In our November Issue:

Microscopic Buccaneers

By Harl Vincent

Illustrated by Morey

The Brain Accelerator

By Dr. Daniel Dressler

Illustrated by Wesso

Cold Light

By William Lemkin, Ph. D.

Illustrated by McGerr

The Undersea Tube

By L. Taylor Hansen

Illustrated by Wesso

What Do You Know?

(Science Questionnaire)

725

The Secret Kingdom

(A Serial in 3 parts) Part II

By Allen S. and Otis Adelbert Kline

726

Illustrated by Bob Dean

The Moon Woman

By Minna Irving

746

Illustrated by Wallitt

Discussions

754

In the Realm of Books

(Mostly scientific fiction)

756

Our Cover

This month depicts a scene from the story entitled, "The Undersea Tube," by L. Taylor Hansen, in which the marvelous City of the Cavern is made visible as a result of a quake in the undersea tube—and an attendant wreck.
Acceleration in Interplanetary Travel

By T. O'Conor Sloane, Ph.D.

We find ourselves in a peculiar dilemma in reference to one class of stories for which so many of our readers have expressed a preference. These stories fall into the class of Interplanetary Travel and the dilemma is in this: AMAZING STORIES is dealing with the many phases of natural science. Of course, the word science means everything that is known. It definitely means knowledge, and it is not too much to say that the commonest actions of our lives, if the mind has any part in them, are scientific. But this is to a certain extent begging the question, for what is usually meant by science, and certainly what the readers of this magazine understand by that word, is what is known as Natural Science, which can be extended to include ethnology, or the study of the races of men, and philology or the study of languages, and many other such topics. The effect of this is to give an extended range to the subjects presented to our readers.

But to come back to interplanetary travel. If voyages were to be made from the earth to any of the planets, or even to the moon, the distances are so great that starting from rest as the travelers would do, they would have to attain a high velocity in a very short space of time. Such a change of velocity, if in the direction of speed, is called positive acceleration, or more often simply, acceleration. If velocity is checked and reduced, the process is called negative acceleration. If a person were to enter an elevator and it rushed down its shaft with evenly increasing speed, so that at the end of a second it would be moving at the rate of thirty-two feet per second, and at the end of the next second at sixty-four feet a second, the weight of this person in the elevator would disappear as far as the elevator is concerned. If he jumped up in the air, he would strike his head against the top of the elevator and would stay there. If there were a spring balance in the elevator and the person were to stand upon it, instead of showing his normal weight, which might be 150 lbs., it would show simply nothing. But suppose that he started at the foot of the shaft and stood upon the spring balance; the instant the elevator began to move upward he would show more than his normal weight, which would continue to show on the dial as long as the car increased its rate of motion. Once the rate of motion ceased to increase, his normal weight would show.

The point to be made is that weight is entirely dependent upon gravitation—that weight has nothing to do with acceleration, but at the same time the effect of weight might be produced thereby. One of the great feats of baseball players—cited many times—is the catching of a ball thrown from the top of the Washington Monument, which gives a fall of about 550 feet. This, of course, brings it down very rapidly and when the catcher receives the ball on his glove, it will probably feel as though a 10-pound weight landed there. Of course that would only be true for a fraction of a second.

In interplanetary travel, where the travelers start from the earth at a velocity of zero, that is to say from rest, the acceleration must start and must be very rapid, so that the travelers will press, not with weight alone, but with a combination of weight and the force of positive acceleration against the base of the chamber in the projectile, or "ship," as it may be termed. Now this pressure will be so enormous that, in order to reach a planet, or even to reach the moon in any reasonable time, it would probably be sufficient to kill the person, just as he would be killed by a fall—let us say, for instance, from the Washington Monument. On striking the earth, he would be killed by negative acceleration.

One of the ideas in interplanetary travel is to use a rocket-propelled vehicle—that is, a vehicle from whose stern gases will be propelled at high velocity by some explosive mixture. This is the way in which a rocket rises upon its impressive flight into the upper air.

Now some of our readers do not understand how a rocket could work in a vacuum, where there is no air for the expelled gases to press against. Here again there is a bit of science to be learned. The rocket acts by pure reaction—the presence or absence of air has nothing to do with its propulsion. Action and reaction are equal and opposite. If one fires a gun, one feels the recoil against the shoulder, if this gun is fired in the air. If by some means you could be transported with it to a vacuum and fire it there, the pressure against the shoulder would be practically identical with the first. The air has nothing to do with the motion of a rocket and nothing to do with the recoil of a gun except to act as a retarding force. Action and reaction are equal and opposite, independent of the surrounding of the body with air.

So since our readers like interplanetary stories, since they unceasingly ask for them in letters to us, and since there is any amount of science, mechanical, astronomical and other to be gleaned therefrom, we certainly shall be glad to continue to give them, even in face of the fact that we are inclined to think that interplanetary travel may never be attained. On the other hand, in science, "never" has proved to be a very dangerous word to employ.

So many "impossible" things have become almost common occurrences. Much of what we have said above may apply to the fourth dimension, which is almost undefinable in popular terms, yet our readers like it. It does give a basis for good science fiction stories, and we see no reason why even an apparent impossibility should not be invoked for the sake of a good story. Some people have been carried away by the idea of the fourth dimension, much as others have been carried away by spiritualism. Some very curious books have been brought to the attention of the writer treating of the fourth dimension, but we will take it for what it is worth—as a mathematical construction and conception—and it will serve as a fine basis for stories of science and will bring out very good scientific points.
thought impossible that man would ever fly—mind you, fly in the atmosphere like a bird. Ten centuries ago it was thought that gravity could never be counteracted or overcome. And less than five centuries ago a trip to one of the planets was held to be the height of ridiculous imagination. Yet all of these things have been accomplished, and much more. No, I would not say the trip is impossible."

"But it is hardly probable, is it?"

"Hardly. Though the thing merits consideration."

