The Plague of the Living Dead

by Alpheus Hyatt Verrill, 1871-1954

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Illustration:
The two fellows came dashing toward him, terror in their eyes

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If you should read this story by our well-known author with incredulity and feel inclined to lay it aside with the remark "impossible," please be apprised of the following facts:

At the Rockefeller Institute, in New York City, the famous surgeon, Dr. Alexis Carrel, for the last fifteen years, has retained a fragment of a chicken's heart in a special medium, in which it has not only stayed alive and pulsating but has contained growing also, so that it only needs to be trimmed every little while, to be kept alive.

Here, then, is immortality in the laboratory. Mr. Verrill's story, therefore, is not as fanciful as it might seem.

Chapter I

THE astounding occurrences which took place upon the island of Abilone many years ago, and which culminated in the most dramatic and most remarkable event in the history of the world, have never been made public. Even the vague rumours of what happened in the island republic were regarded as fiction or as the work of imagination, for the truth has been most zealously and carefully concealed. Even the press of the island co-operated with the officials in their desire to maintain absolute secrecy regarding what was taking place, and instead of making capital of the affair, the papers merely announced—as the government had requested them to do—that an unknown, contagious disease had broken out upon the island and that a most rigid quarantine was being enforced.

But even if the incredible news had been blazoned to the world, I doubt if the public would have believed it. At any rate, now that it is for ever a thing of the past, there is no reason why the story should not be told in all its details.

When the world-famous biologist, Dr. Gordon Farnham, announced that he had discovered the secret of prolonging life indefinitely, the world reacted to the news in various ways. Many persons openly scoffed and declared that Dr. Farnham was either in his dotage or else had been misquoted. Others, familiar with the doctor's attainments and his reputation for conservative statements, expressed their belief that, incredible as it might seem, it must be true; while the majority were inclined to treat the matter as a joke. This was the attitude of nearly all the daily papers; the Sunday supplements had elaborately illustrated the entirely unfounded and ridiculous stories purporting to voice the doctor's views and statements on the subject.

Only one paper, the reliable, conservative, and somewhat out of date Examiner saw fit to print the biologist's announcement verbatim and without comment. Upon the vaudeville stage, and over the radio, jokes based on Dr. Farnham's alleged discovery were all the rage; a popular song in which immortality and the scientist were the leading themes was heard on every side and at length. In sheer desperation, Dr. Farnham was forced to make public a detailed statement of his discovery. In this, he clearly pointed out that he had not claimed to have learned the secret of prolonging human life indefinitely, for, in order to prove that he had done so it would be necessary to keep a human being alive for several centuries, and even then the treatment might merely have prolonged life for a certain period and not for ever. His experiments, he stated, had hitherto been confined to the lower animals and by his treatment of them be had been able to extend their normal span of life four to eight times. In other words, if the treatment worked equally well with human beings, a man would live for five to eight hundred years quite long enough to fulfill most persons' ideas of immortality. Certain persons, whose names he declined to reveal, had taken his treatment, the doctor stated, but of course its effect had not yet had time to prove his claims. He added that the treatment was harmless, that a chemical preparation injected into the system figured in it, and that he was willing to treat a limited number of persons if they wished to experiment and test the efficacy of his discovery. For Dr. Farnham, who was sparing of words both in conversation and writing, and who rarely gave out anything for publication, this statement was remarkable and, so his champions claimed, proved that he was sure of his stand. But such is the psychology of the average person, that the biologist's perfectly logical and straightforward explanation, instead of convincing the public or the press, served merely to bring an even greater storm of ridicule upon his head.

Curious crowds gathered about his laboratory. Wherever he went he was stared at, laughed at and watched. At every turn press photographers snapped cameras at him. Hardly a day passed without some new and humorous or sarcastic article appearing in the press and his pictures appeared along with those of crooks, murderers, society divorcees and prize-fighters in the illustrated tabloid newspapers. To a man of Dr. Farnham's retiring habits, self- consciousness and modesty, all this was torture, and finally, unable to endure his unwelcome publicity longer, he packed up his belongings and slipped quietly and secretly away from the metropolis, confiding the secret of his destination to only a few of his most intimate scientific friends. For a space his disappearance created something of a stir, and further sensational news for press and public; but in a short time, he and his alleged discovery were forgotten.

Doctor Farnham, however, had no intention of abandoning his researches and experiments and, together with his supposedly immortal menagerie, as well as three aged derelicts who had offered themselves for treatment, and who had agreed to remain with the scientist indefinitely—at larger salaries than they had ever received before—be moved to Abilone Island. Here he was wholly unknown, and scarcely an inhabitant had ever heard of him or his work. He purchased a large abandoned sugar estate and here, he thought, he could carry on his work unnoticed and unmolested. But he did not take into consideration his three human experiments.

These worthies, finding that their treatment was having its effects and that they were remaining, as it were, steadfast in years and vigour, and quite convinced that they would continue to live on for ever, could not resist boasting of the fact to those whom they met. The white residents listened and laughed, deeming the fellows a little mad, while the coloured population regarded the doctor's patients with superstitious awe, and were convinced that Doctor Farnham was a most powerful and greatly to be feared "Obeah man."

The fact that his secret and his reasons for being on the island had leaked out, did not, however, interfere with Doctor Farnham's work as be had dreaded. The intelligent folk, who were in the minority, of course, jokingly referred to what they had heard when they met the scientist, but never asked him seriously if there was any truth in the story, while the majority avoided him as they would Satan himself and gave his grounds a wide berth, for which he was thankful. But, on the other hand, he had no opportunities to try out his immortality treatment on human beings, and hence was obliged to carry on his experiments with the lower animals.

Quite early in the course of his experiments, he had discovered that while his treatment halted the ravages of time on vertebrates, and the creatures or human beings treated gave every promise of living on indefinitely, yet it did not restore them to youth. In other words, a subject treated with his serum remained in the same condition, physically and mentally, as existed when the treatment was administered, although, to a certain extent, there was an increase in the development of muscles, an increased flexibility of joints, a softening of hardened arteries and a greater activity, due perhaps, to the fact that the vital organs were not being worked to their limit to stave off advancing age.

Thus the oldest—in point of years—of the doctor's human experiments was to all external appearances over ninety (his exact age was ninety-three when he had taken the treatment) or precisely as he had appeared when, two years previously, he had submitted his ancient frame to the doctor's injections. His gums were toothless, his scanty hair was snow white, his face was as seamed and gnarled as a walnut, and he was bent, stoop- shouldered and scrawny-necked. But he had thrown aside his glasses, he could see as well as any man, his hearing was acute, and he was as lively as a cricket and physically stronger than he had been for years, and he ate like a sailor. For all he or the scientist could see he would go on in this state until the crack of doom, barring accidents, for each day his blood pressure, his temperature, his pulse and his respiration were carefully noted, microscopic examinations were made of his blood, and so far, not the least sign of any alteration in his condition, and not the least indication of any increase in age, had been detected.

Chapter II

BUT Doctor Farnham was not satisfied with this. If his discovery was to be of real value to the human race, he would have to learn how to restore at least a little

of lost youth, as well as to check age; and day and night he worked trying to discover how to accomplish the impossible.

Countless rabbits, guinea pigs, dogs, monkeys and other creatures were treated, innumerable formulae were worked out and tested, endless and involved experiments were made, and volumes of closely written and methodically tabulated observations filled the shelves of Doctor Farnham's library.

But still, he seemed as far from the desired result as ever. He was not, in his own estimation, trying to perform a miracle, nor was he striving to bring about the impossible. The human system, or that of any creature, was, he argued, merely a machine, a machine which, through marvellously perfected and most economical means, utilized fuel in the form of food to produce heat, power, and motion, and which in addition constantly replaced the worn parts of its own mechanism. The presence of a soul or spirit, as anything divine or incomprehensible, the biologist would not admit, although he willingly granted that life, which actuated the machine, was something which no man could explain or could create. But, he argued, this did not necessarily mean that, sooner or later, the secret of life might not be discovered. Indeed, he affirmed, it was the machine of the body which produced life, rather than life which actuated the machine. And, following this line of reasoning, he would hold that the spirit or soul, or as he preferred to call it, "the actuative intelligence", was the ultimate product, the goal so to speak, of the entire machinery of the organic body.

