



IGLES VERNE'S TOMBSOME AT AMIENS  
PORTRAYING HIS IMMORTALITY

# AMAZING STORIES

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## Our Cover

This month depicts a scene from the story entitled, "The Octopus Cycle," by Irvin Lester and Fletcher Pratt, in which the small group of natives, headed by the American scientist and a Frenchman, are fleeing from the scene of battle against a highly organized army of enormous animals of the mollusk order. Several of the natives are caught up in the tentacles of the octopuses, only to vanish almost instantly.

## In Our Next Issue:

**THE GOLDEN GIRL OF MUNAN**, by Harf Vincent. "Necessity is the mother of invention." Hatred, or a lust for revenge, also enables a person to perform wonders. What a very few scientists, excited with a small group of radicals, finally invent on a small island off in the uncharted seas, is graphically told by our new author, who not only has a vivid imagination, but, being an engineer of high standing, has an adequate amount of scientific knowledge from which to draw.

**BARON MÜNCHHAUSEN'S SCIENTIFIC ADVENTURES**, by Hugo Gernsback. Mars, according to most scientists, is an almost inexhaustible source of interest, and our friend, the Baron, being avid for interesting information and experiences, and having a knack for learning everything worth while knowing, continues, in his own manner, to tell us about the cities of Mars and how the planets look, as seen through the powerful Martian telescopes. He also advances an entirely new theory as to how the Martians might make life bearable on their desert planet.

**THE BLUE DIMENSION**, by Francis Flagg. Of course, you will remember Mr. Flagg's past stories, "The Master Ants" and "The Machine Man of Ardatbia." In "The Blue Dimension," he has produced a real thriller. Here he takes us to another planet; a different world, and it is a most convincing story, too. Don't miss it, by any means.

**THE INVISIBLE MAN**, by H. G. Wells. While there have been many battles fought in our Discussions Department as to certain "Weird" stories, the editor makes the prediction that "The Invisible Man" will be acclaimed by all of the readers of **AMAZING STORIES**. "The Invisible Man" no doubt is a scientific story, plus. It is one of those stories that is well nigh perfect. Of all the "invisible" type of stories ever written, anywhere, we unhesitatingly say this is the best and by far the most scientific.

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# The MASTER ANTS

## by Francis Flagg

Author of "The Machine Man of Ardathia."

### A Strange Disappearance

**T**HE thing is a hoax."  
"Palpably a hoax."  
"And yet the handwriting is theirs."  
"Or a forgery."  
"A clever forgery then. Schultz is a handwriting expert, you know, and he declares the signatures to be genuine."  
"But the thing is incredible."

The two men looked at each other helplessly. One was a Doctor of Science; the other a nationally-known criminal lawyer. Several days before, a strange thing had happened. The nationally-known lawyer had been dining with his family in his home on Tanglewood Road, Berkeley, California, when what was at first taken to be an infernal machine of some sort dropped in the midst of the dinner table with a crash, upsetting the table and narrowly missing injuring the diners with its flying wreckage. Yet, as it was the rainy season and the evening was damp and raw, no windows had been open; nor did investigation show any of the panes or sashes to have been broken, as would have been the case had the machine been hurled through them. In short, save for some spatters of food and a few dents in the walls made by the flying metal, the room was intact. Only one door had been open at the time, the door leading into the kitchen; and the kitchen had been occupied by the cook, a middle-aged lady who had been in the employ of the lawyer for five years. Seemingly, the infernal contraption had materialized out of thin air. As if this were not startling enough, there was the manuscript.

"I found it," said the lawyer, "in the midst of the wreckage."

The third member of the party, an ordinary practising M.D., examined the manuscript with curiosity. It had evidently been tightly rolled and was yellow, as if with age.

"You say," he said, "that this purports to be a message from two men who dropped out of existence some twelve months ago. As I am only visiting in the East Bay for a few weeks, I am not acquainted with the facts of their disappearance. If it wouldn't be too much trouble . . ."

"Not at all," replied the Doctor of Science. "John Reubens was a fellow professor of mine at the

University and held the chair of Physics. Raymond Bent was a student, working his way through college by doing secretarial work for him. Reubens was a man of about forty-odd, well-known in scientific circles as a brilliant, if somewhat eccentric, physicist. In fact, he had studied under, and once collaborated with, Jacques Loeb, before the death of that great mechanist. He lived with his widowed sister in a large, old-fashioned house on Panoramic Way, and had a splendidly equipped laboratory there in which he carried out strange experiments of his own. I will frankly confess that while we acknowledged him to be a brilliant man in some respects, the majority of other professors thought him a nut because of wild theories he was wont to voice in relation to time. On the other hand, he made no secret of regarding us as so many 'Dumb Doras' without vision enough to see beyond the tips of our noses. That's the best picture I can give you of the man who went into his laboratory with his secretary on the 14th of October, 1926, and never came out again! But let his sister give you her version of the affair. I clipped this interview with her out of the *San Francisco Examiner* and saved it."

The M.D. took and read the proffered piece of paper.

"At four o'clock Raymond Bent came and I let him in by way of the side door. He chatted with me a few minutes before going to the laboratory, where my brother was. The laboratory is on the second floor and I had occasion to pass it several times on my way to and from my bedroom. My brother never told me about his experiments, and it was understood I was never to enter his work-room. One time the door was ajar and I saw the two of them standing by some sort of a machine. That is all, except at about four-thirty, when I was passing the laboratory door on my way downstairs, I heard a terrible crash. I guess it was a pretty bad one, because all the plaster was knocked off the ceiling in the room below. When my brother didn't answer my call, I got frightened and went in. Things were upset—your know, basins and things—but neither Bent nor my brother was there."

The article went on to state that Reuben's sister admitted that the machine had also disappeared.

"Some bright reporters," remarked the Doctor

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*ONE of America's great entomologists made the statement that if the insect world ever took it in its heads to conquer this planet, there would be no stopping them. Man would be powerless against billions and billions of ants if they should ever become organized. Anyone who has been in the tropics and has seen army ants at work, and has seen how they eat everything that comes their way, humans and cattle included, will understand this statement much better. Let no one think that Mr. Flagg's picture is overdrawn. Yes, even to the milking of human beings, for ants do keep cattle now and do milk them, just as we milk our domestic cows.*

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Relentlessly, the leathome thing clambered upwards until it had settled itself firmly on neck and shoulders. The two antennae reached down my cheeks, gripping the corners of my mouth and clamping themselves there. . . . And as I fought to unsettle the inhuman rider perched on my shoulders, I knew what I was . . . I was an inferior animal being conquered, beaten, trained by a superior one.

of Science, "got to speculating if the professor hadn't hopped off in some sort of an airship he had built; but the theory wouldn't stand up against the fact that while one end of the laboratory was all glass, and the great door-like windows swung wide open, a crow could hardly have winged its way through the iron grilling, which protected them on the outside."

"Wasn't there talk of missing money in connection with the affair?" asked the M.D. "Seems to me, now, that I do recall reading of the case. Only . . ."

The nationally-known lawyer nodded. "Unfortunately, yes. At the time of his disappearance, the professor had drawn twenty thousand dollars of his sister's money from the bank for reinvestment. The money had been issued to him in Treasury notes of one thousand dollars each. Some people were uncharitable enough to find in this fact full explanation of his disappearance. However, notes bearing the serial numbers of those issued to him have never appeared on the market, as far as is known."

At this juncture the doorbell rang and a few minutes later the president of the university and two members of the faculty were ushered in. When they were seated, the lawyer addressed the gathering.

"I take it that everyone of you is aware of why I have asked you here tonight." He held up the manuscript. "My letters, I believe, explained adequately how this document came into my possession. It only remains for me to say that I have submitted it, with specimens of the handwritings of Professor Reubens and Raymond Bent, to Herman Schultz, the chirographist, and he pronounces the writing and signatures in the manuscript to be identical with that of the specimens submitted."