They obeyed in some little trepidation, drawing near the strange conveyance and stopping as a small square opening appeared in the side nearest them.
The Brain Accelerator

Some means could be found to speed up these secretions beneficially, marvelous results might be obtained. Dr. Dressler, being a physician, who also possesses imagination, enlarges on the subject of gland treatment in a highly scientific and plausible manner. "The Brain Accelerator" should make many new followers for this author.

There was no doubt about it. As the ray struck him, the dog showed definite signs of returning animation.
that presented itself to his unbelieving eyes. From over the top of the hedge there slowly rose a luminous face, as weird and ghostlike a spectacle as ever met the horrified gaze of human eye. It was normal in size, a perfect human face and head, with kindly eyes and smiling, far from unpleasant lips. The skin radiated a pale-green phosphorescence, and the eyes were, as Bill Sheridan had described them, shining forth like glowing coals of fire, with a piercing yellow gleam.

Illustrated by McGERR

For fully a minute the two adventurers stood transfixed—every muscle taut and paralyzed. They stared in open-mouthed amazement at the superhuman spectacle.
"Now the plan of the thing is like this" he added, putting aside his pipe and pulling a sheet of paper from the corner of his desk.

Rapidly, with all of his old accuracy, he sketched the main plan and leaned over as he handed it to me.

"You see," he explained, picking up his pipe again, "both pumps work at one time—in fact, I should say all four, because this plan is duplicated on the English side. On both ends then, a train is gently pushed in by an electric locomotive. A car at a time goes through the gate so that there is a cushion of air between each car. The same thing happens at Liverpool. Now, when the due train comes out of the suction tube, it goes on out the gate, but the air behind it travels right on around and
A Tale of the Future

The Moon Woman

By Minna Irving

MOST of our authors, thus far, have been more or less pessimistic of the future. Just why this should be so, we cannot say. Our new author, however, shows nothing of that fear. Rather, she sees a considerable amount of improvement several thousand years hence. Even effectual communication with another planet does not phase her. If the problem of indefinite suspended animation could be solved, we wonder how many people would lend themselves to such an experiment, even with all chances in their favor.

We are sure you will agree with us when we say "The Moon Woman" is a beautiful story.

Illustrated by WALLIT

In a Winged World

Professor James Holloway Hicks was thirty-five when he discovered the wonderful serum of suspended animation. By injecting this marvelous fluid into the veins, a living body became practically dead and remained so for a certain length of time without undergoing the processes of decay.

When the serum ceased to act, the apparently dead man would revive and take up the thread of life again where he left it, and as well as ever. The period of suspended animation was governed by the quantity of serum injected into the blood.

Professor Hicks had repeatedly demonstrated the perfect success of his great discovery on dogs, cats, rabbits, mice, and even on horses, but for obvious reasons had failed to find a human subject. Though he offered a large reward to any man or woman willing to be "made dead" for six months or a year, no one could be found courageous enough to risk it. Even would-be suicides shied at the test, preferring to travel to the next world on a high-speed ticket, or by the popular gas-route, to taking chances with an unknown drug, which might for all any one knew (even Professor Hicks himself) bind the body in the chains of pseudo death but leave the brain alive—truly a frightful condition to contemplate.

So after vainly advertising for a subject, and even canvassing the park benches at night in the hope of persuading some wretched creature to lend himself to the glorious cause of science, the professor decided to try it on himself.

One blustery March night found him seated in his handsomely appointed library ready for an excursion in death. Opposite him sat his friend, Dr. Horace Blinkman, and upon the carved teakwood table between the two men lay the black box containing the serum in a small vial and a little hypodermic syringe filled for the supreme test.

Outside in the bitter wind the professor's luxurious limousine waited at a side door to bear him away to his temporary tomb.

Professor Hicks was clothed in a long, loose robe of fine white woolen stuff, fleeced inside with lambs-wool of a sufficient thickness to protect his inanimate body from freezing hard in winter in the damp cold atmosphere of the marble mausoleum which he had built especially for this great experiment.

His affairs had been put in order a few days before, and in case of his death occurring through any unforeseen contingency, such as some unsuspected freak of the serum, he had made a will leaving his entire fortune to Dr. Blinkman. The doctor needed it; his own scientific experiments had drained his pockets without adding to his reputation, and more than one loan-shark and pawnbroker was acquainted with his shuffling step and
To the professor's amazement, she floated up to the roof like a bird or a gigantic butterfly. From her shoulder blades extended broad wings of a glistening, semi-transparent, membranous material.
slovenly figure. He had borrowed heavily, too, from Hicks, and had been living on the professor's bounty for months.

The clock struck twelve—the hour appointed for the experiment to begin. Professor Hicks rolled up his loose woolen sleeve, revealing a white and muscular forearm, and Dr. Blinkman picked up the fateful hypodermic and poised it above the large vein at the wrist.

"Two punctures," instructed the professor calmly, "each injection will last for six months. A year will pretty thoroughly prove to the world the immense value of my serum. You are to occupy this house during my absence. One year from tonight at exactly twelve o'clock you will come to the mausoleum with my attorney, one other gentleman of science chosen by yourself, and several members of the press to witness my triumphant resurrection. Now goodbye."

Dr. Blinkman gripped the professor's extended hand, jabbed the needle twice in his wrist and the thing was done.

"I will compose my limbs on the davenport," remarked the professor, "so that you may be better able to observe the action of the serum, and take careful notes."

He stretched himself upon the richly upholstered couch and crossed his hands upon his breast. A valuable ruby on his little finger winked malevolently in the clear flood of light from the electrolamp. Already a deathly pallor was stealing over his smooth-shaven cheek, and his eyes were fast losing their accustomed brilliance.

"I feel as though my limbs were going to sleep," he murmured drowsily, "there is a pricking sensation all over me, and a numbness. Horace, I—am—so—sleepy."