"The unborn embryo," he once said, "is capable of independent motion, but not of independent thought. It does not breathe, it does not produce sounds, it neither sleeps nor wakes, and it does not obtain nourishment by eating. Neither does it pass excrement. In other words, it is a completed machine as yet inoperative by its own power, a mechanism like an engine with banked fires, ready to be set in motion and to produce results when the steam is turned on. This moment is the time of birth. With the first breath, the machinery starts in motion; cries issue from the vocal organs; food is demanded, waste matter is thrown off and steadily, ceaselessly, the machine continues gradually forming and building up the intelligence until it has reached its highest state, whereupon, the machine, having accomplished its purpose, begins to slow down, to let its worn out parts remain worn, until at last, it is clogged, erratic and finally fails to function."

So having decided, to his entire satisfaction, that any living creature was in its basic principles a machine. Doctor Farnham felt that in order to keep the machine running for ever it was only necessary to provide for the replacement of worn out units and to provide an inducement for the "actuative intelligence" to keep the mechanism going after it had fulfilled its original purpose. And to all intents and purposes, the scientist had accomplished this. Animals which he had treated, and which under his care and observation had lived on for several times their normal span of life, at no time showed any signs of hardening of the blood vessels, or the accumulation of lime in the system, or of glandular deterioration.

Moreover, the doctor had discovered that creatures which had been treated could propagate their race, although normally they would have been sterile through age, and he grew wildly excited over this, for, if his conclusions were correct, the young of these supposedly immortal animals would inherit immortality. But here Doctor Farnham ran against a seemingly insurmountable

obstacle to propagating a race of immortals. A litter of young rabbits remained, for month after month, the same helpless, blind, naked, embryonic things they had been at birth. No doubt they would have continued in that state for ever had not the mother, perhaps growing impatient or disgusted with her offspring, devoured the entire litter. However, it proved that the power of inheriting the results of the treatment existed, and Doctor Farnham felt sure that in time he could work out some scheme by which the young would develop to any desired stage of life before the cessation of age took effect, and they would then remain indefinitely in that state. Herein, he felt assured, lay the solution to the restoration of youth. Not that he could restore old age to youth, but that, provided he discovered the means, all generations would—if they desired—attain vigorous womanhood and would then cease to increase in age and would forever remain at the very pinnacle of mental and physical power. It was while conducting his researches in this direction that Doctor Farnham accidentally made a most amazing discovery which quite altered his plans.

He had been working on an entirely new combination of the constituents of his original product, and in order to test its penetrative peculiarities, he injected a little of the fluid into a chloroformed guinea pig, so as to determine the progress of the material through the various organs. To his utmost astonishment the supposedly dead animal at once began to move, and, before the astounded doctor's eye, was soon running about as lively as ever. Doctor Farnham was speechless. The little creature had been supposedly dead for hours—its body had even been stiff, and yet here it was obviously very much alive.

Could it be that the guinea pig had merely been in a state of anaesthesia? Or was it possible—and Doctor Farnham trembled with excitement at the idea—that his serum had actually restored life to the animal?

Scarcely daring to hope that this was the case, the scientist quickly secured a rabbit from his stock, and placing it under a bell glass administered enough ether to have killed several men. Then, forcing himself to be patient, he waited until the rabbit's body was cold and *rigor mortis* had set in. Even then the doctor was not satisfied. He examined the rabbit's eyes. Listened with a most delicate stethoscope for possible heart beats, and even opened a vein in the animal's leg. There could be no question, the rabbit was dead. Then, with nervous but steady fingers, the doctor inserted the point of his hypodermic needle in the rabbit's neck and injected a small quantity of the new liquid. Almost immediately the rabbit's legs twitched, its eves opened, and as the doctor gazed incredulously, the creature rose to its feet and hopped off.

Chapter III

HERE was a discovery! The serum with its new constituents would not only check the inroads of age but it would restore life!

But Doctor Farnham was a hard-headed scientist and not a man given to imaginative romancing, and he fully realized that there must be limitations to his discovery. It could not, he felt sure, restore life to a creature which had met a violent death through injury to a vital organ, nor to a creature which bad died from some organic disease. In coming to this conclusion he was unconsciously comparing living things with machinery, as usual. "One might stop the pendulum of a clock," he wrote, "and the mechanism will cease to function until the pendulum is again put in motion; but if the clock stops through loss of a wheel or broken spring or cogs, it cannot be made to function again unless the broken parts are replaced or repaired."

But would his treatment revive animals which had succumbed to death by other means than anaesthetics? That was a most important matter to settle, and Doctor Farnham immediately proceeded to settle it. For his first experiment, a kitten was sacrificed to the cause of science, and was humanely and very thoroughly drowned. In order that his experiment might be the more conclusive, the biologist decided to delay his attempted resurrection until all possibility of ordinary means of resuscitation were at an end; he set four hours as the time which he would permit to elapse before he injected his serum in the defunct cat. In the meantime, he prepared for another test. He had mentally checked off the various causes of premature death, apart from those by organic disease and violence, and found that drowning, freezing, gas-poisoning, and poisoning by non-irritant poisons led the list; after these came fright, shock, and various other rare causes.

It might be difficult to provide subjects killed by all of these means, but he could test the efficacy of his treatment on the more important ones, so he proceeded to prepare subjects by freezing, gassing, and poisoning a number of animals. By the time these corpses had been made ready, the dead cat had reposed upon his laboratory table for the allotted four hours, and, with pulse quickened in a wholly unscientific manner, Doctor Farnham forced a dose of his compound into the kitten's neck. In exactly fifty- eight seconds by the doctor's watch, the cat's muscles twitched, its lungs began to breathe, its heart commenced to resume its interrupted functions, and at the expiration of two minutes and eighteen seconds, the kitten was sitting up and licking its damp and bedraggled fur. The experiments with the frozen, gassed and poisoned subjects were equally successful, and Doctor Farnham was thoroughly convinced that, barring injuries, deterioration of vital organs, or excessive loss of blood, any dead animal could be brought back to life by his process. Naturally, he was most anxious to test the marvelous compound on human beings, and he at once hurried to the coroner's office with a request that he might try a new form of resuscitation on the next person drowned or poisoned on the island. Then he visited the hospital in the hopes of finding some unfortunate who had expired through some cause which had not wrought injury to the vital organs, but was again disappointed. However, the authorities promised to notify him if such a case as he desired turned up; he returned to his laboratory to carry on more extensive tests.

Among other matters, he wished to determine how long a creature could remain dead and yet be revived, and, with this end in view, he began a wholesale slaughter of his menagerie intending to label each body and carry on a progressive series of experiments, each animal being allowed to remain dead a certain number of hours, until his injections failed to restore life, thus enabling him to determine the exact limits of its efficacy.

It so happened that, in the excitement and interest of his discovery, he had neglected to place the resurrected kitten in a cage; during his absence from the laboratory, his servant—the youngest of the three human immortals—found the creature loose and, thinking it had escaped from its pen, replaced it with the other cats. And later, when the doctor selected half a dozen healthy-looking cats as martyrs to science, he inadvertently included the animal which, a few hours previously, he had brought back from death.

Together with its fellow felines, the resurrected kitten was placed in an airtight chamber into which lethal gas was forced, and wherein the cats were allowed to remain for nearly an hour. Feeling certain the deadly fumes had most thoroughly done their work, the doctor, wearing a gas-mask, opened the chamber preparatory to removing the bodies of the deceased creatures. Imagine his amazement when, as the cover was removed, a bristling, meowing cat sprang from within and, racing across the room, leaped upon a table, spitting and snarling and most obviously very much alive.

"Extraordinary! Most extraordinary!" exclaimed the scientist, as he cautiously peered into the chamber and saw the other cats stretched lifeless within. "A most remarkable example of natural immunity to the effects of hydrocyanic acid gas. I must make a note of the fact."

After considerable difficulty in mollifying the irate creature. Doctor Farnham examined her most carefully. In doing so he noticed a small wound upon the cat's neck and uttered a surprised ejaculation. This was the very cat he had resuscitated! The mark upon its neck was where he had inserted his hypodermic needle, and across his brain flashed a wild, impossible thought. The cat was immortal! Not only would it resist death by age indefinitely, but it could not be killed!

But the next instant, the scientist's common sense came to his rescue. "Of course," he reasoned, "that is impossible; absolutely preposterous."

