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#### Abstract

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These new books, as usual, are printed on a good grade of paper, and contain brand new stories never published before in any magazine.

Each book (size $6 \times 8$ inches) contains one or two stories by a well-known science fiction author.

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# WONDERS OF PROGRESS 

By HUGO GERNSBACK

PROGRESS, like evolution, is of a gradually slow nature, and while it may be said that progress is far more rapid than human evolution, particularly from the biological standpoint, it should be noted that both usually are time-consuming.

Thus, the progress of the aborigine who first invented fire by means of friction and our modern match covers a great deal of time on our own time scale. The invention of the first crude wheel down to the latest rubber-covered automobile wheel also covers a long stretch of time, as human beings figure time.
Progress, on the other hand, is very insidious in that coupled with what we are pleased to call modern civilization, it creeps upon us unawares and changes our whole mode of life in a truly miraculous manner. It is not to be supposed for a minute that such progress will stop and it is quite possible that our present type of civilization will go on for many thousands of years until humanity gradually rises to a pinnacle undreamt of today.
During this future time, it is quite possible that there will be many setbacks ; in other words, the curve will not be constantly rising, as this would be against all teachings of past history. It is even conceivable that humanity will go back to the dark ages for a spell, only to rise to new and greater heights. It has thus been in the past, and it will probably be thus in the future.

Our present progress is particularly precarious and few people hardly ever appreciate by what a fine thread our present civilization is hung. A cataclysmic war might well wipe out much of our civilization. It is not usually forces -from the outside that change progress, but
rather the stupidity of the human race itself.
Thus, for instance, our entire present civilization is balanced on the thing which we call transportation, and transportation has grown to such a vast network that practically all human beings and particularly those located in the largest centers are dependent upon it. If there should be a nation-wide breakdown of transportation, it would not take very long for humanity to descend to barbarianism once more. Stop all trains, stop all automobiles, disrupt telegraph and telephone service and destroy our water works, usually distant from the large cities, and you immediately have chaos. Modern civilization is reared upon transportation and is inter-related in such a manner that neither the cities nor the farms can do without the transportation.

It does not take a great imagination to figure out what would happen if all railroads and automobiles were to stop operating for any great length of time. A city like New York, for instance, if cut off from all outside sources, could not possibly last more than about two weeks without its population being reduced to starvation, which, in its turn, would bring food riots and worse.

Nor is it to be supposed that progress will stop at our present transportation methods. The chances are that, let us say 100,000 years from now, railroads and automobiles and land traveling will be obsolete. Most of the traffic will then be by air. This will make progress then even more precarious than it is today because humanity will then be dependent upon an aerial transportation machine, which will be even more fragile than our present land transportation machinery.

(IINBCtretion by Poul)
Impatiently, he gave the shrub a last mighty tug, and pulled himself out of the basket onto the marshy ground!

## THE ELIXIR OF PROGRESS

## By PHILIP J. BARTEL

- Horror-stricken, Burke-Cliff, the Nutrition Council's dullest worker, gazed at the irreparable blunder he had committed. He had destroyed beyond possible recovery the world's last supply of vi-tality-giving Spinach!

He lifted muscular hands to his high, bulging forehead, and pounded his hairless skull in hopeless desperation.

What would his superiors say? What would his punishment be? were the thoughts that passed through his fearquickened mind.

Burke-Lars, director of Nutrition Council B-11, had hesitated to detail his slower-minded assistant to the all-important work of cleansing the last reserve of Spinach of parasites, but he had been ordered to leave an assistant in charge, in order to answer a summons from the Council-Governor Burke-Mel.

Painstakingly, Lars had shown Cliff just how to feed the vermin-destroying mortygen in quantities sufficient to preserve the fleshy leaves from the devastating attack of the insects.

With a move of his clumsy fingers, Cliff had turned the projection lever to its fullest extent. Before his dull wits had grasped the danger, the lethal fumes of mortygen had burned leaf, stem, and seed to a black viscous mass. Long experience told him how useless it was to search the mile-square glass-house for a single living seed.

Fearfully he turned to answer the visitor's signal. "Had Burke-Lars returned so soon ?" he wondered.

The opening of the forty-fifth century had found Humanity stolidly happy in the midst of universal activity. Fifteen hundred years of Family Government had benefited all. And why not?

- The tremendous success of Mr. Bartel's "Twenty-Five Centuries Late," recently published in our pages; will make his latest story, written in the same vein, heartily welcome.
Our author's stories, like those of Stanley G. Weinbaum, have writing-style as the keynote. It is this more than the plot and science which makes the stories so different, so much of a relief from the stereotyped phrasing of many other authors.

The present tale we could call a "semisatire," for, though to the characters in the story everything is very serious, you will be forced to smile often at the peculiar actions of the characters-peculiar to us, two thousand years behind them in development.

Hadn't all ancient forms of government failed? Even the dream of philosophers, Universal Socialism, hadn't been able to solve the problems it had inherited from the Capitalistic Syste . It had, however, eradicated all national boundaries and trained each individual into a useful and expert worker-workers who had turned upon their greedy and corrupt leaders, with ruthless vengeance.

Slowly the working classes had segregated and married only among themselves, thereby creating huge families. These groups ruled themselves, and easily gained control of all industry and science. Each family proudly concerned themselves only with a single art, and spent the years carefully promoting and developing its chosen work. The realization of the need of a common co-operative system resulted in the Great Confederation of 2903, which directed the formation of the "Council" Family Government.

Every worker belonged to an operative council, which was assigned to certam labors. This council was ruled by a director and an assistant. The directors were
all members of the Industry's Governing Council, which had as its absolute ruler, the head of its family, usually its oldest member, the Patriarch.

In their turn, the heads of the Industry Councils were members of the Supreme Council which decided on all matters pertaining to the benefit of Humanity. Second only to this council was the Eugenics Council, which directed the mating of the citizens, brought up their children, and advised on problems of public welfare.

Ever since its formation, the Burke Family had been the guiding spirit of the Nutrition Council. To them it was given to guard the health of debilitated Humanity. They were proud of their accomplishments in their own field. True enough, their perfection of pills as a substitute for solid foods did cause the disappearance of natural teeth, but the Science Council quickly invented practical and beautiful artificial sets.

And if evolution was changing the shape of man's jaws, due to the lack of masticatory exercise, that was a problem for the Health Councils. Narrow jaws accentuated the bulge of their heads and gave them the desired appearance of great mentality.

The Burkes also claimed that their concentrated forms of foods were responsible for the disappearance of lust, material greed, and many other worldly vices. Their enemies blamed them for causing general debility and poor resistance to colds. Again they denied responsibility, and pointed to the "weather-hoods" that all wore outdoors. Surely that little inconvenience was worth the avoidance of stomach disorders and time-wasting meals!

But what the Nutrition-Burkes did not openly admit, was that much of their success was due to the discovery of Vitamins L and M in "Spinacia Oleracea," or ordinary Spinach!

Without Vitamin L, concentrated foods promoted sluggishness and indolence. Without Vitamin M, the world's highly developed acumen and perspicacity would soon give place to imbecility!

Now that a succession of storms had destroyed a million acres of the precious Spinach, the Nutrition Council was tenderly nurturing its reserve plantation, in the hope that the sanity and happiness of its fellows might be preserved.
Imagine, then, how it would penalize any blunderer who might endanger any of its plans!

## CHAPTER II

## Threatened Colamity

- The face that Burke-Cliff saw in the silvery visitor's-dial was that of JonesLem, of the History Council.

Of all the family-groups, the Joneses alone had retained the ancient characteristics of affability and courtesy. They frequently annoyed their associates with comic anecdotes and shocked them with scandalous bursts of laughter!

Their friends explained these anachronous exhibitions by reminding themselves that day after day the Joneses occupied their time by consulting aged records and listening to recordographs drone fact and fiction of bygone eras. "No doubt," they agreed, "our friends, the Historians, absorbed the ancients' vulgarities along with their knowledge!"

In spite of their irritating qualities, the Joneses were greatly sought after as counselors and advisors. Besides, as the Historians carefully recorded the events of the day, none cared to antagonize them for fear that he would be mentioned disparagingly.

In appearance, Jones-Lem might have been the reflection of Burke-Cliff-the same bulging head, narrow jaw, heavy goggles. Perhaps his hands were not as muscular, nor were his shoulders as broad, but under his transparent weatherhood, he wore the same white, close-fitting silken garment.

Still more, by reason of their tiny, almost unnoticeable legs, each rode the indispensable motor-carriage that replaced the lost use of their feet.
As he entered, Jones-Lem amiably, bobbed his carefuily plucked bald head.
"Greetings, Burke-Cliff. You seem to be sad and preoccupied. What is the trouble ?"
Cliff stroked his small jaw. He was greatly relieved to find that Burke-Lars had not returned.

He cordially pressed Jones-Lem's hand and sighed: "You are mere than welcome, today, Lem."

Lem knew that his supposition was correct. The usually stolid Cliff was worried. "Tell me your problem," he coaxed.
"I fear that I've been the cause of a great catastrophe," Cliff confided. "By a silly blunder, l've destroyed our reserve supply of Spinach."
"And what does that mean?" quizzed Lem.
"Nothing less than the loss of our last sources of Vitamins L and M!"
"Not the Vitamin of Energy?" gasped Lem.
"Yes, and what's more importantVitamin M, the element of Sanity is gone forever!"
"But how did the accident occur?" demanded Lem.
"Burke-Lars was summoned to a council meeting," explained Cliff. "Before he left, he carefully showed me how to spray our experimental crop with mortygen."
"Go on!" insisted Lem.
"I don't know how it happened, but I placed too much pressure on the lever and before I could turn off the supply, I had projected a hundred times more gas than was needed to destroy only the insect parasites!" Cliff nervously glanced towards the visitor's dial.

The Historian was frankly worried. He reflected that if it had happened to another, some fancy tale could have been contrived to exonerate Lem, but the young numskull would never survive the cross-examination of the Discipline Council.
"Better tell your superior, Burke-Lars, the whole truth," he advised. "I'll think the matter over."

The hum of the visitor's signal interrupted Lem's suggestion. Cliff rolled to the dial and anxiously peered into it.
"It's Burke-Lars," he quavered, "What'll I do?"
"First admit him," snapped Lem. "Ill try to break the news gently."

The director of Council B-11 slid into the room bristling with importance "Greetings, Jones-Lem," he bobbed. "What tidings do you bring us?"
Lem phunged into his story. "Bad tidings, Burke-Lars," he began. "Prepare yourself for the worst:"
Lars rushed at his assistant and grasped his bowed shoulder in his sinewy: hand. "Cliff, tell me," he commanded, "is this more of your carelessness?"

The young man nodded sorrowfully and pointed to a glass orifice.

His face pale with alarm, Lars glued his eyes to the window. He drew back in horror. "The Spinach!" he cried "What has become of it?"

Slowly the explanation came to bis shocked senses. "Burnt to carbon! Lost forever!" he blurted. He turned to the frightened Cliff. "Wretch," he ranted, "know you what this means?"
Lem drew nearer to Cliff and threw him a look of encouragement. "Slewly, Lars," he soothed, "perhaps there is a substitute."
"Substitute!" he shrieked. "There is no substitute. For seven weeks of years have my associates sought a substitute. We alone knew the importance of Spinach. We dared not even confide in the Supreme Council." In his anger, Lars' shiny pate shone with sweat. "Look ahead, dolt, and see the results of your stupid clumsiness!
"Your fellow-men will slowly lose all ambition and virility-perhaps even worse. Our sanity is at stake!"

Cliff raised his arms in helplessness. "Is there nothing for me to do?" he pleaded.

Lars laughed hysterically. "You have nothing to fear," he sneered. "You'll never live long enough to enjoy the fruits of your treacherous negligence! The Discipline Council will make sure of that !"
In spite of his experience, the hardened Lem shuddered. "It is my duty to report this disaster to the Supreme Coun-
cil." he stated regretfully. "I shall endeavor to spare you as much as possible."

He wheeled to the visicastor and connected it. The televisor screen lost its choudy appearance and the face of WhiteAl was seen.
"Communications-Council, City of Neonia," he drawled.
"Jones-Lem, director Historian Council L-40, desires immediate word with Supreme Councilman-in-charge!"

In a moment, White-Al's bored face faded, and Kent-Sam of the Supreme Council frowningly demanded: "Who disturbs the Supreme Council?"

Lars and Cliff watched attentively.
Jones-Lem calmed himself and began, "Great Leader, I have an important communication. A serious accident has befallen a sub-bureau of the Nutrition Council. I pray that an Emergent Session of the Supreme Council be called to determine its remedy!"

An impatient expression crossed KentSam's wrinkled countenance. "It is my order that you summon all concerned in this mishap for an immediate hearing before is at the Executive Chamber in Xenonia in four hours!" Without waiting for a reply, he disconnected the instrument.

## CHAPTER III

By Air to Xenonia

- As they entered the public conveyance,

Lem whispered to Cliff: "Fasten your carriage next to mine. We must discuss your problem."

The unfortunate young man nodded gratefully. Burke-Lars disdainfully moved to the other end of the polytrol.

The signal to hold fast was given and the flyer left the landing platform at a terrific speed. They had less than four hours to travel four thousand miles to the polar city of Xenonia. As the craft sped through the dense atmosphere, the interior of the cabin became noticeably warm, due to the friction caused by their tremendous velocity.

- In a few moments, the air began to cool and became actually frigid as they burst
into the stratosphere. The polytrol's passengers glared at the Transportation Council's operator and drew their wea-ther-hoods closer around them. He grimaced and adjusted the thermostat. The geodetron, or automatic-destination control, ticked merrily as it guided them on their way.

All but Lem and Cliff dozed. The Historian was mentally giving thanks for the perfected science of telekinetrics.

How much better was radiated energy than the unreliable ancient stored-power, he mused.

The sight of a black duotrol, which he spied through a porthole, reminded him of Burke-Cliff and his dilemma.

Worry had sharpened Cliff's wits. "Look, Lem," he indicated, "isn't that a Discipline Council flyer?"
"It is," he agreed, and to himself he muttered, "So-we are already under surveillance!"

For the remainder of the voyage, Lem tried repeatedly to instill courage and advice into Cliff, but to no avail. As the golden towers of the Capitol came into sight, he realized that if his friend was to be helped escape the wrath of the Su preme Council, he could expect no assistance from the frightened youth, himself.

His grim thoughts were interrupted by the food siren, shrieking eerily through the quiet atmosphere of the polytrol.

The passengers stirred from their naps and took small glass tubes from their pockets. It was the hour for the Universal Meal. Once a day, at the beginning of the thirteenth hour, the single, speedy repast was taken. Two of the Nutrition Council's food-lozenges sufficed for twenty-four hours.

The regulating of the food-periods had proved valuable in the constant battle with disease.

Before he had finished feeding, Lem noticed that the craft had halted in midair. The operator signaled for permission to continue, and the travelers prepared for their arrival.

As the arctic temperature made it impossible to use landing platforms, incom-
ing ships first signaled their presence, and then carefully nosed their way into the openings in the metal walls of Xenonia's goden towers.
Once inside the walls, Lem and the two Burkes removed their weather-hoods and entered the speedy elevators for the Executive Chamber.
At the entrance to the hall, each displayed his identification symbol tattooed on the top of his shiny skull and was granted adnittance.

As he led the way to a point in the center of the room, Lem glanced at BurkeLars. Cold and dispassionate, the Council Director hardly looked at his disgraced assistant. Poor Cliff did not dare to leave Lem's side for a moment.

The Historian mentally girded up his loins. He would need every artifice he knew in this encounter with the world's master-minds.

## CHAPTER IV

## Six Months of Life!

- Like shining white counters on a titanic abacus, the tiers of glistening, bald skulls entirely filled the vaulted chamber of the Executive Council.
As if pushed into place by an invisible mathematician, each representative gracefully slid into position.
When the room was filled to capacity, all doors were closed. Jones-Lem directed his gaze to the dais, where the Su preme Council were wriggling themselves into comfortable positions.

He wondered how less at ease they would be had they been aware of the calamity that threatened their well-being. His eyes fell upon each male and female councilman.

In his labors, he had had close contact with but twelve of the thirty-three rulers. The others he knew by reputation. Wise, learned, venerable, and popular, their decisions were hailed with acclaim and approval. And with good reason.

Each had spent a lifetime in the service of his or her industry or science. Only hard work and infinite proficiency had ad-
vanced them to the highest honor attainable. Perhaps their training was to blame for their staidness, placidity, and unswerving sense of justice.

The Historian's reflections were interrupted by the triple ring of the assembly goug. All present bowed their heads, as Smith-Tom, Patriarch of the Scientific Smiths and Governor of the Supreme Council pronounced the invocation for Divine Aid.
"And now," he rasped, "by the power in me vested, I declare this Emergent Session of the Supreme Council duly open."

He turned his eyes upon a councilman to his right. "Kent-Sam, it was by your direction we were summoned. Relate to us your reasons."
Kent-Sam, Governor of the powerful Discipline ouncil, bobbed his head to his superior and frowned at the rest of the assemblage.
"Great Leader," he began, "while at my post, I was disturbed by Jones-Lem, an Historian Council director. He begged that an Emergent Council be called to consider a remedy for an accident of universal importance, which occurred at a local Nutrition Bureau."
"Is Jones-Lem here?" Smith-Tom boomed.
"Great Leader, I am here and at your service," replied Lem.
"Will Burke-Mel, the Nutrition-Council governor, appoint a prosecutor?" He turned to a man at his left.
"Willingly, Great Leader," was the reply. "I order Burke-Lars director of Council B-11 to present his charges."

With a visible attempt to control his anger, Lars related his story. As he finished, he turned to Burke-Cliff and screamed.
"And there, Great Leader, is the man who destroyed our last supply of Vitamins L and M ! I pray that he receive the proper punishment!"

A murmur of voices swept across the hall to where Cliff and Lem stood aghast at the effect of Lars' address.
"Quiet!", shouted Smith-Tom. "This is grave, indeed, and should receive our-
most careful consideration. Justice must be done. But wait. Burke-Mel, why were we not notified that Spinach was the only source of these vitamins?"
"We had good reason, Great Leader!" was Mel's annoyed response. "This is neither the time nor place for an explanation. We have a more important matter to discuss!"
''Tis well. Who will speak for the accused ?"

Before anyone else could speak, Lem raised his hand and cried. "I, Great Leader, I will defend Burke-Cliff."
"Then advance before us with the defendant!"
Jones-Lem allowed his eyes to drift from one stern, merciless face to another. Heavily spectacled eyes glared at him, daring him to say anything he would; nothing, they threatened, could excuse so dastardly a crime.

He bowed his head to the four corners of the room. "Great Leader, I will not waste your precious time. Burke-Cliff pleads guilty!"

At his words, even those councilmen, who were pretending bored disinterest, straightened to attention.

Smith-Tom glowered at the shrinking Cliff. "Then there is nothing for us to do but pronounce sentence!'
"If the Great Leader pleases, what would be the penalty for such a crime, if wilfully committed?" Lem peered up into Tom's face.

Carried away by his ire, Burke-Lars forgot himself. "It was wilful."
"Silence," thundered Tom. "How dare you speak without permission ?"

Lars apologized and was forgiven.
Tom clasped his hands and reflected for a moment. "The penalty for a crime endangering the health and very existence of humanity, is punishable by the maximum sentence. Disintegration!"

A moan of desperation came from Cliff.
Again Lem raised his hand for permission to speak. It was granted.
"Great Leader," he began, "I beg your indulgence for but a moment. I wish to call your venerable attention to the fact
that an important detail is being overlooked by your august presences!"

Lem shouted his words with the greatest assurance. He was positive that he had the right defense for his friend.

Ill-humor and irascibility showed on every face. What nonsense wąs this garrulous Historian about to spout now?
"Our Laws and Regulations," Lem continued, "are for normal, conventional beings like ourselves, not for a weak-minded, sub-normal individual such as poor BurkeCliff.
"Look at him! If he has been clumsy, it was unintentional. If he has erred, it was unpremeditated. Blame not this unfortunate young man. Blame rather the Eugenics Council, for the inadequacy of his training! I challenge it to produce his childhood record for our examination!"

Astounded at the Historian's audacity, only one councilman was able to reply.

Green-Rhea, Governor of the Eugenics Council, clenched her fists in exasperation. "Fool," she scowled, "Burke-Cliff received an education, in every respect as good as your own. We grant no special privileges."
"True, venerable Governor," agreed Lem. "But that was the trouble. His lesser intellect should have received additional consideration-"
"Enough of this caviling," interrupted Smith-Tom, "Let the record be brought before us immediately."

An attendant silently sped to the nearest exit. In the few moments that elapsed before the messenger returned, Lem signaled for Cliff to approach him.
"Be calm," he whispered. "If questioned, remember to be truthful and all will end well."
"I can't thank you enough," Cliff began brokenly.

Lem quieted him with a pat of his hand. "Hush, the messenger has returned."

Smith-Tom rapidly scanned the childhood record of the young Nutritionist. At various times, he frowned and nodded his wrinkled head. Finally he lifted his eyes from the document and cleared his throat.
"From what I have read, Burke-Cliff, as is our custom, was taken from his parents the day of his birth and spent his eighteen years of childhood among the other children of the Burke Family. Like the rest of the Males, he has been kept from the association of all unmarried Fe males.
"All through the record, I note instances where his clumsiness caused minor accidents. While he received the usual training, there is no sign of any special psychological treatment for his strange awkwardness and stupidity. I fear JonesLem is right. Burke-Cliff is innocent. The Eugenics Council is at fault!"

Her face pale with pugnacity and anger, Green-Rhea fairly screeched at the Council-Governor. "If we are responsible, let me prescribe the cure!"
For the first time, Lem felt a cold chill of foreboding come over him. He fixed his eyes on the aged woman.
"If mental treatment was omitted in his youth, let us give it to him now. What he needs is the constant association of an expert psychologist. We cannot bring back the lost Spinach, but we can reclaim a dying intellect!"

Whispers of approval grew to a rumble of applause.
"An excellent idea," admitted Tom. "Have your any particular tutor in mind?"
"I have, Great Leader-a woman director of a Eugenics Sub-Council, GreenMina."
"Green-Mina," eckoed Tom. "I've heard of her reputation. But wait : she is still unmated. It is impossible. You well know our Law that no unmarried male and female shall associate."

Green-Rhea was undaunted. "True enough, Great Leader, but why not marry them to each other? He will prove an excellent foil to the brilliant Green-Mina."
"But Great Leader," Jones-Lem objected. '"Burke-Cliff has five years more before he is compelled to wed. And furthermore, the venerable Green-Rhea knows that none may marry unless their types compare favorably."

Again Smith-Tom consulted Cliff's record. "Eugenic Rating," he read, "S-43."
"Excellent," commented Rhea. "GreenMina's type is S-24. I strongly urge their marriage at once. A few months in her company will accomplish wonders. As for the lost vitamins, let the Nutrition and the Science Councils concern themselves with that problem."
Jones-Lem made one last attempt. "If the Great Leader pleases, I pray that this marriage be one of gender-equality."
"Impossible," exclaimed Rhea. "In no way is Burke-Cliff her equal! I insist upon an order of female-superiority!"
Smith-Tom and his associates grouped together in conference. After a while he turned to the audience. "This Council," he announced, "reserves its decision pending investigation. It orders, however, that the marriage date of Burke-Cliff be advanced five years, and that he and GreenMina ued immediately. In six months from today, we shall reconvene and consider the progress made, if any. At that time, we shall prenounce final sentence. This session is adjourned!"
Lem wheeled out of the hall, muttering to himself, "At least Cliff has six months more of life. With so much time, surely I can find a better way out of this dilemma!"

## CHAPTER V

## The Female

- Jones-Lem waited until the first restday after Cliff's marriage before visiting them. He was curious to determine just how the young man reacted to a wife's influence.
He presented himself at the base of the metal tower that contained Burke-Cliff's dwelling and pressed his face close to the annunciator-board. The visitor's panel was clear, showing that the occupant of the apartment was awake and desirous of visitors.

In a moment, a strange bald head appeared before Lem's startled eyes. He was amused at the disgusted look on the woman's face. "Too bad," he thought, "Cliff has been blessed with a shrew. But
her eyes didn't look like those of an illtempered vixen."

He was about to move on when Cliff's image bobbed him welcome. With a shrug of his shoulders, he ascended to their level and entered the room. Only Cliff was in sight.
"You are very welcome," he greeted. "I must ask you to excuse my wife Mina. She has an important duty to perform and will join us later."