His voice died away in a whisper, his faint respirations became slower and slower, and at 12:15 he was to all appearances stone-dead.

Dr. Blinkman closed his ancient silver watch with a snap and laid his hand upon the professor's brow; it was damp and cold. He lifted one of his hands and it dropped limply from his clasp. He held a small pocket-mirror to the blue lips and the clear surface of the glass remained undimmed. There was no pulse, and not the faintest flutter of the heart could be detected. Any coroner in the land would have pronounced Professor Hicks as dead as a door-nail.

**Dr. Blinkman** stood regarding the inert form with knitted brows. What if he were really dead? It would mean great things to him, all this ease and luxury would be his as the professor's sole heir. Yet he knew the apparently lifeless man before him was not dead. He knew he would return to life at the appointed time. He had assisted at too many experiments with the serum on animals to doubt it. His own setter dog had been dead and was alive again none the worse for three weeks siesta in the professor's laboratory. The vial glittering on the table caught his eye.

What if he should administer a little more—enough to make the professor sleep a little longer, say five or ten years? That would leave him in undisturbed enjoyment of this splendid mansion and the income from certain stocks and bonds long enough to complete some experiments he had under way, and so put him on his feet in the scientific world. Professor Hicks would think his reckoning had been wrong.

But would he? Had he not proved the exact duration of the serum too many times to be fooled? The professor was a "square man," loathing deceit, despising trickery, and utterly incapable of a dishonorable action himself.

He would denounce him without mercy if he played any tricks on him. He remembered, too, that each puncture must be made in a different place, and the tiny scars would reveal his perfidy.

The doctor paced the room, his hands clasped behind him, black temptation wrestling with his soul.

A year of this luxury, and then to return to his dingy lodgings in Harlem with their faded brown curtains, worn leather chairs, and tattered rugs; once more to be bound by the loan-sharks, to make furtive rounds of the dusty pawn-shops again, to beg for time from the slatternly landlady—his whole being revolted at the thought of it all.

It would be lifting a man into Heaven for a brief time, then plunging him into the depths of Hell forever.

His bloodshot eyes raged over the *de luxe* editions that lined the walls on three sides, the costly desk-fittings, the rare bronzes, the marble figures guarding the doorway with its sweeping curtains of heavy brocade. He gazed at the humidor with its expensive cigars; his mind traveled to the cobwebbed bottles in the cellars, the gray limousine with its Turkish upholstery and silver vase always filled with fresh flowers now waiting outside, and from the bottom of his treacherous heart he fervently wished the still form on the davenport was really dead, that all these luxuries might be his, not for a few fleeting months but for as long as he lived.

It would be easy to inject any one of the deadly poisons in the laboratory into the veins of the unconscious man, and the long sleep would become the sleep of death.

But each poison left its damning evidence behind, and murder is an ugly word. He was ghastly pale, beads of sweat glistened on his forehead and his knees shook under him.

He picked up the vial of serum, trying to guess the operative power of the fluid it still contained. The oily stuff gave off an opalescent shimmer as he turned it this way and that in his trembling fingers.

Within that tiny crystal cylinder lay his future. It would not be murder—not if all Professor Hicks claimed for it was true. The professor would simply sleep on for a number of years, ten or twenty according to the amount administered, and wake up at the end of that time safe and sound with all his faculties unimpaired. Meantime he would revel in the luxuries he coveted, and would have the means and leisure to conduct the costly experiments in cancer-cure that he felt sure would bring him fame and fortune.

He picked up the little syringe and crossed to the quiet form on the couch. Blinkman had no clear idea of the quantity that should be injected to produce a quarter of a century of suspended animation, and he was too agitated to figure it out, but when he folded back the professor's sleeve and made half a dozen punctures, he felt dissatisfied. Perhaps it would only last four or five years and the professor would wake up and be furious—for every little scar would be a witness against him.

He had already gone too far now to draw back, so he determined to make sure and use all of the stuff in the vial.

He filled and refilled the syringe, jabbing wildly at the professor's arms and legs until the last drop was gone.
Then with a sigh he sank down in the big velvet chair and stared dumbly at the seemingly dead body before him.

Was he dead? Perhaps he had been from the first.

His muscles were so rigid, his flesh so clammy cold.

His eyes were shut, and the violet shadows of dissolution lay beneath the lids.

The doctor shuddered and reached for a towel.

A bell jangled sharply in the silence. He staggered to his feet and rushed into the hall, throwing a fearful glance over his shoulder as he went; it was hard to believe it was not a dead man stretched out on the davenport.

He swung open the door and admitted the professor's chauffeur, Mr. Lecky, who was to accompany the body to the mausoleum and see it properly installed within.

"Is everything ready?" he inquired brusquely after a moment's pause.

"He's dead," replied Mr. Lecky.

"Dr. Blinkman was to accompany me tonight, however, and you will bring them back here. I am explaining these matters to you so that you will understand why I do not return with them.

"I will say goodbye to you now, Stewart, as I have other things to occupy me tonight."

Thus had the professor paved the way for the midnight journey to the mausoleum, and nipped in the bud any suspicion of foul play that might have been born of the peculiar circumstances under which he was to disappear.

"Wait here," said Dr. Blinkman to the chauffeur.

"There is no road up to the house on this side, only a short cut through the woods. We will be back in half an hour.

While in sight of the furred figure on the front seat of the limousine, the men went slowly with the professor slightly in advance propelled by their hands on his shoulders. The chauffeur paused in the act of lighting a cigarette to watch the three dark figures:

"Now I wonder what the legal guy has to do with this trip? Gee! doctors are all nuts."

Once behind the shelter of the thick bushes and low-hanging branches, the two men picked up the professor by the head and feet and carried him swiftly up the hillside.

It was a stiff climb to the mausoleum, and they laid their burden down on the marble steps and stood gasping for breath, and wiping the sweat from their flushed faces, though the night was cold.

