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JULES VERNE'S TOMBSTONE AT AMIENS

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In Our Next Issue:

THE RETURN OF THE MARTIANS, by Cecil D. White. Being an astronomer, our author is well informed on this subject and in this sequel to The Retreat to Mars, he gives us a most unusual as The Refred to stars, he gives us a most unusual as well as powerfully written story, which is not too technical to hold the interest of any reader, no matter what his inclinations might be.

THE ANCIENT HORROR, by Hal Grant. Prehistoric monsters are no novelty in literature, but here is one so totally different and the story is so well written that by the time you are through reading the story, you will not be at all sure that it is not entirely truth that you have read. This is an excellent tale that is sure to give you halfhour's interesting reading.

BARON MUENCHHAUSEN'S ADVENTURE. by Hugo Gernsback. In Instalments 3 and 4 the and description of his space fiver, his trip to the moon, his landing on the moon and his views of the earth from the moon.

THE MASTER OF THE WORLD, (A Serial in Two Parts) Part II, by Jules Verne, In this instalment, the uncanny appearances and disappearances of the mysterious thing that threatens the safety of the world continue until Strock, the Inspector of the Police and head detective, solves the mystery in an extremely unexpected manner.

TEN MILLION MILES SUNWARD, by Geoffrey Hewelcke. We wager that the interest that this story will arouse, will be as great as that of "Doctor Mentiroso." While it has nothing to do with the Fourth Dimension, it evolves a most novel point to change the axis of the earth by human energy. It is one of the eleverest stories of this kind that we have ever seen. And when you have finished the story, we will ask you what is wrong with it.

And others

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THE FOURTEENTH EARTH

By Walter Kateley



Then, as I pendered over this, the magic stem suddenly blossomed at the top, or rather exploded like a beautiful rocket in a gian pyrotechnical display . . . bere were great luminous clouds and vivid scintiliations, like many colored stars and streaks of livid incan

HERE again we have a characteristic story of great originality. Scientists have steadfastly maintained

that there must be other inhabited planes beside our own. Where these planes may be located, few have ventured to predict. But in "The Fourteenth Earth" we find some

excellent as well as interesting science. A charming tale,

well told, that we know you will enjoy.



N relating this experience, which I feel is entirely unique. I am determined to avoid, as far as possible, all technical terms, and to resort to scientific expression only when it seems necessary in order to convey an understanding of the strange

and otherwise inexplicable situations in which I found myself.

I hope that this report will constitute an acceptable excuse to my department for long absence from my post of duty in the Patent Office, and at the same time become a document of some appreciable value in the scientific world. At the time when my narrative properly begins, I had been working for some years as an assistant examiner in the Patent Office: and while I had won no promotion. I think I had gained some recognition from the Primary Bxaminer. because of my proficiency in matters pertaining to chemistry and physics

But about the matter in hand.

About a year ago, shortly before my annual vacation, my superior, Primary Examiner Jameson, handed me an application for patent, with the remark that Ouinn of the mechanical department had called it squirrel food. In any case, if the application was in regular legal form, we would have to prepare a statement of reasons for rejection.

Upon examination, I found the application was in regular form and that it was made through a very reputable firm of patent attorneys, duly admitted to practise before the Patent Office, by the Commissioner of Patents.

The presentation of claims was made in a singularly lucid and convincing style, but the subject matter-well, there is perhaps no place in the world where one comes in contact with so much that is visionary, incongruous, or downright absurd as in the Patent Office I thought I was quite immune to surprise, but this man was laving claim to an achievement positively fascinating in its ridiculousness

It seemed entirely impracticable and supernatural, vet the presentation was convincing and gripped the attention. I read it again and again, The conclusions were so real as to be quite disturbing. It was as if one

were to dream in the night of visiting some enchanted land and wake in the morning to find the bedroom cluttered up with souvenirs and photographs from the dream country. Feeling undecided how best to proceed with the examination, I laid it aside, to take it up another day. But my mind kept wandering back to it, just as a sore tongue, in spite of all determination to the contrary, will constantly go back to explore a jagged place on a tooth. So I took it up and read again. The preamble was in the usual form, setting forth the name of the applicant, place of residence and the title of the invention:

> George Kingston 321 Barnet Drive Tillmore

> > TRANSITE.