Lem looked at Cliff curiously. The young man had changed.
"Tell me," he prompted, "how do you like being married?"
"It's wonderful," he enthused, "but Mina-" He hesitated.
"Yes?" coaxed Lem.
"She-er-hardly bothers about me. When I attempt to start a conversation, she just looks at me with contempt in her eyes and wheels out of the room. I wish she could have some more respect for me. I know that I haven't her intelligence, but if I could only accomplish something to make her think more of me, how happy I would be!"
Lem nodded in sympathy ; he was sorry for Cliff. The order of female-superiority was a nuisance. Imagine losing all privileges of naming and classifying your own children!

If Mina chose, any sons or daughters would be brought up as Greens and become members of the Eugenics Family.
"Does your wife assist you in your work at the Nutrition Bureau?" he inquired.
"Certainly. It is part of her duty to observe my every reaction while at work. She has little patience for my blunders, though, and scolds me continuously."

At that moment, Mina glided into the chamber.

She returned Lem's bob by the slightest inclination of her head. "Jones-Lem, I cannot account for your friendship with so stupid a dullard. A man of your intelligence should seek more suitable companions."

The Historian regarded her in silence while he perused every detail of her ap-
pearance. At a short distance, like all the women of his acquaintance, she could not have been distinguished from a man.

The unusual size of her carefully plucked head denoted intelligence of the highest degree. Large brown eyes, at present filled with righteous indignation, stared boldly at him. Her hands, due to her profession, were small and well-kept. Outside of her crossness, he approved of her greatly. He was sure that under ordinary conditions she was capable of unusual good sense.

He turned to Cliff. The young man was watching his wife with blind worship in his eyes.

Lem promised himself that he would exert every effort to revise the poor opinion she had of her husband. He placed an arm around Cliff's shoulders and remarked. "Respected Mina, I know of no other man of so amiable a character as Cliff. I advise you to consider this carefully, before criticizing him thoughtlessly."

The young woman lifted her head scornfully and said. "Bah, in him, amiability is a sign of stupidity! I would that I were rid of him!"

Cliff sighed hopelessly.
Lem was angered at this show of unkindness. "Be calm," he chided; "in but a few months, he may leave you forever. Besides, you have him to thank for your majority. Whether he lives or dies, as a married woman you will be able to finally associate with your older colleagues, male and female leaders of your profession."

In a huff, she threw Lem a nod of farewell and left the room.
"There, Lem, you have an example of what occurs every day," murmured Cliff.
"Truly a pity," nodded Lem. "I wonder what we can do about it?"
"If I could develop something of great importance in my laboratory, something to bring honor and respect to me, I'm sure she would be different." Cliff's anxiety was pitiful.
"Like a new source for Vitamins L and M," suggested Lem. "That would do the
trick! Tell me, are you sure every possibility for a substitute has been exhausted ?"
"We've gone back a thousand years in our researches. Even the wisdom of the ancients gave us nothing."
"Only a thousand years!" exclaimed the historian. "We must go back farther than that. Imagine the result if we should be successful-honor, rewards, perhaps even full acquittal for your blunder. And last but not least, Mina's regard-"

Cliff grasped Lem's arm, ecstasy and hope in his eyes.

## CHAPTER VI <br> The Search

- A full week Jones-Lem spent at the History Center. Hour after hour, the records of bygone generations flashed before his observant eyes. Products, chemicals, drugs, and foods he examined closely.

He skipped a thousand years to the thirty-fifth century, knowing that the Nu tritionists would have missed nothing of interest in that era.

The next ten centuries revealed nothing to help him. Spinach and Spinach alone had been responsible for the isolation of Vitamins $L$ and $M$ in 2604, and had brought the Vitamin Age to its greatest height.
Discouraged at his failure, he idly reviewed the events of the twenty-first century, long before the era of the benevolent, Patriarchal form of government was born.

As he watched the birth and death of political systems, an item of unusual interest caught his eye-THE REVOLUTION OF 2034.

Quickly he surveyed the causes. The Central Congress of the United Socialistic States of North and South America had by a small margin approved the Prohibition of Coffee. By a like small majority, the individual states had ratified it and Civil War raged in the western hemisphere.

Lem's interest was now aroused. "What
was this substance that caused brother to fight brother, wife to defy husband, and father to pitilessly destroy child?" he wondered.

Beyond ascertaining that the Anti-Coffeeists were victorious, the historian paid no further attention to politics. He was only interested in determining the apparent effect the substance Coffee had upon social and scientific developments.

One thing was indelibly impressed upon his mind. Within a single generation of the disappearance of Coffee from the face of the earth, gaiety, geniality, and cheer began to wane!

Another important result was that sluggishness, inertness, and mental dullness threatened civilization's progress until various drugs were used to combat their ingress!

All this was due to the removal of Coffee from the diet of Man-truly a remarkable substance!

As he revealed the record of its first general popularity in the fourteenth century, he marveled no more at the increased tempo of the March of Intellect that began at that time.

Proof of the world's old fondness for Coffee met his eye everywhere. He noted the reference to its delicious odor.
"Smelling," he mused, "I wonder how long it has been since men have experienced pleasure through their olfactory sense?"

He carefully noted the ancient locations of the coffee plantations, the description of the tree and plant, and finally the method of roasting and preparing the bean.

Though almost twenty-five centuries had passed since its destruction, he was certain that somewhere in the world, perhaps in a clime where once it flourished, the Coffee plant still grew wild.

He left the Historical Archives and summoned a Transportation Council representative. After hearing of the extent of his intended travels, the Transportationist promised to furnish a fully equipped monotrol of late design.

As he made his extensive preparations for the search, Lem reflected on the pos-
sibilities of Coffee. "Perhaps it may correct Burke-Cliff's dullness of mind?" he conjectured. "What a blessing to mankind in general and Burke-Cliff in partic: ular, should my quest prove successful. And if not-" he shuddered at the thought.

## CHAPTER VII

## A Costly Success

- Entering the monotrol, Jones-Lem carefully set the geodetron for the city of Flauria, the Botanical Center of the World.

There, in tropical surroundings, the Agricultural Council had set up a garden containing a specimen of every plant available.
"Perhaps," Lem hopefully mused, "in some neglected corner, a forgotten Coffee plant might be discovered."

The ship sped on unerringly aimed at its destination. With no need to control his flight, Lem proudly gazed down at the various manufactories over which he flew.

Here was the gigantic plant of the Construction Council. Hermetically sealed in the monotrol, Lem could not hear the sounds of the ant-like industry that his eyes beheld. Thousands of workers were busy building large and small units of composition and metallic materials for dwelling and machine. Each individual was a tiny cog in the eternal mechanism of Progiess.

Minutes later found him soaring over the city of Luxunia, the great Science center. Involuntarily, though behind tightly closed walls, Lem's nostrils wrinkled with the memory of the evil smelling streets of the city of experimentation.

As he passed site after site of co-operative industry, he rejoiced in the perfection of his civilization. Truly they were all for one and one for all.

In a flash the reason for his mission came back to him.
"These scenes of harmonious activity," he wondered, "were they to be disturbed and slowed down by a lack of the proper vitamins?"

His reflections were rudely interrupted by the approaching warning of the geodetron. He was nearing Flauria. Perhaps his search would soon be over.

As the monotrol lightly came to a stop, eager attendants helped Lem to alight. He asked for Blake-Don, the Council Director, whom he had met before. Immediately he was conducted to him.
"Greetings, Jones-Lem," bobbed Don. "To what do we owe the visit of a prominent Historian?"
Lem gazed warmly at the familiar figure of the director. He noted the everpresent light of intelligence in the agriculturalist's eyes--that light of thirst for knowledge that Evolution had bestowed upon his fellow men, together with their bulging skulls and powerful arms.

Was this light of percipience to dim with the rest of their mental faculties? He hoped not.
"Greetings, Blake-Don," he returned. "I seek a long-lost plant such as this photograph. How soon can you report on it?"

Don reached for the picture and examined it carefully. He rubbed his small chin and showed it to an assistant who shook his head in bewilderment.
"A strange plant indeed," he replied. "Nowhere have I ever seen anything even remotely similar. What is it called?"
"Coffee," answered Lem. "Are you positive that you have never come across it in your work?"
"Never. I trust that it's not vital to your labors?"
"Quite vital," returned Lem. "So vital that if I do not locate a species, a great calamity will strike us."

Duly impressed, Don immediately gave orders for a strict search to be made for the lost plant. In the hours that passed before a complete report was returned, Jones-Lem assisted by closely examining trees and shrubs remotely favoring the Coffee plant, but with no success.
He was not surprised when the investigation proved fruitless.

Disheartened and discouraged, Lem turned his craft homeward. The ticking
of the control signals soothed his tired nerves and refreshed his weary mind.

At once a thought came to him. He would visit the site of the ancient country of Brazil. If his memory failed him not, millions upon millions of bags of coffee had been shipped from there to the four corners of the world of yesteryear.

Surely, somewhere in the still-flourishing jungles of South America, perhaps in a far-flung almost unapproachable corner, he could find a wild specimen of the Coffee tree.

He determined to continue his search and not return without at least some tidings.

Setting his geodetron for the exact point crossed by 58 degrees west longitude and 4 degrees south latitude, he adjusted the polytrol to its greatest speed.

As he left the Nutrition Council's great settlement at the mouth of the Amazon, he thanked his stars for the stubbornness of the jungle that had resisted the efforts of modern science.

To this indominability alone he assigned any possibility of discovering the Coffee tree. Surely, if any of it still remained in the fastnesses of the forest, it was because its very inaccessibility prevented the mad, bigoted Anti-coffeeists from destroying the plants.

Upon nearing his destination, he noticed that he had chosen well. The growth became less and less penetrable. Only by air could passage be made.

In a moment, his craft came to a halt. Suspended in mid-air, Lem adjusted his spectacles, but found that in order to observe satisfactorily, he would have to leave the monotrol and make a closer study of the vegetation of the area.

This decision led to formidable obstacles. He was forced to remember that it was impossible to move along such uneven and dangerous surfaces by the use of his logs-poor limbs, they were but ornaments, useless and limp.

He decided to construct a hanging basket, suspended from the monotrol, in which he could lower himself at will, and
thereby obtain a close view without losing contact with the ship.

A few hours later found Lem, creeping along the tops of the shrubs, greatly resembling a large spider hanging from its web. The monotrol moved forward at a snail's pace, thus giving him sufficient time to peer into the undergrowth.

Lem gazed at the sun. It was getting late; he would have to work more quickly, if he didn't want to be overtaken by darkness.
Aside from the pressing need of finding the Coffee, he found his labors most interesting. Strange plants and fruits met his eye everywhere. He recalled the ancient maxim of looking for a needle in a haystack. This haystack covered almost an entire continent. Oh! for some magnet to unhesitatingly draw the Coffee plant to him!

Small animals and birds flung themselves from his path. He was glad that the larger ones had been destroyed ages ago by aggressive hunters. Imagine slipping into the maw of a waiting boa-constrictor! Why, even disintegration would be more desirable.

Disintegration! That was the penalty that hung over his friend Burke-Cliff! No time was to be wasted! His capable fingers pushed large stalks aside so that he could examine the smaller plants growing beside them.
At once his heart stood still! What was this?-this plant that so modestly raised its slender growth but ten feet in the air, forming a small pyramid.

He shakily noted its small snow-white fragrant flowers surrounded by green, leathery leaves. His nervous fingers lightly touched its cherry-like fruit.

Quickly he broke open the red berry and saw with relief the plano-convex seeds embedded in a yellowish pulp.

At last, he was successful! Here in his palm he held the bean he sought. Here was salvation for the world in general and Burke-Cliff in particular!

He carefully gathered as many specimens as he could carry and with some difficulty, brought them to the monotrol.

Darting to and fro, he soon filled the car to its capacity.

He was about to leave the neighborhood, when, in the last rays of the dying sun, he espied an unusually attractive specimen of Coffee shrub on an eminence a short distance away.

Forgetting caution, he approached it and proceeded to uproot the plant hurriedly. In his excitement, he overlooked the fact that the monotrol was moving at twice its ordinary speed, and found himself the object of a tug-of-war between the ship and the sturdy Coffee plant.

Impatiently, he gave the shrub a last mighty tug, and pulled himself out of the basket onto the marshy ground!

He uttered a cry of fear as the monotrol, freed of his weight, soared up into the sky, entirely out of his reach !

Groaning in exasperation, he wondered how he would ever be able to escape from the jungle without the use of his legs. Darkness was his only response!

## CHAPTER VIII

## The Rediscovery of Coffee

- "Fool! Be more careful !" Mina's voice shook with impatient disgust. "You handled that vial as if it were a mallet. No wonder you crushed it in your clumsy hands!"

Burke-Cliff recoiled from her anger. He wondered if she knew that her very presence made him more nervous than ever.
"I'm sorry," he apologized. "I was thinking of something else-"
"Thinking!" she jeered.
Cliff flushed. He gathered enough courage to look directly at his wife. The vehemence of her expression thrilled him. How marvellous would be their association, if only he could meet her on her own ground. How wonderful their companionship, if he could arouse her respect!

Into his dull brain seeped the thought, that as an eminent psychologist, his wife should be able to tell how much he adored her.

It was too bad Mina didn't know of his reasoning. She would have been
greatly encouraged at this show of near, intelligence.

They had been married for three months, and instead of becoming accustomed to his slowness, Mina had been unable to restrain her exclamations of disgust at being forced to suffer his stupid companionship.

According to her instructions from the Eugenics Council, she was to be his constant companion, even in his workshop. She permitted no act of carelessness to go by without severe censure and reproach, and in the practice of his daily work, she offered no encouragement.

One thing about him alone fascinated her-his great strength. Accustomed as she was to powerful hands and fingers, in both sexes, Cliff's strong arms constantly drew her eyes when he strained at a heavy piece of apparatus. If the man only had the perspicacity of a ten-yearold, perhaps she would learn to enjoy his friendship.

But it was all useless. Day by day he became duller and duller. She watched him as he mixed several food-substances. He lifted the container and started to pour its contents into a boiling cauldron. With a great splash the container slipped from his clumsy fingers and fell into the cauldron, covering him with scalding liquid!

Mina dashed to his side and quickly dried his arms and face.
"Numskull," she cried, "what is to become of you? I can stand your stupidity no further. If I stay any longer, you may destroy us both with your awkwardness!"

Cliff tried to detain her, but she wheeled out of the room, shrilling over her shoulder, "I go to obtain permission to leave you for a time. My nerves need a rest!"

He ceased his routine work and tried to think of some solution to his problem. But the more he attempted to find a proper method, the greater Cliff's befuddlement. The effort made him drowsy, causing his head to ache.

Good-naturedly, he sympathized with his wife. She needed the company of her fellow-scientists, people more suitable
than himself. He was sorry that he could offer her no diversion.
"Well," he sighed, "in a few months, she will be free." He could see no remedy. And if the Supreme Council saw no im*provement, he'd be turned over to the Discipline Council for disintegration. Their highly developed civilization had no patience with morons.

Cliff turned to his labors. Habit more than anything else led him to finish his duties. He was disturbed by the buzzing of the visitor's signal. Was Mina returning? Perhaps she was sorry for her tirade. Eagerly he consulted the visitor's panel.

Cliff was shocked at what he saw in the panel. He recognized Jones-Lem's face, but it was in so bruised and scarred a condition as to make it almost unidentifiable.

He bobbed his head in welcome and prepared himself for Lem's entry. What had happened to his friend, he couldn't imagine.

Lem entered the room; he was relieved to see that Cliff was alone. Immediately following him was an attendant bearing a large bag. He deposited his burden, bobbed his farewell, and departed.
"Why, Lem," exclaimed the Nutritionist. "What has occurred? Some accident, I suppose?"

The Historian wrinkled his scratched face in a smirk. "Never mind, Cliff. First tell me-do you expect any other visitors today? It is important that we be alone for a few hours."
"I expect no one. Mina will surely not return today. She is in one of her moods. But tell me what is the trouble?"

In as few words as possible, Lem related his adventures. Cliff shuddered on hearing that Lem had spent a night in the jungle, torn by thorns and bitten by insects.
"In an hour," Lem went on, "my wea-ther-hood was torn to shreds and my body bitten and scratched. I crambed a few food lozenges into my swollen mouth and felt relieved. I dared not touch any water for fear of infection.
"Fearfully I dragged my weary body in the direction where I had last seen my monotrol depart. Finally I dropped off to sleep out of sheer exhaustion. When I awoke, the sun was high in the heavens and I heard the thrumming of a ship. I looked up and there flying low above the trees was a Discipline Council duotrol. In a few moments it had discovered me and I was taken aboard.
"I couldn't imagine what a Discipline craft was doing so far from civilization, but I understood in a moment.
"The Disciplinarian frankly advised me that since the destruction of the Spinach, each of us have been under close surveillance. To this fact alone, I owe my life, as it would have been impossible to locate me, lost as I was in the jungle, even if I had been able to advise the authorities of my dilemma.
"After having lost me in the darkness, the patrol had spent the night locating my monotrol. When light came, they had a fair idea where to seek me, and it took but a few hours of searching until I was found."

Cliff began to express his anxiety and sympathy, intermingled with thanks, but Lem halted him.
"Let's get to work. We have important tests to make. On the passage home, I had my companions assist me in separating the Coffee beans from their skins, and have a considerable amount of them here.
"If we follow these simple directions for roasting, we should have little trouble duplicating the beverage of our ancestors."

The bag was opened and the beans were spread thinly on a large table and successively subjected to the penetrating rays of the Ultra-Violet Ray, the heating of the Infra-Red Rays, and finally dried and rubbed by a winnowing roller.

After the protective silver skin was broken, they were shaken through a sieve and all damaged beans removed. The beans were now ready for roasting.

Several trays were filled and placed in an, electric oven, where at a slow, even
temperature they were carefully roasted.
Though Lem had thoroughly studied his subject, and was prepared for the delightful odor of roasting coffee, both he and Cliff were enthralled by the delicious, sease-thrilling perfume that emanated from the stove.

Never before had either of the men experienced joy through their olfactory organs. To them it was a new sensation. It exhilarated their senses, and strangest of all, caused their mouths to water with a desire for food!

Lem carefully timed the roasting procoss, revolving the trays at five minute intervals.

After a short time, he pronounced the roasting finished. He removed a tray and cautiously crushed a few of the beans in a mortar. The odor became more pungent and enjoyable.

He boiled some water, not trusting any of these operations to the tender mercies of Ciff's clumsy fingers, and suspended a small vessel filled with the ground beans into the bubbling liquid.

In half an hour he pronounced the coffee ready for a test.
Pouring the thick, black liquid into a small viat, he offered it to Cliff. "Here, my friend," he invited, "to you goes the honor of drinking the first 'cup' of Coffee brewed in two thousand years!"

His hand trembling with anticipation, Cliff slowly brought thie vial to his lips and sipped it hesitatingly.

He finished and turned to Lem. "May I have some more?" he begged. "Never before have I enjoyed any food-substance. It is marvelous!"
"First, I will try some," Lem retorted. "K's my turn now."

Many times was the vial filled and refilled. When the container was emptied, both men sat back and relaxed. Gone was Lem's tired feeling. A sense of wellbeing crept over them.

Their nervous and vascular systems were stimulated as never before. All sense of fatigue vanistred and for the first time in his life, Cliff felt a rush of ready conrersation come to his lips.

His mind clicked more easily and a new facility of expression slipped into place in his awakened brain. He tumed to Lem.
"Let us subject the Coffee to the Vitameter," he suggested. "It must be" charged with Vitamins L and M!

The historian agreed and they repaireat to a complicated Vitamin detector in a corner of the laboratory.

The indicator swung to its maximum "L" position. With a sigh of relief Cliff reversed the setting and eagerly gazed at the " M " qualitative reading.
"Sixty-five maxims!" he shouted gleefully. "I am saved! We all are saved!"
"Is it a good substitute for Spinach?" asked Lem.
"Substitute!" Cliff scoffed impatiently, "it's a thousand times better than the original! Besides, I see tremendous possibilities for it in several other directions."
Lem regarded his friend intently. Never before had he seen him so emphatic in any declaration. On no occasion had Cliff shown foresight. Had this slight amount of coffee already had its effect?

Cliff waxed enthusiastic. "Seeds will develop in six weeks in our hot-houses. Applications of Infra-Chrome Rays will bring forth fruit as sturdy as your wild specimens.
"It will take its place in the Vitamin Group with the sources of the famous Vitamin K. You know how difficult it would be to combat disease without Vita$\min \mathrm{K}$ ? Remember how Burke-Phil obtained it from ordinary dried plams, or prunes, as they were called?"

Lem nodded soberly. He owed Vita: $\min \mathrm{K}$ a good deal. Had it not been included in common food-lozenges, who knows bat what fever he might have developed that night in the jungle.
"What say you to brewing another jar?" Cliff implored.
"Agreed," Lem chuckled, reflecting to himseff how fortunate it was that the young man had not acquired a dislike for the bitter beverage.

## CHAPTER IX

## Exoneration and Reward

- Refreshed and invigorated, the Historian attentively watched the young Nu tritionist skillfully prepare the beans. His clumsiness was gone, and though he had seen Lem perform the operation but once, Cliff hesitated not one moment.
"There is nothing wrong with his brain," mused Lem. "It only needed awakening."

It was a joy to see his fingers, once slow and awkward, now deft and quick, as he speedily prepared the Coffee.

As he dashed from table to furnace, Cliff praised the discovery and promised future improvements in food-substances with its aid.

He impatiently frowned as the visitor's signal interrupted his labors.
"Who can that be ?" asked Lem wonderingly.
"Not Lars, I'm sure," growled Cliff. "He never bothers me any more."
He consulted the visitor's panel and wrinkled his brow in surprise. "It's Mina! She seems quite excited!"
Mina slid into the room: she hesitated on seeing Lem's scratched face and head. "Has this simpleton made you the victim of one of his stupid blunders? If so, it will be his last. I've taken good care of that!"
"What do you mean ?" demanded her husband.
"No longer will your folly endanger Humanity and yourself. I've turned in my report to the Eugenics Council. We've arranged to shorten your probation. I told them further tests are useless and your final hearing comes up tomorrow! It will be your last chance to prove why you shouldn't be disintegrated as a moron and a menace to Civilization!"

Cliff's worried face cleared as he inhaled the perfume of freshly made coffee. It gave him courage and assurance. His newly aroused faculties could foretell every detail of the morrow's trial.

He glanced at her with supreme confi-
dence, certain that there was nothing for him to worry about.

But even he could not foresee one surprise the hearing had in store for him!

Instead of the public conveyance, Burke-Cliff insisted that Jones-Lem share a duotrol, on their voyage to Xenonia.

If Lem expected that Cliff would laboriously review the plans for his coming encounter, he was mistaken.

The young man never mentioned the council session. He ceaselessly spoke of his plans for incorporating Coffee in the daily diet.
"How different was this trip from the last," Lem reflected. "How dissimilar Cliff's present cheerful attitude from his gloomy mien on the last visit to the Capitol."

He stopped him in the midst of a technical discourse. "Tell me Cliff, what are all these packages?"

Cliff replied with great emphasis: "Portable apparatus for testing the Coffee. I mean to prepare the beverage right under their very noses!"
Little did he know the significance of his own words!

No time was wasted in calling the session to order. At a short distance from the friends, Burke-Lars and Mina sat whispering volubly.

Smith-Tom, staid and grave, gaveled for order. "Will Burke-Lars, the prosecutor, come forward with the charge ?"

Bobbing his shiny head, Lars advanced to the dais. He reviewed the evidence, his anger increasing with every sentence. His small jaws opened and closed like the flanges of a mouse-trap, spurting forth indignant accusations.
"See, Great Leader," he continued, "how Burke-Cliff sits there, calm and undisturbed. Do you need further proof of his imbecility? See how unconcerned he is about the calamity he has caused. I've read you reports, showing the universal effect the lack of these indispensable vitamins has had on our people.
"Though it is but a few months since the small supply gave out, we cannot deny the terrible results. Everywhere men
and women are slowing down. Fatigue and exhaustion never came so easity. These is an acclaim for an additional restday per morth.
"But worse than this, Great Leader, is the lack of ambition which always precedes inanity and chaos. What has BurkeCliff accomplished in the way of contriving some substitute for the Spinach he has destroyed? Nothing-I am sure. I pray-nay, I demand-the penalty of disintegration!"
All through this tirade, Jones-Lem did not remove his eyes from Cliff. Instead of becoming alarmed, he was sure that the young man enjoyed the effects the address was having on the assembled councilmen. Frequently Cliff would glance at Mina, who would haughtily turn from his gaze.
When Burke-Lars had concluded, Smith-Tom raised his eyes to Lem and rasped: "Will Jones-Lem speak for the de fendant?"