Neither spoke, an invisible finger of silence seemed laid upon their lips. The mausoleum was a magnificent structure, perfectly round in shape with a row of fluted pillars supporting the overhanging roof. It was encircled by a flight of shallow marble steps, and bronze bas-reliefs, typifying the immortality of the soul, formed eight panels set deeply in the walls. The domed roof was flattened at the top to receive a thick glass skylight which was protected by an iron grill-work set in a leaden frame. The bronze door swung outward, and was supplemented by an inner door of iron studded with brass nails. Ventilation was supplied by slits in the walls close to the roof, and cunningly concealed in the pattern of the ornate frieze.

As the doors creaked open, Dr. Blinkman involuntarily shrank back from the pitch-black interior, but...
Lecky, more self-possessed or perhaps less imaginative, stepped into the inky chamber and sat along the wall until he found the electric light button. Instantly a flood of soft radiance poured down upon the place and streamed out across the marble steps on the dark form huddled there.

The floor was paved with blocks of black and white marble. In the center stood a bronze sarcophagus lined with softly padded white velvet. The sarcophagus was of unusual size; at the head was a pillow of white velvet for the professor’s head to rest upon, and at the feet an air-tight metal box containing food-tabletoids and a bottle of champagne.

A bronze canopy supported on iron rods sheltered the sarcophagus and completely concealed the open interior from any inquisitive person who might climb to the roof and look down through the skylight. Heavy metallic fringes depended from this canopy all around.

Gently, almost reverently the two men laid Professor Hicks in his gruesome bed, arranged the velvet pillow beneath his head, straightened his white robe and threw the black cloak across the foot of the sarcophagus like a pall. A duplicate key was left by his side in case the effects of the serum should wear off sooner than expected.

The light was then turned off and the doctor and lawyer stepped out side by side into the chill March morning, closing and locking the heavy doors behind them. The cold light of a struggling moonbeam pierced the clouds and fell across the marble steps as they turned once to look back; all else was in blackest shadow.

One Year Later

A YEAR had passed since the March night when Professor Hicks had been secretly laid away in the marble mausoleum on the lonely hilltop. Dr. Blinkman again sat in the library awaiting the arrival of Mr. Lecky and the representatives of the press.

With him was Professor Perkins, alert, keen-eyed, bubbling over with scepticism. “Mark my words,” he cried, “you will find that I am right, and our learned friend has been another martyr to the great cause of science. Dear me! where do the others stay? It is time we were off.”

“I sent the car to the 8:15 to meet Mr. Lecky,” replied the doctor, and the correspondents will also come up by that train. They should all be here together in a few minutes now.”

Dr. Blinkman had improved with a year of easy living. His form had taken on flesh, his face a ruddy color, and his manner the pomposity of one accustomed to command. He had no fear of the result of the night’s trip to the mausoleum; he felt sure that Hicks was dead months ago of too much serum. He had tried heavy doses repeatedly on animals in the interim, and while they had lain without any signs of decay for a week or more, according to the dose, at the end of that time all had given indisputable evidence that they were dead. He had even kept several until the odor became unbearable, desiring to convince himself beyond all doubt that the serum was fatal in large doses.

All his experiments had set his mind at rest. Tomorrow everything would be his, he thought exultantly as the blare of a motor-horn announced the Lecky’s arrival.

The lawyer was soon followed by a hired touring-car containing the special correspondents who had been invited to the “resurrection.”

After some light refreshments and a hasty explanation from Mr. Lecky regarding the nature of the professor’s experiment, the entire party was on the road to the mausoleum within the hour.

The night was clear and cold, the sky studded with millions of stars and the earth blanketed with a heavy fall of snow. Stewart, hunched down in the front of the limousine with his gloved hands on the wheel and the speed limit off, was turning matters over in his mind:

“Darn funny,” he was thinking, “this trip out in the woods again same time as last year, with all these strange guys along too. Something I don’t understand. These professors are all crazy anyhow, but Hicks was a good old scout. Wish he’d come back and give this Blinkman bozo the air.”

Thus ruminating, he arrived at the foot of the hill with the hired car close behind, and the whole party piled out in the snow, and started to climb the narrow path Indian file, leaving the chauffeurs to gossip and smoke.

Not a footprint of man or beast had broken the smooth snow on the circular steps. The strange edifice rose glimmering from the snows that banked it and hooded it, white, cold, silent, a fit waiting-room on the mysterious route to eternity. Ice had filled the lock of the bronze outer door and had to be thawed out with matches before the key could be inserted. A reporter who carried an electric flash-light threw the beam on the lock and the rest stood grouped at the bottom of the steps, all eyes and ears and shivering with cold and expectancy. By tacit consent, as the great door swung slowly outward, Dr. Blinkman, Professor Perkins, and the newspaper men dropped back to let Mr. Lecky enter first. As on his first visit the preceding year he pressed the button in the wall and the electric light streamed down upon the interior from the rows of bulbs around the skylight.

Everything was exactly as it was left twelve months before.

One by one the awe-stricken men stepped softly in and gathered round the sarcophagus, staring down wide-eyed upon the white face of Professor Hicks. No change had taken place in those frozen features; there were no indications of decay and neither were there any signs of life. To all appearances he was still a dead man—and the hands of Mr. Lecky’s watch pointed to ten minutes after midnight.

The professor was overdue on his journey back from oblivion.

No one moved, no one spoke, every eye was riveted unwinkingly upon the rigid form stretched out under the bronze canopy, every heart beat madly with suspense, and teeth chattered like castanets with excitement and the deadly cold of the tomb.

“One o’clock,” said Professor Perkins at last as he pocketed his watch. “Supposing Professor Hicks’ theory of his serum to have been correct, perhaps it would be as well to assist returning circulation by rubbing the extremities. Let us remove him from his present resting-place to the floor.”