The president of the university nodded. "I believe that is clear to all of us. The manuscript is held to have been written in the hand of Raymond Bent, and bears both his signature and that of Professor Reubens. Very well, then. We are acquainted with the peculiar manner in which you received it, but as yet are unaware of its contents. If you would kindly read the communication to us . . ."

Thus bidden, the lawyer cleared his throat and read what is probably the strangest document ever penned by human hand:

### The Document

**W**HETHER any human eye, in the age I have left behind me forever, may chance to read this writing, I do not know. I can only trust to Providence and send what I have written into the past with the fervent prayer that it will fall into the hands of intelligent people and be made known to the American public.

When I came into the Professor's laboratory on the afternoon of October 14, 1926, I had not the slightest inkling of the terrible fate that was so soon to befall me. If I had, I would probably have fled in horror from the place. The Professor was so absorbed in tinkering with the mechanism of the machine which had engrossed his interest for nearly two years, that he did not at first notice my entrance. I picked up a book lying open on a stand to one side of him. It was H. G. Wells' "The Time Machine." I smiled at the absurdity of a great professor being interested in such truck. The Professor turned and caught me smiling. "Impossible fiction," I remarked, with what, God help me, was an illy-concealed sneer.

"Fiction, yes," replied the Professor, "but why impossible?"

"Surely you don't think there is anything possible about this?" I exclaimed.

"Yes, I do."

"But to travel in something that has no reality!"

"What is reality? The earth on which we stand? The sea on which we sail? The air through which we fly? Have they any existence outside of the attributes with which our senses endow them?"

"But I can touch the earth," I protested, "I can feel the sea, but I cannot touch or handle time."

"Neither can you touch or handle space," said the Professor dryly, "but you move in it; and if you were to move through space, say from this spot to the City Hall in Oakland, you would probably calculate the journey took you fifty minutes of time. In that sense time would have a very real significance for you, and you would have moved in it to the extent of fifty minutes. But if I ask you why it isn't possible to move ahead in time not fifty minutes, but fifty centuries, you consider me insane. Your trouble is that of most people, my boy; the lack of enough imagination to lift your brains out of the accustomed rut."

"Perhaps so," I replied, reddening angrily; "but, save in fiction, who has ever invented a time machine?"

"I have," answered the professor. He smiled at my look of disbelief. "Now this thing," he added, patting the mechanical creation affectionately, "is a Time Machine."

It was the first time he had ever told me what his invention was supposed to be.

"You mean it will travel into the future?" I asked skeptically.

"If my calculations are correct—and I have every reason to believe they are—then this machine will take us into the future."

"Us!" I echoed.

He walked over and shut the door with a bang. "Have you any objections to taking such a trip?" "None at all," I lied, thinking the chances of doing so were very remote.

"That is splendid. Then there is nothing to prevent our giving the machine a trial this afternoon."

The machine had two seats, with backs probably two feet high. The Professor seated me in one of them, while he occupied the other. "Just as a precaution to keep you from falling out," he smiled, buckling me in with a broad leather belt. In front of himself he swung a shelf-like section of the apparatus on which was arranged a number of dials and clock-like instruments. In some respects—save for the clocks—the shelf resembled the surface of a radio board. Whatever cogs and wheels there might be were hidden in the body of the machine, under our feet.

"That," said the Professor, indicating a dial, registers the years and centuries; the one next to it, the weeks, days and hours; and this handle," he touched a projecting lever, "controls the machine." Before sitting down, he had lifted the bottom from his seat and revealed below it a hollow space filled with tools and provisions. "It is the same with your chair," he said with satisfaction, "and if you examine the leather belt, which holds you in, you will discover that it also acts as the holster for a Colt automatic and a box of spare cartridges." He settled himself

comfortably in his seat and grasped the lever. "Are you ready, my boy?"

So business-like was his manner, so self-assured, that for a moment a qualm of doubt assailed me. What if the confounded thing were to work! Then my commonsense got the upper hand again. Of course it wouldn't! Already I began to feel sorry for the professor. At my nod of assent, he pressed down on the lever. The machine shook; there was a purring noise; but that was all. I smiled, partly with relief, partly with derision. "What's the matter?" I asked; and even as I spoke the whole room spun like a giddy top and dissolved into blackness. The roaring of a million cataracts dazed and stunned me. There was an awful sensation of turning inside out, a terrible jolt, and then it was all over and I was lying sprawled out and half senseless in a wreck of disintegrating iron and steel. My first thought, of course, was that we were still in the laboratory. The machine had turned over, or exploded, and nearly killed me. That's what came of listening to bughouse professors and their crazy inventions! I felt my head and limbs blindly. Sound enough, I seemed, save for a few scratches and bruises. I struggled to sit up; as I did so, I came face to face with an old man with a tangled mane of gray hair and an unkempt beard. It was several minutes before I realized that I was looking at the professor. Even as I did so, I became conscious of the fact that black whiskers hung down on my own breast and that the top of my head was as bald as a billiard ball. I looked around and saw that we were lying on a prairie-like expanse of country. Some trees were far off to one side and the immediate plain was covered with stunted bushes and tufts of grass. Anything more different from the laboratory could not well be imagined. As I stared stupefied, not yet realizing the awful truth, the Professor gave a deprecating cough.

"I'm afraid," he said in a voice that was his, yet curiously changed. "I'm afraid I overlooked a very vital thing." He shook his head. "How I was so stupid as not to think of it, I can't understand."

"Think of what?" I mumbled.

"Of the almost elementary fact that as we journeyed into the future our bodies would age."

**H**IS words brought me to my senses. Incredible as it seemed, this was the future. At least we had come to rest on some other spot than that of the laboratory. And undoubtedly physical changes had taken place in the Professor and myself.

"We must return at once!" I cried.

"Of course," replied the Professor, "at once. But how?"

I looked at him dumbly.

"As you see," he remarked, picking up a piece of rusted, crumbling metal, "the machine just kept going until it was so old it fell to pieces. My boy, we have had a lucky escape."

"A lucky escape!" I echoed.

"Yes; for if the machine had not worn out when it did we would have gone on until we perished from old age."

"But I thought you told me once that old age was not caused by the passing of time."

"I did; but you can readily understand that in our journey through time we encountered more or less friction from environment. Of course the faster we traveled through a century, say, the less action

of environment on our bodies there would be in a given period of time. But still there would be enough to age us after awhile. At least, such seems to have been the case."

"How far have we come?" I asked.

"I don't know. All my instruments are destroyed. As you see, the machine is junk."

"But we can build another."

"What with?"

I groaned. Machine, tools, weapons, all were gone. God knows how many centuries in the future, we stood on a bleak prairie, middle-aged and old, the rotting clothes falling from our backs, with only our bare hands to protect us from whatever dangers might lurk for us in this new and unknown age. With despairing eyes I stood up and scanned the horizon. "Look, professor, look!" I cried, seizing him by the shoulder. "Aren't those men running towards us?"

The professor focussed his eyes in the direction my finger pointed. Perhaps a half mile away, having seemingly just topped a rise, was a body of what appeared to be men. Even at that distance something about them looked peculiar; and when they came nearer we saw that they were running with bowed backs, their heads jutting at almost right angles with their bodies, and their arms dangling loosely in front of them.