Nonchalantly, Cliff glided from Lem's side to the dais. "Great Leader," he drawled, "I will speak for myself."
Nothing could have been more surprising to his audience! Only Lem had anticipated Cliff remarks. He grunted amusedby, and observed the expression on Mina's fine face. She appeared dumfounded.
In the moment af silence, Cliff let his eyes rum from councilman to councilman. Hard, dispassionate, unfriendly, their cruel eyes glared down at him accusingly.

As if seeking encouragement, he glanced at the heap of apparatus nearby. He bobbed and went on.
"All that my colleague has said is only too true. We are faced with 2 tremendous problem. But one question he asked I'm going to answer. I have not been idle. A substitute has been discavered!"

Again his listeners were thrilled. Now Mina's eyes were fixed on her husband. Her intuition told her some additional development was at hand. She was taken aback. Had she misunderstood him? Were her findings in error? Not once did she cease to observe his every move.

Cinf signaled to several assistants who
quickly set up a small electric furnace and the Vitameters.
"Great Leader," he began, "with your indufgence, I will prepare nry new beverage. It will take hat a few moments."
"Yout have our permission."
While he skillfutly moved about his duties, Cliff carefulthy explained each operation. "See," he painted out, "how the substance is prepared. Now you will be surprised-"

With these words, he suspended the ground beans in the boiling water, and looked at the Council expectantly. His hopes were not in vain. What he saw satisfied his greatest anticipations.

As the soul-filling odor of steaming coffee filled the room, every occupant drew it in eagerly, their nostrils quivering with gratification and enjoyment.

Cliff carefully observed their faces. Countenances once drawn with anger and anxiety relaxed and became almost amiable. Their eyes lost their unfriendly light, and shone with interested curiosity:

Smith-Tom, the governor, was greatly impressed. "My son," he exclaimed, "never before have I encountered so delightful an odor. What is it?"'
"Have patience, Great Leader," begged Cliff. "I am not yet faished."
Tom nodded his approval.
With the aid of his assistants, all thirty-three members of the Supreme Council were furnished with a small bowl of coffee, which as it was placell before them, entranced them with its intriguing perfume.
"Great Leader," stggested Cliff,"if you will please partake of the beverage, you will not regret it."

All watched the Governor sip the coffee. After a moment, his usually placid face actually beamed with pleasure. Without waiting for a further invitation, they, placed the containers to their lips.

Cliff exchanged a glance of pride with Jones-Lem who was thoroughly enjoying himself.

Murmurs of gratification and expressions of relish and gusto swept forward from the dais. Burke-Lars and Mina ex-
changed looks of wonder. What was this marvelous substance that enchanted the Council? Mina's eyes filled with a new interest.
"And now, Great Leader," remarked Cliff, "I wish to demonstrate publicly, the Vitamin value of Coffee."

He placed a few beans in the Vitameter and started to discourse upon its possibilities, explaining how the Coffee was rediscovered through the invaluable aid of Jones-Lem.
"Though handicapped by the neglect of the Eugenics Council," Cliff continued, bowing toward Green-Rhea, with also a bob to Mina, "this wonderful substance quickly cured my stilted brain and eased my intellectual powers. I am sure that we have nothing further to worry about. Our new sources Vitamins L and M are inexhaustible."

The Council drew together and conferred hastily. Smith-Tom turned to Cliff and for the first time in his life, actually smiled!
"Burke-Cliff," he boomed, "you have more than atoned for your crime. We hereby clear you completely and gratefully express our thanks for your important experiments.
"We further appoint you Director of a new Nutrition Council to be formed by yourself, for the purpose of developing and inculcating this valuable substance in our daily diet.
"To Jones-Lem we offer the next vacant vice-governorship in his own Council and extend our compliments."

During the Governor's speech, Lem was mentally wrestling with a strange thought. He could not explain to his own satisfaction why Mina was apparently unaffected by the events that had occurred.

From the beginning, her cold, aloof attitude had been scarcely changed. Aside from a look of wonderment, she had not been moved by the general feeling of good will and appreciation that had captured all in the Council-chamber.

As Lem studied her, a sudden light broke upon him. He turned from her to

Smith-Tom who was still expressing his congratulations.
"Great Leader," he shouted, " I have a boon to ask."
"Name it, and if it is in our power, we will grant it."
"Great Leader," he implored, "the happiness of Burke-Cliff is not yet complete. I pray that the edict of female-superiority that was decreed when he married GreenMina be changed to an order of genderequality. Surely, he has proved himself her equal. Perhaps he is even entitled to male-superiority!"
In the hush that followed, Cliff dared not to glance at Mina. He was prepared for an outburst of indignation. It didn't come.
The Governor smiled sadly and shook his head. "My son, I regret that we cannot accommodate you. Your request is impossible. You well know the Law. When once given, the decree of femalesuperiority cannot be changed, unless by mutual agreement of the parties concerned, or by the proof that the female is not the physical equal of her mate."
"But, Great Leader," exclaimed Lem, "we owe Burke-Cliff a great debt. Has he not perfected the greatest discovery of our age? Has he not given to us, in place of what was lost, an Elixir of Progress? Surely, an exception can be made in his case."

Smith-Tom was adamant. "It would create a precedent that might shake the foundations of our civilization. It cannot be done."
Jones-Lem was in a dilemma. Was Cliff to be subservient to Mina's willful ways for the rest of his life?
In a flash the solution came to him. He picked up a small cup of the still steaming coffee and wheeled to Mina's side. Before she could withdraw, he placed it under her nose. She looked at him in surprise. Was he mad?

Triumphantly he grinned into her astonished face, and placed his lips to her ear. He whispered hoarsely. At his words, her features convulsed with anger and she shook her head vehemently. He
bent and whispered again. This time she blanched and drooped her head in surrender.

Lem turned to the dais. "Great Leader," he sang out, "Green-Mina cheerfully agrees to a decree of gender-equality!"

The Governor's eyebrows lifted in surprise. "Is it true, my daughter?" he inquired.
"Yes, Great Leader," she murmured.
"Then it is so ordered. Burke-Mina, take your rightful place at your husband's side."

- Cliff's new laboratory was completed.

He cordially explained the use of each machine to Jones-Lem. When they had returned to the reception room, Lem expressed his congratulations.
"It is all due to you," insisted Cliff. "Everything you have seen, even my new happiness with Mina. But tell me, what did you whisper to her that changed her mind so quickly about our gender-classification?"

Lem grinned. "I couldn't understand why she had not commented on what she saw, when she broke in on us that day in the laboratory. 'She showed no interest or curiosity in our first Coffee experiment. As a woman, she should have at least asked questions when she saw that we were so excited about something. It wasn't natural.
"And when the entire assemblage at the Council-Session was affected by your demonstration, I knew that my suspicions were justified. The truth came to me immediately.
"I whispered that I would expose the fact that she was your physical inferior, if she wouldn't gracefully agree to a gen-der-equality, and she quickly acceded. Her pride would never permit her to stand the disgrace."
"What do you mean by 'my physical inferior' ?" blurted Cliff.

Lem's shoulders shook with laughter. "She didn't DARE have it knowen that she has no sense of smell!"

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WDNDRE STDRIRS-ON ALL NEWSSTANDS

## PHANTOM MONSTERS

## By JOSEPH H. KRAUS

- A hushed undertone, broken only by the noise of steel clicking against steel -soft-shod feet moving on tile floorsbelow us, in the pit, on a white table in a white room, a figure draped in white. We knew him well. Around him were three men in white, with rubber gloves, and masked faces-four women similarly attired. One of them was busy with shining instruments-another was at the head of the table, her right hand on a peculiar mask which pressed over the nose and mouth of the patient and was connected by rubber tubes to a bag and steel bottles apparently containing gas under pressure. The figure on the table was brilliantly illuminated in the flood of lights coming from a large chandelier overhead. We leaned forward to watch every move, every action and to deduct, if possible, any signs of breathing. Suddenly, the rumbling murmurs were broken by a voice.
"Case History"-one of the doctors was reading from a paper clipped to a wooden tablet held in his hand. "Case History-Dr. Glen Walker, age 38 years, previous history unknown. While in a diving suit suddenly frantically tugged the life-line-was hauled quickly to the surface. When helmet was removed he was raving. Observers report that the lenses of his eyes fairly popped out of the eyeballs, protruding far beyond them, and that he appeared to be suffering from great shock. He was rushed to the hospital by seaplane for an emergency operation. No further findings.
"Diagnosis - cerebral hemorrhage pressure."

Lowering the tablet, the surgeon continued.
"Gentlemen, by removing a portion of the bone in the skull, we hope to bring
this patient back to consciousness. He has been placed under nitrous oxide anesthetic and will now be given ether, after which we will operate. This case presents a number of peculiar twists and angles and I want you to

His voice dwindled into nothingness and I, who was so fortunate (or unfortunate) as to have accompanied Dr. Walker on this ill-fated trip, suddenly found myself traveling back to the scene of the adventure.

Many reports had come to us of the presence of a sea-serpent which apparently was washed inland and had made its habitat in a lake (whose name I will not here mention) in northern Scotland. We had contemplated communicating with Williamson, to hire, for our operations, his "hole-in-the-water" apparatus with which he had been so successful in the taking of deep-sea motion pictures.

I was intimately acquainted with the elder Williamson, the inventor, and his son, who had used the apparatus for many years in the vicinity of the Bahamas and also understood the operation of the tube and its attached bulbous lower end. It was probably for this reason that I was taken along on this expedition, but Dr. Walker thought that he would have greater freedom if he used an ordinary diving suit fitted for deep sea operations.
I visualized again how, on the first day of active operation, we gradually lowered him from the working platform fitted to the side of our small yacht. We cautioned him to be very careful because we had been unable to find suitable anchorage; the lake apparently was bottomless. Again I recall how Walker continued to signal that all was well as we lowered him farther and farther at a more rapid rate than would be safe normally.

I relived the operation of hauling him up and working him closer to the shore
in accordance with his signals-and then, suddenly, he pulled frantically on the lifeline. When we hauled him to the surface and removed the helmet, he raved like a maniac about all sorts of monsters, the like of which no man had ever seen. His intimate descriptions of them convinced me at least that they wete no mere hallucinations, no imaginary pictures fancifully created by an imaginative mind. He had described how he attempted to shoot his harpoon (driven from a rifle by compressed air) at a gigantic animal with semi-transparent sides, tripodrlike feet, and huge paddlewheels which seemed to spin around at its head and not only drove the animal through the water at terrific speed, but swirled the water currents and food into a voracious gullet. His description of plants was that they were so transparent he could see through them; they had a spiral internal construction within their transparent walls, some with but one spiral and others with two, of a blue-green color. Giant armored tortoise shells moved rapidly forward or backward, amazingly savage and destructive. Sexti with four tentacles were there, looking very much like octopi, except that they anchored themselves on a stalk and would reach out in four directions with their arms to grasp gigantic fish which were rapidly devoured.

Now Walker could not conceive of such animals even in his subconscious mind. He had not enough imagination. He had never read Wonder Stories, probably never knew of its existence. He had no creative qualities whatever.

I recoiled with horror when I recalled how he doubled up, blood gushing from his nostrils-a typical case of the bends to which divers are subjected when pressure is suddenly relieved. But those eyeballs, with their peculiar shape, the rounded lenses sticking out beyond the balls to such a degree that it was impossible for him to close his lids-how they sent the chills racing up and down my spine! The lenses were actually round instead of being a double convex type shape like that found in normal eyes. I could
see again how he raved in spite of his bends, trying to convince us that he had seen these animals, that he fought with them, that he shot his harpoon gun at them many times, the shots apparently going through them, but because of the murkiness of the waters he was unsuccessful in his efforts to bring one of them back.

We bundled him up and huddled him into the de-compression chamber, a large affair into which air could be pumped to produce a pressure equal to that which a diver was subjected. Gradually releasing that pressure would relieve the bends.

- When we entered the chamber again, his bends were gone but he was unconscious and remained so. We carried him into our amphibian plane, wirelessed a London hospital, then flew to Croyden Air Field where the ambulance was awaiting him.
And now, here he was on the operating table, still unconscious.
I had forgotten for the time being where I was. I was startled out of my lethargy when a female voice exclaimed, "Doctor, his eyes!" I then saw that the gas mask had been replaced by the ether mask ; the anesthetician at the head of the table had been dropping ether upon the cone held over Walker's nose and mouth and the room already reeked with the anesthetic. No knife, saw, or chisel had approached Walker's head. The surgeon, who had taken his place in preparation for the operative procedure, rudely brushed the girl aside, and looking, exclaimed, "Well, I'll be hanged! The ether relaxed his muscles and relieved the pressure."
He stripped off his gloves, ordered the mask removed, and the patient returned to his room.

The next thing we knew, we were sitting beside the bed of Dr. Walker. He was coming out of the effects of the gas and in halting words exclaimed, "I know what happened-when I was lowered to the extreme depths of the lake, the pressure inside the diving suit became unbearable -but I was so intent on the work before me that I was unmindful of this increased
pressure-I felt a terrible pain in my head, particularly in my eyes. My eyeballs felt as though they were distorted out of shape. The eyeball is filled with aqueous humor, and liquid, as you know, is practically incompressible.
"The pressure was evidently so great that the eyeball was pushed out of shape. 'The incompressible liquid contained therein then forced the lens out and distorted it into a round mass. Now we all know that the rounder a lens, the greater is its magnifying power-the result was that my eyes became veritable microscopes. Of course, the greater magnification of a lens, the closer it must be to the objects-and I do remember now that I had to move my head forward and backward so that my eyes almost touched the glass of the helmet before I could see out. I attributed my inability to see things clearly at a distance to the murkiness of the water, but it must have been my eyes ${ }^{1}$ -and these objects which I saw, apparently life size, were really microscopic organisms which every microscopist has observed in his examination of fresh and salt water.
"There were protozoa, euglena, and the
beautiful transparent growths with the spirals inside, called the spirogira, the belllike animals, known as vorticella; the tentacled monster, the hydra; and the anjmal with the paddle wheels was my conception of a rotifer.
"While I was down there-I did not realize that my eyes had suddenly become defective-these things seemed just as real to me as you men do-standing here around my bed.
"Just like an aviator when he is flying upside down when traveling through a fog bank doesn't realize his true position, so, too, I did not know that these animals were not just as large as I perceived them to be. Actually, they were crawling or positioned on the glass of the diving helmet, but to me they seemed to be projected out into the waters beyond. I knew that I had the bends when I came out of the water-a too rapid ascent always causes that. I cannot understand why I became unconscious, unless it was the aftermath of that pressure.
"It seems obvious that the ether caused all muscles to relax and, in so doing, brought my eyes back again to their normal functioning."

## THE END




He slipped, fell, and became the unlucky nucleus of a mewing, cursing, scrate ing mass of flesh and fur.

## A SUITOR BY PROXY

## By HARRY COLLIER

- Of two things, Professor Job Ohmpere, Dean of Physics at Eastmore University, was very prond. The first, properly enough, was his motherless daughter, Madeleine, and the second was his paper in the Anerican Scientist, "The Illusion of the Physical World." Among male students, at least, Madeleine ranked far above this second pride of the Professor's life.

The article in the Scientist had aroused a hornets' nest of controversy, most of it in humorous vein. Needless to say, every student in the Professor's classes had digested "The Illusion of the Physical World," upon pain of failing in the forthcoming finals if the elements of this paper were not thoroughly absorbed. Its bold theories were nevertheless held in widespread, if subdued, contempt by the student body, if in this group we except a certain credulous junior.

Benjamin Spindledrift was by no meeans a typical student. Studious and bookish by nature, he seemed to revolve in a self-contained orbit of his own, with ambitions and desires known only to himself. This apparently content and mildmannered young man, reading his instructor's absurd conclusions, clutched wildly at the straw this improbable article held out to him. After classes that very day, he visited Professor Ohmpere in the latter's private study:
"Professor," he said without preliminary, "you state here that our sensation of matter through the five senses, and matter's effects in the physical world, is due entirely to the etheric stresses or vortexes set up by the motion of atomic systems."
"Would you care to dispute that?" growled Ohmpere, submerged in a moun-


#### Abstract

C In 1932 Epaminondas T. Snooks, D.T.G., wrote for us a yarn entitled "Why the Heavens Fell." In 1933 we had "The End of Tyme" by Hasse and Fedor, and in 1934 we were honored by Kenneth Sterling's "The Brain-Eaters of Pluto."

All of the above stories were burlesques, and all were so well received, with anxious clamoring for more of the same nature, that we feel an occasional burlesque puts a little spice into the magazine. The present story, though not slapstick, contains some wholesome humor and can be favorably compared to the best comic science-fiction tales of the past. But here is the story for your perusal -read it and smile.


tain of correspondence pertaining to his unfortunate article, "or is it amplification that you want? In short, if I hit your head with a hammer, the resultant blow and pain are not the result of hitting your head with a hammer."
"No?" inquired Spindledrift mildly.
"The hammer does not exist!" bawled Ohmpere.
"Of course not."
"It is the close contact of the atoms forming the material of your skull, and of others which constitute the physical property we associate with iron, which causes the sensation of being hit with a hammer."
"Astounding," said Spindledrift heartily.
"The atoms themselves do not exist!" howled Ohmpere, warming to his subject. "I declare them to be merely suppositional. In reality, they are mere vortexes in space, etheric vacuums, if you will, where the universal substance has been temporarily wrenched out of place."
"And which vacuums, on coming together, combine in action to produce a painful sensation on my cranium," mused Spindledrift. "Is that right?"
"The opposed forces of the atomic systems, upon approaching too closely each other's magnetic fields, are repulsed with terrific energy, so that we are deceived into thinking we deal with solid matter, much as a spinning flywheel seems solid by virtue of its motion. That much," finished Ohmpere malevolently, "should be clear even to your absurdly limited comprehension."
"Perfectly clear, Professor. But that was not what I wanted to see you about."
A violet blush slowly suffused Ohmpere's face, even to the pinkish bald spot on his grizzled head. A speechless indignation, a silent breathless fury, imprisoned for a moment, to gain greater force, found vent in words at last. The Professor spoke cuttingly and to the point, outlining deftly the deficiencies in Spindledrift's physical aspect, mental make-up, and heredity. This briskly done, Ohmpere turned back to his work.
"I beg your pardon, Professor," resumed the student with desperate courage, "but what I really want to know is -can it be done?"
"Can what be done?"
Spindledrift took a deep breath.
"Can you do what the article suggests -project a wireless image of a solid body which will to all appearances be that solid body?"
"Matter is an etheric disturbance. Electricity is an etheric disturbance. Essentially they are the same. Electricity can be transmitted without wires, hence matter can also be so projected. To prove this to you or others too dense to accept reasonable conclusions I have neither time nor inclination. If you are finished with your absurd questions you might clear out."

Spindledrift swallowed hard.
"Professor, you've got to help me. I'm going to work on this line, and like it or not, you must help me."

Ohmpere laid down his papers. Very deliberately he leaned back in his chair, an ominous calm descending upon him like a mantle.
"Must?" he asked.
"Must!" Spindledrift was magnificently firm. "Professor, I've been bashful, a recluse all my life. I'd die if a woman spoke to me first. I have never experienced emotion or-or passion. And it is impossible for me lightly to break the habits of a lifetime."
"Which signifies—?"
"Professor, I am in love."
"Ah!"
"With a woman who is more than all else of creation to me, etheric or other-wise-a woman whom I must win though I die for it-a woman whom I dare not address in my proper person, far less woo in the manner to which women the world over have become accustomed."

Ohmpere swung back to his desk.
"I would suggest a psychiatrist. Close the door gently as you leave."

Spindledrift was on his feet.
"Therefore," ignoring Ohmpere's remark, "I shall project my image through space to the side of my beloved, to woo by proxy as I dare not in person. It is my only hope in all the world. You must-you shall help me-"
Ohmpere looked long into the desperate intentness of the young man's eyes, then slowly drew paper and pencil to him. When Spindledrift left, it was far into the night. In his fist he clutched a great sheaf of papers, and his face shone with a great and hopeful light.

- The campus took no notice when Benjamin Spindledrift moved to unknown quarters in the city, nor did it remark the fact that he spent no more time in study halls or library after lectures. Somewhere in the town proper, however, a landlady eyed dubiously the feverish young man who stormed up and down four flights of stairs many times daily, and carried with him to his chambers bulky boxes of great weight.

Very different was the attitude of the student body after the evening of the Junior Prom. Alan A. Dair, popular escort of the charming Madeleine Ohmpere, was dancing with that young lady under a canopy of shaded lights when
both were startled by a voice, courteously firm.

## "May I cut in?"

Dair later swore that the dancers were so crowded on that part of the floor that he could never understand how the fellow made his way to them, but the fact, remained that Benjamin Spindledrift, tuxedoed and suave, stood at his elbow. Dair swore under his breath and surrendered his partner, to watch her gliding away in the arms of a transformed Spindledrift.

There was a superb aplomb in his bearing, a swagger of just the right quality to lend a handsome, insolent confidence to his carriage. Alan Dair gaped at this man whom he had mentally relegated to a group known collegiately as "bookworms." That this particular bookworm should be at the Prom was in itself miraculous. That he should cut in on the dazzling Madeleine Ohmpere was not merely incredible, but impossible.

Yet, there he was.
It was two dances later, so great was his amazement, that Dair picked his way to the couple.
"May I cut in?" he requested, with a slight stress on the pronoun, crowding Spindledrift from his place.
"Sorry, old chap, we're not cutting."
Dair, arrested, turned to Madeleine. She was smiling, one slim hand on Spindledrift's shoulder, and made no effort to remove it. Whereupon Dair became angry, and edged ever so slightly closer to Spindledrift.
There were interested witnesses now, and all, comparing notes later, agree on one point. Spindledrift did not move, did not strike Dair. Some claim that he faded from sight for an instant, that the trim tuxedoed figure became momentarily blurred, but if so it was for an imperceptible instant. Certain it is that there was a thud as of colliding bodies, and that Dair was suddenly hurled to the floor in a tumbled heap, as if he had been struck, not by a fist, but by a flying tackle as on the football field.

Dair rose. But for the intervention of
others, there might have been fisticuffs. Friends pointed out to Dair that only a fool would strike a man who had not struck him. Spindledrift made no move to escape trouble, but stood his ground, vaguely smiling. And much later that evening it was he who saw Madeleine Ohmpere to her home.

- On leaving the Ohmpere residence, Spindledrift was followed at a discreet distance by another. Dair kept to the shadows until both were some distance from the Ohmpere home, confused though he was by the movements of his prey. The figure of Spindledrift was at times vague and blurred. At others it seemed to drift oddly, like a matterless ghost, through the thin wisps of fog which had settled in the streets. Dair cursed the rapid movement of this fugitive will-o'the-wisp. Exasperated, he sought to close in on the swiftly moving figure.

As though guessing his intentions, Spindledrift paused under the full glare of an arc light. Too angry to be surprised, Dair furiously confronted the transformed Bookworm.
"We have something to settle here and now, Spindledrift!" he exploded. "I'll pass up your striking me at the Prom. But I want it understood that you are to pay no further attentions to Madeleine -Miss Ohmpere."

Spindledrift looked at him keenly.
"A bit muddled,' aren't you, Dair? I really don't recall striking you. You haven't been drinking?"

Dair sputtered. Only the astonishing change which had come over the Bookworm, the unguessed coolness of the other, held him in check.
"I suppose you didn't leave Madeleine a moment ago? I suppose you didn't fetch me one at the Prom this evening. Why-why-"

Spindledrift sighed patiently, the gesture of a man who knows himself master of the situation.
"Sorry, Dair, but I really don't know what you're talking about. Look here, old man-of course we all get this way,
at times-but why not go to bed and sleep it off?"

Dair's patience snapped. With an explosive curse he shot out at the other, a straight, hard driving blow. His knuckles struck Spindledrift full in the face. The sound of the impact was like that of flesh on firm wood. Dair moaned and dropped his mangled hand.
"Better have a doctor attend to that," urged Spindledrift solicitously. "You can explain that you struck a lamp-post in the dark."