So the poor professor who had sacrificed himself on the altar of science was tenderly lifted from his huge bronze coffin, and for more than an hour the men took turns at rubbing his icy hands and feet, and working
his stiff arms up and down like pump-handles; at the end of that time, and after every test known to medical science had been applied, Professor Perkins sadly pronounced him to be dead.

He was restored to the sarcophagus, the long black cloak was again thrown over him, this time to conceal his face, and Mr. Lecky, turning to the horrified group, spoke briefly and solemnly:

"I have already explained to you, gentlemen of the press, the fact that we are obeying the instructions of the late Professor Hicks in gathering here tonight. He made an heroic experiment in the interest of science and has failed. On my return to my office tomorrow, I will hand you the explanation of this most lamentable event as prepared by him to be given to the world in the affair as prepared by him to be given to the world in the event of just what has happened—his death. In view of the peculiar circumstances surrounding his demise, I think you will all agree with me that a second burial would be a mockery, and that we cannot do better than to leave him here to the long sleep, from which we are now convinced he will never wake in the flesh."

Slowly, solemnly, the silent company passed out, the great door clanged shut for the last time, and the mausoleum's quiet occupant was left to await the resurrection dawn.

**The Awakening**

IN the dew of the early morning a young woman alighted in the cedar grove surrounding the ruined mausoleum where Professor James Holloway Hicks had lain for two hundred years. Her bare white feet were thrust into sandals of snowy leather, her superb form was clothed only in a scant garment of thin white silk that only reached to her dimpled knees and left her arms and shoulders uncovered. Her glorious golden hair was confined by a fillet of silver studded with turquoises, and anklets and armlets of the same jeweled metal linked and clinked musically as she walked or rather glided forward.

Suspended from a thick gold chain about her neck dangled a cylinder about two inches long and of a dull green substance. From her shoulder-blades extended broad wings of a glittering, semi-transparent, membrane-like material, and these beautiful wings she folded as her feet touched the ground—apparently without volition just as a bird folds its pinions when it alights, but really by touching a small protuberance set in a belt of white leather that crossed her full bosom.

She looked around her, and her eyes caught the gleam of marble through the trees. Stooping, she touched the backs of her sandals and immediately a pair of little wheels sprang out under the soles; on these she rolled smoothly and rapidly towards the crumbling tomb. Rain had stained its purity, sun and wind had cracked and crumbled the cement that held the marble blocks together; many of the columns had fallen and were buried in weeds and débris, and the walls were half submerged in a rising tide of soil, only the upper half of the bronze door remaining above the ground.

"It is a temple of the dead," she exclaimed delightedly, "and those are supposed to be in existence now. Oh, my God! Grandfather must come here tomorrow and explore it. He may find some priceless relic of the old, old barbaric times, or new material for his film on 'Ancient Customs of a Wingless World.'"

Her curiosity was aroused and she circled the ruined mausoleum slowly on her wheeled sandals, looking for a crack or a peep-hole in the walls, but solid marble confronted her. Determined to find some fissure through which she could see the interior, she spread her majestic white wings and rose above the roof, where she hung poised in the sunlight, gazing down upon the fragments of the iron grill-work still adhering to the leaden frame. The sheet of glass beneath it had long ago dropped and been shattered on the bronze canopy below.

The winged woman had a good view of the inside of the mausoleum through the broken skylight, and she studied the bronze canopy-top with increasing interest, trying to conjure what it could conceal.

Resolving to find out and reap the glory of a first discovery, she alighted on the roof and removed the fragments of iron still projecting around the edges of the opening. The air that arose from within was cool and sweet. She measured with her eye the distance from the roof to the flat top of the canopy beneath. She could not make use of her wings in squeezing through the narrow skylight, and the canopy appeared to be as solid as the marble walls. Seizing the sides of the aperture, she fearlessly lowered herself through it until she hung by her hands, then let herself drop.

When 150 pounds of solid, healthy womanhood struck the top of the canopy exactly in the middle, the metallic supports snapped like so many pipe-stems and the whole structure heeled over like a full-rigged ship in a squall, and spilled her on the floor, where she sat half stunned by the fall and afraid to move.

The floor was deep with fine gray dust mingled with shreds of black near the great sarcophagus. The canopy had toppled to one side clear of the bronze coffin, which now stood fully revealed. All around her on the floor were little reddish heaps of rust-like gouts of dry blood where the metallic fringes had fallen. She had discovered the sarcophagus had no lid and was so frightened at the thought of the horrible unknown dead thing within it, that she was about to unfold her wings and try to scramble out through the roof again when a sound broke the profound stillness and robbed her of strength to stir.

It was a long, fluttering sigh.

She closed her eyes in helpless terror.

When after at least ten minutes of absolute silence she ventured to open them again, a large white hand was dangling over the side of the sarcophagus.

She sat staring at it, mute, paralyzed, waiting for the dead to rise and destroy her for having dared to invade the sanctity of the tomb. Then a dark head appeared and a pair of broad shoulders, and a man sat up and looked stupidly around him.

His eyes wandered slowly round the bare, windowless walls, and rested on the beautiful intruder. He spoke in a thick, hoarse whisper, articulating the words with difficulty like a child first learning to talk:

"Who are you?"

Though trembling with fear, she understood him at once and answered timidly but clearly:

"I am Rosaria. Please don't hurt me."

The man continued to gaze at her for some time in silence, evidently pondering deeply over some problem he could not grasp, but when she made a motion to rise, he spoke again, hurriedly but in a clearer voice than at first:

"Don't, I beg of you. Remain where you are, my dear young lady, I am—not—not exactly presentable."
 SOMEHOW his tones sounded more natural now, and she sank back to her sitting posture on the dusty floor obediently, but wondering, fearful that this “dead” man was half bones and so objected to being seen in a skeleton state. She was too amazed at this weird tête-à-tête to be frightened now.

