It will not injure them?"

"No; not if we fire the fuse within—about—three minutes. It must seem hard to you, Celia, to know that my hand will send you to the Silence so that Amy may have the last desperate chance of life. Somehow, these last few hours, I have felt the ancient emotions surging back."

The hand that clasped his gave a gentle pressure.

"And I, too, Alwyn; but their reign will be brief. I would rather die with you now than live without you. I am ready. Do not be too late with the fulminate, Alwyn."

They swayed together; their arms were about each other; their lips met in the last kiss. While their faces were yet very near, Alwyn's disengaged right hand touched a tiny white button that was embedded in the padding of the interior.

There was an instantaneous flash of light and roar of sound, and the man and woman in the second sphere were startled by the sudden glare and concussion of it, as their metal shell drove upwards through the cloud of elemental dust that was all that remained of the first Red Sphere and its occupants.

The silence and clear darkness that had been round them a moment before, had returned when they recovered their balance; and in that silence and clear darkness, the man and woman who had not been chosen passed out into the abyss of the Beyond, ignorant of the cause and meaning of that strange explosion in the air, and knew that they were alone in Space, bound they knew not whither.