"Those are the queerest looking men I've ever seen," I said in alarm, looking around for a weapon to defend myself with in case of attack, and plucking up the only thing available, a piece of rusted iron. The professor did likewise. Thus armed, we stood up to await their approach, for there was no place to hide, and nothing behind which we could find shelter. Perhaps three hundred yards away the odd men spread out into a semi-circle. There were probably twenty-five or thirty of them, naked, with not even a breach-clout, shaggy of hair and beard, and with hair almost as heavy as fur running down their backs and on the weather sides of their arms and legs. They continued coming at a fast gallop; but just when it seemed they would run on and over us, they reared back—much as do horses when reined in—and came to an abrupt stop, shaking their heavy manes, and pawing at the ground with their feet.

"Very peculiar; very peculiar indeed," said the Professor thoughtfully. "Except for the clearly defined features of their faces and the general structure of their bodies, one would not take them for men at all."

"They seem more like apes," I retorted. "I hope they're not as savage as they look. Speak to them, Professor, before they start something, and see if they can't talk."

The Professor held up one hand in a peaceful gesture and took a step forward. He raised his voice so as to make it carry across the thirty or forty feet which still separated the shaggy men from us.

"We are American travelers!" he shouted. "Is there any among you who can talk English?"

The only response to this was a snorting and a rearing, accompanied by a rustling sound which affected the nerves disagreeably. Several of the shaggy men broke from the circle, doing a great deal of plunging and rearing before reluctantly coming back into formation again.

"By God, Professor," I said fervently, the goose-

flesh appearing on my body, "I don't like this at all."

The Professor repeated his question in French, Spanish, Italian; he asked it in Portuguese, and in what he later told me were several Indian dialects; but all to no purpose. Only every time he paused to catch his breath, there came that dry rustling as of the rasping of metal on metal. Suddenly he stepped back and caught me by the shoulder.

"Those creatures," he whispered, gesturing towards the shaggy men, "are controlled."

"Controlled!" I exclaimed. "What do you mean?"

"That there is something on their shoulders."

I thought the Professor was taking leave of his senses. "What could it possibly be?" I began, then stopped, for the shaggy men were in motion. They divided, one group going to the right of us and the other to the left. In our rear they joined ranks and made us retreat before them. It was then I caught my first glimpse of the unbelievable riders that perched on their shoulders and rode them, much as human beings ride horses. Long antennae reached down on either side of the shaggy men's faces, gripping the corners of their mouths and serving to guide them as with bit and bridle. Other antennae waved in the air, or rubbed one on the other, producing the rasping noise which had so grated on my nerves. The bodies to which these antennae were attached were about a foot in length.

"In the name of God, what are they, Professor?" I screamed, half raising my piece of iron as if to throw it at the slowly advancing horrors. But the Professor gripped my arm. "Don't start fighting," he warned sternly, "unless you have to. As to what they are, I'm not certain, but I believe them to be some sort of ant-like insects."

We retreated, slowly at first, then at a brisk walk, finally at a trot. When we moved in a given direction the insects were content to keep their steeds at a distance; but when we veered from it they urged on the shaggy men to head us off.

"I believe those insects are driving us in front of them as men herd cattle," gasped the Professor.

We topped a rise and saw stretching away before us a level plain. Far out on this plain—several miles away, perhaps—were numerous mounds, and it did not take us long to suspect that they were our destination. Several times the Professor sank to the earth, utterly winded, unable to run another step. At such times, I stood over his body with my iron club, determined to sell our lives dearly, but there was no need to fight. The shaggy men were brought to a halt and their uncanny riders waited patiently until the Professor could regain his feet, when we were once more urged ahead at a brisk pace.

Night had fallen and it was almost too dark to see when we finally staggered through a narrow gap into a large enclosure and were left to our own devices. The splash of water led us to a stream, where we slaked our thirst and bathed our sore and swollen feet; and then, too miserable and tired to care what further happened to us, we huddled together for warmth and fell asleep.

### The Master Ants

SEVERAL hours later, the Professor and I awoke, chilled to the bone. And no wonder! For we were practically naked, only shreds of cloth clinging to our backs. The moon was riding high overhead, making the enclosure as light

as day. Now and then the silence would be broken with a shrill scream or a heavy snort. Once or twice we heard the metallic slithering of antennae; and once, in looking up, I saw an insect crawling on top of a mound, its sinuous body etched sharply against the sky. I shivered with more than the cold. "Professor," I whispered, "is this a nightmare or am I really awake?"

"I'm very much afraid that both of us are wide awake," said the Professor with a sigh.

"But it doesn't seem possible," I exclaimed. "Those bugs . . . My God, Professor, what has happened to the world!"

The Professor pulled thoughtfully at his unkempt beard. "I don't know. In our day there were scientists who held insects to be a growing menace to man's rule. Perhaps . . . But you could see for yourself that those ants rode men!"

"Were they men?"

"Yes; I believe they were."

"But their hair?"

"Could be accounted for by the fact that they were exposed, naked, to all kinds of weather. The fit, in this case, the strong, hairy ones, would survive and breed. A few centuries of such breeding could possibly produce the type we saw."

The thought of a world in which insects were the dominant species and men subject to them as beasts of burden, filled me with horror. If such were the case, what would our fate be? In spite of the chill night wind, in spite of the fact that we were cold and hungry, I dreaded the morning. But daylight came at last, and then we were better able to examine our surroundings. The enclosure was probably a half mile square and fenced in with an irregular line of mounds anywhere from ten to twenty feet high. Across the stream from us, bedded against the walls of a mound, were several hundred of the shaggy men. Soon after daylight they were afoot and came down to the stream to drink, wading into the water, in some cases, up to the waist, and drinking with an animal-like abandonment that filled me with disgust. It couldn't be possible that those creatures had once been human beings like the professor and myself. No, no! It seemed incredible that mankind could ever have fallen so low.

Some of the shaggy men crossed the stream to view us more closely. Most of these were females, stooping forward as they walked. One of them came quite close to us, uttering plaintive cries, and the Professor stepped forward in an attempt to speak to her. At this a great hulking bull of a fellow, with fiery red hair that glistened in the sun, and who would have stood well over six feet if he had straightened up, rushed at the Professor with a roar. The latter retreated hastily; whereupon the leader of the herd—for you could have called the gathering of shaggy men nothing else than a herd, and the red-haired giant the leader of it—turned upon the females, and with blows of his fists and sundry kicks of his splay feet, drove them back across the stream where they all, men, women and children, took to grubbing in the ground for some sort of roots.

"And you call them human," I said to the Professor.

"They once were."

I shook my head. "Those creatures are bent almost double. Even the children are so formed, and the posture seems a natural one to them."

"Perhaps they were bred for that characteristic."

"Bred!"

"Why not? If things are as I suspect, then those men have become the domestic animals of the insects. In the beginning they were probably bent double by bearing the weight of their riders. Acquired characteristics are, of course, generally conceded to be uninherited, but little is known of the possibilities of variation—what effects the constant doing of a thing may have on the germ-plant. It is possible that mutations with certain peculiarities of structure were born and men, such as you see, bred from them."

Before I could make reply, we had our first leisurely view of one of the ant-like insects. It suddenly appeared on top of a ten-foot mound a few yards from where we stood. Its body was in three segments of an almost metallic blackness, being raised, on stilted feet, about eight inches from the ground. Four feelers, or antennae, waved in the air or rasped one on the other, and were attached to a mobile head. There was no indication of eyes, yet the weird thing paused in one spot for all of five minutes, as if intently regarding us, and I, for one, believed that it could see. Other insects appeared on the mounds, and soon the air was full of metallic slithering. At the sound, the males of the shaggy herd pricked up their ears, stamped the ground with their feet, and then continued feeding. On the other hand, the females ran towards the mounds, stretching up their hands to the insects on top of them, and calling out with imploring cries. Then we witnessed a strange sight. The ants crawled down the wall in one stream, paused beside a female for a moment or two, and then crawled up the wall again in another. It was a few minutes before the reason for this dawned on me.