But, after all, he thought, was it any more preposterous than bringing dead creatures back to life? There might be some unknown effect of his treatment which rendered creatures subjected to it immune to certain poisons. But if so, then other means would destroy the cat's life, and, anxious to prove this theory, he secured the cat and proceeded to drown her the second time. Having left her immersed in water for a full hour, Doctor Farnham lifted the wire basket containing the supposedly defunct kitten from the tank, and the next second leaped back as if he had been struck. Within the close-meshed container the cat was scratching, yowling, fighting like a fury to escape, and evidently very much alive and most highly indignant at having been immersed in the cold water.

Chapter IV

UNABLE to believe his senses, Doctor Farnham sank into a chair and mopped his forehead while the cat, having at last freed itself, dashed like a mad thing about the room and finally sought refuge under a radiator.

Presently, however, the doctor recovered his accustomed self- possession, and considered the seeming miracle more calmly. After all, he thought, the cat had been restored to life after drowning, so why was it not possible that having once been resuscitated, it could not thereafter be drowned, even though subject to death through other means? But then again, the creature had also survived the gas. Here was something that must be investigated. He would try freezing the cat—he chuckled to himself as he thought of the time-honoured saying that cats bad nine lives—and if the beast still refused to succumb he would test every other means. But the cat had other ideas on the subject and, having had quite enough of the doctor's experiments, it eluded the scientist's grasp, and with arched back and fluffed-out tail sprang through a partly-opened window and vanished for ever in the shrubbery of the open spaces.

Doctor Farnham sighed. Here was a most valuable and interesting experiment lost, but he soon consoled himself. He recollected that he still had a rabbit and a guinea pig which had also been revived from an apparently dead state, and he could carry out his tests on these.

And the doctor became more and more astounded as his tests proceeded. The two creatures were frozen as stiff as boards, but no sooner had they thawed out than they were as healthy and lively as before; they were gassed, chloroformed, poisoned, and electrocuted but all to no purpose. They could not be put to sleep by anaesthetics and they could not be killed. At last the scientist was forced to believe that his treatment literally rendered living things immortal.

And when at last he was convinced, and had assured himself that he was still sane, he threw himself into a chair and roared with laughter.

What would the papers back in the States say to this? Not only could human beings live on for ever, so far as age was concerned, but they would be immune from the most common causes of accidental death. Persons going on sea voyages would have no dread of disaster for they could not be drowned. Electricians need have no fear of live wires or third rails for they could not be killed by any current. Arctic explorers could be frozen solid but would revive when thawed out. And half the terrors of war, the deadly gases on which such vast sums had been spent and to which so many years of research had been devoted, now meant nothing, for an army treated with the marvelous compound would be immune to the effects of the most fatal gases.

The doctor's head fairly whirled with the ideas that crowded his brain, but still he was not entirely satisfied. He had proved his amazing discovery by testing it on the lower animals, but was he positive that it would perform the same miracles on human beings? He thought of trying it on his three companions, but hesitated. Supposing he drowned, poisoned, or gassed one of the three old men and the fellow failed to revive? Would he not be guilty of murder in the eyes of the law, even if the subject had willingly submitted to the test? And dared he actually take the risk? Doctor Farnham shook his head as he thought on this. No, he admitted to himself, he would not dare risk it. Many times, he knew, experiments which were perfectly successful with the lower animals, were anything but successful when applied to men. And then again, if he could not test his discovery on human beings, how would he ever be sure mat it would or would not render mankind immortal?

Possibly, he decided, by dissecting one of his immortal creatures, he might discover something which would throw light on the matter. And then a puzzled, troubled frown wrinkled his forehead. He was thoroughly antagonistic to vivisection; and yet, bow could be dissect one of his creatures without practising vivisection? Of course, he thought, he could kill the rabbit by a blow on the back of the bead, by piercing the brain painlessly with a lancet or by decapitating it But in that case he might be destroying the very thing which he was in search of.

Still, that was the only way: not even in the interests of science, nor to set his mind at rest, would he willingly torture any living thing. But he could kill the rabbit by injuring its brain and kill the guinea pig by an equally painless death by way of its heart, and thus be reasonably sure of having both the nervous and circulatory systems uninjured.

So, rather regretfully, he picked up the unsuspecting rabbit, and with the utmost care and precision, he thrust a slender- bladed scalpel into the base of the creature's brain.

The next instant his instrument fell from his hand, he felt faint and weak, and he sat staring with gaping jaw and unbelieving eyes. Instead of becoming instantly limp in death at the thrust, the rabbit was quite unconcernedly nibbling a bit of carrot, and appeared as much alive and as healthy as before!

Doctor Farnham now felt convinced that he had gone mad. The excitement, the nerve strain, his long hours of experimenting had caused him to have hallucinations, for he well knew that no matter how remarkable his discovery had actually proved, no warm- blooded vertebrate could survive a scalpel thrust in its brain.

Chapter V

HE shook himself, rubbed his eyes, pinched himself. He looked about his laboratory, gazed at the palm trees and shrubbery of the grounds about his dwelling, perused a few pages of a book, and put himself to a dozen tests. In every respect he seemed in his normal senses.

Something, he reasoned, must have gone wrong. By some error he had failed to reach a vital spot, and forcing himself to calmness, and steadying his nerves by a tremendous effort, he again picked up his lancet, and holding the rabbit's head immovable, he ran the full length of the razor-edged blade into the animal's brain.

And then he almost screamed and, limp and faint, slumped into his chair, while the rabbit, shaking its head and wiggling its ears as if a bit uncomfortable, hopped from the table and began sniffing about for bits of carrot which had dropped to the floor!

For fully half an hour the biologist remained, inert, entirely overcome, his nerves shaken, his brain in a whirl. How could such a thing be possible?

At last, slowly, almost fearfully, Doctor Farnham rose, and with determination written on his features, he secured the guinea pig and, by an almost superhuman exercise of will power, he stretched the animal upon a table and deliberately ran a

scalpel through its heart. But, apart from a small amount of blood which issued from the wound, the creature appeared absolutely uninjured. Indeed it did not seem to suffer any pain and made no effort to escape when released.

For the first time in his life. Doctor Farnham swooned.

When, nearly an hour later, his assistant, frightened half out of his wits, managed to revive the scientist, darkness had fallen, and, trembling and utterly unnerved. Doctor Farnham staggered from his laboratory, scarcely daring to look about and wondering if it had all been some nightmare or the hallucination of his fainting fit.

It was a long time before he recovered his usual calm, and having forced himself to view the two animals which, by all accepted theories and scientific facts, should be stiff in death, enjoying excellent health, and having braced himself by a hearty meal and some fifty-year-old rum, the doctor set himself to face incontrovertible facts and to determine the reasons therefore.

From the time he had entered his senior year at college, he had devoted himself to the study of biology. No other biologist living had won such an enviable reputation as a master of the science. No other biologist had made more important or world- famous discoveries. No other scientist could boast of such a voluminous and complete library or a more valuable and perfect collection of instruments, apparatus, and paraphernalia for studying in his chosen field, for Doctor Farnham was fortunate in being immensely wealthy, and he devoted all his income to his science. Although thoroughly revolutionary and unconventional in his theories, his experiments and his beliefs, yet he was willing to admit that no man can know everything, and that the most exact and careful persons will at times make mistakes. Hence, even if be did not entirely agree with them, he consulted all available works of other biologists, and, very often, he would find much of value in their monographs, and reports. Also, on more than one occasion, he had seized upon some statement or apparently unimportant data which had been passed by with cursory mention, and built meaningfully upon it, giving full credit to his source.