He made no move of pain or anger.
"A dose of bromide, I've heard, should be good for what ails you," continued the Bookworm. "You're in no shape tonight to see things clearly. I shouldn't wonder if you suspect yourself of having nightmares, come morning."
He looked about coolly.
"It's a bit late. If you don't mind, Dair, I'll leave you to your own thoughts. Try another brand next time. Hallucinations are a bad sign."
"Hallucinations?" muttered Dair blankly, gaping at his broken hand. He stared suddenly into Spindledrift's mocking face. The features of the Bookworm blurred oddly. Dair swept his good hand over his eyes. The trim tuxedoed figure was gone. The arc light swept full on bare grey pavement, and from the depths of drifting fog, as from a distance, came the merest ghost of a thin chuckle.

- Foiliowed three days during which Dair kept to his room, and the campus knew him not. When he reappeared, gaunt and thoughtful, with a hand lumped in bandages, it was to make his way directly to the office of the Dean of Physics. The author of "The Illusion of the Physical World" eyed him suspiciously.
"Sorry to disturb you, Professor," he began humbly. "If the problem weren't such a huge one-it's about your theory, of course."
"It's a [censored] good theory!" boomed Ohmpere.
"It-of course. It certainly is. Magnificent," floundered Dair. "What I mean
to ask, though, is whether it's possible."
"Possible ?" snorted Ohmpere. "There's no doubt I'm right. For full mathematical proof I refer you to my article in the American Scientist, 'The Illusion of the Phys-'"
"Certainly, Professor. To be sure. But I mean the projection of matter-the human body, for example-at a distance from the original. If the figure of a man possessed the solidity of a board fence, yet vanished from sight before your eyes, what would you say?"
"I would say," rejoined Ohmpere thoughtfully, "that he had thoroughly proved my conclusions. You say he is solid ?"
"Unmistakably so," agreed Dair, regarding his hand.
"Of course. An artificial atomic force wall. A very interesting demonstration. Matter conceived electrically, held in manifestation, so to speak, by a temporary congruence of etheric stresses. He has succeeded, then."
"Who ?" asked Dair quickly.
"Spindledrift, as I recall the name. A remarkable youngster. Claimed the matter was one of life and death, or something of the sort. I really don't fully remember-'
Dair leaped to his feet.
"Professor Ohmpere, you are criminally guilty in placing this secret in the hands of an irresponsible chap like Spindledrift. The power this man now wields-the ability to penetrate wherever he wills, to overcome all opposition by a force not human-the powers of a superman, in short, make Benjamin Spindledrift a dangerous suitor for your daughter."
"My daughter?"
"Your daughter Madeleine is at this moment in the company of this-this projection, and beyond your help or mine. She is, furthermore, in love with-"

Dair stopped, appalled by the effect of his words. Ohmpere's face, mottled with anger, turned red and blue by turns. His hands writhed dumbly on the table. And then, breaking like the outspewn contents of a rocket, a verbal bombshell burst. It
ran the scale of profanity with abandon, touched the very heights of masterful invective, and only for very want of breath subsided to a mere rumble.
"I followed Spindledrift from the swimming pool an hour ago," suggested Dair craftily. "Wouldn't send his proxy there. He's in a rooming house on the West Side, and he swims daily from three to four."

The purple died slowly out of Ohmpere's face. He studied Dair craftily, and cunning dawned in his fierce little eyes.
"Tomorrow at two-thirty," he said, "you shall take me to the West Side. It may be that I can teach this Spindledrift something which he does not know."

Dair grinned.
"I'll be ready on the dot. I know the place. And for that matter, I've a little idea of my own that isn't half bad-"

- At seven minutes past eight the follow-
ing evening, Benjamin Spindledrift tucked the last bit of white cuff into place, straightened a precise black tie, and stepped back from his glass with confident self-approval. Going to the door, he opened it, peered out, loudly shut it, and carefully bolted it on the inside.

Hat in hand, he walked toward the amazing array of apparatus which claimed almost half of the tiny room. A huge framework of metal tubing carried a score of cylindrical, searchlight-like bodies which had as the common focus of their thick quartz lenses a central dais or platform some eight feet in diameter. The floor of this platform, upon which Spindledrift now stood, was composed of numerous large steel balls, revolving in individual sockets to present a universally frictionless surface. Walking gingerly to the center of this odd floor, he was able to view in turn any one of four dull glass plates. A heavy electrical cord, armored and insulated, terminated in a compact switching arrangement which he held concealed in one hand. With the other he quickly set four dials on the wall at precalculated settings, and pulled a switch lever.

From the searchlight-like tubes poured, not light, but a milk-white, tenuous radiance, cloud-fingered, which momentarily settled about him like a blanket of vapor. Simultaneously the four glass plates glowed faintly, and the room's single common light bulb faded in brilliance.

Spindledrift stood erect, hat in hand. The vision plates cleared, until the one before him presented a dim night view of a residence. And now the white fog cleared about Spindledrift, although pouring still from its multi-faceted source like dissolving, heatless steam.

He turned. The plate to his right showed a street, elm lined, with the University buildings in the background. In the next glass appeared the opposite side of the street. The fourth afforded a view away from the campus. Together, the four screens represented a full, all-directional view of the street before the Ohmpere residence.

Spindledrift pressed the control in his hand. On the screens nothing changed, but on College Way, four miles distant, there appeared the well-groomed figure of a young man, hat in hand, who looked about for an instant as though finding his way.

On the platform, Spindledrift walked with natural masculine strides. The steel balls spun beneath his feet. On the screens the views changed gradually, as would those of a walking man. Benjamin Spindledrift, as all the world would have sworn had it been there to see, walked to the Ohmpere gate, up the Ohmpere walk, and presently rang the Ohmpere bell. Whereupon the Ohmpere door opened, and a girl smiled welcome.
"Come in, Ben," offered the loudspeaker in Spindledrift's four-mile-distant room.
The view on the vision plates shifted again. Spindledrift smiled as his projection took a cozy seat in the Ohmpere living room, while the original of that amazing illusion seated himself upon a small stool, cunningly fitted with cupped feet to fit firmly upon four of the platform's steel balls, and carefully insulated to prevent
its projection into the Ohmpere home four miles distant.

From an adjoining room Professor Ohmpere watched this intimate little scene through a hole in the wall. Nor was his interest academic, as with a single roving eye and stifled mutterings he followed the every movement of his daughter and her amazing beau. But of this both lovers were blissfully unaware.

Spindledrift was nevertheless uneasy. For all the smooth operation of the machine, he was tonight vaguely apprehensive, a state of mind which he found no difficulty in ascribing to his emotions. The Bookworm had discovered sad limitations in his brilliant plan. There was, for example, the utter lack of sensation connected with the projection. Convenient in the case of Dair's blow, this was a serious detriment under more tender circumstances, and Spindledrift had actually come to regard his etheric double with an absurd jealousy. To remedy the situation, conquer his own shyness, and hereafter appear in his proper person, was his avowed intention tonight.
"There's-something really important I must ask you tonight, Madeleine," he plungẹ.
"Ask me?"
Spindledrift drew from his pocket a small velvet covered case.
"Oh!" breathed Madeleine, in a tone from which any swain might have taken courage.
"I-uh-I thought I'd ask you, Made-leine-l've wanted to for some time-and I brought this ring for you," he finished lamely.

She laughed gently, slipped the ring easily on her finger.
"It's lovely, Ben." She turned toward him, eyes shining. Spindledrift groaned.
"Please, Nadeleine, I've got to havehave the ring back."

Astonishment and hurt dissolved her smile.
"Back? Why, Ben, I don't understand. I thought-you said it was mine."
"It is. I'll bring it to you myself, tomorrow," he promised, with more sip-
cerity than ease. "I only brought it now to ask you."
"To ask me! Benjamin Spindledrift, whose is this ring?"
"Yours, darling. But I must have it tonight. You see," he added with sudden inspiration, "I only bought this one for size."
"For size?" incredulously. "Well, it fits perfectly."
"Well, the fact is, yours is a better ring."
"Darling."
"But I need this one, to change it tomorrow," persisted Spindledrift, all too aware of the phantasmal existence of the circlet upon Madeleine's finger, and cursing this circumstance he had not foreseen. To leave the ring, only to have it disappear with his projected self, would involve difficulties.

The girl surrendered the platinum band.
"I really still don't understand."
"I'm doing the best I can, in my position," confessed Spindledrift miserably.
"Perhaps you had better explain your position," suggested the girl frigidly.

- The Bookworm shuddered. Never had the situation been more trying. More than ever was he determined to end all subterfuge, to appear on the morrow as his real self. So intent was he upon these thoughts, that he failed to hear the faint scrape of a window sash being raised from the fire escape landing outside his window. Certain odd flashings and electrical growls from his apparatus also failed to attract his attention.
"Tomorrow," he pleaded, facing the vision plate appealingly, "tomorrow things will be different."
The girl's startled expression flashed upon him for one brief, bewildering instant. Frightened, she drew back from him. And then-
"O-o-oh!" screamed the loudspeaker. "Ben! Dad! Oh-keep away."

The Bookworm shuddered with the strong premonition of disaster. About him now the milk-white radiance was
tinged with sulphuric yellow. The odor of burning insulation stung his nostrils. Alarmed, he leaped back, knocking the stool off the platform. Screams issued from the loudspeaker. A swelling roar, strangely mingled with a whining as of hungry cats, added to the din. Something hurtled through the air. Spindledrift's eyes followed it to his feet, popped incredulously as he beheld between the toes of his patent leather shoes a large, silvery and odorous dead fish.

The fish was not alone. Hard on its trail followed the cats. The Bookworm's head swam at the sight. No fewer than six animals were spitting and snarling over their booty. No ribboned pets these, but mangy, gaunt alley beasts, projected with him, fish and all, into the sacred precincts of Madeleine's home. He stooped breathlessly and caught up one of the animals, clawing furiously, to throw it off the platform. It returned immediately.

From his invisible vantage-point, Pater Ohmpere had seen the first, comparatively mild results of his afternoon's work. Certain alterations in the adjustments of Spindledrift's apparatus having at last taken effect, the Bookworm's projection had first of all changed color alarmingly. From a well-groomed pink his flesh had turned a shade darker than chocolate. The unassumingly correct blue suit had developed hideous spots of green, vermilion and ochre. But more startling, and quite unexpected, had been the projection's ensuing behavior.

The actions of the Bookworm's double changed suddenly from those of a wellbred gentleman to those of a humorously inclined maniac. For the projection leaped suddenly from its place, suiting each of Spindledrift's own actions with an entirely different movement of its own. When he backed away from the vision screen his double instead approached the girl, and whereas he would have shuddered at the mere thought of such an action, the projection boldly clasped the girl within its arms. To Ohmpere's eyes the struggle which followed resembled nothing more than the gyrations of a particu-
larly abandoned Apache dance team. The projection, stumbling blindly about, knocked over furnishings with gay abandon. Once, approaching a projecting chimney corner, it cast aside all consideration of the laws of space, and with its superlative solidity struck the wall a blow that ripped brick, plaster and beam away. The Ohmpere living room began to look like a well-managed wrecking job nearing completion.

Then came the cats.
Madeleine, escaping a wild clutch of the energetic projection, clung sobbing to the piano, her exit barred by the wild rushings of the monster. Her screams stifled in her throat at sight of the mass of huge, mangy beasts suddenly come from nowhere and now occupying the center of the stage. Snarling, spitting, fighting over the remains of their scant meal, the beasts added havoc to the already staggering total. An overstuffed divan spewed hair, springs, and sawdust under their onslaught. Steel-like claws tore the rug to ribbons. Abruptly one of the beasts was raised from the floor by an unseen force and flung across the room. It struck the piano with a terrific crash, and the instrument, splintered and buckled, sagged of its own fractured weight. The cat was quick to regain its feet, and in a trice was in the mêlée again, unhurt.

Ohmpere could stand no more. Armed with the courage of desperation, he entered that bedlam of a room.

- Alan Dair, on the fire escape landing outside Spindledrift's room, had seldom witnessed such amusing discomfiture of a rival. The fight with the cats, which he had loosed on the spur of a well-timed inspiration, still raged within, but the animals had turned their attention from the consumed fish to the tenderer portions of Spindledrift's legs.

Above, the leaden-hued radiation still sought out and projected the clawing, snarling group on the platform. The control cord, dangling uselessly from Spindledrift's fingers, its upper end severed
(Continued on page 1381)


The termite soldiers opposed us with great valor. We were compelled to kill many hundreds.

## THE INSECT WORLD

## By THOS. S. GARDNER

- Official communication to the Scientific Council of Eo, planet two of the blue star:
Honorable Councilors; G R E ETINGS:

Our journey was singularly blessed by the discovery of the most amazing planet that has ever been reported. This record concerns the third planet of the red star, classification MG11. I do not doubt that you will disbelieve all the things that I shall relate, but in proof I offer brain records of all intelligent types found there.

We entered the system after one tenth radioad* of traveling at the maximum acceleration. There were nine large planets with a belt of planetoids lying between the fourth and fifth planets. Around the sixth planet a triple ring of planetoids revolved. The only planet of interest was the third. Complete astronomical and geological data are enclosed elsewhere. The central luminary was far advanced in age and was rapidly approaching a condition of heat-death. In a quarter of a million radioads, the red star will cease to radiate. The third planet has one satellite smaller than itself. Although its diameter is many times that of Eo, its gravity pull is almost the same. It once possessed extensive bodies of water but they have long since dwindled.

All of these details, however, may be found in the following reports and I shall go on to the unusual history of this planet. But it is necessary that I deal rather closely with its biological state, as you can only grasp what I shall tell you by urderstanding the condition of the planet. It still possesses an abundant flora and fauna and the ice caps have crept far down from the poles. You may be sure that we

[^1]
#### Abstract

- Since the dawn of science-fiction, many authors, even the best, have pictured other worlds inhabited by common, everyday, homo sapiens, some even going so far as to have them speak English.

Others have tried to portray alien horrors beyond the description of anything sane.

In this story, our author introduces us to creatures so foreigu, that they cannot even conceive of intelligent mammals! This peculiar theme provides a very interesting, though very short story.


were surprised to find intelligent life still existing under conditions that were fast becoming intolerable. We were further amazed to find a new type of civilization that we must add to our archivesSocialization. There were three main and quite different intelligent forms of life that exhibited this development. Two were related, bees and ants, and the third very distantly connected, termites. We searched for any other forms and, as we could not find any or traces of any, we assumed that no other form had existed, in which we were mistaken as you will soon perceive.
Each of the three types had broken up into thousands of species showing all stages of civilization from the most primitive groupings to higher and very complex nations of hundreds of thousands of members and tool users. In size, the larger species are only slightly greater than the average Eoian. The three types are antagonistic to one another in the main and fight continually, all the while having peace and harmony within a type. At first we could not understand these creatures. We first encountered the termites who live in tremendous communal dwellings rivaling our largest buildings. A whole nation occupies one building and carries on divers activities. They rear the individual from the egg to perform certain
duties-even as we do. Their soldiers are born soldiers and their division of labor is perfect. The termites are the only ones to perfect this new civilization. The first unusual thing we noticed was that nearly all the members were females-males appearing only at certain seasons. The second unusual thing was that, although intelligent as a group, no individual seemed to possess intelligence. On examination of single members, we could find only seemingly automatic reactions, yet they all performed their work in an intelligent and very efficient manner. Thus we found a new phenomenon-racial intelligence. We possess individual intelligence while these inhabitants have only a group intelligence. Each member possesses a potential reservoir of the whole nation's functions-yet it can only exercise a limited amount in performance of its work.

- We brought our space-ship to the entrance way of one of the larger termitaries and entered with our scientists. The termite soldiers opposed us with great valor, and although possessing no weapons outside of inherited armament, they literally threw themselves on us. We were compelled to kill many hundreds before our mind specialist could impress on their group minds that our mission was peaceful. They seemed to get the idea simultaneously. One second they were battling heroically and the next calmly cleaning up the dead, which they do by eating the bodies. After this little episode, we were allowed to wander around at will. By some strange form of communication, our peaceful intentions were spread all over the planet so that no termitary was closed to us. The termites are very ingenious in their life habits.
They have several queens to lay eggs at a prodigious rate in a great vaulted chamber. The queens are many thousands of times larger than their largest soldier, about the size of our patrol cruisers. These creatures tunnel under rivers, raise special crops, heat their dwelling by decaying organic matter, and live principally on cellulose which they cannot digest
themselves but have protozoa in their intestinal tract to do this job for them. While our scientists were collecting data, we read in their minds quite by accident the dim, hazy memory of a gigantic race that had once inhabited this planet. It seems that this race of creatures were mammals. If that were so, it is the first time in our travels that we have found intelligent mammals. Strange and varied are the intelligent forms of life that I have encountered from the singing crystals of X12-O to the walking plants of W02-A, but never in all my exploring trips have I ever encountered intelligent mammals. Truly a remarkable accident and a remarkable race-but I am getting ahead of my story.

This gigantic race that had called themselves man had once ruled the planet using its metals and resources recklessly. The termites could give us little regarding this race except of powerful machines that delved in the ground and built big cities. However, we did learn here that the termites had had a hand in their extermination as will be told about later in the narrative. We read from their minds that the ants and the bees, especially the bees, could tell us more about them as they lived in the light as man did, and every termite loved darkness.

So we set out in our space-ship to locate the bees and ants, meanwhile broadcasting mental calls to them. Many times we landed in colonies who had answered our signals but found them too low in the scale of civilization to aid us. At last we located a colony of black ants that were tool users. You will see from the preserved bodies of them that they are very strong and adaptable. They lived in elaborate underground tunneled communities. These ants not only practiced the arts of husbandry, agriculture, and slaveholding, but were also excellent warriors. It seemed that they were a development from several higher species about the time that the thing called man lived. I suspect that if this man-thing was nearly as intelligent as their minds pictured him, that he had a hand in their evolution.

## The Story of the Intelligent Mammal

- When we landed, many soldiers rushed out, clacking their mandibles and picking up stones to hurl at us. We had to slay the first combatants before peace was established. The ant people's rule is not as intelligent as the termites'. Their minds are built more like our own and possess more individuality. We had been there but a short time when we learned that they were in constant warfare with a lower species near by. Their savage cousins waylaid and killed the civilized ants.

Seeing a chance to gain their whole attention, I volunteered to exterminate the menacing colony in exchange for their aid in amassing data on the ancient race. They willingly agreed to do this, and the next day we blasted the entrance ways and filled the tunnels with poisonous gas.

On our return, we found that our hosts had brought a new type to us, which were called wasps. They were intelligent in a way but were far below the ants. The ants wanted them to act as messengers to a distant colony of the honeybee. I gave them a message for the bees and they set off. In a few days, the wasps returned with beautiful black and golden-striped creatures who were honeybees and who had come closest to man when he existed.

Their minds told us that man had improved their race tremendously, far more than they were willing to do for themselves. I was astounded at this and on inquiry found that man desired a sweet concoction of the bee catled honey. They brought us some and I must admit that I cannot blame man for cultivating the bee. However, the bees remembered an invasion and, to my amazement, I found that an important factor in man's demise was the termites.

It seems that the termites had eaten man off of the earth-not his bodies, but the materials he worked with-cellulose. They also spoke of a great change in man's mind that helped to destroy him. I was getting desperate. We could get only the vaguest kind of information, so I tried to find out if there were any relics of man left on the earth. At first they said
no, but one village vaguely remembered that a colony on the other side of the planet had heard of some remains. So we set out to locate the bees who at least remembered something. It was our last chance, or so it seemed. At last we located them in a great cliff in a hotter, semi-tropical land.

They readily agreed to show us where the relics were and led us to an anciert termitary. Penetrating it, we were received kindly and we sensed a difference in these termites. They seemed more understanding and readily admitted not only having, but preserving, the last known relic of man on the earth. In the center of the community they stopped before a towering structure covered with a glass-like material that the termites had placed there. They refused to allow us to open it, so we brought the space-penetration rays to bear on it and examined its contents.
Under the glassy material was a hard shell of carborundum which was over a lead shell. This shell covered quartz bottles wrapped in asbestos. The bottles were filled with argon gas and several sheets of a substance resembling the paper we use for preserving our records. On this paper were written many thousands of curious marks. They were wholly incomprehensible to us, of course. Obviously, this last known relic had been manufactured by a highly developed creature. Only a gigantic race with tremendously powerful tools could have cast and made this unknown relic. As I stood there beside this towering remains of a past race, the eternal question kept pounding in my brain. What was it? What was its purpose? I must find that out.

Luckily, we were in the only colony on the planet that had tried to retain some knowledge of this ancient race. This was the story of the strange lost people that I pieced together from the termites.

- This peculiar mammal had had a hard struggle to reach mastery of its environment. When the ants and termites
(Continued os page 1382)

(1bustration by Winter)
"He began to choke me until I finally gave him the formula."


## THE MISSING HOURS

## By MORTON BROTMAN

- Time had flown faster than Mr. Wylie had realized. The striking of the clock on the wall startled him.

Five o'clock! And due home at fourthirty! This would be the second time this week he had come home late to the wrath of Mrs. Wylie.
"George!" he called. "It's five o'clock! Help me carry this into the vault!"

George, the trusted teller of the bank, appeared at the office door and with a curt, "Yes, sir!" obeyed instructions.

The two men reached the open vault door with the currency.
"What the-!" exclaimed the banker, suddenly halting and spinning about.

The clock on the wall was striking again!

Six o'clock!
Was he mad? How could it be six o'clock? Only a moment ago it was five!
"George-" he managed to ejaculate.
His head swirled dizzily. George was not beside him!
"George!" he yelled frantically. "Where are you? George!"

There was no answer.
The mystified lianker looked into the vault carefully. It revealed nothing un-usual-but-a sudden realization struck him with terrific force. The currencyeven that which he had held in his very hands a few moments ago-was gone!

Beads of perspiration showed themselves clearly upon his wrinkled brow as he made his way to the front door. It was still bolted on the inside. No one could have entered or left the bank.

Immediately, he began a thorough search of the entire place. Every nook and corner, over and over again, stubbornly uncovered no clue or sign of either the money or George.


#### Abstract

- An occasional scientific-detective story is well suited to this magazine, and the present one has much merit and everything that a good detective story should have.

Though it is short, there is plenty of suspense, more than the usual amount of mystery and intrigue, a surprising climax, and an amusing denouement.

Herein is related a criminal case that startles the greatest detectives, who finally learn the amazing methods raed by the culprit, mainly through chanee and accident.

You will find the entire story highly absorbing and scientifically plansible.


The impossibility of it all!
"Gosh!" he blurted, unconsciously scratching his troubled head. "I can't even believe this myself!"

- The following morning found Police Captain Mooney behind his desk eyeing Wylie keenly.
"Do you mean to tell me that that is exactly the truth as you know it?"
"Exactly," pleaded the banker. "You must help me. You are the only one I could come to."
"But, Wylie, although I have known you for years for your honesty, you yourself must admit that your statemento about the clock jumping ahead a whole hour in a moment-the vanishing of George and the money while the door remained bolted on the inside sounds ridiculous!"
"But I am telling the truth, Mooney! You must believe me! If you won't, no one else will."

The strange note of sincerity in Wylie's words touched the captain.
"And you are sure," queried the police official after a few moments of silence, "that there was no place in the bank
where George could be hiding with the money?"
"Positively! And I did not feel any snatching of the money from my hands at any time. When I made the discovery of George's disappearance, the money jast wasn't in my hands. I searched every spot over and over again before I left the place."

Mooney stroked his chin in thought.
"Well," he finally said, "you go back to your bank and continue your duties as if nothing happened. I'll have some men over for investigation."

In Mooney's mind, however, the thought remained eminent that the banker was creating a falsehood to protect himself. During these times of depression, even honest men may weaken. Mooney did not intend to voice these thoughts, however, until he was more sure of himself.

A few insignificant formal words followed and Wylie left the office. The official of law-enforcers turned to papers that lay on his desk.

He had little chance of going through these before the office door suddenly flew open and Detective Blake burst in excitedly.

The big Captain looked up from his work.
"What's the idea?" he demanded.
The detective's panting delayed a prompt reply.
"The armored truck-" he managed to get out, "robbed!"
"Armored truck?" gasped Mooney. "Where were the motorcycle escorts?"
"Wait a minute!" went on the sleuth with difficulty. "They were there! It happens this way:
"The truck gets loaded at the Federal Reserve Bank and starts out with the two motor cops riding alongside. They were due at the Cortville Bank in seven minutes. They gets there exactly one hour late!"