This was followed by the customary form of description:

"My invention pertains to a substance hereinafter referred to as Transite; this substance is designed to be employed as an active agent in altering the socalled atomic density of any substance.

'The claims herewith presented have been carefully drawn, and seem to be clearly and fairly allowable, to wit:-That this aforesaid substance when applied or brought in contact with any other substance or matter, of whatsoever nature, will immediately alter the structure and density of said substance or matter to any desired degree by redistributing the electrons revolving around each group of protons, constituting an atom or primary unit of the matter treated."

Then followed a careful description of involved processes in language which was a curious mixture of legal and scientific phraseology, but extremely convincing withal. I was bewildered. Was this necromancy? Was it transmutation, or was it feasible invention?

I searched my mind for knowledge of the physical structure of matter, and to aid my own judgment, I

repaired to the scientific library and research room. In Scientific American, November, 1923, I found an article by Sir Oliver Lodge entitled, "Within the Atom," which was quite illuminating.

As near as 1 can quote from memory, he said in part: "We have gradually learned that electricity exists in two forms, negative, which is called an electron, and positive, which we are now beginning to call a proton.

"The material universe seems to be built up of these two elements; the atom is built on the general pattern of a solar system. That is to say, it consists of bodies arranged like the sun and the planets, on a very minute scale. First of all we find a group of protons, welded together by a compact assemblage

of electrons. This central group represents the sun, and otuside it and at a considerable distance from it, we find a regular series of electrons revolving

round it, like the planets. He speaks of the possibility of dividing up these little suns into smaller units, and distributing the

planets among them, with this conclusion: "Suffice it to say that an atom of nitrogen can demonstrably be broken up into helium and hydrogen,'

So it appeared that the only difference between the gases, liquids and solids, which after all are only relative terms, lies in the number of positive electric particles forming the nucleus of their respective atoms; and these may be changed by artificial means. Therefore in the case in hand, nothing new is involved, only a practical apparatus for accomplishing a transformation already known to science.

B FING somewhat jaded by my past year's work, and somewhat beset by that well known beforehand vacation feeling, I decided to lay the application aside for two weeks, and attack it with refreshed faculties on my return. But even at the old homestead, a thousand miles from my work, I could not forget Mr. Kingston's application.

One day it dawned on me that his address was in my own state, only a few hours ride from me. So I decided to call on him, hoping in that way, to learn something of his methods. I expected to come in contact with a well trained mind. I was disappointed, the next morning, when I found him out.

Without asking me my errand, or even ascertaining my identity, Mrs. Kingston, a florid, pleasantfaced woman of middle age, in a state of acute anxiety, proceeded to tell me that her husband had failed to come in from his laboratory at the usual hour the previous evening, and that she thought he had probably taken a run down town for some necessary article and had been unavoidably delayed. "He seldom goes out without me, but you know when he gets submerged in one of his old inventions he sometimes seems to forget he has me," she said with a half whimsical smile. She had passed a sleepless night, after several trips to the laboratory in the vain hope that he had left some note or clue as to his whereabouts. During the night she had telephoned the police in the city of which this was a suburb, and had called up all the emergency hospitals, but to no purpose. Mr. Kingston's only brother was already on his way by motor from a neighboring town, and she was momentarily expecting the arrival of her mother, who was bringing a police investigator from town.

Of course I offered my services, and asked where the laboratory was located. She led me to the rear of the house past a group of outhvildings to the brow of a very steep hill, overlooking a wide boulevard, and beyond, a recently staked allotment. "Ite has it here to get the sun," she remarked, as we deseended the steep declivity by a few primitive field-stone steps and entered the laboratory. This was very roughly built, the roof being partly of glass, and no floor. As we entered, we stepped into quite yielding sand. I remember that it struck me as rather singular that such a very steep hill could be composed of such unresisting sand. But immediately other things claimed my attention, and I perceived that the place was fitted up very much like the research department in a modern factory.