So now, faced with an impossible fact. Doctor Farnham proceeded to get at basic facts. To describe in detail all his deductions, to analyse his reasoning, or to mention the authoritative confirmations—in a dozen languages, which led to his final conclusions—would be impossible. But, as transcribed in his notes, which he jotted down as he worked, they were as follows:

"No one can exactly define life and death. What is fatal to one form of animal life may be innocuous to other forms. A worm or an amoeba, as well as many invertebrates, may be subdivided, cut into several pieces, and each fragment will continue to survive and will suffer no inconvenience. Moreover, under certain conditions, two or more of these fragments may join and heal together in their original form. Some vertebrates, such as lizards and turtles, may survive injuries which would destroy life in other creatures, but which, in their cases, produce no ill effects. Cases are numerous in which such organs as hearts or even brains have been removed from tortoises, and yet the creatures survived and were able to move about and eat for considerable periods. We speak of vital organs, but can we say which organs are vital? An accidental injury to the brain, heart, or lungs may

cause death, and yet even more serious injuries may be inflicted by surgeons and the patient will survive. A human nose, ear or even a finger, if severed, may be made to grow to the stump, but a limb once severed cannot be rejoined. But why not? Why should it be possible to graft certain organs or portions of anatomy and not others? One man may be shot through the brain or heart and may be instantly killed, while another may have several bullets fired through his brain or may be shot or stabbed through the heart and may live in perfect health for years thereafter. Even so-called vital organs may be removed by surgery without visibly affecting the patient's health, whereas an injury to a non-essential organ may produce death in another. It is not uncommon for persons to die of hemorrhage from a pin prick or a superficial abrasion of the skin, while it is equally common for persons to survive the loss of a limb by an accident or the severing of an artery.

"Life is customarily defined as a condition wherein the various organs are functioning, when the heart beats and the respiratory system is in operation. Conversely, a person or other animal is ordinarily considered dead when the organs cease to function and heart and lung actions cease. But, in innumerable cases of suspended animation, all organs cease functioning and there are no audible or visible traces of heart or lung action. In cases of immersion or drowning, the same conditions exist, the blood ceases to flow through arteries and veins, and the victim, if left to himself, will never revive. But by artificial respiration and other means he may be resuscitated. Is the drowned person alive or dead?

"To sum up: It is impossible to define life or death in exact or scientific terms. It is impossible to state definitely when death takes place until decomposition sets in. It is impossible to say what causes life or produces death. No one has ever yet determined the uses or functions of many glands, and no one can explain the precise action of stimulants, narcotics, sedatives or anaesthetics.

"Is it not possible or even probable that, under certain conditions, life may continue uninterrupted despite causes which ordinarily would result in death? Is it unreasonable to suppose that certain chemical reactions may be produced which will so act upon the vital organs and tissues that they resist all attempts to destroy their functions?

"My contention is that such things are possible. That, scientifically speaking, there is no more reason for an animal surviving the removal of its kidney, stomach, spleen or ductless glands, or injuries to these organs, than for surviving similar injuries to or the removal of the heart, brains or lungs."

Here the doctor dropped his pen, pushed aside his pad and books, and became buried in thought. He had, after all, learned nothing he did not already know. He had come back to his starting point. In fact, he had already answered his own queries and had proved his contention. But his studies and researches had started new trains of thought. Never before had he been so close to the mystery of life and death. Never before had it occurred to him that life might be a thing entirely apart from the mere physical organism—the machine, as he called it. An if his theories were correct, if his deductions were sound, could he not then restore life to a creature killed by violence or whose organs were injured or diseased? And where might his discovery not lead? If a creature could be so treated that it could

resist death by drowning, by gassing, poisoning, freezing and electrocution, and the perforation of heart or brains, would it be possible to deprive that creature of life by any means? Even if the animal were cut into pieces, if its head were severed from its body, would it die? Or would it, like the earthworm or the amoeba, continue to life, and living, would the parts reunite and function as before?

Suddenly the scientist leaped from his chair as if a spring had been released beneath him. He had it at last! That was the solution! No one had been able to explain why certain forms of life could be subdivided without injury, while other forms succumbed to comparatively slight injuries.

But whatever the reason, whatever the difference between the lower and higher animals as regards life and death, he had bridged the gap. By his discovery the warm-blooded invertebrates were rendered as indestructible as animalcules.

Yes, it must be so; it must be that by his treatment a mammal could survive the same mutilation as an earthworm. Doctor Farnham rushed to his laboratory, seized the rabbit and, without the least qualms or hesitation, severed the head from the body.

And although he had been prepared for it, although he was confident of the result, yet he paled, and staggered back, grasped a chair for support, when the headless creature continued to hop about, erratically and aimlessly, but fully alive, while the bodiless head wiggled its nose, waved its ears and blinked its eyes as if wondering what had become of its body. Hastily picking up the living body and the living head he placed them together, sewed and splinted them securely in position and, elated at the success of his experiment, placed the apparently contented and non-suffering rabbit in its cage. But there was still one experiment Doctor Farnham had not tried. Could he resuscitate a creature killed by violence? He would soon find out; and securing a healthy hare he mercifully and painlessly killed it by a thrust in its brain, and immediately prepared to inject a dose of his almost magical preparation into the dead animal's veins. But the test was never made...

Chapter VI

AS everyone knows, Abilone Island is of volcanic formation and is subject to frequent earthquakes. Hence, while during the past few days earth tremors had been felt, no one paid much attention to them, and even Doctor Farnham, who subconsciously noted that one or two tremors had been unusually severe, was merely disturbed because they interfered with his work and the adjustment of his delicate instruments.

Now, as he bent above the dead body of the hare, his hypodermic syringe in hand, a terrific quake shook the earth; the floor or the laboratory rose and fell; the walls cracked; glass came slithering down from the skylight; beakers, bell-glasses, retorts, test-tubes, jars and porcelain dishes toppled to the floor in a clash of shattered fragments; tables and chairs were overturned, and the doctor was thrown violently against the wall. It was no time for hesitating, no time for

scientific experiments, and Doctor Farnham, being thoroughly human and quite alive to his own danger, dashed from the wrecked laboratory to the open air, still grasping his syringe in one hand and a vial of his preparation in the other. Quite forgetting that they were supposedly immortal, his three aged companions rushed screaming with terror from the crumbling dwelling and, scarcely able to keep to their feet, nauseated and dizzy from the rocking, oscillating earth shocks which followed one another in rapid succession, the four gazed speechless and awed as the buildings were reduced to shapeless ruins before their eyes.

But the worst was yet to come. Following upon quakes, came a deafening, awful roar—the sound of a terrific explosion that seemed to rend the universe. The sky grew black; bright daylight gave way to twilight; the palm trees bent with a howling gale, and, unable to stand, the four men threw themselves flat upon their faces.

"An eruption!" shouted the doctor, striving to make himself heard above the howling wind, the explosive concussions that sounded like the detonations of shell-fire, and the thrashing of palm-fronds. "The volcano is in eruption," he repeated. "The crater of Sugar Loaf has burst into activity. We are probably out of danger, but thousands of people may have been destroyed. God pity the villagers upon the mountain slopes!"

Even while he spoke, dust and ashes began to fall, and soon, the earth, the vegetation, the ruins of the buildings and the men's clothing were covered with a grey coating of the volcanic ash. But presently the dust ceased to fall, the wind died down, the explosions grew fainter and occurred at longer intervals and the four shaken and terrified men rose to their feet and gazed about upon a landscape they would never have recognized.

The houses, outbuildings, laboratory and library were utterly destroyed, for fire had broken out and had completed the destruction of the earthquake, and Doctor Farnham's priceless books, his invaluable instruments, his work of years were gone for ever. Somewhere under the heap of blazing ruins lay the formulae and ingredients for his elixir of immortality; somewhere in the smoking pile reposed the bodies of the creatures which had proved its efficacy, and sadly, unable to voice the immensity of his loss, Doctor Farnham stood regarding what had so shortly before been his laboratory. Suddenly, from beneath the piles of debris, a brown and white creature appeared, and with a confused glance about, scuttled off into the weeds and brush. The scientist stared, rubbed his eyes and gasped. That any living thing could have survived that catastrophe seemed impossible. And then he broke into hysterical laughter. Of course! He had forgotten! It was the immortal guinea pig! And scarcely had his explanation dawned upon him when, from another pile of blackened, shattered masonry and timbers, a second animal appeared. Like a man bereft of reason the doctor stared incredulously at the apparition—a large white rabbit, its neck swathed in bandages and adhesive tape. There could be no doubt of it. It was the rabbit whose head had been severed from its body and then replaced! All of the biologist's scientific ardour came back with a rush at sight of this incredible demonstration of the miraculous nature of his discovery, and leaping forward, he attempted to capture the little rodent. But he was too late. With a bound, the rabbit gained a clump of hibiscus and vanished as completely as if the earth had swallowed him up.