Blake paused another moment for breath.
"When they look inside, the truck's empty! The cops and the truckmen claim
they couldn't have taken any more than the regular required time. Yet, they were an hour late in the delivery. They act baffled themselves. Shall I bring them in?"
Mooney replied in the affirmative and soon was firing away with his cross-examination. But his earnest efforts were futile. He could learn no more than what Blake had already disclosed.
The connection of this case with that of Wylie's was significant when Mooney verified, by reaching the banker on the telephone, the fact that the missing teller had known this shipment of money was to be made that day.
"All this mysterious business of a disappearing hour and vanishing money probably could be explained," Mooney announced to Blake, "if only hands could be laid on this missing teller."

The doubts, as to Wylie's report, were almost completely wiped out of Mooney's mind by the bobbing up of the armored car robbery. Now, the situation did bear all the earmarks of a real mystery case that necessitated immediate action.

Mooney paced the floor restlessly. Blake watched him.
"How about some dope on the teller?" suggested the detective. "What's he look like?"
"We'll know, in short order!" emphatically replied the big captain, stopping short. "I'm going down to the Cortville Bank myself!"
"Say-," broke out Blake, "I brought you the news on the car robbery. How about my going along?"

Mooriey donned his hat.
"Well," he reflected, "all right. Come along. Guess you can't make things worse."
"This teller of yours," Mooney queried of the banker at his establishment, "what was his full name?"
"Just a minute, I'll get you his application card. All the details are there."
"That guy Wylie," whispered Blake, as soon as Wylie was out of view, "looks queer to me-."
"Humph!" uttered Mooney. "Hustle around. See what you can find."

Blake obeyed without another word.
Meanwhile, Wylie brought the card to Mooney. It revealed little more than George's full name, address and working experiences.
"Wylie, you'd better come back to headquarters with me. I want you to see if you can pick his picture in the Rogues Gallery."

The banker was glad to assist and more than willingly consented to the request.

Blake returned to Mooney, not many minutes later, with the announcement of a fruitless search.

Back at headquarters again, the three completed their hunt through the gallery and Mooney held, in his hand, the picture of Convict Number 178, George Mackleer.
"Served six months, arson, July 5th, 1922," the index card read in part.
"Funny thing," remarked the captain, "that this fellow hasn't been caught for anything worse. And nothing on him since that time, either!"

Wylie left the Police Building later, feeling slightly relieved. He had been assured that every effort would be made to locate the mysterious teller. He felt, now, that some of the responsibility he had borne until now was shifted to the shoulders of the Police Department.

Meanwhile, Mooney wasted no time in obtaining the permission of the Police Commissioner for the issuance of "fliers."

These "fliers," rushed through on the press with a big headline of "Reward," were hurried off, almost before they were dry, to every large city in the country.

Copies were posted in conspicuous places throughout Cortville and several went onto the bulletin boards at the Pofice Headquarters.
And on each of these informative papers was printed, "Wanted, Alive."

The man-hunt was on!

## The Mysterious Criminal

- Several days of no particular interest elapsed while Mooney nervously awaited results. But they did not come. Only once, during the second day, he had received word of a man whose description
was close to the missing teller's, but investigation proved it to be a "blind alley."
"He'll have to show up some place," Blake was advised by the captain. "Somebody is bound to spot him."

The detective lit a cigarette.
"Listen," he said, after inhaling deeply, "something's mighty funny about this case. It ain't human-like. If this missing teller got away with the dough, how in the blame-hill did he vanish ont of the bank while it stayed bolted on the inside? And the armored car-how did that dough get out of there without anybody but the truck guard having a key into it? And that missing hour- I ain't got any particular love for that part either. Any guy who can do tricks like that ain't human, I tell you. There just 'ain't no such animal.' "
"Why." retorted Mooney, "do you think I'm so anxious to get him alive? I verant the solution. The one way to get it is from Mackleer himself."

The Bowling Golf Course was some twelve miles from Cortville, but it was well patronized.

Mr. Pfeiffer, the retired insurance broker of Cortville, carefully prepared for his early morning "tee-off." He drew back the club and swished a beautiful contact, sailing the ball high, but to a side of the field.
"Vot a shot!" he exclaimed with a radiant smile. "Vare iss it? Mine eyesight, it ain't so goot like it used to bee."

The boy kept his eyes on the ball until it landed.
"It's over there, Mr. Pfeiffer, somewhere in those bushes," the boy pointed out.

As they walked along in the hot sun, the fat fellow perspired freely.
"Dug-gun-itt!" he remarked. "Reducink! Alvays reducink, I am! Vot's de use? I valk und valk und loose maybe sometimes a liddle bit, den I get so hungry I eat und kain more den I loose?''
The two finally reached the objective and began their search in the bushes for the ball.

The caddy boy went ahead into the deeper part and upon parting two tall plants, stopped short, his mouth agape.

Pfeiffer saw and noted the expression of the boy.
"Vot iss it? Vot's de matter dere?"
The boy did not answer. He looked horrified. He let go of the two parted tall bushes and they sprang back into position. He turned and ran to Pfeiffer.
"It-it-it's a man! A-a-a d-d-dead man!" he stammered. "D-d-dried blood all over his face!"

Meanwhile, Mooney and Blake were still discussing the mysterious case.

The telephone interrupted.
"Captain Mooney speaking," drawled the official mechanically into the mouthpiece.

His eyes spread into a blank stare at the words reaching his ear. A moment later, he slapped the receiver onto its hook and leapt from his chair.
"Come on, Blake!" he exclaimed, snatching his head-gear. "It's murder!"

The whirring siren of the little police car heralded its speedy pace as it hummed through the streets. Police at busy intersections held traffic to offer the right of way.

Thirteen minutes later found the car at the golf course.

Blake pointed out the gathered crowd at the bushy section and the coupé sped onto the grassy field to the spot.
"Back, everybody!" yelled Mooney, as he hurriedly made his way to the body. Blake came scurrying behind him.

The two bent over the inanimate heap.
"He's stone dead all right," someone in the crowd advised. "I happened to be near. I'm a physician."

But Blake and Mooney were troubled with something else. They looked into each other's eyes with puzzling stares.

The body was that of the teller, George Mackleer!
How could he be the guilty one in the robberies? Perhaps he was guilty and was killed by his associates. But was that the answer to the riddle?

A protruding piece of paper from the dead man's coat pocket caught Mooney's attention. He removed it.
"Having obtained all information possible from the sap, it's better for his mouth to be shut," read the pencil-written words. There was no signature.

Even if George Mackleer was not innocent of the thieving, it was quite evident that some other criminal existed in the case. And this other criminal, no doubt, was the murderer of the teller.

Mooney mused these things.
"Blake," he said, while they were both riding slowly back to the Police Building, "this killing spells danger in big red letters. This criminal doesn't stop at killing. We've got to do something before he goes any further!"
"How in the world," puzzled Blake aloud, "did he ever get that teller out of that bank that night when the door remained bolted on the inside? And the money-and that missing hour-. Say, the more I think about these baffling things, the more I'm sure I'll go 'nuts' trying to figure them out."

Mooney paid no attention to the detective's statements.
"We've got to work out some waysome trap-"

Blake moved uneasily and drew out a cigarette.
"A trap?" he repeated, shielding the thing from the wind as he lit it.
"But the question is," went on the captain, "how can we set this trap?"
"Go ahead," dared Blake. "I'm listening. You tell me how to set a trap for an invisible criminal!"
"Listen, now!" burst Mooney angrily. "I don't want any of your impudence! I'm trying to work along constructive lines. If you want to help me, okay. If you're not interested, get back to your own department!"

Blake was quite accustomed to arguments of this kind with Mooney. Perhaps this was the very reason they always got along together so well, like two overgrown boys.
The detective followed his usual pro-
cedure of profane apologetic pleadings, knowing of Mooney's weak determination against Blake's coöperation.

He gained his point.
"All right, then, but remember-no more of that stuff. Work with me, not against me."

And when they reached Mooney's office, they did work together. They devised and adopted a plan.

- Mooney, Blake, and Sergeant Fleigh, dressed as ordinary citizens, were being transported the following day in a motor boat to meet the Batavia.
"All the papers carried the item," announced Police Captain Mooney, handing one of the newspapers to Blake.
A small, neatly wrapped square package lay on Mooney's lap. It was the "bait" for the criminal, supposedly containing a precious shipment of cut diamonds.

The detective looked at the item and Sergeant Fleigh read from over his shoulder. It told of a shipment of diamonds that was to arrive at noon on the Batavia.
"Okay so far," spoke up Blake, giving back the printed sheet. "Here's hoping it works."
"Now, Sergeant," Mooney warned, "remember, you're the one to carry the package when we 'arrive' off the Batavia, and I don't want any slip-ups."
"I understand, sir," returned Fleigh with a grin. "I'll do my part."

They succeeded in meeting the ship beyond sight of land, and after some minor difficulties, boarded it.

Nothing eventful followed their display of badges to the captain of the vessel.
At twelve nøon, sharp, the huge Batavia docked amid the cheers of the welcoming crowds. The connecting gangplank went into position and passengers made their way to the pier.

The customs officers did not stop the trio, however, in earnest. By prearrangement, they questioned the three, in order to avert any suspicions on the part of the criminal.

Released by the customs men, Mooney
pretended be sought an expected automobile.
"Where's our chauffeur? I'm going to fire him sure as the devil!" he spoke aloud. "He's never on time."

Blake took his cue. "Well, we ćan't stay here. Let's look for a cab on the street."

Mooney and Blake both walked close to Fleigh as they made their way from the pier to the street. Each of the two men held one hand in a coat pocket, a finger on the trigger of a loaded pistol. But nothing happened.
"That's funny," remarked Mooney. "Not an empty cab in sight. Let's take this short cut through this side street."

Blake knew the reason for that remark. It was plainly for the purpose of offering a still better opportunity for the criminal to make his appearance.

The trio made its way along the quiet street, where only shut-tight warehouses stood. The street itself was a complete contrast to the noise of the crowds at the ship. Even the voices failed to carry to this place.

Mooney walked first; Blake stayed behind. This manner of proceeding gave the impression of Fleigh being guarded.

A sudden yell from Blake startled Mooney.
"Fleigh!"
Mooney spun about on his heel. At the same instant, he felt that his hand no longer clutched a revolver. A rumpled piece of paper was in its stead.

Fleigh was flat on the ground, his stilled eyes staring blankly up at heaven.
"What happened?" Mooney demanded.
Blake could only remain motionless, hardly able to even speak.
"I-I don't know," he managed finally. "All of a sudden, Fleigh's on the ground instead of walking in front of me."

Mooney bent over the motiontess figure and completed a hasty examination.
"Strangled!" he gasped. "Finger marks on his throat ! How in the world-" then he turned to the still dumbfounded detective. "Didn't you see anybody at all?"

Blake forced himself to blink bis eyes
and bring himself out of the daze. He moved his head slowly in the negative as his lips hardly moved. "No. Nobody."

Mooney stood upright.
"Don't stand there like an idiot! Go get an ambulance!"

Blake found it hard to move his eyes from the figure on the ground. It was all so ridiculously impossible. He moved away and soon broke into a run for the nearest telephone.

Mooney, in the meantime, looked at his watch. It read exactly one o'clock. The boat had docked at noon. What had happened to the hour between? He puzzled. Suddenly, he recalled the piece of paper he had felt in his pocket. He drew it out and read the following note, scribbled in pencil:

## Captain Mooney:

Trying to lay a trap for me with a fake package is about as useless as looking for me in China. Take some good advice. Lay off unless you are anxious to join Sergeant Fleigh.

Mooney gasped. What manner of criminal was this who could execute his crimes without being as much as seen ?
"Well, I'll be-!"

## The Plot Thickens

- At headquarters again, Captain Mooney's powerful magnifying glass revealed no fingerprints on the note but his own. The writer had evidently worn gloves.

Blake was seated near the desk.
"Can't figure that out yet," he said. "Fleigh strangled to death right before my eyes and," he snapped his fingers significantly, "just like that!"

Mooney took the pencil he had in his topcoat pocket and began to make notes.
"Look!" Blake exclaimed. "This pencil you're using! It has exactly the same broad point as that used on the note itself!"

The Captain scrutinized his own notes with the writing on the scribbled note. He used the magnifying glass again and identified the two as being written with the identical pencil!
"Can you imagine the audacity! Used my pencil to-say! This piece of paper comes from my own notebook!"
He found the torn stub in his notebook and by placing the piece of paper to it, found it to correspond exactly. Mooney stared, dazed by the discovery.
"How could anybody get to my pockets? No one even came near me-."

The telephone interrupted.
"Hello," drawled the big captain into the mouthpiece. "Captain Mooney speak-" He sat upright and changed his speech to a much smoother tone. "Yes, Commissioner. Yes, I'll come right up."
He clicked the receiver back on its hook. "What's up?" Blake wanted to know.
"Commissioner's burning up. He just got the report on this case. Wants me in his office right away."

Blake shook his head.
"I'm glad I'm not in your shoes. Two murders and a flock of robberies in a little burg like this without even a suspect doesn't look so hot for you. You got my best wishes, though. I'll wait for you here."

The office door closed behind Mooney and Blake was alone. He wondered what the commissioner would do with the captain. He arose and began pacing the floor. He didn't want to see Mooney demoted.

At least a half-hour passed before the big captain returned through the door, mopping the abundant perspiration from his neck and face.
"Thinks it's all your fault, I suppose," soothed the detective.

Mooney did not answer.
"Well, what's he want you to do?"
Mooney sneered.
"He's sending that scientist Finney in on the case. Says the people are getting too 'het-up' about it."

And later that day, while Captain Mooney sat alone, a rapping on his office door interrupted his thoughts.
"Come in!"
The Desk Sergeant, with a snappy salute, announced the arrival of the scientist.
"Show him right in."

The fellow appeared to be more of an athlete than a scientist. He was unusually well proportioned and his face betrayed his youthful age. With a word of greeting, he shook Mooney's hand and took a seat. He immediately asked for the details of the strange case.

Mooney minced no words. He reviewed the entire matter from Wylie's case to the present time.
"Hm-m," mused the scientist thoughtfully as he crossed his legs, "right interesting."
"Interesting?" retorted Mooney. "It's too darned impossible! And not even a real clue for a starting point."

Another knocking on the door interfered.
"Come on in," from the captain.
The door opened and the Desk Sergeant announced, "Mr. Wylie here to see you, sir. He seems excited and impatient."

Mooney thought a moment, and then said, "All right, send him in."

Wylie was shaking all over. He seemed to have reached twice his age since Mooney had last seen him.
"Sit down, Wylie," invited Mooney, pointing out a seat. "What's happened to you? You look like you're-"

Wylie slipped into the seat.
"Is it all right to talk before this gentleman?" He nodded toward Finney.
"It's okay," returned Mooney. "Go ahead."

Wylie leaned forward. "Mooney," he said, "I've learned something. As a result, I've grown old overnight. You know I've always had a hobby of experimenting in chemistry. I even have a special laboratory built in my home. Last night, I was working with some dangerous chemicals. As a protection, I wore a rubberized suit and face covering. No part of me was uncovered except my eyes and even they were protected by a pair of glasses. The acid explosive I was working to complete proved to be a success. Its secret, of course, would be of tremendous value to the government for future warfare. Suddenly, I felt a ticklish feeling run through
me. I turned about. I saw the man who stole my bank's money-the man who killed Mackleer-"

Finney broke in. "How did you know he was the man?"
"He admitted it after I refused to divulge my secret, in order to shew me his powers. He even told me that he had not come with the purpose of speaking to me, but my rubberized helmet and glasses had prevented his original plans. He began to choke me until I finally gave him the formula. He warned me against reporting to the police-"
"How does he execute his crimes? The missing hour- Who is he? Did you-?" Mooney began to question, excitedly.
"I did find out how he carries out his crimes. It's all so simple and-"

- Finney had just lit a cigarette and was exhaling the smoke when an astonishing thing took place. The smoke ceased to come out with his breath. There was not even a taste left of the tobacco smoke in his mouth. In that flash, the cigarette too, had disappeared from between his fingers. Astounded, he saw that it lay on the ash tray before him, all burned to ashes.
"Wylie!" Mooney cried out, leaping to his feet.

Finney saw that Wylie was still in the seat. His head was forward, limp on his chest. A quick examination revealed the brutal knife still extending from Wylie's back. Blood was on the floor.
The questioning of the Desk Sergeart in the adjoining room revealed nothing. He had been in the next room all the while, and there was only the one connection from Mooney's office to this particular room, yet he had seen no one come or go. How did anyone get into the office, then, to kill Wylie? What happened to the interval of time between that in which the cigarette was lit and burned out?
Finney turned these questions over in his mind seriously, that evening, as he sat in his big armchair before the crackling $\log$ fire. A scientific criminal who had
created a gap between his progress and that of the police was indeed a problem. Finney would have to span that gap. He would have to catch up to the point in science at which the criminal had arrived.

Wylie's information about the head covering was invaluable. At least, the way to shield himself from the criminal's efforts to some extent would now be possible. But of what value could even that be, when there remained the vital question of first locating the criminal?
Finney glanced at the rubberized hel-met-like hat he had purchased before coming home. It was black and of such construction as to serve also as a complete face mask. A pair of goggles had been sewed into them making the thing a complete coverage of the head.
He leaned to a side and clicked on the little short-wave radio set on the small table. It was adjusted, as usual, for the local police broadcasting station. Finney paid no more attention to it, however, and turned back to his problems.
"Calling Scout Car Number Seven!" suddenly burst from the speaker. "West Avenue and First Street. A fire, result of explosion. Fire department and ambulances are on the way. Calling Scout Car Number Seven-"
Wylie had spoken of an explosive chemical. The formula had been stolen. Could it be-? And the address was no more than a mile from Finney's home. Finney snatched the rubberized mask and was on his way.

The siren on his fast coupé gained the right of way for him as he sped across the street corners. It was only a matter of a minute before his tires howled their screeching noise as they slid the car to a stop. Only a crowd was before the burning building. Finney quickly made his way into the edifice. On the second floor, the flames were eating their way fast from the general direction of one particular room. This room, there could be no doubt, was the one in which the explosion had taken place.

Finney stumbled over something. When he kneeled down in the smoke, he found
it to be the body of a semi-conscious man, clutching a flashlight in one hand.
Finney lifted him.
"Any one else in the house?" he asked.
The short stockily built person seemed to regain more consciousness. He shook his head in the negative.
"I live here myself," he said.
Finney put him across his back and carried him into the street. The sirens of fire engines and ambulances were close at hand. In spite of the surprised crowd. Finney put the man into his own car. He sat back limply.
"Hurt much ?" Finney asked as he drove toward his own home.

The small fellow shook his head in the negative.

As they stopped before Finney's house, the fellow spoke, his voice unexpectedly rough.
"Where are you taking me?" he demanded.
"To my house."
"What's the idea? What right have you got to take me to your house? And what's the idea of the mask you're wearing?"
"I want to talk to you."
The little fellow was fully recovered.
"You and I have nothing in common! I'm leaving you right here!" he blurted.

Finney grasped the man's coat behind his neck.
"You're coming with me!"
Finney immediately frisked the person for any concealed weapons. He found 2 knife, still in its sheath. He removed it and placed it in his own pocket. He almost pulled the little fellow from the front seat and pushed him ahead of himself, into the house.
"Now," started Finney, inside the house, "I want to know what caused that explosion."
"What explosion?"
"Come, come! The explosion that caused the fire. That chemical you were working with-where did you get it ?"'
"O-o-h!" drawled the little fellow, squinting his eyes hideously. "So you're a copper! That's what this is all abous ! Well, I'm not afraid of you or anybody.
like you! You might be wearing protection over your head, but it won't protect you from this!"

- He drew a small tube of fluid from his pocket and held it up. His eyes glared and his teeth showed as he broke into a maddened laugh. Finney reluctantly backed away..
"Wylie's wonderful explosive!" announced the threatening person, still carrying on his blood-curdling laughter.

Some one was rapping on the door.
The little fellow looked toward the door and quickly back at Finney.
"No! I'm not cornered!" the little man yelled. "Let them come !"

He held the flashlight he had been carrying toward the door. With his other hand, he flung the little tube at Finney.

Finney leaped aside. An explosion rocked the room. Part of the ceiling caved in with its downpour of plaster. A gaping hole, only, remained where the wall had been.

But Finney had been particularly fortunate in his quick dodging of the explosive. Only his arm ached from the jolt of a beam that had caused him to fall to the floor. He raised his head and saw the little fellow face the door.

An axe split through it. Soon it was down. Police, headed by Captain Mooney, came inside. The little fellow still held his position, his flashlight lit and focused toward the incoming group.

At the second, the entire solution of the mystery flashed through Finney's mind. He understood, then, why this fellow was unafraid and sure of himself.

Finney managed to get to his feet and sprang upon the back of the fellow. Together, they fell to the floor in a tussle. Finney was amazed at the strength of his opponent. But the police soon separated the pair and held the stranger a prisoner.
Finney removed his helmet and rubbed his still aching arm.
"What made you come here?" Finney asked of Mooney.
"The crowd told me a man had been carried out of the burning building and
taken away. They gave the license tag number of the car. Finding it to be your number, I came immediately. What is this all about?"

Finney picked up the flashlight from the floor.
"I think I can explain the mystery to your satisfaction now. You," he said, turning to one of the patrolmen, "stand over here."

The fattened officer did not know Finney. He hesitated.
"Go ahead," ordered Mooney.
"Now," started Finney, "it looks like this flashlight I am holding in my hand is the very solution to our mystery. Here, I'll turn it on and focus it on this officer."

Mooney noticed the strange glare that instantly came to the officer's eyes, and the rigidity that gripped his body.

Finney turned off the flashlight and walked up to the now stone-like officer.
"Dance a jig until exactly five minutes from now," Finney addressed the officer. "You will then awaken without remembering what took place since you went to sleep."

Mooney could not resist speaking as the fat officer danced. "What in the devil! Do you mean to say this officer is asleep?"
"Certainly. Under the inducement of the ray, he immediately became under hypnotic influence. In five minutes, if my guess is right, he will awaken and only remember up to the moment I told him to stand over here. To him, five minutes will have just disappeared. In other words, the solution to the whole thing is simply 'hypnotism' carried out by a rapid action ray."
"But that doesn't explain how the bank was robbed-or the armored truck."
"It does. Under the hypnotic influence, the criminal had only to make Wylie himself open the door to admit him into the bank. Wylie himself could have handed over the money. But the criminal ordered him to forget all that had taken place and to awaken one hour later in the exact position at the vault door. The motorcycle escorts and the armored truck men were
(Continued on page 1383)

(Illinstration by Pawl)
Doctors stood along the wall of the entrance tunnel and gave the first injections as the people passed.

## THE PROPHETIC VOICE

## By

## LAURENCE MANNING

- It was about one hundred and fifty years ago that the world, newly thrilled by communications from the future, began to expand its mental horizons. We humans took deeper breaths and eyed the stars speculatively and, to tell the truth, none too reverently. We should soon, perhaps, have conquered the art of space travel and commence the exploration of the universe itself - why not? If time could be conquered, why not all other dimensions? Rocket ships had already explored Mars and Venus-a few had even returned safely. The United States of the World included in one harmonious nation all the races of the world, except for the Hottentots, Esquimeaux, and such other lesser breeds which were kept on reservations as wards of the nation. One laniguage, one government, one scheme of education-all these unities had had their effect. Wealth to some extent was common property and such primitive things as poverty, famine, and want had been banished. Remember that this enviable position had been recently reached-the old ills not yet entirely forgotten. Is it any wonder that a man's head seemed to tower among the stars? Into the midst of this hopeful research the message from Mount Everest's Mentelepathic Laboratory came like a thunderbolt and left numb horror in its wake.

It was authentic enough, too. Dr. Baisdik himself signed it and there can be no doubt whatever that it was actually received by him and his associates. His unknown communicant had first definitely established the correct year by means of star references and historical datings. Then he had grown excited and poured
> - After an absence of quite a few months, your favorite author, Laurence Manning, is back with us again with an unusual little short story.

> Perhaps the novel feature in this tale is that it leaves an uncertainty in your mind. It is left for you to decide whether "The Prophetic Voice" was something to be taken seriously or only a hoax.

> We have had all kinds of dooms descend upon the Earth - conquerors from the void, floods, earthquakes, subarctic cold, death rays, etc., but here we find something so out of the ordinary that you will recall nothing like it in all of the stories you have read in the past.

