Ralph 124C 41+, Part 4

Modern Electrics, vol. 4 no. 4

July 1911

(Continued.)

Synopsis of Preceding Installments

Ralph 124C 41+ living in New Yark in the year 2060 while in conversation with a friend at his Telephot, an instrument enabling one to see at a distance, is cut off from his friend and by mistake is connected with a young lady in Switzerland, thus making her acquaintance by Telephot.

The weather engineers in Switzerland who control the weather decided to strike against the Government and turned on the high depression of their Meteoro-Towers, thereby snowing in a large district. An avalanche threatens to sweep away the house in which the young Swiss lady, Miss 212B 42, lives and she appeals to the great American inventor, Ralph 124C 41+, to save her, which he promptly does by melting the avalanche by directed wireless energy from his New York laboratory.

The inventor on the same afternoon is given an ovation by distance, in which the Telephot plays a great part. Afterwards he reads a "newspaper," the size of a Postage stamp and "writes" a lecture by means of the Menograph, an instrument by means of which words are made to appear on a paper tape by impulses from the brain acting on the apparatus. During the night his head is connected electrically to the Hypnobioscope, an instrument by eans of which words and sentences are transmitted directly to the brain while one sleeps, in such a manner that everything can be remembered the next morning.

THE next day Ralph 124C 41, engrossed in deep research work, was interrupted by Peter.

The great inventor, irritated by the intrusion of his old servant, said a few unkind things and quite lost his temper.

"But," Peter interjected, "won't you let me explain that the lady whom you-"

"Never mind your lady," was the angry reply, "and now please disappear, and quickly at that!"

With that he pressed a button nearby, an electromagnet acted and the heavy plate glass door slid down from above, almost brushing Peter's displeased face.

Ralph 124C 41 returned to the large glass box over which he had been working and in which one could see through greenish vapors a medium-size dog, across whose heart was strapped a flat glass box, filled with a metal-like substance.

The substance in the box was Radium-K. Radium, which had been known for centuries, had the curious property of giving out heat for thousands of years without disintegrating and without apparently obtaining energy from outside.

In 2009 the great Frenchman Anatole M610 B9 found that Radium obtained all its energy from the ether of space and he proved that Radium was one of the few substances having a very strong affinity for the ether. Radium he found attracts the ether violently and the latter surging back and forward through the Radium becomes charged electrically and presents all the other well known phenomena.

Anatole M610 B9 compares the action of Radium on the ether with that of a magnet acting upon a piece oi iron. He proved his theory by examining a piece of pure metallic Radium in an. etherless space, whereupon it lost all its characteristics and acted like a piece of ordinary metal.

Radium-K, as used by 124C 41, was not pure Radium, but an alloy composed of Radium and Argonium. This alloy exhibited all the usual phenomena of pure Radium and produced a large amount of heat, but it did not give rise to burns on animal tissue, and ould be handled freely and without danget.

The dog lying in the glass box had been "dead" for three years. Just three years ago, in the presence of twenty professors from all over the globe, Ralph 124C 41 had exhibited a live dog and had proceeded to drain off all his blood till the dog was quite dead and his heart had stopped beating. Thereupon he had refilled the empty blood vessels of the animal with a weak solution of Radium-K bromide, and the large artery through which the solution was pumped irito the body had been closed.

The flat box containing Radium-K was then strapped over the dog's heart and he was placed in the large glass case. The latter was filled with *Permagatol*, a green gas having the peculiar property of preserving animal tissue permanently and indefinitely. The purpose of the. box containing Radium-K was to keep the tem perature of the dog's body at an even point and the substance did this admi,rably.

After the glass case was completely filled with gas, the glass cover was sealed in such a manner that it was impossible to open the case without breaking the seals. The professors had agreed to return after three years to witness the opening of the box, hereupon they departed.

There were several delicate instruments inside of the box and these were connected by means of wires to recording instruments on the side of the box, and $124\mathrm{C}$ 41 inspected these twice each day. Throughout the three years the "dead" dog behaved admirably. He had never stirred a muscle, his temperature had never changed $1/\mathrm{J}$ OO of a degree and his respiratory functions had never showed signs of any life. To all intents and purposes the dog was totally dead.