In the foreground was an upright piece of apparatus about the size of the usual dentist's X-ray machine, but apparently containing quite a number of hoppers, mixers and agitators. As I stopped a moment to regard this, my hostess turned about saying, "I am just going to take another look at the sidehill. It is so slippery this wet weather, it is just possible that he——"I was left to finish the sentence for myself.

I was alone, before this strange device. I had a momentary leeding that I was standing in a presence. On a rack before the machine stood a small aluminum vat, full of a, translucent shimmering fluld, on the surface of which floated some dozen or more small discs, about the size of a hady's watch. These were prevented from coming in contact with the side of the vat by slender spines of chalk-like substance, projecting from all the walls. I noticed that each of the discs had a large number printed on its broad side. And with my mind more than half engaged with the speculation as to the whereabouts of Mr. Kingston, I took up one of the discs. It was rather spongy, and surprisingly heavy; in color it resembled a very green apole.

HARDLY had I lifted it from its insulating bath, than I realized the danger and impropriety of such a rash act, and essayed to lay it down again. But even as I did so, I felt a spasmodic contraction of the muscles of my fingers, and involuntarily I gripped the disc in a crushing grasp. I looked wildly around for help. Whether I cried out or not, I do not know. Then the objects in the room appeared to be rising up and growing taller, till with an indescribable sense of horror I perceived that I was shrinking in height and size. Then my sight commenced to blur, and I had a sensation as of descending in an express elevator. I remember thinking, "This must be the sinking sensation which precedes death." Or did this sensation prevail only under an anesthetic? And I thought "How could it be known what one experiences in dying, since none come back to tell?"

Gradually my mind ceased to function, and I was only conscious of a rapid falling motion, at times somewhat retarded and at other times greatly accelerated. This continued for what seemed a very long time.

Then I brought up with a mild jerk, and as my perceptions reasserted themselves, found myself suspended in the crotch of a low tree, with my feet just clearing the ground. As I was struggling to free myself, I saw a little man about twenty inches tall, coming hurriedly toward me. I decided to wait for his help, which he gingerly offered by supporting my feet, and I had no difficulty in climbing to the ground. It was then that I noticed that I was no larger than my rescuer. I thought, "This is only a temporary hallucination, and I shall come out of it directly,"

For a long moment we stood regarding each other, with surprise and wonder. Then the human aspect of the situation asserted itself, and, sensing that certain amenities were required of me, I thanked him in as well-selected words as my muddled brain could muster.\(\)

However, the choice of words was of little moment, for he accepted my gratitude with a courteous gesture, and made rejoinder in words that had no meaning for me. Then, as I gazed at my strange surroundings—for they were indeed strange in every detail—he stood, wondering who I was and where I came from. Then for the first time I perceived that I still held the little disc in my hand. Turning it over I read the number,—14. As I stood gazing at this very commonplace number, a realization of what had happened flashed upon me, and I said, half aloud, "So this is the Fourteenth Earth?"

About this time my companion became aware that I was out of my element—lost in a strange world, and with no apparent hesitation, assumed the rôle of conductor.

We were, in what seemed to be a park, or the grounds of a large estate, and he led me to a near-by bench and hade me be seated. Then he took from his pocket an instrument resembling a very small deak clock. This he held in his hand, while he made a few rapid adjustments, and to my surprise, began talking to it. He was apparently giving the listener some instructions, which I, of course, was mable to understand. Then he put the instrument back in his pocket, and came and sat beside me in a friendly manner. Almost immediately a small light vehicle came swiftly along the drive in front, and halted directly opposite us

This was rather a surprising performance, since there was no driver, and apparently no compartment large enough to house the engine. Straightway my companion entered, and motioned me to a seat beside him. Then, by manipulating a small dial, he started the car rolling very gradually along the road. Directly we commenced to gain speed, and I noticed to my surprise, that little flanges were coming out on the spokes of the wheels. (There were no fenders.) These flangers seemed to catch the air and help to propel us along. Then gradually two sheets of metal started to unfur! on each side of the car, providing two wings, each held rigid on top by two rows of X-bracing that resembled a collapshile support for a desk telephone. We now seemed to touch the ground only very lightly.