> We cannot praise too highly any story with Laurence Manaing in the "by": line.

out to all his warning in five vivid minutes. The exact words have been preserved.
"Obviously there must be some way of escape-here I am in existence, descended from you. It is all over and therefore some of you must have escaped. But at the same time there can be no doubt whatsoever that a disaster of some sort will overtake your world within twelve months.
"Somehow the knowledge that you will escape-my ancestors at least-keeps me from feeling too much worried. Yet it is absurd not to take precautions-I must warn you. It must be important. Perhaps this warning I am giving you is the very means by which you are to escape . . . . [it was at this point that the message grew more rapid in its telling] . . . . Why that's it, of course! Do you hear me? Do you understand? What I am saying is ordained to save the world!
"The form of the danger? No, I do not know that. Yet my information is horrible enough. Sometime between one and two years in the future (from your preseft date) there will remain not one
human being alive on the planet! That much I know for certain-as to the rest I can only guess. But you are not so far in the past but what deductions may be drawn. There has been no collision between the earth and a comet, for instance, for the geologic 21 scars would remain for us to see today. Moreover, trees and plants grow on the earth even as they do with you-so heat cannot have been the agent which is to wipe out human life. What then? Loss of atmosphere? Hardly likely, for it is present in my age and cannot have been built up quickly. No, there are only two possibilities: First, that some poisonous gas has spread through the atmosphere-or some deadly radiation-sufficient to kill humans but not plants; second-and for this I have strange grounds for suspicion-there may be soon to visit the earth a race from some far distant world-powerful, skilled in sciences, which you cannot resist and which will hunt you through the forests and over the oceans until not one single man or woman remains. This last is what I really suspect!
"You must find some means to escape -one exists very certainly, for how else have the people around me come into being unless they are descended from you? As I see it, you can escape by hiding-a great cave deep underground with the entire peoples of the world gathered into it. You must stay there for years-until all danger is past. I would think perhaps even fifty years is not too long-perhaps a hundred!
"How can you live underground without food? All that is required is bare existence, so that when danger no longer threatens you can ascend to the surface once more and live in sunlight. Suspend your metabolism, of course! . . . How? Surely you know-but perhaps not. It is simple. . . ."

And the message ends with the formula of drug and condition necessary-a matter of no immediate interest here. Read over the communication once again and see if you, in the light of outr present philosophy of life, would have been
stampeded into immediate action. I think not. Most of our race today would be rather inclined to take up posts of observation the better to view this mysterious disaster so glibly promised. But times have changed and in those days it was still considered a crime to commit what was called "suicide." It would have been considered "suicide" for them to risk one's life in such needless curiosity.

For they believed every word of it. There was a major panic, from all accounts, and the racial annals are actually blank for weeks at a time while the clerks in the Division of History were out-ofdoors, perhaps eyeing the sky fearfully for signs of danger. Eyewitness accounts are available almost by the million, of course, and no doubt none of my readers but has skimmed through one. The great Blaisdik himself will do for authority as well as another.
"When I landed in Europe," he writes, "it was to find a world altogether disorganized. Leadership was lacking in the true sense, although of course a dozen wild schemes were mouthed on every street corner by a dozen self-appointed saviors of the race. Research was actually stopped in the laboratories and even some of the automatic factories were left unattended so that supplies ran short occasionally. I remember that it was impossible to obtain sandals or red wine for almost a week, for instance. And trans ${ }^{2}$ portation facilities were completely topsyturvy. The finding of the great caverns in the Pyrenees a decade before had always impressed me as a wonderful thing. Nothing could have been more natural, therefore, than for the idea to occur to me that these caverns-two miles below the mountain-tops-might be used to preserve my fellow beings from destruction. I claim no credit for so obvious an idea. To my surprise, the solution I proposed had the effect of instantly stilling the confusion. Instead there was action and an embarrassment of willing hands at my command, so that I was pushed along by popular opinion, rather than a leader showing the way to escape."

- Dr. Blaisdik's proposal was that the new caves in the Pyrenees be expanded artificially into one great chamber a mile across and a mile in height to an enormous vaulted roof strengthened with reenforced concrete and supported by massive steel pillars. This roof in turn would be a mile below the rocky surface of the mountains above and protected by this vast thickness of earth, with the entrances well concealed and fortified so that the entire population of the earth could be gathered together, each in a separate cubicle seven feet long and three feet in diameter. Here, having taken the proper dose of the drug necessary, they would lie insensible for fifty or a hundred years as might be decided upon. When they awoke, the danger would have passed and life could again be resumed.
"I shall never forget," he writes, "the appearance of the caves as the excavating neared completion. I entered by a great tunnel down which twenty people could walk abreast and at its end looked out upon a subterranean world filled with dusty air and lit in fifty thousand directions by miner's lamps. The lights were constantly shifting and turning, giving the effect of much confused labor, which was heightened by the constant roar of related sounds-hammering, automatic drills, the fall of stone, and the mutter of distant voices blended into one vague murnur. Across the levelled floor rattled trucks and while most of them were removing loose stone from the cave, some were already bringing in the steel girders for the great columns already under construction. A great pile of sheet metal was being accumulated noisily for the human cubicles which would fill the entire cave."

What had happened cannot be explained psychologically except by reference to mob minds, To convince one man that because of some undefined peril he must burrow under the ground and remain in a state of suspended a nimation for many years - would be difficult! He would perhaps refuse. He would demand proofs and even then might decline to bother himself. Not so do a million men react. Some
nameless spirit takes hold over them and in an instant they are converted-moreover they will instantly insist that another million men agree with them!

Solemnly, in city after city, continent after continent, men and women voted upon the problem and time after time the majority voted to make exodus to the Pyrenees. Whereupon each particular community voted it "suicide" to abstain from accompanying the majority to safety. Committees of public safety were set up to see to it that each resident-man, woman, and child - should accompany the movement of the rest of the populations of earth. Spain became filled with people months before the caves were ready. Steel mills in Newfoundland were shut down and the fires drawn for the last time before all the steel required for the construction had been fabricated! The chemical companies did their part well, and three large vessels berthed in old Cadiz with the entire medical requirements of the earth's population on board-only to have the crews desert before unloading could be completed! But the time came, and surprisingly soon, when all details had been attended and the call went forth for the great gathering.

Those nearest to hand were, of course, disposed of first. A thousand doctors stood along the wall of the entrance tunnel and gave the first injections as the people passed - old men leaning upon sticks, young children eyeing the throng with wonder in their eyes (and sometimes fear), babies in their mothers' armsalong they came at a steady pace and into the cave. Here they were guided in a dozen separate streams which followed up inclined wooden ramps to elevators and were whisked aloft to the topmost tier a mile above the floor. As the upper tier of cubicles was filled, the next one was opened. Fifty thousand physicians and medical assistants stood at the cubicles giving each person the final injection and telling them to crawl into the narrow box which was to be their temporary tomb for so many years to come. It was of course impossible to sit up-one must needs lie down. The
feet were inserted first and the head carme at the open end. Here (in case of premature awakening) was fixed a vial of stimulant and a light switch. But these arrangements had been studied for months by all as they appeared in the television broadcasts and, moreover, each newcomer had had two injections. He scarcely had time to lay his head down when unconsciousness fell upon him and the tramp of a thousand feet a few inches from his face faded into a dull, rumbling nothingness.

Twenty such entrance tunnels fed the gathering populace into the caves. Twenty abreast they marched down each-thirtyfive thousand an hour twenty times repeated. Each day almost seventeen million were cared for and stored away against the great awakening, for the work was carried on twenty-four hours a day. Yet even at this speed the whole of southwestern Europe was dangerously crowded and a food shortage threatened ruin for a time. Three months elapsed before the last of the gathering had vanished underground and still day by day people came in thousands-rounded up by air patrols or factory units from distant places who had stayed to the last to maintain supplies for others. It was another month before the last patrols were in and the staff of medicos had been reduced to the last few of the directing staff. The great doors, planted with fast growing creepers set in pockets of earth, were shut and even the cracks of sill and jam filled with earth and planted with shrubs and plants which would conceal the last traces.

Inside, the lights were out except for the last corner where the chief physician stood inoculating Dr. Blaisdik and gravely handing the hypodermic syringe to him, at the same time offering his own arm. The two men shook hands and crawled feet first into their cubicles. The last light went out and in a few minutes the faint sounds of breathing grew quieterfinally ceasing altogether.

Picture the world outside, for a moment! Here is London, streets empty and silent. The wharves at night seem haunted
by rustlings and creakings and the Thames has its own little noises as though the ghosts of boats were slipping by on the tide. But the only life is the fish in the river and the rats in the pilings. And those mournful howls that echo across Trafalgar Square are from a homeless dog whose gods have died.

New York's skyscrapers are like specters in the mooniight and her down-town streets as quiet as though it were always Sunday morning - Chicago, San Francisco, Tokio, Shanghai-it is the same everywhere. In Montreal bands of wolves have already chased deer more than once through St. Catherine's Street. It is a world as devoid of sensible life as those mysterious cities found in the Mayan jungles. Like them, curiously enough, the problem that would face the chance visitor would be-why? And that question remains unanswered today.

- Eighty years later Dr. Blaisdik and his physician awoke, they having timed their awakening earlier than for the rest of humanity. Cautiously they tested their muscles and dosed themselves with restoratives. Carefully they selected a working crew for the first food factory-awakened and restored them-fed them from the reserves and set them to work. Then, with supplies on the way, they brought back a few dozen physicians to consciousness and repeated the process until all of France and Spain were in production. It took ten years to bring the last sleeper out of his cubicle, and by that time the cities were again populated as before. Many buildings were in ruins from neglect-most machinery had to be completely replaced with new-but the job had been done and the minds of the curious asked, as we do, why? For no slightest trace of any great happening-dangerous or otherwisecould be found. Surveyors mapped the entire face of the world from the air and compared the results with old photographs. No changes. Chemists tested the atmosphere for signs of poisons-no changes. Communication was restored by mentelepathy with the future and perfect-
ed quickly into its present form. No one could be found in the present or the future who knew of the warning, nor who could have given it.

Dr. Blaisdik, somewhat discomfited by a sudden cooling in popular opinion, retired to his observatory and the world hesitantly agreed that the whole affair had been a hoax from beginning to end. Perhaps a few were puzzled as to what possible purpose there could have been in such a cruel joke, but such doubters seldom raised their voices and so the curious incident has passed into history. Our metaphysicians are still discussing which came first: the future knowledge that the race would bury itself in a century of panic, or the actual panic, which might have been sensed vaguely by some future correspondent who mixed up cause and effect. For obviously, the alternative that the hoax might have been entirely unintentional has occurred to many.
Whether due to the shock to his pride, or from truly reasonable causes, Dr. Blaisdik a few years later published the following rather fantastic statemerit. Nothing came of it, for a month later he died from some undetermined malady in his lonely observatory on the top of Mount Everest.
". . . . I have an altogether different solution to propose. Suppose that the facts be marshalled one after the other and none ignored. First comes a message, presumably from the future. If so, then since all the present world knows the facts, such a warning as was given would be meaningless. To call it a 'hoax' is merely another way of calling it absurd. Why not, rather, grant that the intelligence great enough to send mental messages must be great enough to be serious? What do we argue from such a presumption-why, that the message was not from the future at all. But, since it was plainly from a great dis-tance-since this distance was not in time it must have been in space. Now since there are no human beings in space out beyond the solar system, at least none known, what is more natural than to assume that the message came from other than a human being?
"Let us analyze once more this famous message: First there is a vague warning, including a suggestion that poisonous gases or rays may wipe out the human race and, alternately, an alien race of su-per-beings may land upon the earth and kill all men; second, there is a definite plan of action outlined. This plan of action is made to appear, it is true, like a means of escape. But might it not in reality be simply a thing desired by the sender of the message? He is not Human, remember, and he is from Outer Space. Why has he sent a message at all? He must have a purpose, obviously, and it should be equally obvious that that purpose is to get all of mankind shut away down under the earth for a period of years.
"Why? What purpose could he have in such a desire ? Let us suppose, for the moment, that you who read these words wish to investigate an African jungle filled with lions and elephants and rhinoceroses and other dangerous animals. Might you not wish to get the beasts out of the way before you commence your exploring? Naturally! You would probably do this by means of lines of beaters, smoke bombs, noisy explosions, and rings of fire. The wild animals, in a panic, would rush away and leave the jungle empty so that you could conduct your work in safety.
"And to leap at once to the solution I propose for the entire mystery, I ask you what strange ship may have appeared out of the sky during our eighty years of sleep? What strange creatures may have landed from her ports and scouted through the silent streets of our cities? What mysterious minds may have ordered the sampling of earth, air, water, temperature and solar radiation? And most important of all, what conclusions were drawn?
"Or was this concealed expedition simply to acquire a supply of some element abundant here on earth ? I think not. Already our human scientists are close upon the discovery of atomic synthesis. These alien creatures we have deduced upon these pages must be far ahead of us in
(Continued on page 1384)


## (ulinstration by Paul)

Their steel bodies bristled with seares of long tapering qubes, twenty feet high, and pointing in all directions, like the throats of siege guns,

## IN CAVERNS BELOW

## By STANTON A. COBLENTZ

PART TWO

## WHAT HAS GONE BEFORE:

- Philip Clay and Frank Comstock are exploring an old mine in Nevada when Frank, who tells the story in the first person, feels tremors in the earth as they go down farther and farther below the surface, though none of the others of the party, not even Phil, could notice anything unusual. Frank thinks it strange that there could be any hint of an earthquake in this pert of the world. Suddenly, and unexpectedly, an unusually intense tremor is felt and the floor caves in under the two men, who plunge down into immense gulfs, rolling over and over down a forty-degree slope. They cannot estimate whether this continued for minutes or hours, but when they finally land, bruised and battered, they know that they are farther below the surface than man has ever been before, in pitch darkness, without their searchlights (which had been lost in the fall) and without hope of regaining the surface. For hours they wind around corridors with smooth walls. A growing terror comes upon them that the walls are not natural formations. Finally they see a weird patch of light in the distance and approach it hesitantly, yet eagerly. Upon reaching it, they come upon a huge abyss. A mile below they see two great armies destroy each other, and then great war-machines appear which blow one another to pieces. Bewildered by this display (which had caused the tremors in the earth that brought them to this predicament) they barely escape when they are attacked by dazzling lightnings of some alien underground race who think that they are the enemy. In their panic, the men become separated and Frank is finally captured by chalk-white people who can see only at a distance. Imprisoned for a short while, he is about to be killed as a spy when he is rescued by a dignitary and taken before the ruler of the Underworld. He learns later that the ruler will allow the scientist who had saved him to keep him for the purpose of finding out what he knew-for his notebook showed that he was not one of the enemy race, as did also his peculiar coloring and faculties. Now go on with the story:
- In every phase of our modern cipilization, we can usually bring forth what is considered the "best" of anything. For instance, we would set up the Erupire State Building as the greatest structure in the world, Gar Wood as the acme of auto racers, Irving Berlin as the sapreme song-writer, or the World Almanac as the best book of statisties.

In the same manner would we labl the novels of Stanton $A$. Coblentz as the most excellent satire. If you are doubtful as to the true meaning of this word, you will have a better definition of it his your mind after reading this story that any encyclopedia could give yous.

Many of our present-day laws and castoms are shown as utterly ridiculous when carried to the extreme through the pages of this novel. But it's all in fuis and we want you to share it with us.

Adrenture through the topsy-tarp world of Wu with Frank Comstoclr, a "dizzier" Wonderland than Alice ever dreamt of-which Wonderland, by eevis parison, would seem as solema as as church sermon.

## CHAPTER X

## Some Riddles Solved

- The home of Professor Tan Trum was typical of the so-called "Second Class" citizen of the country of Wu . It was composed of five or six small rooms, excavated out of solid rock, and opening on one of the numerous side-galleries that threaded the underworld. There were no windows, but light was provided by the yellowish-green electric bulbs; while a constant supply of air was forced in through whirling fan-like devices located in little orifices near the front door. All in all, the Professor's abode was comfortable enough, although I could never accustom myself to the stone chairs and tables, to the stone beds without pillows, or to the grotesque hangings and adornments, com-
posed of small likenesses of swords, helmets and land-battleships, which constituted the native idea of art.

The family of the Professor included his wife, Tan Tal, and his three daughters, Loa, Moa, and Noa. In them I made my first acquaintance with the feminine half of the population-and not few or slight were the surprises which they gave me! To begin with, there was the trouble of telling them apart, and in distinguishing the oldest from the youngest. On first entering the house, I assumed that Tan Tal, the mother, was the most youthful of the girls, while Loa, the last-born daughter, struck me as undoubtedly the parent. And this mistake, absurd as it may seem, was only natural, owing to the peculiar ideas of beauty entertained by the ladies of Wu .
For it was their opinion-in which the men seemed to share-that the supreme mark of a woman's loveliness was her wrinkles, and that the more wrinkles she boasted, particularly around the eyes and on the neck, the more alluring was her appearance. Hence all the damsels used to spend hours a day with wrinkle-producing creams, with permanent "wrinklewavers," and with other devices to create creases in their naturally smooth countenances; and only the old and matronly women, who were past the stage of trying to shine before their lovers, could afford to neglect the cosmetic arts and to let their features unwrinkle themselves.
It was for this reason that the young Loa, who, as I was later told, had barely reached seventeen, impressed me as a hag of advanced years. Her cheeks, her forehead, and her neck were furrowed in such a fashion as to remind me of a crone of ninety; while she was rendered all the more hideous, to my way of thinking, by the cream-colored paint with which she had daubed her lips, and by the fact that her eyelashes, in accordance with native custom, had been shaved away. Yet in the estimation of the chalk-faces, she was supremely beautiful!

There was another fact about Loa-and about all the other ladies-which grated
horribly on my sensibilities. This was that, while the men wore skirts, the women all went around in trousers! All females, above the age of four or five, wore loose, pajama-like pantaloons of various colors; and it was considered unseemly, not to say indecent, for a lady to appear in any other costume; in fact, one of the maidens of my acquaintance was denied admittance to the best social circles because once, in jest, she had donned her brother's skirts.

In the same way, I myself was looked upon with suspicion, not to say contempt, because the trousers which I wore were considered unbecoming for a gentleman. Some persons, seeing me from a distance, made a mistake as to my sex, while others were so shocked that they went away shuddering with noses pointed high in the air in horror. Only after Professor Tan Trum had been officially notified of nry delinquency, and had remedied the situation by providing me with one of his old black skirts, was I able to appear in respectable society.

I am sure that any of the local youths would have envied me the privilege that I now endured for several hours each day. This was to be instructed in the native language and institutions by the "beautiful" Loa. Professor Tan Trum, of course, supervised my education, but was so absorbed in his researches into the roots of extinct verbs that he could not give me more than a few minutes a day. Hence, it was natural that his daughter, having little else to do with her time, should be my instructress.

I must confess that she took her task, on the whole, conscientiously enough, although her first efforts were not to teach me the language, but to teach me how to pencil my eyebrows, whiten my cheeks and lips, and bleach my hair, so as to conform to the native idea of masculine beauty. Failing in these efforts, she resigned herself with a sigh to the inevitable; yet from the too-gentle and yearning way in which she glanced at me from time to time, I could see that my charms, such as they were, had had too much of an effect on her impressionable young
heart. Already I had intimations that trouble was brewing!

- But let me pass from this subject, for the present, to mention some of the astonishing facts I learned under her tutorage. First, of course, there was the necessity of studying the native language; but, fortunately, I made rapid steps in this direction, not so much because of any natural ability, as for the fact that Loa was a capable teacher, and because I made every effort to remember when she pointed to object after object and mentioned its native name, and then, after a time, began linking the words into simple sentences. I was like a little child first learning the language of its parents; but having, I confidently believe, a quicker intelligence than a child's, I was not long in absorbing the rudiments of the vernacular. Within two or three weeks, I could exchange elementary ideas; within a month, I could conduct a brief conversation; while, in less than three months, I was able to carry on an extended colloquy with any member of Tan Trum's household, and would not miss more than an occasional word, due to the limits of my vocabulary.

Strange, unbelievably strange, were my discoveries as to my new home. The underworld, composed of the twin countries of Wu and Zu , reached for hundreds of miles in all directions, and probably underlay not only most of Nevada, but much of Utah, Arizona, and adjoining states. This whole vast universe, comprising a multiplicity of great caverns and smaller connecting galleries, some of which reached down eight or ten miles, was inhabited by a population variously estimated as between forty and fifty millions -all of them chalk-faced and salmoneyed, like the ones I had already seen. Neither Loa nor her father could tell me how long they had dwelt underground; their written records dated back thousands of years, and their claim was "Forever"! While there were traditions that once they had lived above ground, in a land of blue skies and open air from which
they had been driven to escape annihilation in warfare, there were now no intelligent men to believe such tales, which were not only preposterous on the surface, but had never been proven by historical research. It was generally held that human life had originated in caves underground, and that, as population multiplied, men had excavated new caves and corridors to take care of the surplus millions.

So accustomed had the people become to their subterranean environment that it was impossible for them to appear above ground, unless they wore heavy metallic suits, like those of undersea divers, in order to protect them from the rays of the sun, which their white skins, having lost all pigment in the course of the ages, were no longer able to endure. Hence their belief, which scientists had verified by means of elaborate mathematical proofs, that no life could endure above ground, and hence the fact that none of them had ever been observed by our race; for only once every score of years would any scientist of Wu venture above ground, and even then he would emerge in some desert place where no human habitation existed.

But how did the millions of Wu and Zu manage to preserve life underground? How did they contrive to eat, breathe, and clothe themselves? That was one of the first questions I asked; and the answer came to me partly from Loa, and partly from my own observations.
The secret, as I had early surmised, was to be found in the prodigious scientific development of the Underworld. I do not exaggerate when I say that they were centuries in advance of our own race; they had evolved mechanical formulae and devices of which we have not the remotest conception. As an engineer by profession, I was naturally much interested in this phase of their growth; and while I was not able to study or understand all their numerous contrivances, yet I could understand enough to fill me with. amazement and admiration. Every phase of the life of Wu , I found, depended upon science. Without it, they could not have
existed for a single day; it was both astonishing and frightening to know how completely these people had come to rely upon their own inventions.

- I shall not take time, at this point, to dwell upon all their elaborate appli-ances-which, indeed, would require a separate volume even for their enumeration. I shall leave out of account the intricate ventilating system, by which they pumped an adequate supply of air from the outer world ; for I shall have occasion to refer to this again. Likewise, I shall not now describe their military engines, of which I have already given some idea, but which I was later to observe more intimately. I shall begin, therefore, by telling of the manufacture of food and clothing, which was conducted on principles I had never before considered possible.

Let me say, by way of explanation, that my food in the Professor's house had consisted entirely of queer-looking ingredients. comprised in part of purple capsules, such as I had been given in prison, and in part of a stringy, fibrous substance reminding me of seaweed. I was told, indeed, that the wealthier sections of the population occasionally enjoyed delicacies such as fish from subterranean rivers, and mushrooms grown in specially prepared cellars : but if Professor Tan Trum could afford such luxuries, he would not waste them on a barbarian such as myself.

My clothes, likewise, were of a substance I could not recognize-a woven substance a little like hemp and yet clearly not hemp, for it was not quite so coarse. But the fibres, on the other hand, did not resemble those of linen, cotton, silk, or wool. What could it be? The answer, as I learned from Loa, was that the native clothing, and likewise the food, was manufactured synthetically. From the most ordinary chemical ingredients-from oxygen and hydrogen as contained in water, from carbon as contained in carbon dioxide or in coal, from the nitrogen found in the air, and from the sulphur and phosphorus of the mines-they would create
compounds resembling natural organic products.

The simplest of all to manufacture were starch and sugar, and a fibre like the cellulose of plants. For these, all that was required was a brilliant lamp, imitating the qualities of sunlight, a chemical cell which utilized the lamp-rays as the chlorophyll of the vegetable kingdom utilizes the solar beams, and an adequate supply of water and carbon. Thus the people might obtain all the carbohydrates they required for the table, and also all the fibres needed for weaving into paper and clothes; for, since cellulose constitutes the main ingredient of cotton and other vegetable fabrics, it was possible to produce a synthetic equivalent of the garments worn in the world above.

More difficult was the problem of the nitrogenous foodstuffs; but here again the ingenuity of the chalk-faces had proved equal to the task. I was never able to understand by exactly what process they had succeeded in combining nitrogen with oxygen, hydrogen, carbon, and other substances to form albumin; but it is certain that this is precisely what they did, fusing the elements by means of an electric current and several catalyptic agents, whose nature I was unable to learn.