"Good Lord, Professor!" I exclaimed suddenly, "they're milking them!"

It was true. The females of the shaggy men were so many cows being milked. Again the horror of our position came over me. We were castaway in a future age where man no longer was lord and master. Instead, he was a beast to be driven like a horse, milked like a cow, and—since ants ate meat, or used to—slaughtered like an ox. I wiped the cold sweat from my forehead.

"Professor," I said, "we must escape from here."

"Of course," replied the Professor; "but how—and where to?"

There was no answer to make. The mounds hemmed us in; and even if we could get beyond them and away from our present captors, there were doubtless other mounds and other insects who would capture us. If the world was really in the hands of ants, then we were animals to be hunted down, tamed or killed. This age into which we had blundered was not safe for man—at least, not for civilized man. I closed my eyes to shut out the horrible sight of crawling insects. I tried to shut my ears to the sound of insane slithering, but heard readily enough when the Professor said somewhat nervously, "My boy, I believe they're coming over here." Three of the ants had mounted on the backs of shaggy men and were trotting them towards us. I looked desperately around for my piece of iron. It was gone. So was the Professor's. Someone or something had removed them while we slept. Nor was there anything else that could be used as a weapon. In this dilemma we turned and ran, but

were soon overtaken. Two of the shaggy men closed in on me, while the third held the Professor powerless. I fought like a fiend; but the four hands of the shaggy men were like iron bands, the grip of their fingers like vises. In a few minutes I was helpless. Then came the crowning horror. One of the insects dismounted from the back of its steed and climbed on mine. At the feel of its suction-like legs on my flesh I went crazy. The muscles writhed in horrified protest under my skin. I bit and screamed and lashed out with my feet. All to no avail. Relentlessly, the loathsome thing clambered upwards until it had settled itself firmly on neck and shoulders. Two antennae reached down my cheeks, gripping the corners of my mouth and clamping themselves there. Almost at the same instant the shaggy men loosed their grip of me and I was free. For a moment I stood still, dazed and trembling; then the antennae gave a pull at my mouth, wrenching the head back with a cruel jerk. With a scream of pure terror, I plunged forward in a mad leap, clawing upwards with my hands at the awful incubus on my shoulders, tearing futilely at the antennae which gripped my mouth. And as I fought to unseat the inhuman rider perched on my shoulders, I knew what I was: I was a horse being broken, a wild mustang, knowing for the first time the torture of bit and saddle, of spur and quirt; I was an inferior animal being conquered, beaten, trained by a superior one. The blind, unreasoning fear I felt, a thousand wild horses being brought under the yoke of all-powerful man must have felt. I ran—it seemed for ages—goaded, spurred, until I could run no more. My gait slackened, became a trot, a walk. Finally I stood still, frothing blood and saliva at the mouth, gulping painfully for air, trembling in every limb. The incredible insect breathed me for a few minutes before again urging me into a trot. I made no protest. I was beaten, cowed. The antenna on the left pulled; I went to the left. The one to the right tugged; I went to the right. My rider drove me past mounds where ants perched watching, much as cowboys of the past were wont to straddle corral fences and observe one of their number perform. They slithered what was undoubtedly their applause. For about twenty minutes I was put through my paces; made to walk, canter, circle, wheel and stop at command. Finally the insect slid from my shoulders and I sank to the ground, too miserable and distraught to care whether I lived or died. I flinched and closed my eyes when it patted me with its antennae and slithered soothingly, much as a man might pat a horse and at the time say, "There, there, old boy, don't be afraid." Afterwards a quantity of raw vegetables and what appeared to be coarse grain cakes were tossed to me and the insect went away. I lay there for a long time, hardly stirring a finger, when the Professor came up and sat down beside me.

"No," he said, "they didn't ride me. Too old, perhaps."

He picked up a grain cake and gnawed at it hungrily.

"Try one, my boy, they're not half bad. Besides you'll feel better if you eat something."

I suppose it seems queer to tell it, but we sat there on the rough grass, with the slithering ants coming and going about their business, and ate those cakes. Neither one of us had tasted food since the day before—or was it several centuries before?—

and were half starved. Only hunger could make eating at all bearable with my sore and lacerated mouth. Suddenly the Professor spoke to me in an odd tone.

"My dear boy, I don't like to arouse any false hopes, but will you take a look at that thing in the air and tell me what you think it is."

I glanced up apathetically enough; then at sight of what I saw I leaped to my feet with a wild cry; for, soaring through the air at a height of about seventy feet from the ground was a craft of shining metal.

"An airship!" I shouted deliriously. "An airship!"

#### 2450 A.D.

**Y**ES, it was an airship. There could be no doubt of that. And where there was an airship, there must be human beings, men.

"Then civilized people are still living on the earth," cried the Professor exultantly. "Quick, my boy, shout and attract the driver's attention."

He had no need to urge me. Pain, weariness and despair were forgotten as I waved madly. "Help!" I shouted, dancing up and down. "Help!"

The strange craft jerked to a pause in mid-air, hung motionless for a moment, then sank directly earthwards for what must have been forty feet or more. Over the side looked a girl, her beautiful face wearing a look of amazement.

"For God's sake, help us!" I shouted again, "or the ants . . ."

I got no further, fear throttling my voice, for the ants were coming. Thousands of them suddenly appeared in sight, literally covering the tops and sides of the mounds. They saw the airship; there could be no doubt of that. A half million antennae reached threateningly heavenwards, and the angry slithering of them appalled the ears. The woman shouted something, what I could not hear, and waved her hand. Even as some of the insects surged down from the mounds and made for us, the airship dropped. It was a close thing. We leaped and clutched the metal sides, hanging on with the grip of desperation, as the strange craft brushed the earth like a feather and soared aloft again. I felt the sucking claws of an insect fasten to one leg and kicked out in a vain endeavor to rid myself of it. Suddenly a withering ray flashed from a cone in the girl's hand and played on the insect. There was an acrid smell of burning, a little flash of light, and the grip on my leg relaxed. With a sob of relief, I stumbled over the side of the car and fell in a heap on the floor. "Safe, my boy, safe!" exulted the Professor, who had preceded me; then, turning to the girl, who was regarding us with wide-eyed wonder, he asked, "What year is this?"

"2450," she answered in perfect English.

"A.D.?"

"Yes."

"Hum," muttered the Professor, making a quick mental calculation. "Five hundred and twenty-five years in the future."

But I was too busy adjusting myself to this sudden change in our fortunes to give him much heed. Far below us the earth was unrolling like a checkered carpet, mounds, hillocks, trees sweeping by at considerable speed. What power was driving the airship. I wondered. There was no sign of a propeller; neither did the craft possess wings and a rudder;

nor any of the other properties associated in my mind with flying machines. Only the girl stood in front of a square box and now and then shifted a small lever. She was, I judged, twenty-one or two, with red-gold hair, eyes like slanted almonds, and skin of yellow ivory. Her lithe body was of medium height and clad in a loose-flowing robe of some scarlet-colored material.

"Where are we going?" I asked her.

"To the Castle," she answered.

As she regarded me, I realized for the first time that I was naked; but the Professor seemed blissfully unconscious of the lack of any clothes.

"We have to thank you for rescuing us from a very dangerous and awkward position," he said courteously.

"I took you for beast men at first," she replied, "and if you hadn't called out in English, I shouldn't have stopped. Tell me, where do you come from and how did you fall into the hands of the Master Ants?"

"We came from the past," replied the Professor, "and landed on the plain about seven miles from where you picked us up. The insects—what you call Master Ants—captured us there."

"The past?" questioned the girl. "Where is that? Over the sea?"

"No," answered the Professor. "In another age, an earlier one than this. Out of the past, you know."