SOON we came to a dense wood, and while I was wondering where the road could penetrate this, we rose evenly from the ground, and passed over it. Nor did we alight again until shortly before we reached our destination.

We approached a city, and passed many conveyances resembling our own. As we drew near a large building, to some extent like a modern hotel, but much more ornate, we came down and glided along a smooth broad street. Passing along this street were a great many people, who observed me with the keenest interest. All were barefoot, or wore only sandals on their feet, and their other clothing appeared to be but a single garment. It was of quite heavy but soft material, and reminded me of a child's rompers. It fitted only very loosely and left off at the ollows and knees.

My companion conducted me into a spacious hall, and thence into a small but elegant library, where there were perhaps a couple of dozen people, absorbed in what I took to be scientific apparatus. My guide called out in a very cheery voice, and they all gathered around us in great excitement, and fell to discussing me, and especially my clothes, which they examined very minutely. My companion exhibited, me in a very proprietary way. I gathered that they called him Akon.

After a rather lengthy discussion, Akon mounted a chair, and made a little speech. He punctuated this oration with gestures, now toward the others and now toward me. I supposed that he was introducing me, and so when he was done I bowed and smiled and tried to appear at case, which caused them no little amusement; the reason for this I did not discover till some time afterward.

Then Akon and two of the others conducted me to a private apartment and after demonstrating the various household devices for my comfort, they withdrew, only to return in a few moments with an ample and tasty supper, which they placed before me, and took their leave.

I was hungry and tired and so amazed and confused that I was only too glad to be alone. The food proved to be very palatable. There was quite a variety of it, but I was unable to determine of what any of the dishes were composed. There was no meat or vegetables, in natural state. Everything seemed to be cast in molds, like manufactured products.

Soon I noticed that it was growing dark out of doors, and I wondered if I could compose myself sufficiently to go to sleep. I stayed awake till far

into the night, trying to piece together my varied experiences, unable to decide what it all meant.

It was apparent that my body had undergone a change of atomic structure, assuming a greater density. This, no doubt, was the reason 1 had become so much smaller.

It was also clear that I had descended into the earth, to a place where the atomic density of the surface of an inner stratum was sufficient to sustain me in my altered condition. Here all the people were approximately my own size, and no doubt, of about the same density. I decided that the hardness or density of the things of this surface must bear about the same relation to the density of the next stratum above, as our common earthly things do to the stratum that we call air; and it occurred to me that what I was breathing might be a great many times more solid than granite rock. I fell to wondering how it could be that the little disc had power to change the proportion of the electrons to the protons in all the various parts of my body, yes, even to my very clothes and shoes, and still permit me to live to tell the story.

THEN my thoughts wandered back to the disappearance of Mr. Kingston. I had not thought of him since morning. Now I had no doubt of his fate. Like me, he was taking up his residence in a strange land; I wondered what he looked like, and if I should ever see him. I wondered what the number was on the disc that he might accidentally have grasped. What an age it seemed since I left home in the morning!

The next morning, Akon and his two friends came for me and took me before a judge. I waited with no little anxiety, while a lengthy document was read and while the court questioned each of the three in turn. At length he seemed satisfied, and after his seal had been affixed to the document, we were disvired

Not for some weeks afterward did I learn what it was all about. It seems that on my arrival, Akon had presented me, as a gift of a scientific nature, to his club, much as a public spirited man might present a rare trophy to a museum. And that they had appeared before the court with a petition, asking that the trustees be made my guardians and custodians, assuming responsibility for my care and support; and further promising the state the benefit of any scientific discovery that might be made through me. Upon returning to headquarters, I was examined very minutely, weighed, measured and photographed. I will here mention only three particulars in which it was found that I differed from them. My toes, although normal, were much longer than theirs. In fact, they had only vestiges of toes, with no nails. Their thumbs were decidedly further over toward the middle of their hands than mine, giving a correspondingly greater dexterity. They took particular notice of my tonsils, and obligingly showed me that they had none.