Let me say, at this point, that I made every effort to find out; but the formula was the carefully guarded secret of the National Food Producers, Unlimited, a privately owned corporation, which was forbidden by law to tell the people the truth about the food they ate. Hence my efforts not only met with no success, but were so resented that I was threatened by the Company with imprisonment on the charge of unpatriotic activities.

In other fields, however, I was better able to satisfy my curiosity. I learned something of the power-system, by means of which the chalk-faces kept their factories running, excavated and illuminated the galleries, and conducted their warfare; I was told that they generated electrical energy in part from the flow of underground rivers, and in part by means of a chemical discovery made so long ago
that no one remembered the inventor. This was the compound known as Mulfar, an explosive at times beneficial, and at times annihilating in its effects.

Once again I was unable to discover the formorla, for this was the exclusive property of the National Power Producers, whe found it their most lucrative source of dividends, and had long ago succeeded in passing a law prohibiting themselves from making the facts public. The general principles underlying the invention, however, were well known. Mulflar was made by the union of nitrogen, phosphorus, magnesium, and sulphur with carbon, hydrogen, and one or two other elemients in a. compound both simply and easily produced. Its distinctive feature was its chemical unstability; its atoms would distintegrate and explode upon the slightest shock or upon the application of a spark, releasing a prodigious amount of energy through the conversion of that active element, hydrogen, into the chemically inert helium.

- So great was the explosive power of

Mulftar that a single gram, properly directed, was capable of blowing a hundred pounds of rock or iron to the height of half a mile. Naturally, a substance so dangerous had to be carefully controlled; and though accidents sometimes did occur, resulting in the occasional loss of a few hundred lives, in general it was highly adaptable to inđustrial uses. Shot off in small quantities in cannon-like tubes of specially prepared steel, it was used to set great dynamos into action, and consequently to furnish the larger part of the electricity indispensable to life. It was the energy of Mulflar, passed into storage batteries, that made it possible to run those little coaster-like cars with which I had had such a frightening experience; it was the energy of Mulflar that kept the lights and the ventilation in operation, that ran the food and clothing factories, and that pumped fresh water into pipes throught out the length and depth of the land.

But, at the same time, it was the energy of Mulfar that proved to be the worst
enemy of the people. Never had I seen more convincing proof of how the most beneficial inventions may be transformed into engines of destruction! For it was Mulflar that accounted for the deadliness of the warfare waged by the chalk-faces; it was Mulfar that had prodmeed those lightnings which Clay and I had watched in such fascinated horror; it was Mulflar that had supplied the motive-power for the land-battleships; it was Mulfar that had blown those gigantic machines to tatters. And it was Mulflar that was responsible for even more horrendous implements, which I was later to observe.

But before I report my discoreries in this regard, I must describe other peculiarities of the chalk-faces. And I must tell of one saddening conversation which I had with Loa and her father-a conversation which crushed one lingering spark of hope that had survived until then in the face of all discouragements.

This was in connection with my friend Clay. Hardly an hour went by but that I thought of him and his disappearance; hardly an hour but that I wondered whether he were alive or dead. True, I had heard nothing of him; but he might have been safe and well only a stone's throw away, and I would not have known it, since, at the time, I was confined in the Professor's house as closely as in a prison. Consequently, as soon as I was able to speak a few words in the native language, I asked about my friend.

The result could not have been more disappointing. Both Professor Tan Trum and his daughter looked astonished when they understood the nature of my inquiry. "What!" gaspeel my protector, with a sincerity that I could not question. "You say there were two like you? I wish there were! That would double the opportunities for verification of my theories!"
"Another like you?" questioned Loa, in milder tones; and then burst inte a giddy explosion of laughter. "Why, that's just too good for words! I'm sure there couldn't be two like you in the whole deep world!"

Not knowing whether to take this as a
compliment or not, I said nothing, while the Professor continued.
"My dear friend, if another man like you had been found anywhere in Wu , we would know of it instantly. The news would be flashed from end to end of the country-just as your own arrival has been."
"My friend wasn't exactly like me," I explained, fighting against a sinking sensation that all but overcame me. "He was taller, and his hair was red-"

For the first time in my experience, the Professor bent nearly double with laughter, his great ungainly frame rocking back and forth in mirth. It seemed minutes before he and Loa could suppress their merriment. "His hair was red?" echoed Tan Trum, riotously. "Red? Red, you say? My dear man, who ever heard of red hair?"'

And both he and his daughter went off again into spasms of laughter.

My only consolation was the reflection that, although Clay appeared hopelessly lost, still, if he ever were found, I would hear of it, since no red-haired man had ever been seen before in all the land of Wu.

## CHAPTER XI

## Fresh Surprises

- While I was questioning Professor Tan

Trum and his family in regard to the underworld, they were equally eager in making inquiries as to my own land.

Naturally, they were anxious to know where I had come from, and how I had arrived; but, unfortunately, they already had their own theories on the subject, and nothing that I could say was able to change their views. Since they had decided that I had escaped from some cavern far below them, my story that I had come from the so-called "Overworld" met with incredulous smiles. Their attitude was about what our own would be if some stranger should assert that he came from the depths of the sea. "No use trying to deceive us!" they cried reprovingly. "The Overworld is not capable of supporting life!"

And then curiously they asked, "Are the people where you come from all colored like you?"
"Colored ?" I flung back, a little irritated. "I haven't a speck of colored blood in my veins! I'm American white, every inch of me!"
"White?" they jeered, pointing to my face, with its rosy complexion. "What! you call that white? Why, you're pink!"

And loud was the laughter that convulsed the family group.
"If you're white, then what are we?" demanded Loa, insolently indicating her own snowy features.

I had nothing to say in reply. I could see that, by comparison with the chalkfaces, I was indeed the member of a colored race.
"My dear young man," consoled Professor Tan Trum, with the most unbearable superciliousness, "do not let the matter of your origin grieve you. We know that birth is not a matter of choice, and if nature has made you a member of an inferior race, at least it speaks well for you that you could rise to join us."
"But I didn't rise to join you!" I insisted. "I descended! I fell into your world by accident, through a fissure caused by the shocks of your warfare."

This explanation, however, was ignored, while the members of the family exchanged significant glances, as if to say that I was the most incorrigible liar they had ever met.

It was Tan Tal, the charming wife of Tan Trum, who put the next question.
"Where you come from, is there only one country?-or is there more than one, so as to give you someone to fight with?"
"Oh, there are many countries!" I declared. "We have simply no end of lands to fight with!"

At this announcement, the three young daughters of the family tittered uncontrollably, with the most amused expressions on their milky, wrinkled countenances.
"Why, how funny!" laughed Loa.
"How confusing!" giggled Moa.
"How absurd!" roared Noa. "Then how do you know which one to fight first?"

Professor Tan Trum, unlike his daughters, had been listening with an unsmiling solemnity of manner. I could see that he did not consider my statement comical; his massive brow was furrowed with profound thought as he replied.
"That is an excellent idea, young manto divide yourselves into many countries. It is plain that even the barbarians have ideas. Up here, you see, we have only two nations, Wu and Zu . Hence we are much handicapped, from the military point of view. If we want to go to war, we have only one possible enemy, and that at times grows monotonous. Again, it becomes difficult sometimes to find excuses for hostilities. They say that only this year our Secretary of National Defense-poor fel-low!-was driven out of his mind to find a plausible reason for declaring war on Zu . However, if we had had some other country to oppose, there would have been no problem at all."
"Yes, that is so, father," agreed Loa, who by this time had ceased laughing. "Why not recommend to Dictator Thuno Flâtum that we split up into several countries?"
"Excellent!" concurred Tan Tal. "Then we could go to war to defend the rights of small nations!"
"But I don't quite understand," I put in, finding the conversation getting wholly away from me. "You're talking as if war is a good thing! Up in our world, we call it a curse!"
"A curse?" echoed all the members of Tan Trum's family. "A curse? Why, what nonsense!" And loud was the laughter of the ladies.
"Don't let anyone here catch you saying that!" warned the Professor, scowling severely. "If one of the Government Police overheard you, you'd be courtmartialed!"

[^2]Tal, shaking her head sadly, "the savagery of the colored races is unquenchable. To think they're actually opposed to warfare!"
"It's so unenlightened of them!" condemned Loa.
"So disgusting!" jeered Moa.
"So barbarous!" groaned Noa. "Really" they must still be in the Stone Age!"
"You see, my dear young man," explained the Professor, turning to me not unkindly, as he observed my bewilderment, "we live in an age of unreason. Unreason and science-these are the two features of our life. And both of these tell us that man is a fighting animal. Biology assures us that he was created with the instinct of aggression, which is necessary for the sake of self-preservation; and psychology declares that all the instincts planted in him by nature must be satisfied. Accordingly, men must satisfy their instinct of self-preservation by destroying one another. That fact was demonstrated long ago by the philosophers-to question it would be heresy. So you see, my good young friend, why it is necessary to fight?"

There was a vague suspicion in my mind that this argument, reasonable as it seemed, might not be altogether sound; but before I had had time to formulate any objections, Tan Tal once more lifted her voice.
"Besides, there is another reason. If we didn't fight, think of the loss to industry! Think of all the millions invested in Mulflar Works, and in land-battleship factories! Why, if we didn't have any war, all this capital would be wasted."
"Yes, and my stocks in Mulffar Products, Amalgamated, would go down to nothing!" groaned the Professor, who seemed to regard this as the culminating argument.

Taking advantage of a gap in the conversation, I was now able to ask the question that had long been puzzling me.
"What is the present war all about, Professor Tan Trum? What is the issue, the principle behind it?"
"Issue? Principle behind it?" shouted

Tan Trum, while the ladies struggled to hold back a fresh outburst of laughter. "What makes you think there is any issue, any principle behind it? We are fighting for the national honor-and, certainly, there is no principle behind that!"

The Professor paused, energetically stroking his two-pointed beard, glaring at me as though I had been guilty of some offense against decency.
"There has to be an official reason for the war, of course," he resumed, more mildly. "In this case, we were driven to our wits' end, and couldn't think of anything better than the old Nullnull dispute."
"Nullnull dispute? What's that ?"
The five chalk-faces all stared at me a little blankly, as if surprised that there was anyone who had not heard of the Nullnull dispute.

However, the Professor condescendingly undertook to explain.
"On the borderline between Wu and Zu is the province of Nullnull. This is composed of a series of desert caverns, a dozen miles long and about half as wide. They say that once it was valuable land, containing lakes and streams and rich ore deposits ; but it has been so shot to pieces that no one lives there now, and it is worthless for everything except as a place to fly the national flag. It is therefore highly coveted by both Wu and Zu . In the course of the last thousand years, it has changed hands one hundred nineteen times, belonging first to one country, and then to the other, and every time it has been recaptured there has been an excuse for another war, for of course the citizens of the defeated land would not be content to have Nullnull wrenched away from them. Thus the military ardor of the citizens of both countries has been kept at fever pitch, and we have had no trouble in advancing our Military Birth Extension Program."
"Military Birth Extension Program?" I cried. "What under heaven is that?"
"What do you think it is?" demanded Tan Trum, a flare of irritation in his salmon eyes. "Exactly what the name implies I In order to keep a war going, what
do we need most of all, besides money and ammunition? Naturally, man-power! But present-day warfare is so efficient that man-power does not last long. It is estimated that the military turnover is seventy-five per cent a year."
"Military turnover? And what is that?"
"Just what the term implies! The percentage of men turned over to the ranks of the immortals."
"You mean, the percentage killed?"

- Tan Trum and the four ladies all glared at me as though I had committed an impiety. The Professor stroked his beard in indignation; the mouths of Loa, Moa, and Noa all gaped wide with horror.
"Killed? Killed, young man?" thuadered Tan Trum. "Never use that word in connection with war! It is not permitted! It is illegal, unpatriotic! No one is ever killed in war! Millions are sent to the Blessed Caverns, or converted into deathless heroes, or become the Unknown Warriors! But no one is ever killed! That is forbidden by law!"
"Young man," remonstrated Tan Tal, "remarks like yours are enough to ruin military morale!"
"If we didn't know you spoke in ignorance, sir, we would have you examined by the Intelligence Department, which would most likely have you executed for free speech!" threatened the Professor.

After a moment, however, he seemed softened by my contrite expression; and, regaining his good humor, continued.
"But I was going to explain about our Military Birth Extension Program. The principle is very simple. We have introduced Birth Uncontrol, and made it compulsory by law. The idea is that all families should have as many children as possible-sons, so that they may go out to fight for their country, and daughters, so that they may bear more sons to fight for their country. All couples married for ten years or over are required to pay a tax for every child which they have less than seven; while, for every child after the seventh, they receive a bonus. This sys-
tem works so well that we are able to keep our population stationary."
"Stationary ?" I cried. "At that rate, it ought to double every generation!"
"It would-except for the military turnover. As it happens, our boys are all enlisted in the reserve corps of the army at the age of six, and from that time forth are trained for the next war. So rigorous is the discipline that fifty per cent never reach sixteen. This is, in fact, one of the great merits of the system, as it ensures the survival of the fittest. At sixteen the youths are enrolled in the active army, and are sent to the front to face the boys of Zu . They then are offered the hope of being permitted to retire from military life at eighteen, if they should reach that age. But fifteen out of sixteen, in the course of these two years, enjoy the fate of heroes and go over to the Blessed Caverns."

I was about to comment, but refrained, for fear of breaking some penal law.
"Besides being profitable, it is a great honor to have many children," continued the Professor, with zest. "Mothers are given an honorary gold crescent for every son born to them; and fathers receive an honorary crescent of silver. Immediately upon the death-" here Tan Trum paused, and coughed in great embarrass-ment-"I mean to say, immediately upon the turnover of a son, the mother and father each receive another honorary crescent. It is this that makes Birth Uncontrol such a success."
"Well, Professor, you yourself don't seem to have starred in that line," I remarked, with a side glance at Loa, Moa, and Noa, who surprised me by averting their eyes and sighing. "With only three daughters to your credit-"
"Three daughters?" bellowed Tan Trum, his long black-gloved hand shaking in uncontrollable ire. "And what, pray, of my five sons?"
"Yes, what of our five sons?" echoed Tan Tal, wiping a tear from the corner of her eye.
"Well, what of them?" I demanded.
"They have all gone to the Blessed Cav-
erns!" sighed the Professor.
"I have five extra crescents for the dear boys!" confided Tan Tal, wiping a second tear from her eye. "Poor darlings! The oldest was just seventeen when hewhen he was turned over. I shall always be proud of their record!"
"I too!" coincided Tan Trum. "It shall always be a source of melancholy gratification to look at my five extra silver crescents, which shall contribute to my honor forever."
"To your honor?" I cried. "Who was it, then, that died ?"
"Something in me died forever when they-when they were turned over," he mourned, drawing up his gaunt face in a preternaturally long, solemn expression.

- Tan Tal, meanwhile, with all the suppressed fury of outraged motherhood, was glaring at me as if to devour me whole. "Barbarian!" she challenged. "What makes you think they died? They shall live forever in our memory! They shall endure in the annals of their country! They shall live here-here, in the shrine of my breast!"

So speaking, she smote the designated part of her anatomy a blow severe enough to do herself physical injury.
"They shall live forever-here in the shrine of my breast!" thundered the Professor, hitting his bony thorax a resounding smack.

Concluding that these people, though normally sane, had gone mad on this one topic. I thought it best to change the subject. "Did you say all the boys of Wu are enlisted in the army ?" I inquired. "Are there no exceptions?"
"I didn't say there were no exceptions," stated the Professor, assuming a milder manner. "Naturally, there are! All sons of Second and Third Class citizens must go to war. But sons of First Class Citizens are exempted."
"First Class Citizens? Who are they ?"
"Why, haven't I told you of our three classes? The division is an ancient one, and is the basis of our social life. The Third Class, which is the most numerous,
is sometimes also called the Hungry Class; its members are notable for doing most of the country's hard work, and for being so poor that they rarely have enough to eat. The people of this class are prohibited by law from thinking, lest thought lead them to revolt. Above them is the Second or Sedentary Class-to which I have the honor of belonging-its members usually have enough to eat, hence a mild amount of thought is permissible, so long as it doesn't give birth to free speech. But over us all is the First or Master Class, which makes up less than one per cent of the population and owns ninety-eight per cent of the country. This, of course, is the class that rules us."
"But I thought Dictator Thuno Flâtum ruled you."
"Thuno Flattum is the head of the Master Class."
"Let's hope he isn't typical of them," I was on the point of declaring, remembering this puny individual, with his artificial eyes, ears, and breathing apparatus. But, fortunately, I held my tongue and did not make any such treasonous remark.
"Thuno Flâtum was chosen by the Master Class as their leader," continued Tan Trum, "since he was considered the strongest of them all. In other words, his senses, his legs, and his lungs were the most atrophied."

Since this was just a bit confusing, I began to wonder if Tan Trum, after all, were not out of his head.
"You see," he explained, "for ages the Master Class has prided itself on its pure blood. None of its members, under pain of death, has ever been permitted to intermarry with a Second or Third Class citizen. The result of this long interbreeding has been a distinctive type, unlike us low-grade people. Thanks to their lives of huxury, and to their constant use of wheeled vehicles, the Masters have all but forgotten how to use their legs, which have become thin and shriveled; in the same way, since they have never filled their lungs by exercise or labor, their breathing apparatus has almost withered away; while, since they have rarely used
their eyes or ears, these organs too have become worthless without artificial aid. All these qualities, consequently, are regarded as signs of superiority - or of 'green blood,' as aristocracy is called among us; and that Master whose lungs are the frailest, whose legs are the feeblest, and whose vision is the dimmest, is chosen to lead the country, since the purity of his lineage is the most unquestioned."

Being unable to understand this arrangement, which somehow did not strike me as altogether sensible, I was so undiplomatic as to let my doubts be known. "I don't see why the people stand for it," I blurted out. "I don't see why they let these frail little Masters rule them, own most of the property, and be excused from fighting, when they-"
But that was as far as I proceeded. The horrified faces of my hearers warned me to halt. Never, I am certain, had such impious words entered their ears before!
It was a full minute before any of them was able to find speech. "Well, I never!" gasped Loa at length, her features more wrinkled than ever as she made a grimace of disgust. "I didn't know we had a radical right in our own home!"
"A poisonous radical!" cried Moa. "Who would have believed it?"
"The next thing, he'll be demanding the single standard in justice, or some other crazy new-fashioned notion!" exclaimed Noa.
"He may even be asking honest politics!" contributed Tan Tal, glowering at me with a resurgence of her previous indignation.
"This is serious indeed!" conceded the Professor, his long head wagging with laconic severity. "Of course, allowances must be made for barbarians; you can't expect to civilize them in a minute. So I'll tell you what we'll do, folks. We'll take him down tomorrow to the Commissioner of Public Thought, and make him swallow the Oath of Fidelity. After that, if he makes any more disloyal statements, he will have to take the responsibility."
"Good! Very good!" cried the ladies in
chorus. "We should have done that long ago!"
"But who's the Commissioner of Public Thought?" I inquired. "And what's the Oath of Fidelity?"
"You'll find out, young man, after you've swallowed it!" snapped the Professor. "And now you've had enough of my time for one day! I must get back to my researches on the history of the comma in ancient literature!"

So saying, the Professor glided from the room with long strides of his great, ungainly legs, while the four ladies regarded me more than a little coolly, like one who has betrayed a strange and criminal turn of mind.

## CHAPTER XII

## I Swallow the Oath

- It was on the following day that Pro-
fessor Tan Trum, true to his promise, took me to visit the Commissioner of Public Thought. Or, rather, it was on the following "wake"; for the chalk-faces, not having the guidance of the sun, divide time into periods of about twelve hours each, which are known alternately as "sleeps" and "wakes."

As this was the first time I had been out of the Professor's house for months, except for occasional visits to back galleries for exercise, I strode along at his side with great glee as he led me through the winding thoroughfares toward the office of the Commissioner. Several times, in my joy at being out, I walked carelessly ahead of my companion, and narrowly missed being felled by one of the small coasterlike vehicles, or "scootscoots," as they were called; but despite such nearmishaps, I kept up my good spirits until we had reacked our destination, a long gloomy chamber where fifty chalk-faces were already waiting in line.
"The Commissioner's Headquarters are always crowded," stated the Professor, as we took our places at the foot of the procession. "You see, all Second and Third Class citizens are required to swallow the Oath of Fidelity twice a year."
"What's the purpose of that?" I inquired; but the Professor merely shook his head and did not deign to answer. However, I saw how the first in line, having finished his business, passed out a gleaming bit of silver, which was promptly rung up on a cash register by a little chalk-face seated at a table; and later I observed how each successive person, before leaving the room, similarly disposed of a bit of silver, which likewise was rung up on the cash register.

For over an hour we remained standing in line ; and, to amuse himself during the interval, Tan Trum read out to me in loud tones the various signs and placards that hung about the room-signs and placards which I was not yet able to decipher unaided.
"Lower class citizens should be seen and not heard!" read the Professor, sonorously. "And the less seen the better!" Then, turning to me, he commented, "That is a good old maxim dating back thousands of years to Tit Wit, our greatest lawgiver.
"A little thought is a dangerous thing," continued Tan Trum, turning back to the signs, "and much thought is impossible. Therefore the ideal citizen will live in a state of sublime thoughtlessness.
"That is a rule we always do our best to follow," he remarked, turning to me with a boastful smile. "It is the first of the Silver Rules of Conduct-silver being our most valued metal, you know.
"But I suppose it's useless to try to drill such high principles into the barbarian mind," he meditated. "However, here's the second Silver Rule.
"Thoughtlessness is the best policy," he read. "It ensures one the respect of one's superiors, the confidence of one's equals, and a successful career in business or politics."

Seeing that I had no comment to make, my guide proceeded to the third Silver Rule.
"Thoughtlessness is next to godliness. A thoughtless mind and soul are the purest creation of the divine. He who thinks not will be content. He who thinks not will not
spend time on vain revolts. He who thinks not will never suffer from headaches."

There were eleven other Silver Rules, all of which the Professor read with gusto; but my attention had wandered and I scarcely heard what he said. My mind was far away; I was thinking of Clay and asking myself where he was, if indeed he were alive at all; I was picturing my friends in the Overworld, and wishing I might see them once more, and wondering, as I had wondered so often, whether there were not some way to climb back through the maze of caverns toward the sunlight and blue skies . . . .

I was awakened from my reveries by hearing a voice snap, "Next!" and feeling the Professor grab my sleeve and thrust me forward. To my surprise, I saw that I was now first in line.

Before me sat a scowling little individual at a stone table, with a cash register as tall as a grandmother's clock towering above him.
"Well? What is it?" he barked.
"This is my protégé," explained the Professor, coming forward. "Being a barbarian, he knows little of our laws, and I therefore thought it best to give him the Oath of Fidelity before it is too late."
"That's all very well," snarled the official, "but who's going to pay?"
"I'll attend to that," agreed Tan Trum. "As a member of the teaching profession, I'm allowed a ten per cent discount."
"Very well !" the other consented. "All accounts strictly cash!" And then, while the Professor muttered something about "Fidelity oaths come high this year," the official reached for a long roll of paper printed with minute characters, which he read aloud from across the room by means of binoculars, proceeding at such speed and in such mumbling tones that I could not distinguish a word he said!

Having finished, he thrust the paper forward, pushed a pen into my hand, and directed, "Sign here!"

Although not well versed in the native handwriting, I was able to make a mark that passed as my signature.

- With a sigh of relief, I turned away, when I heard the official's voice ringing out behind me, "Wait a minute! You've forgotten to swallow the Oath!"

Unable to imagine what he meant, I wheeled about, and saw that the paper I had just signed was being rolled into a little pellet in the official's hands.
"Here! Swallow this!" he ordered, tossing it to me after it had been reduced to the size and shape of a marble.
"Swallow it?" I echoed. "What for?"
I was a ware that several persons behind me in line were tittering; but I was still unable to take the command literally.
"Do as the man says!" I heard the Professor's irritated voice shrilling in my ear. "What use is the Oath of Fidelity if you don't swallow it-and swallow it whole?"

I reached for the pellet and regarded it suspiciously. It was hard and unappetizing, and I would about as soon have swallowed a stone.
"What are you waiting for ?" demanded the official, his pinkish eyes aflame with anger. "Don't you want to swallow it after all? Or will we have to call the police and force it down your throat?"

Realizing that he was in deadly earnest, I could no longer hesitate, but slowly lifted the pellet toward my lips.