The girl didn't know. She stared at the Professor as if she thought the hardships we had undergone had unbalanced his mind. As for me, I was content to sink into a seat and wonder what kind of place was this Castle she was taking us to, and what manner of people were they who inhabited it in the year of our Lord, 2450. I had not long to wonder. About an hour's flight brought us in sight of a vast structure which crowned the top of a high hill. Its walls glittered like dull silver under the rays of the afternoon sun, and its roof seemed to be one large garden or park. Never had I seen anything more beautiful or bizarre. Here and there domes of silver towered among swaying palm trees, spruce and live oak. The car swooped down like a homing bird and came gently to rest on a wide plaza and was immediately surrounded by a crowd of curious people of all ages and both sexes. The women were clad in gay-colored dresses; the men wearing white trousers, with soft linen tunics. Both men and women went bareheaded and barefooted, and the men were clean-shaven. At sight of us, the women and children fell back with cries of alarm, and some of the men made as if they would attack us forthwith; but the girl cried out that we were not beast men, but English-speaking travelers whom she had rescued from the Master Ants. At this announcement hostility ceased, but the amazement with which we were regarded deepened.

"How is this possible?" said one handsome young fellow. "Save for ourselves, there are no English-speaking people left alive in the two Americas, and for three hundred years no word has come from Europe. The Master Ants rule this country, and perhaps the world. Where, then, could these men have come from unless it be from the ranks of the beast men?"

"We are Time Travelers," began the Professor; "we come from . . ."

But a tall, commanding man of about sixty interrupted him.



"Our guests are worn and weary. Time enough for questions after they have bathed and fed and rested. Come, come! Are we of Science Castle so inhospitable as to leave two wayfarers to faint at our very door?"

At these words, the young fellow fell back abashed and willing hands lifted us from the aircraft. It is hard to tell of the exquisite enjoyment of the next few hours. We were led into a central roof building of dull silver and bathed and washed. Soothing lotions were applied to my wounds. Our bodies were anointed with refreshing balms and swathed in soft robes. Tangled beards were clipped to the skin and our faces shaved. After all these ministrations, I glanced in a mirror and saw the reflected features of a man of about forty-odd, bald of head, yet not entirely unreminiscent of the youth I once had been. Food was served to us as we lay on soft couches. First a thick broth, aromatic, satisfying; then various dishes whose names I did not know; but all were palatable. After eating, we fell asleep and slept, we discovered later, until eight o'clock of the next morning.

### Science Castle

**W**ITHOUT a doubt, our couches had been enclosed by four walls when we fell asleep. What miracle was this? We were lying in an open space with only some green shrubbery between us and the wide plaza on one side, and walks and gardens on the other three. Children were romping in the plaza, evidently laughing and shouting, yet their voices came to us but faintly.

"I suppose we're not dreaming," said the Professor. He got up and took a few steps forward; then came to an abrupt halt. "This is very odd," he said; and even as he spoke, the four walls magically enclosed us, the Professor standing with his face against one of them.

"Good morning," said a laughing voice. "I forgot your room was to be left opaque and turned on the ray."

It was the handsome youth who had questioned us the day before.

"The ray?" asked the Professor.

"Oh, I forgot!" exclaimed the youth. "Everything is probably strange to you. The ray is what makes the walls transparent, so that one can look through them."

"But what is it?"

The youth looked puzzled. "Why I don't know that I can tell you, offhand." He scratched his head in perplexity. "I guess it's like electricity used to be. Thousands of people turned it on every day, but nobody could tell you what it was."

We dressed ourselves in white trousers and soft tunics of a fair fit and followed him to a central dining room. It was strange to walk through what was undoubtedly the corridor of a large building and yet never be certain whether one were indoors or out. Two or three hundred people were breakfasting in this central room and I noticed that they seemed to be a mingling of all races. There were some with the slanted eyes and yellow skin of the Chinese; others, plainly, had more than a drop of negro blood in their veins; yet all were mingling with their white companions on terms of perfect equality. In Science Castle, I was to learn later, no distinction was made as to race or color. Among the early inhabitants had

been numbered Japanese, Negroes, and Chinese, as well as whites. A common foe, a common vital danger had served to weld the various strains together. "Race and color antagonisms," a Scientian told us, "would have proved fatal to the small community. Of necessity a mingling of races took place. My grandfather was a negro. The girl who rescued you has Chinese blood in her veins. Whatever differences existed among our people in the early days has been ironed out by centuries of a common culture and environment." But I am anticipating.

Breakfast consisted of fruit, cereal, scrambled eggs, and milk, and we served ourselves cafeteria fashion. After eating, we repaired to the plaza where several hundred people were gathered, seated on the grass or on rustic benches. Seats were given us on what was evidently the raised platform of a speaker's rostrum. The tall, elderly man who had spoken for our welfare the night before, received us kindly.

"My name," he said, "is Soltano, Director of Science in Science Castle. I am speaking for my companions as well as for myself when I assure you that you are welcome to our home and refuge, and need fear no harm. However, you must realize that it has been centuries since strangers like yourselves have entered Science Castle, and understand that your rescue and coming has caused us untold amazement. Now that you are clothed and shaved, we readily perceive you to be, not beast men, but civilized beings like ourselves. Yet are we puzzled as to whence you could have come."

The Professor replied courteously: "My companion and myself thank you for your kindnesses to us and gratefully receive your assurances of future asylum and safety. A little of your curiosity, I can understand, and shall do my best to satisfy it."

He had raised his voice so that the words might carry to the people below.

"There is no need to pitch your voice above its ordinary key," explained Soltano. "This rostrum is really an instrument which broadcasts and magnifies it. Everyone—even those of us who are employed elsewhere—will pick up what you say by means of ear-phones."

I noticed, then, that the attentive people in the plaza were holding round devices to their ears and ceased wondering how some of them, leaning on the parapet two hundred yards away, expected to hear.

"Splendid," said the Professor. "Some sort of an amplifying, radio machine, I see." He beamed on Soltano. "I merely talk to you, is that it? and all will hear." For a moment I thought he was going to interrupt the interview long enough to examine the platform; but if he wanted to do so, he conquered the temptation. "My name," he said, "is John Reubens, late Professor of Physics at the University of California, and this lad here is Raymond Bent, my secretary. We are Time Travellers."

"Time Travellers!" echoed Soltano.

"Yes," replied the Professor, "from the year 1926. This means, of course, that we have come five centuries and a quarter out of the past."

There was a stir in the crowd below. Soltano looked amazed, as well he might. "This is a strange thing you are telling us, John Reubens," he said at last, "and well-nigh incredible. Much simpler would it be to believe that you had managed to come over

the sea from Europe or from Asia. Never have we listened to such a tale before."

"Nor anybody else," replied the Professor with dignity, "as we are the first human beings ever to make such a trip."

"And how did you come?"

"By means of a Time Machine, the remains of which lie rotting on the spot where the Master Ants discovered us." He then proceeded to tell of the building of the Time Machine, of our incredible rush through space and of our awakening in another age. Then he told of our subsequent capture by, and experiences with, the insects. When he had finished, excited talking and gesturing broke out among the people below. Evidently there were doubting Thomases among them, who discounted our story. But the Professor was not disturbed.

"If you are amazed at what I have told you," he said, "how much more amazed are my companion and myself to find ourselves in a future where ants ride men as steeds and human beings live penned in such a castle as this. Such a state of affairs was not even dreamed of when we left our own day and age. Naturally we are curious to learn how it has come about."