From these observations I decided that they were a little farther along than we are, a little older in the scheme of existence.

The physical examination over, they set to work to find out what I knew. Some writing was placed before me, to see if I knew anything of a written language, and some balls were slowly counted. I took up a pencil and wrote a few words, which of

course they could not read. Then I took up the balls, and counted them aloud in order to show them I knew something of numbers. At this they all laughed, and apparently called it a day.

After lunch Akon took me for a drive in the country. Although it was midsummer, I was surprised to see no crops growing, and no sign of any domestic animals. There were a great many beautiful trees, and here and there I saw extensive landscape gardening. There were very few signs of industry. There were many detached houses, scattered over the landscape, all built of the finest stone. But everything was strange. The trees were different in shape and in foliage, the grass of a different green-and in fact everything about me was beyond my understanding. I came home at night more bewildered than ever. The following day they set to work to teach me the language, for it was evident that I must learn to talk to them if they were ever to learn much about my history. Akon undertook to teach me himself. He pointed to objects and called them by name. I repeated after him, and tried to remember as many as possible from day to day: for instance, as we call ourselves people, so they called themselves feli.

Directly I had learned a few words he introduced their alphabet, which I found very simple and easy to write. I applied myself diligently to the work. and within a few weeks found that I was making gratifying progress. At the end of three months, I could speak well enough to tell the society something about my world and how I came to the Fourteenth Earth. Accordingly I met with them one day in the assembly room, and told them, very slowly and laboriously (and I have no doubt very awkwardly), a few of the things about our world that I thought might interest them most. I described as far as possible, my accidental descent to their world within the earth. They heard me very patiently, albeit with some merriment, and asked me a great many questions. Many of these I was unable to understand, and some I could not answer, because my vocabulary was still so limited. However, I gave them my disc, with the magic 14 on its side and asked them to analyze it.

And now I could learn something of this strange and wonderful country. Now I could ask questions, and understand explanations.

I LEARNED, among other things, that all food and almost everything else used by the feli was made directly from primary elements; that they were so familiar with the functions of electrons and protons that they were able to combine them with ease to form any known substance—many substances still unknown to us. Thus they were relieved of the necessity of growing food stuffs, and of raising domestic animals. They were relieved of the necessity of mining as we practise it, and of a great deal of manufacturing. They had reduced all production to its lowest terms—power.

These electrons and protons which we associate with legislity, they associate with light. They are demonstrating, that all power and all matter are only different manifestations of light, and they believe that if they can discover what light is, they will have discovered the secret of light. There all transportation is carried on by motive force, generated at a central plant and broadcast to what they call "light is they will be considered to the constraint of the constraint

motors" on the cars. These motors were so small that at first they escaped my notice.

Of their religion. I was able to learn but little. Their word for the divinity is Thegel. They build no churches and hold no public services; but when any progress is made in science or invention, the tangible evidence of this achievement is placed in a small chapel or shrine, and allowed to remain in state, so to speak, for three days. For instance, if a medicine is discovered to cure a heretofore incurable disease, a jar of the medicine is left in one of these chancles for three days. There is one of these little buildings in each village, and one for every few thousand inhabitants in the cities. I asked Akon about this peculiar custom, but his answers were a little vague. "That is for Thegel," he said. "Is it for him to see?" I asked, and after some hesitation he explained. "We do not know if Thegel sees or hears, or ever has need of any of our earthly senses; but we hope that there is some kind of a realization that we are making earnest effort, in fact some progress, meager though it may be, to avail ourselves of the divine gifts; that we are struggling up to a higher plane of existence.