For a moment Doctor Farnham stood irresolute, and then he gave vent to a shout which startled his three companions almost out of their immortal senses. Across his brain had flashed an inspiration. There must be scores, hundreds, perhaps thousands of men and women killed or badly injured by the earthquake and eruption. He still possessed enough of his anti-death preparation to treat hundreds of persons. He would hurry to the stricken districts near the volcano, and would use the last drop of his priceless compound in restoring fife to the dead and dying. At last he could test his discovery on human beings to the limit of his desires, and he would be carrying on a work of humanity and incalculable scientific value at one and the same time. If nothing were gained, nothing would be lost, whereas, if the treatment proved efficacious with human beings, he would have saved countless lives and would have rendered those he treated immortal and for ever safe from subsequent eruptions and earthquakes. Partly owing to chances and partly owing to carelessness, the doctor's shabby but thoroughly serviceable car was uninjured, having been left standing in the drive at some distance from the buildings. Leaping into it and followed by the uncomprehending three, Doctor Farnham stepped on the gas and dashed towards the mountain slopes above which hung a dense black smoke cloud lit by vivid flashes of lightning, intermittent bursts of flaming gas, and outbursts of incandescent lavabombs.

"Not so serious an eruption as I thought," commented the scientist, as the car, bumping over the earthquake-disrupted roads and across cracked culverts and bridges, drew nearer and nearer to the hills. "Apparently largely of local extent," he continued, "No signs of mud flows on this side of the cone—probably ejected on the opposite side towards the sea."

And it must be admitted that, as Doctor Farnham drew near to the still active and threatening volcano, be became somewhat disappointed at finding the catastrophe had been no worse. Not that he was sorry the eruption had caused such a comparatively small amount of damage and loss of life, but because be began to fear that he would have no opportunity to test out his discovery on human beings.

But he need not have worried. Although, as he had assumed, the crater had erupted on the northern side, and the stupendous masses of red-hot lava and lava-bombs had flowed down the almost uninhabited seaward slopes into the ocean, still several small villages and many isolated houses had been utterly wiped out of existence; scores of persons, both white and black, had been burned to cinders or buried under many feet of ashes and mud; thousands of acres of cultivated fields and gardens bad been transformed into barren, desolate steaming seas of mud, and an incalculable amount of damage had been done.

Close to the crater, which since time immemorial had been considered wholly extinct, the destruction, where it had occurred at all, had been complete. Beyond this zone of scalding steam, red-hot cinders and blazing gases, even greater fatalities had occurred through the action of heavy deadly gases which, descending from the upper strata of air, had left hundreds of asphyxiated human beings in its wake.

But as is almost always the case with volcanic eruptions and phenomena, the death-dealing fumes had taken their toll in a most erratic and inexplicable

manner. People had fallen in their tracks by scores in one spot, while within a few yards, none had suffered. One side of a village street had been swept by the noxious gas, while the opposite side of the narrow thoroughfare had been unaffected, and, when later intelligible reports had been made, it was found that in several instances a man had been overcome and killed while conversing with a friend who had escaped without injury. Of all the settlements which had thus been made the target for the deadly gases, that of San Marco had suffered the most, and as Doctor Farnham and his companions drove into the stricken village the scientist knew that the opportunity of his lifetime had come. Everywhere, the crumpled-up, inert bodies of men and women lay where they had fallen when overcome by the gas from the volcano. They were stretched on the pavements and in the streets, they lay sprawled on steps and in doorways; the market place and tiny plaza were filled with them, and less than a dozen of the inhabitants of the town remained alive and unhurt. And as these had fled from the gas-stricken village, Doctor Farnham and his three men were the sole living beings in San Marco. Naturally, the scientist was immensely pleased. There was nobody to interfere with him or to raise foolish and wholly unjustifiable objections to his work. There was a superabundance of material to work on, and subjects of the most desirable kind for, at his first glance, Doctor Farnham knew that the people had been killed by gas or shock, and that the deaths had not been caused by injuries to vital organs, in which case he would have had less confidence in his treatment. And we cannot blame him for his elation at finding the village strewn with corpses. Why should be have felt sorrow, pity or regret when, in his own mind, he felt positive that he could bring the stricken people back to life, yes, more than life, to a state of immortality? To him they were not dead, but merely in a temporary state of suspended animation, from which they would awaken never to die.

Leaping from his car, and assisted by his three ancient, but lively and energetic companions. Doctor Farnham proceeded methodically to inject the minimum dose of his precious elixir of life into each body in turn. At the very outset, however, he realized that he could not by any possibility restore all the dead in the village to life. He did not possess half enough of his compound for that, and he was in a quandary. In the first place, he most ardently desired to retain enough of his material to test it on the bodies of those who, he felt sure, must have met violent deaths nearer the volcano. In the second place, how could he decide whom to save and bless with immortality and whom to leave?

It was a difficult, hard question to solve, for never before had any one man possessed the power of life and death over so many of his fellows. But he could not devote much time to deciding. He did not know how long a human being could remain dead and be resuscitated, and much precious time had already elapsed since the villagers had been struck down by the gas. Some decision must be made at once, and he made it. Life, he decided, was more important to the younger and more vigorous persons than to the aged, and more desirable to the intelligent and educated individuals than to the ignorant and illiterate. He knew that, broadly speaking, his treatment would result in the persons treated remaining indefinitely in the physical state in which they were at the time of treatment, that even with the slightly renewed vigour and strength which followed, an old man or woman

would remain physically old, and, he reasoned, it was very probable that an infant or a child would remain for ever undeveloped mentally and physically. Hence, for the good of the world, he would treat the bodies of those who had died in the prime of life—but for the sake of science a few of the children would be treated as well—permitting the old, the diseased, the maimed and the decrepit to remain dead. In this, he felt he was not acting inhumanely or callously. He could only save a certain number anyway, and those whom he passed by would be no worse off than they were at present, for he had assured himself, by a rapid examination, that according to all medical and known standards the victims were as dead as door-nails.

Chapter VII

SO, having come to his decision, he hurried about, injecting his compound into the veins of those he deemed worthy to survive, and in the meantime filled with visions of the future, of a race of immortal people developing from the nucleus he had started. Anxious to know the results of his treatment, and to find out how long it took for a dead person to come back to life. Doctor Farnham ordered his three companions to remain behind and watch the bodies of those treated, and to report to him the moment any of the dead showed signs of reviving. He had commenced his work at the plaza, and here he stationed one of the three; at the market he left another, and the third was to be stationed a few blocks farther on. By the time Doctor Farnham reached the market he had treated several hundred bodies, and yet no word had come from the fellow watching for results at the plaza. Doubts began to assail the scientist as he continued on his way. Perhaps, after all, human beings would not respond to his treatment. Possibly the effects of this particular and unknown gas rendered his treatment valueless. It might be...

Terrifying sounds from the rear suddenly interrupted his thoughts. From the direction of the plaza came screams, shouts, a babel of sounds. It had worked! Where a moment before was the silence of death now could be heard the unmistakable sounds of life. The dead had been raised. The impossible had been accomplished, and, forgetting all else in his anxiety to witness the resurrection. Doctor Farnham dropped syringe and vial beside the body he had been about to treat, and hurried towards the plaza.

The sounds were increasing and coming nearer. Of course, he thought, the dead in the market were coming to life. But why, he wondered, had his two men failed to report?

The answer came most unexpectedly. Racing as fast as their old legs could carry them, the two fellows came dashing around a corner, terror on their faces, panting and breathless, while at their heels came a mob of men and women, screaming, shouting incomprehensible words, waving their arms threateningly, and obviously hostile.

Gasping, hurriedly, the two men tried to explain. "They're mad," exclaimed he who had been stationed at the plaza, "murderin' mad! Lord knows why, but they

set on me like tigers. Mauled me something dreadful. How I lived through it I dunno. Cracked me over the head with stones and beat me up."

"Me, too," chimed in the fellow who had been at the market place. "Stuck a machete in me, one fellow did. Looka here!" As he spoke he bared his chest and revealed a three-inch incision over his heart. The doctor, despite the approaching and obviously dangerous mob, gasped. The wound should have killed the fellow, and yet he appeared in no way inconvenienced. Then it dawned upon him. Of course be had not been killed. How could he be killed when he was immortal!