"OUR historians are not quite clear as to that," replied Soltano. "If you came through time from 1926, then you left your period nine years before the ants began their attack on mankind. It was in 1935 that the papers printed news of a queer happening in South America. Natives came fleeing from the jungles with stories of how the white ants were eating everything up in the forests—even men! In the United States no one paid much attention to the news. The world, at that time, was in a state of political unrest and the government and people were watching Europe and building up a great air force, they were too busy to give heed to preposterous yarns emanating from Latin America. A year later the newspapers again flamed into headlines with news from Argentina, Peru, and Brazil. Small towns in the interior of these countries were being devastated. It had always been known that termites would destroy things carelessly left exposed in the fields or jungles; but now they were eating up brick and stone. Buildings collapsed at the touch of a hand. Men woke and turned to wake a sleeping companion who dissolved into dust at a pressure. Sunday supplements carried lurid stories and sensational pictures for the edification of their readers. Then all such nonsense was swept into oblivion by the fact that Poland declared war on Lithuania, Russia moved to intervene, and Italy and France came to death-grips for five bloody years. In the United States ensued what were called prosperous times. Munition factories provided well-paid work for thousands of workers and made millions of dollars for hundreds of millionaires. Everybody was busily employed and had no time to think of crazy happenings reported from crazier spiggoty republics. Only a few scientists from the Smithsonian and other institutes went down to South America to investigate and wrote back long reports which were read with foreboding by a few learned men and ignored by everybody else. The papers they wrote—the records of those days—are preserved in our library."

"But the Master Ants," asked the Professor, "where did they come from, and how did they overwhelm the United States?"

Soltano waved his hand. "I am coming to that. The Master Ants were first noticed six years after the depredations of the white ants commenced. How they came nobody knows. Only in the nests of the termites, in the little galleries and chambers underground, something stupendous was taking place, something fraught with disaster for the human race. During thousands of years the white ants had undoubtedly been changing, evolving, acquiring, God only knows, what knowledge. It is all speculation, of course, but you doubtless recollect how the bees, by feeding their larvae different foods, will produce at will a queen, a drone, or a worker. Well, the white ants had discovered how to make such food—and to feed it to their larvae. At any rate, the Master Ants appeared. No one had ever seen them before. They swarmed down from the jungles by the hundreds of thousands, and wherever they went the people were stricken and fell in the fields and the streets. We now know that the termites bit them, injecting a subtle poison into their systems which induced a species of paralysis; but at the time it was only known that of every three that fell, two were devoured, and that the third one recovered, stupid, beast-like, to become the creature of the Master Ants. In vain the southern republics sent their soldiers to battle the insects. Guns crumbled to pieces in their hands. Armies lay on the ground to bivouac and only one soldier out of every three ever rose again—and he rose to bear an ant on his shoulders and chase his fleeing countrymen. Panic spread. Natives fled to the seashore and put to sea in all kinds of unseaworthy crafts—only to drown by the thousands. When the Master Ants finally occupied the crumbling ruins of Rio de Janeiro, the whole world was forced to realize that something terrible was happening in South America; and when fifteen years later, all South America having come under their sway, the termites were reported to be making inroads on the Canal Zone, a feeling of uneasiness swept through the people of the United States. Still it seemed impossible that the mighty northern nation could be invaded and flouted by such an insignificant thing as an ant. Newspapers ran articles written by government experts, pointing out how absurd it was to even entertain the thought. South America had succumbed, said the experts, because she had been a tropical wilderness without proper chemical defense. Elaborate plans were drawn up, showing how the border states were protected from invasion by systems of pipes and sprays; showing how fleets of airship were prepared to drop tons of chemicals and explosives. Only the scientists who had studied the tactics and methods of the ants knew how futile these preparations were; but they and their suggestions were ignored by the petty politicians and nincompoops who were directing the affairs of the country."

Soltano paused. I stared at him, wide-eyed.

"And the ants came," breathed the Professor.

"Yes, the ants came. Millions of them were killed with explosives, with gases and poisonous chemicals, but their numbers seemed as exhaustless as the sands on the seashore. In the space of a year they ate up the pipes and put the sprays out of commission. But you will have to read the history of those times for a more detailed account. Then you will learn how the United States soldiers marched against the invaders and met the same fate as had previously befallen the armed forces of South America and Mex-

ico. The scientists had suggested that the soldiers go mailed in a composite metal they had made from the blend of three other metals, comprehensive experiments having shown it to be the only substance the ants could not devour. Guns, pipes, everything possible, they said, should be protected with a casing of this metal. No one paid any attention to them. Rebuffed, a group of them interested financial backing and retired to this hill. Here they congregated machines and workers and started building the castle you now see. It was intended at first for an observation base, merely; an outpost, as it were, from which to spy on and study the habits of the insects. But as the years passed, and it became increasingly clear that the country was doomed, the place became thought of as a permanent home and refuge. Commenced in 1955, it was not finished until the year 2000. For some reason the ants were, comparatively speaking, slow in infesting North America. Perhaps the cooler climate had something to do with this. For instance, they swept through south Texas and all of the southern states before they fared further north. When their coming finally drove the inhabitants of this vicinity panic stricken before them, the scientists—those of them who still lived—entered the Castle, accompanied by the workers and their families, and we, whom you see today, are their descendants."

"But the rest of the people!" cried the Professor. "What became of them?"

"They went crazy with fear," replied Soltano. "For fifty years the United States was increasingly the habitat of terrified mobs. The economic life of the country became disrupted. Citizens, white and black, fled from the southern states and added to the congested panic of northern cities. Famine raised its gaunt head; crime became prevalent. Hundreds of thousands died of hunger, of disease epidemics. Those who could beg, borrow or steal a passage abroad, fled to Europe, to Asia. Out of what was estimated to be a population of a hundred and twenty millions in 1935, only seven millions were living in America when the ants turned north."

"And now?" asked the Professor.

"In the whole western hemisphere there are probably a few hundred thousand beast men bred by the Master Ants for food and transportation."

I stared at the Professor with horror. Only yesterday, it seemed, we had left a populous, thriving America. Great industrial cities had sent their smoke and ash into the sky; giant locomotives had carried thousands of people on two ribbons of steel over thousands of miles of country; and now . . . now . . . it was all as if it had never been. Could it be possible that five hundred years had dissipated an empire? Five hundred years!

"Come," said Soltano; "enough of such matters for the nonce. You will learn more of us as the days pass, as you become better acquainted with us individually."

He led the way down into the plaza where we were immediately surrounded by the crowd and warmly greeted.

#### Soltano Tells of the Progress and Danger of the Age

WHEN I stepped down from the rostrum on that first day in Science Castle, it was to meet the girl who had rescued the Professor and myself from the Master Ants. Her name was

Theda. If anything, she looked more beautiful than she did the day before.

"You have gone through much danger, Raymond," she said shyly.

"It was worth it, if it brought me to you," I replied; and meant it.

She did not seem displeased.

"It is the hour for bathing. Let us go to the pool."

I looked around for the Professor; but he was walking away with a group of elderly Scientists, who were evidently bent on entertaining him.

"Very well," I said.

The pool was an artificial pond perhaps fifty yards square. I plunged after her into the pool. When I drew myself, panting, out of the water at the other end of the pond, it was to find myself sprawling beside the handsome lad who had called me to breakfast. His name, I learned, was Servus, and he was Theda's twin brother. Their parents, he informed me, were both dead. Theda and he were enthralled with my accounts of the life and customs of 1926. By the time we were ready to dress for lunch, the three of us were firm friends.

In the days that followed, I learned a great deal about Science Castle and its inhabitants. With Theda and Servus I walked the parapets which circled the roof of the Castle and looked down the steep sides that fell a sheer eight hundred feet before they touched earth. From the foot of the Castle, the hill sloped away. To the east, as far as the eye could see, stretched a level waste; and to the northwest lay a range of somber hills. On the plain, twenty-five hundred feet below, grew nothing green. The sight reminded me of something about which I had wondered more than once.

"How do you get water?" I asked Servus.