124C 41 had taken it upon himsel£ to prove that a dead body perfectly conserved in each and all respects could be revived by proper means; and this afternoon, the three years having elapsed, the professors would assemble to witness the close of the great test, which had kept the press of the world busy with speculations for years. Would he succeed? Had he not attempted the impossible? Was he not attacking nature on her own sacred ground?

124C 41 evidently knew what he was doing. He busied himself about the box and presently began by pumping out the Permagatol from the box till all the green vapors had disappeared. With infinite care he then introduced a small quantity of oxygen into the box and the recording instruments for the respiratory functions immediately indicated that the oxygen in the dog's lungs had taken the desired effect.

As this was all that could be done for the moment 124C 41 summoned Peter.

"Sir," announced the servant, "Miss 212B 423, the young lady you saved t yesterday, has just arrived with her father; both are m the reception room, anxious to see you."

"Oh, Oh, really!" the great inventor exclaimed, beaming with · pleasure, "I shall be down immediately!"

He at once proceeded to take off his li laboratory coat and donned his house coat. He then stepped over to the dresser and brought face to face with the mirror he could not help noticing that his face was slightly flushed', an uncommon thing for him, the cold man of science.

"Aha," he whistled, "Ralph, take care of yourself, this is getting serious!"

Nevertheless, he took great pains to brush his hair with unusual care and to arrange his tie with an exactitude really ridiculous for him, so he thought. With a springy step that surprised him he stepped over to the electromagnetic elevator and the car slid noiselessly down to the reception room.

As he walked into the spacious room, he suddenly became aware that he was uncommonly awkward and that the room so familiar to him had assumed a weird strangeness.

Seated near one of the windows he saw Miss 2r 2B 423 and next to her he to perceived her father; both of them he recognized immediately, as the faces of

both, which he had seen yesterday only S1 through the telephot, were impressed a upon his memory indelibly.

As soon as Miss 212B 423 caught sight of 124C 41, she jumped up to meet him, and taking hold of his hands proceeded t:""J bestow upon him expressions of her appreciation and thankfulness for having saved her life from that terrible avalanche. In this she was joined by her father, who with tears in his eyes thanked the great scientist profoundly time and again and shook his hands for a long time.

124C 41 noticed that both spoke English perfectly and, as soon as he had recovered from the embarrassment and discomfiture in which he was placed by this vote of thanks, commented upon this fact.

"Why," Miss 212B 423 laughed, "when I spoke French to you yesterday I assumed that you spoke it too, but I suppose you must have used the language rectifier, so I was none the wiser. When we came your butler informed us that you did not speak French, so you see we have the advantage of you!"

"So I perceive," 124C 41 laughed in turn, "and now if you wish to incur my gratitude I must ask both of you not to refer to yesterday's incident any more. But may I ask how you arrived here so early? The af ternoon transatlantic aero-liner is not due as yet, and it can hardly be twenty-four hours since. you left Switzerland."

"Your question is fully justified," replied Mr. 212B 423. "We have the honor to be the first passengers to arrive by means of the new Sttbatlantic Tttbe. As you doubtless are aware, the regular passenger service opens next week, but being one of the consulting engineers of the new electromagnetic tube, my daughter and I were permitted to make the first trip westwa rd. It was a risk for both of us, inasmuch as some small portions of the tube are not entirely completed, but we made the trip with perfect safety, and took the chance personally to thank you as quickly as the latest conveyance would bring us to you."

"A thousand thanks," stammered 124C 41, looking intently at Miss 212B 423, "but it was out of all reason to risk both your lives, in an untested tube, in order to arrive here a few hours earlier; I would have been just as well satisfied to see you a little later, but"-and now the scientist spoke out of him, "tell me all about the new tube!"

"As you of course know," Mr. 212B 423 resumed, "the new subatlantic tube runs in a perf ectly straight line between New York and Brest, in France. If the tube were to run straight along 'the bottom of the ocean the distance between the two points would be from 3700 to 3800 miles on account of the curvature of the earth. For this reason as you are doubtless aware the tube was pushed straight through the earth, thereby making the distance only 3500 miles, instead of 3700 to 3800 miles. You can see this better by examining the chart I brought with me," and unfolding a plan, (part of which is reproduced herewith), he proceeded to show to the great inventor the finer point of the tube construction. "The greatest

trouble," he continued, "our engineers experienced at about the middle part of the tube; this point is 450 miles nearer the center of the earth and the heat became very marked. It became necessary to install large liquid-air plants along several points of the tube to reduce the heat, and now while you ride through the tube no heat is experienced by the passengers.