The truth was that a quick downward glance had revealed to the professor the scandalous fact that he was clothed only in a layer of dust and a few tattered shreds of his silk undergarments. It was a most embarrassing situation to say the least, but probably it did more to shock his dormant senses into their normal activity than anything else could have done.

Professor Hicks was a very modest man.

The fair Rosaria was next to break the silence:

“You are dead, are you not?” she asked gravely.

“But I never knew that the dead could speak. This must be why we disperse them, so they cannot talk to us and bother us about their affairs.”

“Dead!” cried the professor, his voice still a trifle husky, but growing stronger every minute as the returning flood of life swept through his veins. “I am not dead, I’m very much alive. I have not the faintest idea who you are or why you are here, but, no doubt, you can tell me why Dr. Blinkman and Mr. Lecky are not here at my awakening. Perhaps I have acquired consciousness too soon—or have I been longer than I expected to be? My robe must have been destroyed by moths—something I should certainly have guarded against.”

The winged woman heard him through attentively, and at once grasped his meaning. “I do not know your friends,” she declared, “but evidently you have over-slept yourself. Why did you come to a place like this to sleep, an old-time temple of the dead, probably the only one left on earth; our dead have been dispersed now for many generations.”

Professor Hicks gasped, and in his agitation almost forgot his nudity and came near to leaping out of the sarcophagus.

“Generations!” he almost shrieked. “Good Heavens, girl! how long have I been here? What year is this?”

“This,” said Rosaria, “is the 10th of June 3014.”

For five minutes the professor remained actually dumb with amazement. Then his voice rang out in a hoarse cry of mingled astonishment and triumph:

“The serum! the serum! it is more powerful than I thought. I can bridge the centuries for the human race. I can make man almost immortal. Animation has been suspended in me for two hundred years.”

He suddenly realized that he was hungry: two hundred years is a pretty long time between meals for a full-grown man. He felt for the metal box of tabloids that had been placed at his feet. The hinges were gone from the lid, which had fallen off, and the tabloids were merely pinches of powder. He picked up the bottle of champagne, struck off the neck on the side of the sarcophagus, and drank thirstily. The wine was flat and sour, but it moistened his dry throat and parched tongue most acceptably.

Something heavy and cold fell against his naked side; it was the key to the door of the mausoleum.

“Now my dear Miss Rosaria,” he said, “I am placed in a very peculiar position, which I will be able to explain to your entire satisfaction when I am a little stronger. Can you not procure me some clothes and something to eat so that I can leave this terrible place? Here is the key to the door.”

He lifted the great key and threw it at her feet.

But Rosaria shook her head:

“The key is no use,” she said, “the door is half underground now. You can escape the way that I entered, through that hole in the roof.”

He glanced round at the walls which had enclosed him for two long centuries and shuddered:

“I cannot possibly go out in this condition, I must have something to wear, and I am terribly impatient to breathe the free air and walk on good old terra firma again.”

Rosaria sprang to her feet:

“I will go at once,” she cried, “do you wait here until my return. I will fly back within the hour.”

As she stood up, she unfolded her white, glistening wings in such a way as to form a screen between herself and the shrinking man who was vainly trying to hide himself in the bottom of the bronze box. To the professor’s amazement, she floated up to the roof like a bird or a gigantic butterfly. Seizing the edge of the opening in her strong white hands, she deftly ferled her wings while Hicks stared, open-mouthed, and raising herself through the aperture, spread them quickly again and soared up, up against the blue sky, until he could see her no longer.

“The human race has developed wings like the angels since I retired from the world,” mused the professor. “Many marvelous things must have happened while I slept.”

He fairly trembled in his eagerness to leave the mausoleum and see for himself the progress the world had made.

He rose, stretched himself, clambered over the side of the sarcophagus and stood with his bare feet in the dust of centuries. He walked over and pressed the electric light button near the door; the button fell off in his hand. He gazed overhead at the patch of blue sky and saw what he took to be a large bird pass swiftly across it; later he learned it was a man flying.

Soon after he heard something on the roof and darted behind the fallen canopy, which afforded an excellent screen. Rosaria appeared at the opening and dropped a bundle through it. The professor crawled out from behind the canopy, grabbed it and scurried back to shelter. The bundle contained a garment of purple silk reaching to his ankles, a pair of white leather sandals with what looked like flat buttons at the heels and little folded fans under the soles, and two long ribbed contrivances attached to broad pieces of leather.

He could not imagine what they were intended for, and after pushing and pulling them, trying to shut them up and spread them open, he finally threw them aside in disgust and attired himself in the robe and sandals.

When he was dressed he shouted boldly: “Miss Rosaria! Miss Rosaria!”

There was a swish overhead and the winged woman knelt at the opening and looked in.

“I dropped on that broken thing over there when I came in. You see there is no room for me to use my wings, the aperture is too small. I could use them going out because I could catch hold of the edge with one hand and fold them up with the other before I climbed through. But I can’t, coming down. I’ll have to hold on by both hands and drop. It is too far to the floor, so you must stand up in the box and catch me. Only be careful not to break my wings.”

Wonderingly, the professor climbed back in his bronze coffin again, stood up to his full height and stretched out
THE MOON WOMAN

his arms. Fortunately, the roof was not very high and he could reach her ankles with his hands. So she rested her pretty sandaled feet on his palms to steady herself before she let go. The professor made a valiant effort before she let go, but staggered under her weight and both fell into the bottom of the sarcophagus. With that white and gold bundle of womanhood in his arms, the professor suddenly felt how silly all his crucibles and retorts and serums had been. He could not even remember the formula of the serum of suspended animation, and he didn't care if he never remembered it now; it had served its glorious purpose, it had bridged the centuries between him and this super-girl, who was winged like an angel, and he felt that he was through with all that had been so important to him two hundred years ago.

For the first time in his two hundred and thirty-five years, the professor was in love.