"In the early days," he replied, "we relied on wells, boring as deep as four thousand feet; but two hundred years ago they began to fail us. There was a terrible time, I believe, when we were faced with a water famine. Efforts were made to bring water from distant lakes, but without success. Then just in time, our chemists discovered how to make water."

"Make water!" I exclaimed.

"Yes, from hydrogen and oxygen, you know. Now all the water we use is manufactured and stored in great tanks far down in the depths of the Castle, from whence it is raised by means of force pumps."

"Wonderful," I said, marveling at such ingenuity. But wonderful things were what one learned to expect at Science Castle. For instance, the Professor and I were invited one day to be present at a history review to be given to the children of the Castle. The walls of the classrooms were made transparent by means of the ray and there was all the illusion of being outdoors. Highly perfected projecting devices showed moving pictures depicting the building of the Castle. It made me gasp with awe when I realized that the opening reels of this stupendous picture had been taken five hundred and fifteen years before. One saw the motor caravan of scientists and workers coming to the hill and watched breathlessly as the earth was broken by great steam-shovels. One saw the vast walls of the Castle growing upward foot by foot, and finally the finished structure being furnished and stored with all the myriad inventions and devices of the twentieth and twenty-first centuries. In the same manner we were shown how the Castle was enlarged in 2075. Workers sheathed in protecting metal armor labored to raise walls. When

these walls were finished and floors installed, they were scoured with flaming rays which hardened the metal and destroyed whatever insect life might have gotten inside them. So rich by inch we watched the pictured story of how the Castle had grown to its present proportions.

"Some moving picture," I breathed to the Professor. "What a knock-out that would be for Cecil B. DeMille! Did you notice the scene where the panic stricken people rushed by pursued by the ants?" I shuddered. "And the one where the scientists and workers were hoisted up the walls into the Castle? What I can't understand is why the ants couldn't have swarmed over the walls and wiped everyone of them out."

Soltano overheard me. "Because," he replied, "the walls were electrified. Nothing could have lived on them after the current was turned on."

About a week after this the Professor and I were taken into the body of the Castle proper. Far down under the fairy-like buildings and blooming gardens on its roof, were the machine-shops, the laboratories which made possible the pulsing life above. Here we saw great dynamos and whirring machines at whose functions I could not even guess. In one vast room men were putting the finishing touches to what were evidently a number of airships; in another, workers were manufacturing crude oils and thick greases. Whole floors were given over to experimental and research work of too complicated a nature for me to attempt to describe. The Professor was enthralled. He was in his element here and hated to go on.

"What do you do for metal?" he asked suddenly. "Iron, tin, zinc?"

"Hemmed in as we are," replied Soltano, "sufficient metal has always been difficult to obtain. However, we have managed it. A great deal of our tanks, wheels, shafts, and so forth, are made from pulp, from trees grown in the gardens above, and even from vegetable tops, leaves and vines which, treated by a chemical process we have discovered, serve our purpose very well. Iron is the one metal, however, for which we must mine. In those hills north-west of us are old mines which we still work when ore is needed. The work is hard and dangerous. The men engaged at it must go clothed in protecting metal and be constantly protected with flaming rays. However, some day when ore is needed, you may go with us in the airships and see the whole process for yourself."

He dismissed the subject hastily, evidently having something of further interest to show us.

"That," he said, pointing to great metal tanks and a mass of complicated pipes and whirring wheels, "is where the water is made."

He pressed a button. The walls surrounding us became transparent, and looking out we could see the brown slope of the hill. Suddenly I focussed my gaze. About twenty feet from where we stood was a small mound. Something behind it stirred. I caught a glimpse of a metallic body, of waving antennae. "Yes," said Soltano. "It is a Master Ant; they are all around us. But I did not bring you down to show you them; I am going to show you something far more deadly." He guided us into a large lift. "Under us, the foundations of the Castle sink into the ground for a hundred feet. It is where we manufacture the composite metal when needed." The lift sank silently into blackness; the noise of clanging

machinery above grew fainter, seemed farther away, almost ceased. We stepped forth into a wilderness of massive columns. Soltano pressed the now familiar button and the walls faded. We could see the black earth beyond them, and even, it seemed, a foot or two into it. Something gray out there was moving and turning along little runways and tunnels. Millions and millions of tiny things were ceaselessly burrowing and gnawing. For a moment I did not understand, then Soltano spoke and enlightenment came to me. There were the termites—the white ants.

"**B**EIHOOLD the enemies we fight," said Soltano solemnly. "The insects out there are far more dangerous to us than the Master Ants, whose creators they are. Those termites are seeking to demolish the very foundations on which the castle rests by eating away the earth from under them."

I felt the gooseflesh rise on my skin.

"Three times in the last one hundred years have we had to sink our foundations further into the earth. Originally, this basement was only fifty feet deep. Now it is a hundred. In a few years it will be more than that."

"But good God!" I cried; "can't you do something to stop them?"

He shrugged his shoulders. "So far—no! However, our chemists, our various scientists, are busy experimenting night and day. It is hoped that we may perfect a poison, a ray that will kill them off, prevent them from coming near the castle walls."

"And if you cannot?" asked the Professor.

"If we cannot," replied Soltano; "then some day . . . He made a fatal gesture with his hand.

I thought of the busy, joyful life far above, of the green gardens and the laughing women and children. I thought of Theda, and I suddenly realized how much she had grown to mean to me.

"Professor," I said that night when we had retired to our room, "with all those machines and tools at your command, couldn't you make another Time Machine?"

"It possibly could," replied the Professor.

"Then why don't you?"

"Perhaps I shall. Soltano has promised to put a laboratory at my disposal, you know."

Much relieved, I turned away. Here was a way out for Theda and myself. I fell asleep and dreamed I had taken her back on a time machine to 1926 and was showing her the University campus and pointing out the time on the campanile clock. At breakfast, Theda stood behind the counter and filled my tray with cereal, fruit, toast and eggs. That was one thing I had early noticed: there were no idlers tolerated in Science Castle. All worked at something useful. One week Servus, for instance, washed dishes three hours a day; the next he would be tending to the vegetable gardens; bringing in the fresh heads of cabbage and lettuce, gathering the firm, red carrots, or digging potatoes. At my own request, I was given such work. I was amazed at the fertility of those gardens, amazed that fruit trees would grow at all under such conditions.

"Is the soil renewed very often?" I asked Servus.

He shook his head. "It is never renewed."

"Then you must have good fertilizers?"

"We have—electricity."

"Electricity!" I exclaimed.

"Why, yes. Taken from the air by means of

magnetism. But you shouldn't marvel at that so much. Didn't a German engineer do as much in your day? But whereas he got two crops from sandy soil, we get seven."

So it went. I had noticed no animals of any sort in Science Castle, not even cows, yet there was no lack of eggs, butter, milk or meat. Servus again explained the mystery. "Milk is made from turnips and potatoes," he explained. "I believed a man named Ford did that in 1926. Eggs and meat are manufactured synthetically." He went into technical details which there is no need to set down here.

Truly a wonderful place, this Science Castle. It was difficult to realize that its brilliant inhabitants were chained to a hill-top by insects which for centuries had been man's hopeless inferiors. But were they so chained! Hadn't Theda rescued the Professor and me by means of an aircraft? And hadn't Soltano shown us others in the process of being built? And hadn't we been invited to take trips in them? One night while I sat with her on the parapet in the moonlight, I asked Theda about it. "Yes," she replied, "we have air vessels; but save for mining ore they do not do us much good."

"Why not?" I asked.

"Because outside of Science Castle there is hardly a spot they dare land."

"But there is Europe and Asia," I exclaimed. "Perhaps the ants do not control there."