"We boarded the spacious steel car, which resembles a thick cigar, at Brest last night at twelve o'clock, midnight, and arrived at the New York terminal at twelve o'clock noon to-day. There was only one stop, a few hundred miles out from Brest, on account of several short-circuited electromagnets.

"You know, of course, that there are no wheels to the tube car and that it is propelled by magnetism only. At each three hundred feet is stationed a powerful tubular electromagnet, about thirty feet long, through which the tube car passes. Each electromagnet exerts a tremendous pull upon the car three hundred feet away, this being the only steel object, and the car rushes to the electro-magnet with a frightful speed. When the car is only two feet away from this electromagnet, the current is switched off automatically by the car itself, the latter plunging through the open space of the magnet coil, only to he influenced now by the next electromagnet, three hundred f eet distant.

"The momentum acquired by the pull of the former electromagnet propels the car with ever-increasing speed, and by the time the car has passed through twenty-five electromagnets it has reached the respectable speed of three hundred miles per hour. It then continues its speed at a steady pace till the end of the journey.

"As the car is held suspended entirely by magnetism, there is practically no friction whatever, as there are no wheels nor rails. The only friction is from the air, and in order not to heat up the car through this friction, the car is equipped with a double wall, the space between the inner and outer walls being filled with liquid air constantly. Consequently the temperature inside of the car is quite comfortable. Once inside the car, we went to bed and slept as soundly as in our swinging beds at home. There were no shocks, no noise, no rocking, all in all the trip was delightful, and I must pronounce it a decided success!"

"Quite interesting, I must say," 124C 41 remarked, "and how did you enjoy the trip, Miss 212B 423?"

"Oh, it was so exciting and so delightful, so smooth and so fast. Really, the trip was over too soon!"

She then went on to explain the details of the journey and 124C 41 watched her with increasing interest.

Here at last was a girl who interested him. He, who had long since given up hope of making the acquaintance of a girl who would excite more than passing interest in him, began to think that he had found her at last.

Alice 212B 423 was tall and lithe. She carried a wonderful head on queenly shoulders, and her Greek masterfully chiseled profile, crowned with a mass of black curly hair, would command attention everywhere.

Her sparkling, black, vivacious eyes had an impenetrable depth, and when they did not dance mischievously, as was invariable when she laughed, a sorrowful expression would sometimes light up those deep-sea eyes—an expression that was quite in contrast with her general appearance. She was quite tall and carried herself with unusual grace; moreover she was quick in all her movements, and a trained eye would soon detect that she must be a great lover of outdoor sport.

The more 124C 41 watched her, the more he knew that his search was ended and that here at last was a young woman worth his while. The afternoon having progressed, he invited father and daughter to be his guests for a few days. His invitation after some hesitation was finally accepted. He then summoned Peter to show the guests their rooms on the seventeenth floor of the tower, and before they ascended he invited them to be present in the laboratory at four that afternoon.

Promptly at four Ralph 124C 41 entered the laboratory, in which were already assembled the twenty professors from all over the world—who had returned after three years to witness the now famous "Dead-alive Dog" experiment—and a host of reporters. 124C 41 shook hands all around and then waited a few minutes for the appearance of Mr. and Miss 212B 423. They finally arrived and were welcomed heartily by the great inventor.

Everybody being seated, 124C 41 began with the following address:

"Ladies and Gentlemen: It affords me great pleasure to see again all the representatives of the various countries after a lapse of three years.

"As I explained three years ago to-day, I built up a theory that a well preserved animal, though dead to all intents and pu rposes, could be revived, or new life given to it, providing the body had not undergone decomposition and also providing that none of the organs had suffered in the least.

"I found that the rare gas Permagatol would conserve animal tissue and animal organs indefinitely, and this in conjunc · tion with a weak solution of Radium-K bromide, mixed with antiseptic salts, would not allow any part of an animal body to undergo any change for long years.

"I also found that the body would have to be kept at a constant temperature and this was accomplished admirably · by means of Radium-K alloy. I am now ready to prove my theory."