This was the only manifestation of any religious belief I saw during my stay. At first it seemed very primitive to me; and I wondered since their civilization was manifestly older than ours, that their religion should be so undeveloped. Their written history, with some few lapses, extends back over a period of approximately eleven thousand years, comparing very favorably with our six or seven thousand. The ability to write, or in some way to record events, is usually considered the factor that differentiates the civilized man from the savare.

I wAS led to contemplate the evolution of our religion, and was surprised to find that, instead of growing in complexity, it was gradually becoming simplified. In the old pagan days, there were numerous gods and goddesses, some good, some bad. And many of the natural phenomena, such as floods, volcances, etc., were looked upon as activities of the gods. Sacrifices of animals and even human beings were offered with great ceremony. Huge temples were erected. It took the toil of a great nation for generations to build-some of them. Now all is changed. No more sacrifices. Only one God. Buildings comparatively modest, and ceremotics more and more simplified. The major portion of the religious heliefs that were in vogue a few centuries ago, were now looked upon as ignorant superstition.

So it may be in the course of a few thousand years, our conception of the Deity may become less personal, and many of our present religious beliefs may be relegated to the realm of superstition, and our quest of the divine Will may take the form of delving into nature's secrets.

As I gradually learned to read the scientific literature of the feli, I found that they had long held the theory that the earth was composed of successive concentric layers of varying degrees of density, and approximately a thousand miles in thickness; that these layers became more dense and solid in inverse ratio to their outer circumference; that these various surfaces were inhabited, was still in the realm of conjecture, even as we speculate as to whether or not there are people living on the planet Mars.

Recently some scientists of recognized ability had

claimed to have secured proof that there was human life on at least one of these outer surfaces; but their announcements were received in about the same spirit as we take the protestations of Frederic Mevers and Ledbetter, that they are in communication with disembodied spirits.

However, my coming was now hailed as positive proof that this theory was entirely tenable.

On one memorable occasion, Akon told me that he was going to some distant reducing grounds, to view the reduction of large vats of material, and invited me to accompany him, assuring me that it was a very beautiful spectacle. I accompanied him the more gladly, because it would afford me a few days' respite from my studies, which I had been pursuing of late with such absorbing interest that I was not a little fatigued.

We traveled for some days in leisurely fashion, stopping at various places of interest. I only wish that there were time and space to record all the wonderful things I saw on that journey, but if I did, this necessarily brief narrative must become a book, and that book a series of volumes. So I must confine myself to the object of our quest.

Upon our arrival, we took up our headquarters at a point several miles distant from the "works," Here we found a large number of high-powered telescopes, mounted in temporary buildings resembling the general lay-out of our erst-while popular "World's Fair" expositions.

The next day we visited the works, and my companion explained their nature in technical language that rather outstripped my understanding, both of scientific terms and of engineering processes. However, this much I gleaned; the subsoil in this region was rich in elementary substances, such as we might call minerals; and from these substances, which were easily reducible, they drew among other things large stores of electrons and protons, which they combined in various ratios to produce nearly every known substance.

PORTION of territory was selected and A isolated from its surroundings by applying a concentrated ray of decomposing light upon the soil in such a way as to produce a wall or partition of decomposed soil and subsoil, from which certain elements were removed. This partition, being a nonconductor of heat and light, served to form the boundary lines of the tract to be treated. The decomposing ray was played over the surface rapidly, to form a layer of the same non-conducting material, to act as a cover or blanket to retain the gases created in the reducing process

The container or vat thus being completed, the work of reducing the enclosed mass was begun; and a combination of heat and light was projected into the mass for weeks, from huge generators, working might and day till the entire bulk to a great depth was reduced to a molten mass of liquid charged with gas, like a submerged lake of fire. In the present case, it was several miles in extent,

When all was sufficiently melted, a huge rent was made in the surface by means of explosives, and the gases allowed to escape, as from a steel plant. It is this escape of gas that provides the spectacle so prized by the feli.