The two men were in no danger. No matter what the mob did they would survive, and Doctor Farnham had a fleeting, instantaneous vision of the two fellows being chopped into bits or torn to pieces and each separate fragment of their anatomies continuing to live, or perhaps even reuniting to form a complete man again. And bitterly he regretted that he had never tried the treatment on himself. Why hadn't he? For the life of him he didn't know. But there was no time for introspection or regrets. The mob was close now, something must be done. "You can't be hurt," he shouted to his companions. "You are immortal. Nothing can kill you. Don't run, don't be afraid. Face the mob."

But the fellows' confidence in the scientist's treatment and words was not great enough to make them obey, and furtively glancing about for a refuge, they prepared to flee. For a brief instant the doctor thought of facing the mob, of reasoning with them, of explaining why he was there, of quieting them, for he had reasoned that, in all probability, their actions were due to terror and nervous strain; that, reviving, they had been filled with the mad terror of the eruption which had been their last conscious sensations; that seeing many of their fellow men still lying dead they had become panic-stricken, and that their attack on the two watchmen had been merely the unreasoning, unwarranted act of half-crazed, fear-maddened men.

But the scientist's half-formed idea of facing the mob was abandoned almost as soon as conceived. No one could reason with the crowd. In time the mob would calm down; once they realized the eruption was over they would forget their terrors and would busy themselves burying the remaining dead. For the present, discretion was the better part of valour, and seizing his three companions, for the third fellow had now arrived on the scene. Doctor Farnham ducked around the nearest building and the four raced like mad for the car. But even as they fled, shouts, curses and screams came from the other direction; men and women appeared from streets and dwellings, and scores of resuscitated people rushed forward and fell madly, fiendishly upon the mob from the plaza. Instantly pandemonium reigned, and the four fugitives stood, transfixed with the horror of the scene. Fighting, clawing, biting, stabbing, the people fell upon one another, and the watching four shuddered as they saw men and women, minus arms or hands, faces shapeless masses of pulp, bodies slashed, pierced and torn, still leaping, springing about; still struggling and wholly oblivious to their terrible wounds, for being immortal nothing could destroy them.

Heedless of the dead bodies which had not been resuscitated, the struggling mob swayed here and there, while now and then—and Doctor Farnham and his men felt faint and sick at the sight—some panting man or woman would leave the milling mob, and springing like a beast on one of the trampled corpses, would tear and devour the flesh.

It was too much! Madly the four raced to the car, leaped in, and unheeding the peril of the road drove towards the distant town.

As they tore along, Doctor Farnham gradually calmed himself and forced his mind to function in its accustomed manner. He could not fully account for the savagery of the resurrected inhabitants of the village, but he could formulate reasonable theories to account for it. "Reversion to ancestral types under stress of great mental strain," he mentally classified it. "Suddenly finding themselves alive and safe after the impression that they were being destroyed, released inhibitions and gave dormant, savage instinct full rein. A mental explosion as it were. Probably normal calm and other conditions will follow."

But was it not possible—and the scientist trembled at the thought—was it not possible that while his treatment restored life, it did not restore mentality? He had hitherto experimented only with the lower animals, and who could say whether a rabbit or a guinea pig possessed normal or abnormal mentality after being retrieved from death? Then, through Doctor Farnham's mind came thoughts of the actions of the kitten which be had first resuscitated by his discovery, and he remembered how the beast had spit and scratched and yowled, finally escaping and taking to the brush like a wild thing. Perhaps only the physical organism could be restored to life, and the mental processes remained dead. Perhaps, after all, there was such a thing as a soul or spirit and this fled from the body at death and could not be restored. Doctor Farnham shivered despite the sweltering heat of the sun. If this were so, if all the soul or spirit or reason or whatever it was that kept the balance of a human being or an animal, if this inexplicable unknown thing were absent when the dead were revived, then God help the world.

Chapter VIII

NO ONE could visualize the results. The resurrected dead must continue. They could not even destroy one another.

Then, more calmly, and feeling vastly relieved, he tried to cheer himself with the thought that, after all, there might be no basis for his fears. Perhaps the actions of the savage beings back in the village were merely temporary, and possibly, even if mentality or the soul was lacking at first, it would return in time and again fit itself to the resurrected body. No one could say, no one could do more than theorize; but whatever the ultimate result, Doctor Farnham had made up his mind that he would report the matter to the authorities, that regardless of what the consequences might be for him, he would make a clean breast of it, and would do all in his power, would devote all of his fortune and his time to trying to right what he had done, if, as be feared, matters were as bad as they might be.

In this manner came the *Plague of the Living Dead*, as it was afterwards known. At first, the authorities at Abilone believed that Doctor Farnham and his three companions had gone temporarily mad through the effects of the earthquake and

the eruption, and they tried to calm the four and to soothe them. But when, a few hours later the survivors of a relief party reported that the village and the neighbourhood was filled with wild blood-mad savages and that three members of the party had been attacked, killed and torn to pieces, the authorities took action, although they still had no faith in Doctor Farnham's tale, and scoffed at the idea that he had resuscitated the dead or that the savages were immortal, and considered these the hallucinations of an overwrought mind.

No doubt, they said, the survivors of the catastrophe had been driven mad by the eruption and had reverted to savagery, but it would be a simple matter to round them up, confine them in an asylum and gradually cure them.

But the force of police sent to the vicinity of the village found that neither Doctor Farnham nor the relief party had exaggerated matters in the least. In fact, only two policemen managed to escape, and with terror-filled eyes they told a story of horror beyond any imagination. They had seen their fellows destroyed before their eyes. They had poured bullets into the bodies of the savage villagers at close range, but with no effect. They had fought hand-to-hand and had seen their short swords bury themselves in their antagonist's flesh without result, and they shuddered as they told of seeing armless, yes, even headless, men fighting like demons.

At last the officials were convinced that something entirely new and inexplicable had occurred. Incredible as it might seem, the doctor's story must be true, and something must be done without delay to rid the island of its curse—this Plague of the Living Dead. Far into night, and throughout the following day, all the officials of the island sat in conference with the scientist, for, being sensible men, the authorities realized that no one would be so likely to offer a solution of the problem as the man who had brought it about. And very wisely, too. The first suggestion that was made and acted upon was to establish a strict censorship on everything leaving the island. To let the outside world know what had occurred would be most unwise. The press would get hold of it; reporters and others would rush to the island to secure the facts; Abilone would be made the butt of incredulous ridicule or a place accursed, according to whether or not the press and public believed in the reports. But how to establish a censorship, how to prevent outsiders from visiting the island or to prevent the islanders from leaving was the question.

This was solved by Doctor Frisbie, the medical inspector of the port. It would be announced that a virulent contagious disease had broken out in a remote village—which was in a way no more than the truth—and that until further notice no vessels would be allowed to enter or leave the ports. Of course, this would entail some hardships, but the available supplies of food were sufficient to support the population for at least several months, and long before the expiration of that period it was hoped that the Living Dead would be eliminated. But as time passed, those upon Abilone began to fear that no human power could conquer the soulless automatons in human form who cursed the land and could not be destroyed. Luckily, being absolutely lacking in intelligence and with no reasoning powers, the things did not wander far, and showed no inclination to leave their original district to attack persons who did not bother them. And to prevent any possibility of their spreading, immense barriers of barbed wire were erected about the locality where

the Living Dead held sway. As Doctor Farnham had pointed out, the barbed wire would not deter the things through the pain or injuries caused by its jagged points, and hence the fence was erected for strength and height, and formed a barrier which even elephants could scarcely have broken through.

This, however, took time, and long before it was completed innumerable attempts had been made to surround and capture or to destroy the soulless beings, for so fixed are certain ideas in the human brain that the officials could not believe that the Living Dead could not be killed, despite the arguments of Doctor Farnham who, over and again, declared that it was a waste of money and life to attempt to annihilate the beings, he had resurrected. But, of course, every attempt was futile. Bullets had no effect upon them, and when, after many arguments and innumerable protests, it was decided that, as the beings were no better than wild beasts and, therefore, a menace to the world, any means were justifiable, preparations were made to burn them out. Innumerable fires were kindled, and before a fresh wind the flames swept across the entire area occupied by the Living Dead and reduced the last vestiges of their former village to ashes. But, when, the fire over, a detachment of police was sent into the district to count the bodies, they were attacked, almost annihilated and driven back by the horde of singed, mutilated, ghastly beings who, had survived powder and ball, poison gases, and every other means to destroy them. Next, it was suggested that they be drowned, and although Doctor Farnham openly scoffed at the idea and the expense involved, no one could be made to believe that the things were really immune to death in any form whatsoever. Hence, at a terrific expense, a dam was built across the river flowing through the district, and for days the entire area was flooded. But at the end of the time the Living Dead were as lively, as savage, as unreasoning and as great a plague as ever. Strangely enough, too, not one of the beings had ever been captured. On two occasions, to be sure, members of the band had been seized, but on each occasion the beings had literally torn themselves free, leaving a dismembered arm or hand in possession of their captors. And these fragments of flesh, to everyone's horror and amazement, had continued to live.