He then invited the profe!'sors to inspect the seals of the glass case containing the dog, and after the seals and closures had been. found intact, the latter were broken and the glass cover of the case taken off.

A profound silence prevailed. Every one's nerves were on edge and most of those present found it difficult to remain seated.

Ralph $124\mathrm{C}\ 41$ with a cool and deliberate gesture freed the dog of his bandages and attachments and then placed him on an operating table in plain view of everyone.

There were two assistants, and things began to move rapidly. First the dead ti dog's artery was opened and the Radium-K bromide solution was drained off. On the table a young goat had been strapped, and in a very few seconds one of its arteries had been opened and connected to the dead dog's main artery. In less than a minute the dog's body was full of fresh warm blood and immediately efforts were made to bring the dog back to life.

Oxygen was freely administered and the heart was exercised with rhythmical movements by means of an electrical vibratory apparatus.

At the same time one of the assistants 'thad trained a vacuum tube on the d'og head and its cathode shot the powerful F-9-Rays into the dog's brain. These rays, which are known to be one of the most powerful brain stimulants, seemed lto work wonders. No sooner had they [been trained on the dog than he began to show weak signs of life. One of the hind legs was drawn up with a jerk as if m a fit. Then came a faint heave of the chest, followed by a weak attempt to breathe.

For a few minutes following the dog gave no signs of life whatsoever, then all at once the body seemed to contract and a shiver ran though it from head to tail. A deep breathing followed, and for the first time the animal opened its eyes as if awakening from a long sleep.

From that moment on the dog made rapid progress, and at half past five—one hour and ten minutes af ter the dog had been lifted out of the glass case—the animal was able to lie on its paws and to lick up some milk with surprising avidity.

At that moment the audience, who for almost thirty _ minutes had stood up in their seats, burst out in wild applause, scaring the dog almost to death. Everyone wished to shake hands with Ralph 124C 41 and he was visibly moved. He was the first man to give life to a dead body, dead for years; he had conquered nature, achieved the impossible; he had opened a new era for suffering humanity, for what could be achieved with a dog could be achieved with a human being.

It would now be possible for human bodies to have life suspended for centuries, perhaps, and live again after the world had moved on and new generations had appeared. Truly, it was wonderful.

As he descended in a dazed condition to his room a few minutes later, he could not forget a certain young lady, who with tears in her exquisite big black eyes had taken his hand into hers and with a vibrating voice full of emotion had said, "Oh you wonderful, marvelous being!"

(To be Continued.)

This story started in the April issue. Back issues by mail 10 cents each.

"WIRELESS INSTITUTE."

H. Winfield Secor, Associate Member Wireless Institute.

At the June meeting of the Institute of Wireless Engineers, held at Fayerweather Hall, Columbia University, Mr. R. H. Marriot presented a paper covering the new wireless ship bill, to be put into eff ect on July 1, 1911, which compels all vessels carrying passengers, and travelling over a greater distance than 100 miles to be equipped with wireless apparatus, capable of covering a distance of at least 100 miles under all conditions and times.

An important point brought out by Mr. Marriot, in discussion, was the probability of a small ship equipped with ordinary apparatus, communicating a distance of 100 miles, under all conditions, especially with severe interference caused by several large stations operating in the near vicinity. It seems more practical to demand a guaranteed working radius at all times of 50 miles.

This paper was of particular importance to wireless amateurs, as the fact was disclosed that there will be a great demand for operators, but the operator has got to do more than punch a Morse key. He must be, in fact, a wireless expert to pass the Government examinations, which, among other things, require a person of good education; reputable character; an operating speed of 15 words per min ute; familiarity with all types of wireless apparatus, their functions and use; a thorough understanding of close and loose-coupled circuits; tuning; changing sending capacities and inductances, with respect to variation in wave length; a general knowledge of electrical laws and phenomena; the repair of all instruments, etc.

The examinations include questions on both radio-telegraphy and radiophony, and standard apparatus in both fields, as far as standardized up to the present time.

For the reason that the supply of competent professional operators will undoubtedly be far short of the demand, it is most likely that the amateurs who aspire to commercial wireless duty, will get plenty of opportunity, but they must be thoroughly posted on wireless matters.