Laughing, but not in the least embarrassed, the remarkable Rosaria disentangled herself from the professor's arms and sprang lightly out upon the floor.

"Oh!" she exclaimed, "where are your wings? Why didn't you put them on?"

"My wings?" said the bewildered professor feebly. "I have no wings, my dear Miss Rosaria. Nobody had wings in my time."

"No," she said calmly, "I don't suppose they were invented then. Eat your lunch and afterwards I will help you put them on."

From a silver box delicately enameled in colors hanging from her wrist by a slender chain, she produced a number of small vials bearing tiny labels, and filled with differently colored liquids.

Rosaria enumerated the various edibles as she handed him these vials:

"Roast beef, wheat, chicken salad, cheese, potatoes, oranges, coffee and wine. These," she explained, "are extracts of the essences of the foods and drinks I have just named. By reducing them to the actual concentrated essences necessary to nourish the human system, we avoid taking waste matter into our stomachs. We have thus eliminated a great deal of unnecessary work and solved the servant problem and expense that used to be such a source of annoyance to our grandmothers. The kitchen range and sink have disappeared with the butler's pantry and the storeroom. There are no meatmarkets, no grocery-stores, no dairies; everything we eat and drink is prepared by the government laboratories and sold in drug stores. A year's supply of food for a family of eight persons may be kept in a small cellarette."

By this time the professor had swallowed his lunch. While he felt sustained and wonderfully strengthened by the essences, at the same time it seemed too much like taking medicines to be enjoyable.

ROSTRIA now assisted the professor to strap on his wings with the broad leather belt, explaining as she did so, that they were controlled by a tiny spring on his breast which turned on or off at will the electrical current drawn from the body of the wearer, which also controlled the action of the wings. It was all so beautifully simple, the professor wondered why nobody had thought of it before the clumsy airplane of his time was invented. With a little practice and the help of his charming companion he was soon able to balance himself quite well in the air, though he could only rise a foot or so above the floor in the restricted space of the tomb. But when he attempted to catch the edge of the skylight opening and climb out, one of his wings collided violently with the roof because he forgot to touch the spring, and snap went a rib.

Poor Professor Hicks tumbled to the floor and pretty Rosaria wrung her hands in dismay.

"It is too bad," she cried. "It would have been so easy to go out that way. Now I will have to use my radiomatic and partly destroy your lovely temple."

She touched the small, dull-green cylinder that hung from her neck:

"All women carry them," she said, "for since everybody flies who can afford to buy, borrow, rent or steal a pair of wings, it is not safe for any woman to fly out alone without being able to protect herself. I hate to spoil your temple though."

"It is not a temple," exclaimed the professor hastily, "it is just a tomb, a place to put the dead in away from sight. There were much finer ones than this. Don't you be afraid to wreck it, I—I hate it!" he jerked out disgustedly.

"Why," she asked suddenly, "did they keep you? Why didn't they disperse you? Or did you die long before our method of dissolving the dead into nothingness was adopted?"

"People were either entombed in the earth or in a crypt or mausoleum like this in my time, or were cremated," he replied. "I never heard of any other way of disposing of the deceased—unless with quicklime, which was only used on the bodies of criminals."

"Oh!" said Rosaria, "how funny! It must have been dreadfully unhealthy to have a lot of dead people lying around."

"What do you do with them now?" inquired the professor.

"We disperse the remains," she answered. "The coroner turns a powerful X-ray upon a body and it vanishes, resolves into nothingness. It is so much cleaner—and cheaper."

"Can you use that little gun of yours on the locks of these doors?" asked the professor, impatient to get out. Just then the marvelous X-ray did not interest nearly as much as the thought of freedom. The very idea of having spent two hundred years in the limited space of the marble chamber almost stifled him. He wanted to feel the cool winds of heaven on his brow, hear the songs of the birds, touch the green leaves once more. The serum did not interest him, now that he could look at Rosaria's exquisite profile.

"You can't get out of that door," said his fair deliverer. "It is closed and the earth is banked against it half way to the top. I will make an opening above the level of the ground as nearly as I can judge."

She lifted the little cylinder and pointed it straight at the marble wall.

Professor Hicks heard no report, saw no flash, but almost immediately a tiny bubble was traveling rapidly up the smooth surface, and as it moved, the marble melted beneath it until a fissure an inch wide appeared.

Rosaria still stood with the little cylinder extended as if taking aim. The bubble on the wall vanished when it had covered a foot and another bubble took its place, traveled the same distance and a third bubble continued the crack. This was succeeded by a fourth and a fifth until three sides of a square was formed. The direction taken by the bubbles was determined by the position from which they were aimed. With the sixth bubble the section of the wall tumbled inward, raising a great cloud
of dust as it fell. Blue sky, green trees, and sunlit turf appeared through the opening, which was breast-high.

"The radiomagnetic fires a bubble of radium gas," explained Rosaria, "and nothing can withstand it, neither stone nor steel, nor iron nor living flesh."

"I feel," said the professor irrelatively as he gazed out into the world again, "like a ghost. I am two hundred and thirty-five years old and I feel like an infant in knowledge beside you."

Rosaria opened her violet eyes wide, and shook her shining head gravely.

"I am not wise," she said earnestly, "I only know the common things I see, but the world is full of very wise people—those who know how to harness the winds and direct the stars, and make the sun obey. Disease is unknown and death rarely occurs, unless in accident or battle, until the mind becomes so weakened that it can no longer command the forces of the body."

"I suppose earth has changed greatly since my time," he sighed, "and all the governments of the various countries have also changed."

"There is only one government now over the entire world," said the winged girl. "The summer of 1930 a projectile was fired from the earth to the moon, and it was successful in reaching it. It was then for the first time that the moon-people were sure that the earth was inhabited and therefore habitable. So they came to earth in a great cylindrical car—at least some of them did, and finding earth so very far behind moon-times, and also that very large areas on its surface were unpopulated, the moon-people remained here, and sent for many more. Being so much wiser and so much farther advanced in civilization than the earth-people, they became rulers here, and by intermarriage soon improved the earth-races—mentally, morally and physically."