"On the average of once in every ten years," she replied, "expeditions have left here for over the seas—and never returned. My father commanded the last aircraft to attempt the flight. That was five years ago," she added softly. I pressed her hand.

"But they seem to be wonderfully well-controlled machines," I said. "What drives them?"

"Radio power. Waves are sent from a controlling center in the Castle here and received by a device incorporated in the airships themselves. Complete control of the machine is invested in the driver by means of a lever which operates a very simple mechanical arrangement. For a radius of several hundred miles, and in fair weather, the aircrafts are absolutely safe and easily handled. Many of us use them for pleasure rides. But beyond that—" She shook her head. "Perhaps atmospheric conditions interfere with the waves when sent over too great a distance; perhaps the receiving apparatus fails to operate beyond a certain point, though theoretically they should pick up power waves four thousand miles from the sending station. All we know, however, is that those who venture too far—vanish. Perhaps they fall into the sea and are drowned. Or worse still, on the plains, and the Master Ants. . . ." Her voice shivered to silence. For comfort against a black spectre which took on the hideous form of an insect, we drew together.

"Theda," I said unsteadily. "O Theda! Would you . . . will you . . ."

In answer she kissed me.

### The Master Ants Take to the Air

UNDER the thin metal roof which is all that shuts away from us the hordes of conquering ants, I am seated, putting the finishing touches to this manuscript. Of the terrible catastrophe which has occurred, I can hardly write. We were standing one day by the parapet when a young Scientist who had gone on a pleasure spin, planned down from the

sky and landed on the plaza. His face was ashen-grey.

"What is it?" demanded Soltano sharply.

"The ants!" gasped the breathless youth. "The ants have taken to the air!"

"To the air! What do you mean?"

"That they have mounted the backs of insects, of wasps a yard long, and are flying!"

Instantly the Castle was in an uproar. From every direction the Scientians came rushing; from the depths of the Castle, from the gardens and the pool. They assembled in the plaza and listened to the tale the youth had to tell. Attracted by strange activities among the mounds, he had flown nearer the ground than usual, when great insects had spread gossamer wings and pursued him. Fortunately, the speed of the airship had outdistanced them, though at first it had been a close chase! When he finished speaking, Soltano mounted the rostrum and addressed the gathering.

"Fellow Scientians," he said, "if what we have just heard be true, then Science Castle is in immediate and grave danger. You will remember that we have often discussed the possibility of an alliance between the Master Ants and other insects. Now it seems they have enslaved or enlisted a winged insect, probably of the bee family. Not only that, they have evidently fed them with special foods until monsters, capable of bearing a Master Ant aloft have been produced. Sooner or later we shall be attacked. The great cone must be manned at once; the chemical pumps made ready. Let everyone hasten to his post, for we are facing the gravest crisis in our history."

I stared at the Professor with fear. He stared back at me grimly.

"What do you think?" I asked with dry lips.

"That the situation is desperate."

"But the ray cones, the acids!"

"My boy," he said solemnly, "if those insects have really taken to the air, then God help us!"

I sank nervelessly into a seat; then sprang up again as the remembrance of something sent a thrill of hope through my heart.

"The Time Machine!" I cried. "Surely you have finished it by this time!"

The Professor nodded. "Yes," he said, "it is ready."

"Then we can make our escape by means of it."

He looked at me pityingly. "I'm afraid not."

"What's the matter with it?"

"Nothing. Only you forget something."

"Forget what?"

"How we aged when we travelled in it before."

"Well!"

"Don't you see? It would have the same effect on us again."

For a moment I did not understand; then the appalling truth staggered me like a bolt from the blue. The Professor read the dawning comprehension on my face.

"Yes," he said slowly, "yes. If age is caused by the action of environment, then the same friction would be encountered by the body whether it traveled forward in time or backward. In returning to 1926, we would be subjected to the same resistance, the same wear and tear, as we were in coming from it. That would mean annihilation for me, death. For yourself and Theda, would it be much better? You could expect to find yourself an old man of eighty

(Continued on page 178)

# THE MASTER ANTS

By FRANCIS FLAGG

(Concluded)

or ninety, penniless, unknown, in charge of a middle-aged woman. What good would that do either you or Theda? Besides, there is something else to consider. Do you realize that it was only by a miracle we escaped death when our Time Machine fell to pieces on the plain out there? Yet there is no way of returning a machine to 1926, save by hurling it back in time until it, too, disintegrates from old age!"

As I stood glaring at him in horror, there came the terrified clamor of hundreds of voices.

"Look!" cried a woman's shrill voice. "Look!"

Far out on the plain had risen what seemed an eddying cloud. Even as we gazed, petrified, there rose another, and yet another, until the sky was black with them. The Master Ants were coming to the attack!

Of the ghastly fight which took place on the roof, there is little to say. The millions of insects, with their winged steeds, simply fell upon the giant ray cone and smothered it to ineffectiveness with their charred bodies. Nearly two hundred of the Scientists fell in battle, stung to death by the sword-like stings of the flying insects. The remainder fled panic-stricken from the roof into the interior of the Castle and sealed up the entrance with impregnable composite metal. By means of the transparent ray it is possible to look through the walls and ceiling. The once fair garden is being eaten and destroyed. The fruit trees are crumbling into dust. All that is vulnerable is a decaying wreck. As I look at the scene of unutterable desolation, despair grips my heart, and a wild desire to strap myself in the Time Machine and quit this terrible future for the past, almost overwhelms me. But that is impossible. There is nothing to do but stay and face whatever the future holds in store for us. Soltano maintains that our situation is not yet hopeless. Those Scientists amaze me. Their courage and optimism in the face of disaster are wonderful. Now I know what their religion is: It is an abiding faith in the power of their science to aid and uphold them. The Professor tells me of an intricate arrangement for supplying us with air; I do not understand it yet very well, but it is made clear to me that we can live in the interior of the Castle indefinitely. Water and synthetic foods can be made. Meantime, in the splendidly equipped laboratories and machine shops, the scientists and inventors are rushing forward experiments which may release, they say, the energy in the atom and give us possession of weapons which

will destroy the ants and return the lordship of America to man. But as to this, I do not know; I hardly dare hope. Theda leans over me and presses her soft cheek against mine, and though I do not feel at all heroic, I am comforted and made stronger by her love.

Escape or help seems impossible. Nevertheless, I am going to tie this manuscript in the Time Machine, which stands ready at my side, and send it back to the period I have left forever. I repeat my hope that it will fall into the hands of intelligent people and that its contents will be made known to the public. It may be that we shall overcome the ants in the inevitable final conflict between men and insects. In that case we will try to communicate with the twentieth century again. If not, then we bid a final farewell to the people of 1926.

Signed: PROFESSOR JOHN REUBENS,  
RAYMOND BENT.

## What Is To Be Done with the Document?

THE nationally known lawyer laid down the incredible document. For a moment there was complete silence in the room. Finally the President of the University spoke.

"I suppose you wish our advice as to what disposition to make of this . . . this . . ."

"Exactly," returned the lawyer. "I am positive it is a hoax; and yet . . ."

"And yet," finished the Doctor of Science, "there are more things in heaven and earth, Horatio, than are dreamt of in your philosophy!" as Hamlet said!"

The ordinary M. D. coughed. "There is something fishy about this whole affair," he said, "casting no reflections on our host, whose account of how the manuscript came into his possession I believe absolutely. Perhaps someone is trying to cover up the fact that twenty thousand dollars disappeared. But that doesn't sound plausible either. My advice is to lock the manuscript up in a safe. Time enough to publish its contents to the world if any queer happenings should occur—in South America, for instance."

The five other men gave hearty approval to this plan, and there the matter rests, except that there are at least three men in Berkeley, California, who carefully scan the press every day for any strange news from Latin America.