It was indescribably gruesome to see the dismembered arm twisting and writhing about, to see the muscles flexing and the fingers opening and closing. Even when placed in jars of alcohol for formaldehyde, the limbs continued to retain their life and movement, and at last, in sheer desperation, the officials buried them in masses of concrete where, so far as they were concerned, the immortal fragments of anatomy might continue to survive and writhe until the crack of doom.

Chapter IX

INTENSIVE studies and observations of the Living Dead had been made, however, and at last it was conceded that Doctor Farnham had been right and had not in the least overestimated the attributes of the beings. And it was also

admitted that his theories regarding their condition and actions were in the main correct. They could not be killed by any known means; that had been conclusively proved. They could exist without apparent ill effects even when horribly mutilated and even headless. They could literally be cut to pieces and each fragment would continue to live, and if two of these pieces came into contact, they would reunite and grow into monstrous, nightmarish, terrible things. Watching the area within the barrier through powerful glasses, the observers saw many of these things. Once, a head which had joined to two arms and a leg went racing across an open space like a monstrous spider. On another occasion a body appeared minus legs, and with two additional heads growing from the shoulders from which the original arms had been severed. And many of the fairly whole beings had hands, fingers, feet or other portions of anatomy growing from wounds upon various parts of their bodies. For the Living Dead, having no reasoning powers, yet instinctively sought to replace any portions of their bodies which they had lost, and picked up the first human fragment they found and grafted it into any wound or raw surface of their flesh.

Strangely enough too, although it was perfectly logical once the matter was given thought, those individuals who were minus heads appeared fully as well off as those whose heads remained upon their shoulders, for without any glimmerings of intelligence, without reason and merely flesh and blood machines uncontrolled by brains, the Living Dead had no real need of heads. Nevertheless, they seemed to have some strange subconscious idea that heads were desirable, and fierce battles took place over the possession of a head which two of the things discovered simultaneously. Very frequently, the head, when re-established upon a body, was back to front, and a large percentage of the beings wore heads which did not originally belong to them. Moreover, the beings became head-hunters, and lopping off one another's heads became their chief diversion or occupation.

The amazing speed with which the most ghastly wound healed, and the incredibly short period of time required for a limb or head to graft itself firmly in place, were downright uncanny, but were accounted for by Doctor Farnham who explained that whereas, ordinarily, the tissues of normal human beings partially die and must be replaced by new growths, the tissues of the Living Dead remained alive, active and with all their cells intact, and hence instantly re-united, while at the same time, septic infection and injurious microbes could find no opportunity to act upon healthy living tissues. Although at first the beings had struggled and fought night and day, yet as time passed, they became more peaceable and seldom battled among themselves. When this was first observed, the authorities were hopeful of the beings eventually becoming rational, but Doctor Farnham disillusioned them and was borne out in his statement by the island's medical and scientific men.

"It is the logical and to-be-expected result," he declared, "in the first place, being without reason or the powers of deduction, and not being able to profit by experience, they have merely exhausted their powers of fighting. And, in the second place, a large proportion of their numbers are composites. That is, they have arms, limbs, heads or other portions of their anatomy belonging to other individuals. Hence to attack another being would be equivalent to attacking themselves. It is not a question of either instinct or brain, but merely the reaction

of muscles and nerves to the inexplicable but long recognized cellular recognition or affinity existing in all organic matter."

At first, too, it had been thought that the Living Dead could be starved to death, or if truly immortal, that they could be so weakened by lack of food that they could easily be captured. But here again, the authorities had overlooked the basic features of the case. Although the creatures now and then devoured one another—and Doctor Farnham wondered what happened when an unkillable being was devoured by his fellows—yet this cannibalism seemed more a purely instinctive act than a necessity. The headless members of the community could not, of course, eat, but they got along just as well, and at last it dawned upon the officials that when a creature is truly immortal, nothing mortal can affect it.

Meanwhile, the island was getting perilously short of provisions and the people were being put on rations. Very soon, all knew, it would be necessary to allow a vessel to enter the port to bring in supplies, and the quarantine, moreover, could not much longer be maintained without arousing suspicion. Of course, long before this, the government had come to a realization of the fact that the terrible secret of the island could not be kept indefinitely. But the authorities had hoped that the Plague of the Living Dead might be for ever removed before it became necessary to apprise the world at large of the curse which had fallen upon Abilone.

Had it not been for its isolated position, and the fact that news of the eruption had reached the outer world and the public had assumed that the reported epidemic was the direct result of this, the true facts of the case would have become public property long ago.

Now, however, the authorities were at their wits' end. They had tried every means to exterminate the Living Dead without success. They had devoted a fortune and had sacrificed many lives trying to capture the terrible things, all without avail. And Doctor Farnham had, so far, been unable to suggest a means of ridding the island and the world of the incubus he had so unfortunately put upon it.

This, then, was the state of affairs when, on a certain night, the officials had gathered in conference to consider the question of lifting the quarantine and giving up in despair, trusting to keeping the Living Dead confined indefinitely within the wire barrier.

"That," declared Colonel Shoreham, the military commandant, "is, or rather will be, impossible. So far, thank God, the things have made no attempt to tear down or scale the barrier, but sooner or later, they will. If they possessed reason they would have done so long ago, but some day—perhaps tomorrow, perhaps not for a century—they will decide to move, and the stoutest barricade man can erect will not hold them in check. Why, one of those spider-like monsters, consisting of legs and arms, could clamber over the wire as readily as a fly can walk on yonder wall. And do not forget, gentlemen, that water is no barrier to these terrible beings. They cannot be drowned, and hence they may be carried by sea to distant lands and may spread to the uttermost ends of the earth. Terrible and blasphemous as it may sound, I wish to God that another eruption might occur and that a volcano might break forth under the Living Dead and blow them into space. Personally—"

He was interrupted by a shout from Doctor Farnham, who, leaping to his feet, excitedly drew the attention of everyone to himself.

"Colonel!" he cried, "to you belongs the credit of having solved the problem. You spoke of blowing the Living Dead into space. That, gentlemen, is the solution. We will not need to invoke Divine aid in creating the volcano to do this, but we will provide the means ourselves."

The others looked at one another and at the enthusiastic scientist in utter amazement. Had his worries driven him mad? What was he driving at?

Chapter X

BUT Doctor Farnham was most evidently sane and most obviously in earnest. "I quite realize how visionary the idea may appear to you, gentlemen." he said, striving to speak calmly. "But I think you will accept it after my most unfortunate discovery, which resulted, it is true, in our present predicament, but which, nevertheless, proved that the most visionary and seemingly impossible things may be possible. I feel sure, I repeat, that after what you have all seen, you will agree with me that my present scheme is neither visionary nor impossible. Briefly, gentlemen, it is to construct an immense cannon, or perhaps better, an artificial crater, beneath the Living Dead and blow every one of the beings into space. In fact, blow them to such an immense distance that they will be beyond the attraction of Earth and will for ever revolve, like satellites, about our planet."

As he finished, silence fell upon those present. A few weeks previously they would have jeered, scoffed, ridiculed the idea or would have felt sure he was mad. But too many seemingly insane things had occurred to warrant a hasty judgement, and all were thinking deeply. At last, a dignified white-haired gentleman rose to his feet and cleared his throat. He was Senor Martinez, a descendent of one of the old Spanish families who had originally owned the island, and a retired engineer of world-wide fame.