THE professor pondered over this astounding information a few minutes before he asked another question:

"Are you still able to travel from the earth to the moon and vice versa?"

"Oh, yes," answered Rosaria, "almost everybody who is anybody at all takes a trip to the moon once or twice a year, and the moon-people are frequent visitors here. This is also true of the nearer stars, but we have not yet found a way to withstand the long period of traveling in the intense cold in order to reach Jupiter."

"But you still speak the same language—the good, plain English that was spoken over half the globe when I withdrew from active life to my long rest."

"That," said Rosaria, "is because English is so much more expressive and contains so many more words than the language of the moon-people, which is only founded on half the letters of the alphabet, and moreover is very difficult to pronounce properly, being a series of gutturals from the throat rather than the tongue."

"And animals?" queried the interested professor.

"There are very few, only the cow, the hog, the hen and the dog have been allowed to survive, the three former because they are useful for food and fat, the latter for friendly companionship and protection while we sleep. The weavers make furs from silk and wool far more beautiful and durable than the finest pelts. Silk, too, is manufactured from vegetable matter, independent of the silkworm, which is now seen only in museums. So it is with ivory, leather, and gems; science has found out the secrets of nature and makes them far better and at less cost. But had we not better climb out of here while it is yet light?"

The professor gallantly knelt for Rosaria to mount upon his shoulders and she wriggled through the narrow opening without injury to her precious wings. Professor Hicks then scrambled out, aided by the lady's strong little hands. He stood looking round him at the green woods, the glimpse of the Hudson, but a few miles distant, and the azure heavens through which sped occasional specks he knew were men and women. But he looked longest at the ancient mausoleum which was yet younger than himself, and like himself had withstood the assaults of two hundred years. Then he turned and gazed spellbound at his lovely companion. He felt that the wonderful sermon had fulfilled its mission, and that there was no need of it in this marvelous new world into which he had returned. Then and there he ceased to be the professor; he became simply James Holloway Hicks.

"And you?" he asked, "are you an earthwoman?"

"Not altogether," said the winged girl, "I was born of an earth-father and a moon-mother."

Strange flutterings assailed the heart of James Hicks, hitherto callous to female charms, and then happened the most surprising event of that surprising day.

He dropped gracefully on one knee at the feet of his enchanting rescuer and lifted her dainty hand to his lips:

"Miss Rosaria, are you married? If not, will you fly through life with me?"

* * *

THE morning sun was streaming through the long windows of his study. Outside every branch and twig and bush was sheathed in ice and flashing like a million jewels. The professor turned his head and saw Dr. Blinkman smiling at him from the depths of an easy chair:

"I thought it wouldn't work on you," he said, "but you have had a good night's sleep, and at times you seemed to be dreaming."

THE END.
A Choice Selection

"Beware after Dark," by T. Everett Harre. Published by The Macaulay Company, $2.00.

For one, have no fault to find with this collection of short stories, which, for the most part, properly belong in the "Fantastic Adventure" class. A few might be called occult and bizarre. Notable among the better stories are: Arthur Macken's "Novel of the White Powder," George W. Bayly's "The Sunken Land," Edmond Hamilton's "The Monster-God of Mamwhit" and H. P. Lovecraft's "The Call of Cthulhu."

Readers of Amazing Stories will be particularly interested in the stories by Hamilton and Lovecraft, whose works occasionally also appear in this magazine.

To me Lovecraft was especially interesting. He seems to me to have the divine gift of "word wizardry" with which he plays on the emotions and paints pictures and impressions of poignant clarity. His "Colour Out of Space," which appeared in the October, 1929, issue of Amazing Stories, has always seemed to me to be a marvelous bit of writing.

But even the lesser part of this collection is thoroughly enjoyable. Mr. Harre showed obvious good choice in his selection of these stories, and a great deal of care. They are all worth reading. - C. A. B.

"Electropolis"

"Electropolis" (M. German), by Ostfried von Hanstein. Published by Levy & Muller, Stuttgart, Germany. $1.75.

By this time it is quite safe to say that von Hanstein's pet idea seems to be one of utilization of deserts and tropical territories. This subject forms the basis of his two earlier books; "Emperor of the Sahara Desert" and "The Farm of the Missing Man." His ideas reach the pinnacle in his last book, which he calls "Electropolis"—a city of technical wonders.

A Mr. Schmidt inherits the formulas and inventions of the hero of "The Farm of the Missing Man." He has also bought an enormous tract of desert land from the Australian Government, on which land are located subterranean rivers which provide him with power and enormous deposits of gold and radium, which provide him with wealth. He wants, of course, to set up an empire, independent of the rest of the world, and his dreams are almost realized when the Australian Government declares war. Those plans are nipped in the bud, but something much more disastrous occurs and marks a definite change in affairs.

The book is convincingly written, the illustrations are good, and the lover of scientific fiction will find a veritable mine of proven and possible inventions, which will stimulate the imagination and provide good entertainment. - C. A. B.

---

**READERS' VOTE OF PREFERENCE**

<table>
<thead>
<tr>
<th>Stories I like:</th>
<th>Stories I do not like:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
<td>3.</td>
</tr>
<tr>
<td>4.</td>
<td>4.</td>
</tr>
</tbody>
</table>

Why:

___

___

---

This is YOUR magazine. Only by knowing what stories you like, can we please you. Fill out this coupon, or copy it and mail it to Amazing Stories, 381 Fourth Avenue, New York City, telling us what type of story—interplanetary, biological, psychological, archeological or other kind—you prefer.

Also, we are very much interested in knowing how you like our new dress and make-up. We are trying to make Amazing Stories a real magazine, but we need your help.

I prefer

Name.

Address.

City.

State.