The remaining material is then allowed to cool, and constitutes a vast storehouse, which may be drawn on for substances for months, or in some cases even for years. At the appointed time we were in a vast crowd among the buildings where the telescopes were housed, prepared for a rare treat.

Suddenly, without warning, the entire sky was illuminated. After a few seconds, the sound of the explosion reached us. We saw a column of fire and

smoke slowly ascending from the vat.

There were shooting rays like the Northern Lights; there were areas of dense blackness, shot through at intervals with flashes of every shade of color that the human eye can conceive. There were blazes of intense light, such as accompany bursts of shrapnel; rolling clouds of sulphur-colored gases, and in fact such a display of light and color as one might expect if all the oil wells and chemical factories in the world were all rolled into one, and all on fire at once. Then, as the flaming mass rose higher into the sky, the column gradually assumed more definite shape and color. In the center, there arose a fiery column, shooting straight toward the zenith, and on either side of this a column of less brilliance, as though the incandescent column were surrounded by a cylinder of fluorescence; which rapidly faded toward its circumference. This column was very large at the hottom, occupying a space of perhaps 15° of the circle of vision

This diminished in size as it ascended, in the same way as the rails of a railway appear to converge in the distance, when one looks along a level stretch of track. This column grew smaller and smaller till it finally disappeared at the limit of vision.

After gazing for some time at this scene, entirely engrossed by its magnitude and splendor, I became aware that I was alone, my companions and those around me having gone in to the telescopes.

I followed after them and found them gathered in circles around the great mirrors that reflected the magnified images from the gigantic instruments. As I approached the one by which I had previously been assigned a seat beside Akon, I saw a spectacle of brilliance and grandeur rivalling anything I had ever experienced. There rose the luminous column, not as a tapering cone, disappearing in the darkness, but as a splendid creation of light and color, standing out clear and magnificent in every detail.

OW shall I describe it? Words can only con-The vey a most imperfect and inadequate picture. In general effect it was as though you would place a number of very tall and graceful vases, one on top of another; vases somewhat enlarged at the bottom and tapering toward the top.

I remarked to Akon that this seemed to me to be a very peculiar phenomenon; he agreed with me, and said that these enlargements occurring at regular intervals, were thought to be caused by the varying density of the successive layers of the earth. Since the volume of any gas varies in direct ratio to the pressure that confines it, whenever this gas ascends into a stratum of diminished density, it expands, pro-ducing the bowl of the vase. Then, as it rises to a greater height, it naturally appears to dwindle in size, forming the neck of the vase, till it passes through another stratum, expanding into another bowl.

Almost mechanically, I counted the successive enlargements. There were thirteen of them. Then for the second time since my arrival in this strange land. I said. "This must be the Fourteenth Earth."

in spite of the gripping interest of the spectacle, my thoughts took a momentary excursion back to the little numbered discs in Mr. Kingston's laboratory, and I wondered if the number 14 on my tragic selection had meant a definite world to the scientist.

Then as I pondered over this, the magic stem suddenly blossomed at the top, or rather exploded like a beautiful rocket in a giant pyrotechnical display; and a nurmur of awed appreciation went up from those around me, bringing back the scene on the old parade grounds, when I was a boy, watching fire works, when some piece of special merit would meet with the approval of the crowd.

The top of the column had at length reached the surface of the earth, where I had once lived; and where the heavy gases had come in contact with our atmosphere, which was much rarer than the stratum balow.

Here were great luminous clouds and vivid scintillations, like many-colored stars and streaks of livid incandescence, streaming away in crooked contours, but in a general way outlining an upright, very flat These streams faded in the distance till they merged with the darkness of the sky. The illumination was so brilliant, that after gazing for some time I was obliged to shut my eyes to rest them; and as I did so I became conscious that this picture bore a striking likeness to something I had seen or known about, long ago. That squat cone-the fading streams-then, like the lifting of a curtain, it became clear to me; and there flashed into my mind another picture. I saw a fiery volcano, belching forth death and destruction; with the white-hot streams of lava pouring down the mountain sides, engulfing homes and cities, and boiling into the sea. I saw a multitude of people fleeing in terror for their lives, and others faint from suffocation or perishing miserably from the heat; and hovering over all a great pall of black smoke, while a rain of cinders and ashes descended on the country for miles around.