"I feel," he began, "that Doctor Farnham's suggestion might be carried out. I have only two questions in my mind as to its feasibility. First; the cost of the undertaking which would be prodigious—far more than the somewhat depleted treasury of Abilone would permit. And second; by what form of explosive the force could be generated which would project the beings so far that they would not fall back upon Earth, and being immortal, still be living things?"

"The expense," announced Doctor Farnham, as Senor Martinez resumed his seat, "will be borne by me. My fortune, which originally amounted to something over three millions, has remained practically untouched for the past forty-five years, for I have expended but a small fraction of the income. As it was entirely due to my work that the Plague of the Living Dead has been brought upon your island, I feel that it is no more than just that I should devote my last cent and my last effort to righting the wrong. As for the explosive, Senor Martinez, that will be a combination of nature's forces and modern high-powered explosives. Beneath the area occupied by the Living Dead is a deep-seated fissure connecting, in all probability, with the Sugar Loaf volcano. By excavating and tunneling we will enlarge that fissure to form an immense hollow under the area we desire to

destroy, and we will fill the hollow with all the highest explosives known to science, and which can be purchased with my wealth. In the meantime, the San Marco River will be diverted from its present course and will be led to a tunnel which will be cut through the rim of the old crater. By means of electricity we will arrange to explode the charge under the Living Dead at the precise instant when the water of the river is released, and emptying into the crater, creates a steam pressure sufficient to produce an eruption. That pressure, gentlemen, being released by the detonation of the explosives will unquestioningly follow the line of least resistance and will burst forth as a violent sporadic eruption coincidentally with the force of the explosives, and will, I feel sure, project the Living Dead beyond the attraction of our planet."

For a brief instant silence followed the scientist's words, and then the hall echoed to uproarious applause.

When the demonstrations had at last subsided, the elderly engineer again spoke. "As an engineer, I approve most heartily of Doctor Farnham's ideas," he announced. "A few years ago such an undertaking would have been impossible, but science in many lines has advanced by leaps and bounds. We know the exact pressure generated by water in contact with molten igneous rocks at various depths—thanks to the researches of Sigoor Baroardi and Professor Svenson, who devoted several years to intensive studies of volcanic activities in their respective countries of Italy and Iceland. We now know the exact pressure of steam essential to produce a volcanic eruption, and we also know the precise temperature at that steam pressure. Hence it will be a comparatively simple matter to devise means of detonating explosives coincidentally with the eruptive forces, as Doctor Farnham has outlined. Also, the modern explosives, which I presume would be the recently discovered YLT, and the even more powerful Mozanite, have already proved to possess sufficient force to project a missile several thousand miles beyond Earth's atmosphere, and in all probability, beyond the attractive forces of our sphere. The one really great difficulty which I foresee will be to calculate the exact diameter and depth of the excavation and to confine the Living Dead to the area immediately above it. I am most happy, gentlemen, to offer my poor services in this cause, and if you desire it, I will most gladly place my knowledge of engineering at the disposal of the government and will be honoured to collaborate with Doctor Farnham."

Amid vociferous applause Senor Martinez took his chair, and the governor rose and thanked him and accepted his offer. He was followed by Colonel Shoreham, who expressed his gratification in having inadvertently suggested the means of destroying the Living Dead, and who offered a plan for confining the beings to the restricted area desired. "It is possible, I think," he said, "to gradually push the wire barrier nearer and nearer the selected spot. It will, I take it, require some considerable time to complete excavations and prepare for the grand finale, and in the interim we can move the barrier forward an inch or two at a time. As the Living Dead have no intelligence they will never notice the change, and even if they do they will not understand what it means. As soon as Doctor Farnham and Senor Martinez have decided upon the exact spot, and the extent of the area to be blown up, I will commence moving the barrier."

This suggestion appeared to solve the last difficulty, and, vastly relieved that at last there seemed to be hopes of for ever destroying the Plague of the Living Dead, the meeting broke up after voting *carte blanche* to those who had volunteered to see the scheme through.

There is little more to be told. Everything proceeded smoothly. The precise area which was to be blown into space was determined, and true to his word, Colonel Shoreham moved the steel barrier forward until the inhuman, though human, monsters within were confined to the selected spot. Meanwhile, with millions at their disposal, the engineer and his assistants diverted the San Marco River, cut a tunnel through the base of the thin outer rim of the crater, and held the pent-up stream in check by a dam which could be destroyed by a single explosion set off by an electrical connection and detonator. Beneath the doomed beings, great electrically-driven machines were tunneling deep into the bowels of the mountain slope, and each hour, as the excavation deepened, the heat increased and scalding steam jets were more frequently met, all of which was most promising as proving that the active crater was not many feet below the spot wherein the work was going on. At last Senor Martinez feared to go deeper. Beneath the vast hole the roaring and rumbling of the volcano's forces could be heard; the steam issued from every crevice and crack in the rocks, and the temperature registered over two hundred degrees. Carefully, hundreds of tons of the most powerful of up-to-date explosives were piled within the vast excavation—tons of the recently discovered YLT, which had entirely superseded TNT and was nearly one hundred times as powerful, and tons of the even more powerful Mozanite-until the cavity was completely filled with the explosives. At last all was in readiness. Delicate instruments had been placed deep within the crater, instruments which at predetermined temperatures would send a charge of electricity to the detonating caps in the explosive-filled excavations, and instruments which would accomplish the same result when the steam pressure reached a pre-arranged pressure.

Chapter XI

FOR weeks, the inhabitants had been warned away from the vicinity of activities, though there was little need for this, for few people cared to visit that portion of the island. And in order that persons in distant parts of the island might not be unduly alarmed, notices had been posted stating that at any time a stupendous explosion might occur, but which would cause no damage to outlying districts. Far more excited and nervous than they had ever been in their lives, the officials, together with the engineer and Doctor Farnham, waited within their bomb-proof shelter several miles from the area of the Living Dead, for the last stupendous drama.

Without a hitch the dam was blown-up, and the vast torrent of water rushed in a mighty cataract through the crater wall and into the depths of the volcano. Even from where they watched, the officials could see the far-flung white cloud of steam that instantly arose from the towering mountain top. One minute passed, two, three—with a roar that seemed to split heaven and earth, with a shock that threw every man to the ground, the entire side of the mountain seemed to rise into the air. A blinding glare that dulled the midday sun clove the sky; a pillar of smoke that shot upward to the zenith blotted sun and sky from sight, and for miles around the earth was split, rent and riven. Streams overflowed their banks; landslides came crashing down mountain sides; forest trees were splintered into matchwood. Birds were killed in mid-air by the concussion, and for days afterwards, dead fish floated by thousands upon the surface of the sea. To those in the bombproof shelter, it seemed as if the explosion would never end, as if the mightiest of the volcano's forces had been conjured from the bowels of the earth and might never cease to erupt. And for what seemed hours, no debris, no stones or pulverized earth and rocks came tumbling back to earth. But at last—in reality but a few moments after the explosion—thousands of tons of broken rock, of splintered trees, of ash and mud, of impalpable dust came crashing, pattering, until at last all was still—not a sound was heard.

Awed and shaken, the watchers, accompanied by a band of armed troops, made their way to the devastated area.

A vast new crater yawned where the Living Dead had been. For half a dozen miles about, the island was littered with debris; but nowhere could a trace be found of the terrible beings.

And as no one, anywhere, has ever reported finding one of the monsters, or any fragments of their immortal bodies, it is safe to assume that somewhere, far beyond Earth's attraction, the Living Dead, blown to infinitesimal atoms, are doomed to for ever remain suspended in space.

The terrific explosion, which was reported by ships at sea and which was plainly heard at Roque over fifty miles distant, was passed off as a natural, but harmless eruption of Sugar Loaf volcano.

As for Doctor Farnham, with the several thousands of dollars left from his fortune, he built a church and a hospital, and he still resides quietly in Abilone, devoting his talents and his knowledge to healing the sick and relieving the suffering. His three human experiments are still with him. Never have they divulged what they know, and never do they mention the fact that they were subjected to the doctor's treatment, for they have got the idea that if the officials should discover they are immortal, they would meet the same fate as the Living Dead.

As far as can be seen or determined, they are as lively and chipper as ever, but whether they are fated to live on for ever, or whether their span of life has merely been extended, no one can say. At any rate, the oldest fellow has made his will, and the other two are in constant dread of being killed by motor cars. So, being immortal does not, apparently, rid a person of the fear of death.