Sick and frozen with horror, I opened my eyes to meet the learning countenance of Akon, happy in the contemplation of this thing of beauty on the reflector. Seeing all was not well with me, he hastened to ask solicituously what was the matter. For the life of me, I could not think of one word of that wretched language with which to answer him.

As one turns away from a revolting scene, I turned away from the mirror. It no longer held any fascination for me. My companion soon followed me, and when I had composed myself enough to regain some command of his language, I told him how the by-product of their industry causes our volcanoes, and of their havee and destruction.

He was deeply concerned, although at first a little incredulous. However, he promised to report the matter to the scientific society, and thought perhaps some means might be devised to ameliorate its effects, or possibly to do away with the eruption altogether.

Yery soon after our return from the reducing grounds, the Penyon Society, my adopted parent, or rather guardian, decided to make an attempt to return me whence I came. My saudden appearance had stimulated the entire scientific world to an intense activity in the study of the possibilities of an artificial redistribution of electrons in the atom. As I have said, they were already proficient in arranging the electrons and protons in the proper ratio to form any

basic substance. But to re-arrange the electrons in complex substances without destroying the shape and without reducing it to its primary elements was somewhat in advance of their progress.

THE late promulgation of the Einstein theory created a somewhat analogous stir in our world of science.

Under the urge of this stimulus, the Penyon Society, in cooperation with other research workers, had been making some very remarkable progress, and they now decided to put their knowledge to the test by constructing an apparatus that would revivify my little 14 disc in such a way that it would undo the change formerly wrought in my atomic structure. They all set to work with such vigor and enthusiasm that hardly a month elapsed before all was ready for a test of their success.

Then we again presented ourselves before the magistrate, and in language which I was now able to understand, the court was petitioned to relieve the Penyon Society of its responsibility of guardianship and permit me to submit my person, in the interests of science, to the uncertain action of this admittedly dangerous process. This petition was readily granted, and the following day was set for my departure. The Penyon Society banquetted me, and bade me Bon Voyage, with fitting ceremony; and Akon bade me good-bye with much feeling and very evident re-luctance.

At the appointed hour, in the presence of a great multitude, I approached the insulating vat, and grasping old 14 with a resolute hold, I lifted the disc from its bath. I reflected how different this was from my solitary departure a year ago. Almost immediately I became aware of a rising and expanding feeling, and amid great shouts from the people, I began my ascent.

At first slowly, and then with gradually accelerating velocity, I was soon travelling at great speed, and directly commenced to experience that sense of benumbed faculties that I had felt on the downward trip; and I was only conscious of a long period of upward movement.

Then, when I finally emerged from the gloom, I had a moment of clear consciousness; then I perceived that I was restored to my normal size, and that I had popped into the air like a fragment of some very light material when it rises from a great depth of water, gaining enough momentum to carry it clear of the surface.

For a fraction of a second I hung suspended a few feet in air and then dropped with a breath-expelling plop to the ground. The sext thing I knew, I was in a comfortable bed, here in this hospital, as I am told, in the little town of Wilby. Of course, no trace was left of the manner of my coming, and I have been obliged to resort to fiction to account for having been found in a bruised and unconscious condition, in the middle of a plowed field. So I have explained that I fell only a few feet from a balloon which I had invented, and with which I was making a trial

I have no desire to be transferred to the psychopathic ward, where I surely would go if I were to be so rash as to tell them the truth about my adventure.

I should no doubt be judged insane without further examination and then would ensue no end of compli-(Continued on page 1106)

THE FOURTEENTH EARTH

By Walter Kateley

(Concluded from page 1098)

cations and inconvenience; and what is more deplorable, the scientific value of this experience would be larm about to have this report mailed together with jeodarized to such an extent that it might conceivably be entirely lost. I have asked for writing maproper destination.

THE END