As I did so, I noticed that it had a bad odor, suggestive of decay; hence I was more reluctant than ever to swallow it.

But alas!-there was no hope! "I suppose well have to force it down your throat after all!" threatened the oneeyed one-at which, in sheer desperation, I thrust the oath into my mouth ... .

But not so easily could I gulp it down. The seconds that followed were among the most miserable of my existence. Have you ever, dear reader, experienced the sensation of choking? Have you ever felt a piece of foreign matter stuck in your throat, cutting off your breath? This was exactly my plight, for the Oath of Fidelity got caught, and would not go either up or down.

They tell me that my face went blue in the ensuing struggle, and that I sank down and almost fainted. I was aware that Tan

Trum, half beside himself with excitement, was pounding vigorous blows on my back; I was aware that some one had snatched a tool like a pair of pliers, and was forcing it down my throat; but I knew little besides this, except the desperate craving for air, and the furious wish not to die, not to die just yet . . . .

But at last, thanks to heroic efforts, the refractory Oath went down the passageway after all, and the reviving air entered my lungs. A minute longer, and the Oath would have killed me....

As I gradually regained my senses, I saw the Professor passing out a bright piece of silver, and heard the ringing of the cash register.
"Congratulations, young man!" exclaimed Tan Trum, heartily, as he led me away. "The Oath of Fidelity pretty nearly didn't take-but I'm glad you swallowed it after all. Now you're a fullfledged citizen of Wu!"
"Full-fledged citizen? And what does that mean?"
"It means you've promised to obey all the laws of the land. It means you've pledged allegiance to Dictator Thuno Flâtum, promised to honor him, to obey all his orders unquestioningly and never to utter a word against him. It means you've vowed to lead a life of one hundred per cent thoughtlessness. It means, finally, that you guarantee to live in Wu the rest of your days, and never to attempt to leave, under penalty of death."
"But I didn't guarantee anything of the kind!" I protested, perceiving that new and unexpected obstacles were being placed between me and escape.
"Indeed you did!" he denied. "Didn't you sign the Oath?"
"Yes, but I didn't understand what it said."
"That doesn't matter. No one is supposed to understand. Understanding is a sign of thought, and thought is a sign of disloyalty. But you did swallow the Oath, didn't you? That's what makes it legal!"

Not yet did I realize that this was but one of many unpleasant things I should have to swallow during my stay in Wu !

## CHAPTER XIII

## An Official Visiter

- Now that I had swallowed the Oath and become a full-fledged citizen, my life took a sharp turn-though whether for the better, I could hardly say. As a free man, I was permitted to wander unescorted through many of the streets and side-galleries; yet it seemed to me that I had really less freedom than when confined in the Professor's home. I was now officially on the Government books, being known as Citizen No. $44,667,023 \mathrm{XZ}$, Third Class; I had had my photograph taken and filed with the War Department, my physical measurements recorded and filed with the Police Department, and my toe-prints registered and filed with both the War and the Police Departments. Worst of all, I was now to receive a visit from a sub-agent of the Ministry of Public Unemployment.
This event occurred on the fifth dayor the fifth "wake"-after I had swallowed the Oath. I well remember the occasion; I had been practicing writing the native language, under the tutorage of Loa; and having noticed a light of warning fondness in her salmon eyes, I was desiring some tactful way of escape . . . . when I was startled by the entrance of Moa, who informed me that a visitor wished to see me.

A visitor to see me! Who knew me well enough to call upon me down in this Nether World? For one mad, hopeful instant, the thought came to me that perhaps it was Clay! Perhaps, after all, he had survived and discovered my hidingplace!

But no! In the next room, a weakened little chalk-face with the features of a fox arose to receive me. "Citizen Number 44,$667,023 \mathrm{XZ}$, Third Class?" he inquired.
"I believe that is my name," said I, although not quite certain yet whether I were an "XZ" or an "XY."
"I have been detailed to investigate your case," he declared, in such a businesslike manner that I had a momentary tremor, imagining him to be a detective. "I do not
know why the Government has overlooked you so long; I understand; sir, that you have been illegally living in a state of unemployment."
"Illegally-living in a state of unemployment?" I gasped.
"So I am told!" he continued, with unsmiling severity. "Do you not realize, sir, that unemployment is a crime? That is to say, in all except First Class citizens, who are paid a salary by the State for being unemployed."

Fearing that I was about to be punished, I remained silent and anxiously regarded my visitor.
"However, we do not wish to be severe with you," he conceded, still scowling. "This is, after all, your first dereliction, and I have been instructed to let you off with a reprimand. But we must immediately end your unemployment."
"Very well," I assented, vastly relieved.
"The question is, what valuable labor can you perform?" asked the chhalk-face, taking a chart out of his pocket and withdrawing across the room so as to examine it through an instrument that looked like a pair of opera glasses. "Fortunately, owing to the unusual turnover of the present war, an exceptional number of positions are vacant just now."
"Good! What are they?"
My visitor drew up his lean, white face into a puzzled frown, and answered in a drawl.
"Well, let's see. There are so many, it's hard to know where to begin. Now here's one that might do. In the thought-inoculation department of the army."
"Thought-inoculation?"
"Yes, you see it's necessary to be sure that no private in the army should ever have a thought; otherwise, how could we maintain discipline? We have found it isn't safe to rely on laws only, so we have invented an anti-thought serum, which acts on the nervous system so as to paralyze the thought-centers of the brain. The results are excellent; the recruit has no power left except to obey orders-which makes him a perfect soldier."
"A very good idea," I acknowledged,
wishing I might have the formula of this wonderful serum to bring home for use in our own armies.
"A derivative of the same drug, known as 'the Mu ' is fed by big business firms to employees. It is taken internally, and the results are said to be excellent . . . . However, a job in this department is not for you!" concluded the agent, sadly. "You're a barbarian, and what do barbarians know of thought-prevention?"
"More than you think!" I snapped, defensively.
"Now here's another good job," he went on, still gazing at the chart by means of the opera glasses. "We're in need of spies. The recent turnover in that department

[^3] is more esteemed! If you survive, you'll be given a high position in the diplomatic corps; and if, on the other hand, you are turned-"
"That's just it! I'm satisfied not to be turned over!" I asserted, remembering the prison I had occupied just after my arrival, and the execution of my cellmates beneath the violet ray.
"It's a glorious death-I mean to say, a glorious turnover!" argued my visitor. And then, with a disappointed expression, "However, if you're not out for honors, I suppose we can find you some humbler job. What about a position in the Mulfar Works?"
"But is that safe?"
"Safe?" The Unemployment Agent glared at me angrily. "Who cares if it is safe? Of course it isn't! You may be blown to shreds and splinters any wake! But what of that? Is anything safe in modern life? It's all a matter of the degree of risk! And, besides, the salary is high."
"Im not greedy for a high salary," I remarked.
"Oh, well, if that's the way you feel, of course we can fix you up!" returned the chalk-face, contemptuously. "There's never much demand for low-paying jobs.

- Again he stared at the chart, and, after
a moment of indecision, suggested,
"Let's see now-we might make you valet to a First Class Citizen. The wages are not very good, but the work is easy. All you would have to do would be to dust off your master's eye-tubes, or hold his megaphone to his mouth when he speaks, or adjust his breathing tubes when they get out of order, or merely stand in his reception hall and look stiff and official when he receives visitors. And whenever he kicks you or cuffs you or calls you names, you would have to bow respectfully, and say 'Thank you, sir!' What do you say?"
"Haven't you anything else?" I asked, in desperation.

The agent scowled again. "You're a hard man to suit!" he declared. "I really don't know what else to offer you. If you weren't a barbarian, we might place you in the Department of Public Unenlighten-ment-vulgarly known as the Censorship Bureau-whose business it is to keep the public from knowing too much. But nothat won't do at all! Third Class citizens are not eligible!"

Once more he paused, his long blackdraped fingers tapping at his knees; and for a moment I feared that no further suggestions would be forthcoming.

But he was a resourceful man; at last, with a shout of triumph, he exclaimed, "Ah!-now I have it! Just the thing! The very thing!"
"The very what?" I asked, hoping he would have a better suggestion this time.
"The very job for you!" he ejaculated, slapping his knee in delight. "I congratulate you, young man! You're a lucky individual! A very lucky individual!"
"How so ?" I asked doubtfully.
"Very lucky, I assure you!" he repeated. "We need more office help for the Ventilation Company. You see, too many of their employees have volunteered for the war-and have been turned over. So they have a job just waiting for you in the air-supply division. You may begin tomorrow."
'But what is the Ventilation Company? And what's the air-supply division?" I
demanded, none too certain that I wished to accept.
"Take my word, it's just the thing for you! No ability required! No thought necessary! Merely do what you are told! And get paid regularly every five wakes!"
"But what's the job like?"
"You'll find out after you're on it! Time enough to worry then!"

Further discussion followed; but as the agent had no job which he recommended so highly as the ventilating one, I ended by reluctantly accepting.

Immediately upon securing my assent, the visitor let out a whoop of joy; then, drawing forth a printed sheet and a pencil, he flung them at me, and directed, "There! Sign on the dotted line!"

Hesitantly I did as directed, and the agent immediately snatched up the paper, folded it into an inner pocket, left me instructions where and when to report to work, bowed, and gingerly left.

Not until later did I learn that, as 2 commission for securing me the work, I had signed over to him all my wages for the first fifty-two "wakes!"

## CHAPTER XIV

## The Last Straw

- The Ventilating Company, as I soon discovered, was the most powerful corporation in Wu . It was literally the breath of the country, for it controlled the fresh air supply, and, with the aid of ninety-six subsidiaries, was said to be highly influential in finance, politics, and war. Owned by a group of First Class citizens, who supported themselves in luxury on a fraction of their dividends, the Company was declared to number Dictator Thuno Flâtum himself among its stockholders; hence its interests were carefully considered in the councils of State, and 2 recommendation of its Directorate was tantamount to the enactment of a law. It was common gossip that more than one war had been commenced on the decision of the Ventilating officials, and that the current conflict with Zu had been stimulated by them, owing to the fact that the
workers had been threatening a strike, and that it was believed that they needed something to distract their attention.

Whatever one might think of the management, one could easily understand the influence of the Ventilating Company. Truly, it brought a marvelous service to the people! The more I observed the vast system of air-tubes and wheels, the more I admired the ingenuity of its creators. I was informed how ventilating pipes, opening in narrow ducts in the Overworld, received a constant supply of the fresh air that always blew in that uninhabitable domain; and I was told how this air, forced downward by mighty pumps operated by the power of Mulfar, was delivered in pipes and conduits to every gallery, chamber and private residence in Wu. This it was that kept the air always fresh and sweet, and that had averted those noisome odors usually found in underground passageways. Yet stop the ventilating wheels for a few short hours only, and the whole country would be faced with danger of suffocation. Little did I realize what a deadly advantage I was later to find in this fact!

My work for the Ventilating Company began humbly enough in view of the tremendous rôle I was to play. Perched on a stone chair behind a stone railing in a large, draughty gallery, where a perfect torrent of air was blowing in order to display "ventilating efficiency," I had to interview customers, hear their complaints, accept the service fees which they paid every twenty "wakes," and attempt to sell the various air-machines displayed about the room. "Do your cleaning by air." "Have you tried our automatic air-baths?" "Remove dust and germs; air-filters at reduced rates." "Air-rays for healthrecommended by leading physicians." "Air-heating apparatus-guaranteed for hot air." These were but a few of the signs I saw scattered about me on a multitude of curious-looking instruments, some of them reminding me of electric toasters, others of vacuum cleaners, and a few looming large and imposing like great dynamos.

Although I still did not know the principles behind these inventions, I was able to sell them easily enough. All I had to do was to look knowing, point to the company's guarantee, and state that the objects were on sale for a limited period only ; and the prospective customers, particularly if of the fair sex, were rarely able to resist the lure, even though they understood nothing of the point or purpose of the apparatus they purchased. The sale of articles under such conditions, I found, was known to the people of Wu as "good business." It was said that, as a result of such "good business," ninetenths of the population was constantly in debt to the Ventilating Company.

The other phases of my work were less interesting. What I particularly disliked was listening to complaints-and what a stream of them there were! Sometimes the line of complainers reached all the way across the office and fifty yards down the adjoining gallery! Here, for example would come a testy-looking old chalkface, with a squeaky wail, "My air-service has been very poor of late! Haven't been able to breathe properly for wakes!" . . . And after I had promised to send an air-man around to his home to see if his brakes were not out of order, a querulous young woman, hideous with wrinkles, would exclaim, "See here, young man! Look at this bill! It's robbery, highway, robbery! The meter must be wrong! I'm positive we couldn't have breathed that much air!" . . . Following her in line would be a miserable-looking old dame, who would gloomily display a printed notice, "If you do not pay your bill within five wakes, we will turn off your air supply." . . ."If you do that, we'll all smother!" she would moan. "You must give us more time to pay!"

But I would have to inform her that the rules of the Company made no exception; that she might smother, for all the Ventilating officials cared.
There were constantly other complaints, of an equally grievous nature-complaints from persons whose air-supply was too hot, and from persons whose air-supply.
was too cold, and from persons whose airsupply had been interrupted, and from persons with an oversupply of air, and from persons who had ordered Grade A air for the children, and received only Grade B-in other words, so numerous were the charges that one would have supposed the entire country to be suffering from air-complaints.

- My hours in the Ventilating Office were ten each wake, with one wake out of every five off duty. I was expected to stay half an hour after the office formally closed, in order to clean a great ventilating duct, which opened in a corner of the room. This was a task I disliked even more than listening to complaints; I would be obliged to creep into the tube, which was wide enough to admit two men standing abreast, and would have to reach into its dark recesses with a mop, so as to remove all dust and foreign matter. The tube, I was told, connected with the Upper Ventilating Corridors, and had to be kept in condition if our product were to remain pure.

After I had been in the Ventilating Office for twenty or thirty wakes, I could see that, in the monotonous routine of my labors, I was beginning to fall into that thoughtlessness which was the ideal of the chalk-faces. I had, in fact, been commended for speaking in that automatic manner and acting with that vacuity of expression which betokens an empty mind and an efficient worker; hence I began to fear that I would suffer from softening of the brain if I did not find some way to escape. But how was escape possible? Ever since swallowing the Oath of Fidelity and being granted my freedom, I had been looking about me for means of returning to the Overworld; but so completely had I been hedged about that the attempt had seemed hopeless. However, the time was soon coming when, in sheer desperation, I was to make the dash for liberty.

There was something else besides discontent with my work, which was urging me to flee. Although now supposedly a
wage-earning citizen, I was still living upon the bounty of Professor Tan Trum, since my pay was going to the Unemployment Agent. Even after he had received his share, I should have to pay an Employment Tax to the Government, and various fines and charges to the Ventilating Company, and a fee for joining the Ventilation Union; and, after that, I would have to buy War Bonds from the Government, and pay War Taxes, and Residence Taxes, and Food Taxes, and Clothing Taxes, and Water Taxes, and Air Taxes, and several other taxes-so that, at a moderate estimate, it would be three years before I would have a penny for myself. During the first two and a half years, the more I worked, the more deeply I would be in debt!

Now all this would have occasioned me no worry; for the natives of Wu consider it honorable to be in debt, the more so the better; and, besides, Professor Tan Trum, thanks to his profits from his Mulflar stocks, was well able to support me. But what I could not endure was the necessity of living in the Professor's home -of living there in daily contact with his daughter Loa.

Alas! I was hopelessly trapped! I do not blame the poor girl ; for some mysterious reason, she had succumbed to my attractions, and the melting light in her salmon eyes had long ago warned me to be cautious. Unfortunately, it had never occurred to her that she was not equally attractive. It was positively pitiable, the way she devoted herself for hours a day to her wrinkling-machine, diligently putting new wrinkles into her face, since the old ones did not suffice to win my affection! And it was even more pitiable the way she turned, still hopeful, to a new method, and began "producing," as they, say in the native vernacular-in other words, adding on flesh by "producing powders," "producing baths," a "producing diet," and other means recommended by the dictators of fashion.

Now whatever I might have said about Loa's face when I first met her, I had
thought her form perfect. But, owing to her "producing" methods, she soon grew rotund; her features bulged and puffed, with a double chin; her stomach protruded; her legs became so fat that she waddled when she walked; her arms, once graceful, seemed little more than flabby masses of flesh. Oh, if she had only been content to remain as nature had made her! Had she but retained her natural form and unwrinkled countenance, who knows? I might have come to love her! But, as it was, she daily grew more hideous in my eyes. And no word or hint of mine could deter her from her purpose. Fatness, next to wrinkles, was considered the supreme sign of beauty in women; and she seemed never to suspect that I would not be dazzled by her corpulent loveliness.

Since I had no choice but to remain in the same house with her, I of course had to be civil; but I thought it the best policy to avoid her as much as possible. Unhappily, in my ignorance of native customs, I was pursuing the road straight to tuin!

This fact became painfully evident one day when Professor Tan Trum, pausing in his researches into some dead and buried language, summoned me to his study and indicated that he had something important to say.

- I noticed that he hemmed and hawed to an unusual degree as he motioned me to a seat opposite him, and seemed actually embarrassed as he began.
"My dear young man," he at last said, tising, and coming over to place a fatherty hand on my shoulder. "I have been re-quested-er-requested to speak to you by my daughter Loa. For a long time I have been-er-observing how matters are between you two."
"Why, I-I have always treated her tike a gentleman," it was on my lips to say, feeling that he was about to upbraid me for my coldness.

But the kindly smile on his long, lean face showed that I had mistaken his intention.
"I have been observing-yes, observing how matters are between you," he repeated, gradually warming to his subject. "With becoming modesty, you have not made any undue approach. You have kept your feelings to yourself, as was only proper, in view of your Third Class status; you would not insult a Second Class lady by openly declaring yourself. But I have been observing, my dear young man, I have been observing! How, after all, could any one resist the allurements of my Loa?"

So astonished was I at this speech that I sat gaping at the Professor, my jaw hanging loose, as though I had been accused of a crime.
"Yes, I have been observing!" he went on, with a paternal blandness of manner. "I have been consulting with Loa, as was only a father's place, and have been assured that she-she reciprocates your feelings."
"She reciprocates my feelings?" I echoed, with a sudden sense that the world was falling from under my feet.
"Yes, she reciprocates your feelings! It is only natural, young man, that you should be overwhelmed-it isn't often that a Second Class lady reciprocates the feelings of a Third Class suitor! But I have no prejudices in the matter at all, my boy, no prejudices at all! Though you're a barbarian by birth, you've recently grown civilized! So, since my daughter is willing, I can only give my blessings! May your union be crowned with-"

But I did not hear the end of the sentence. My head was reeling; I believe I sank to the floor in a swoon. When I came to myself again, Loa was bending over me tenderly, tears in her eyes, a bottle of some strong-smelling solution in her hand. And in the background I saw the Professor looming, still smiling the same benignant smile. "Poor young man!" I thought I heard him say. "The shock of this happiness was more than he could bear!"

It was then that I decided that safety lay in flight.

## CHAPTER XV

## Flight

- It was what was known to the chalk-
faces as the "mid-sleep." The lights of the public galleries had been dimmed to a slumberous dullness; the lamps of the houses had been extinguished, the ventilating currents were turned low; and only an occasional belated wayfarer or military guard, darting through the deserted thoroughfares on his little "scootscoot," gave proof that life still went on in the land of Wu.

At this silent hour, when the house doors stared in black, almost invisible lines along the empty passageways, a figure might have been seen stealthily emerging from one of the doorways and slinking off down a narrow side-corridor. Had one followed in his footsteps, one would have observed how he wound and twisted through a multitude of lanes, sometimes pausing as if uncertain of his course, sometimes huddling in fright in some dismal alley while a "scootscoot" glided past, but gradually making his way upward amid the intricacy of the Underworld.

That fleeing figure, as the reader will have guessed, was none other than myself. Only half a dozen hours had passed since Professor Tan Trum had made the shattering revelation about Loa; and I was now resigned to taking whatever risks lay in the outside world. My preparations, it is true, had been less complete than would have been desirable; but I had, at least, found time to ransack the Professor's pantry and to secrete a pound or two of concentrated food in my clothing, in addition to a flask of water; and thus equipped, I had determined to venture abroad. As for my direction-I must confess that I was none too certain of it, but I had found an old map in the kitchen closet, and had studied it as well as my haste permitted, in the hope that it would show me the way through the upper corridors to the Overworld and safety.

Let it not be supposed that I had not weighed the dangers. I knew that I might be seized by the police, that I might be
punished as a vagrant or a spy, or that, even if recognized when caught, I would be charged with breaking my Oath of Fidelity, and would be subject to the death penalty. But what were such perils beside the certainty that, if I remained in Tan Trum's home, I should have to marry bis daughter?

So I stole away hopefully, in the dead of the "mid-sleep," resolved to escape or perish in the attempt. How far I was from foreseeing the outcome! For several hours I advanced with the caution of a cat, and almost with the silence of a cat, since I had removed my heavy native sandals, in order to walk the more noiselessly. But I was not certain what to do after the "sleep" was over. Suddenly I was aware of an ear-ripping sound, like the blast of a siren; the lights in the galleries flashed into brilliance and I realized that a new "wake" had begun, and that it would henceforth be impossible to conceal myself.

I was now in a section of the Underworld I had never before visited. The narrowness and dinginess of the galleries; the dusty, dirt-encrusted walls and floors; the foulness of the air, which was not clear and filtered as in other regions; the nauseating odors, as of overcrowded humanity; the naked glare of the lights, unprotected by the yellow-green screens common everywhere else-these and a hundred other signs showed that I was in an inferior district.

This fact became even more evident when, after a time, swarms of people began to pour through little round holes in the ground into all the passageways. Never before had I seen such desolatelooking chalk-faces! The clothes of the great majority were in rags; the original fabric was overlaid with a thousand strips and patches, and, in many cases, bits of the naked skin showed through; some of the men were without shoes, and some without coats, and a few were without even the skirts that were the emblem of masculinity. As for the women-they were equally tattered, their skirts and trousers often resembling crazy-quilts; but they
had the advantage of being less fat and wrinkled than their more fortunate sisters, and I thought many of them quite attractive. Most of them carried babes in their arms, or else a crowd of urchins tagged at their coat-tails; and the children, too, were clad in threadbare scraps, some of them being almost naked-which fact did not seem to bother them at all, for they rollicked and shouted quite as happily as children the world over. Their elders, however, were drawn and sad of appearance, and a majority had those pinched and ravaged faces which come of privation.

Was this a district of criminals and outcasts? But no! A prominent sign informed me otherwise. "Residential section -Third Class," I read. Now I understood why the Third Class was called the Hungry Class.

- As a majority of the men I passed bore picks, spades, and shovels, I realized that they were laborers on their way to work. These, fortunately, took no note of me, but slouched onward with downcast eyes that seemed to see nothing besides the path on which they walked. Some of the women, however, did stare at me a little curiously, giving me the uneasy sense that I might be reported; while now and then some man or woman, of especially squalid and ragged appearance, would stop me with a piteous, "Stranger, haven't you a mite of silver to spare? . . . I haven't had a scrap to eat since wake before last." Or, again, "Stranger, haven't you something for the children? The taxes took all our money, and there's nothing left to feed the babies with." Or else some small boy or girl would accost me, opening his hand with a piteous expression, "Stranger, we're hungry!" And the drawn and hollowed faces would show that they spoke truly!

With these poor wretches I shared the concentrated food I had taken from the Professor's house-and it was pathetic to see with what eagerness they snatched at the food capsules, and how ravenously they devoured them.
"What is the matter?" I asked one of the beggars, as I doled out my last capsule. "Do none of you needy folk work?"
"Do none of us work?" The man stared at me with manifest surprise. "Say, you must be one of those Second Class swells, to ask such a question!"

I assured him that, on the contrary, I was Third Class, but from another part of the country; and at this he looked a. little mollified, and went on to explain.
"Well, I don't know how it is where you come from, but here we all work. We have to, on account of the unemployment law. Even the children-those not in the army-are compelled to work from seven years of age. But, of course, we don't get any wages till the First Class Citizens take out their dividends, which are guaranteed by law at fifty per cent a year; and what is left is usually just about enough to pay the First Class landlords. If we have anything over for food or clothing, we consider ourselves lucky."

Feeling indignant against the whole First Class, I proceeded on my way ; and, hastening up a long, dark corridor, I sought to escape from this miserable Third Class district. Finally, after several hours, I found myself in a more pleasant and airier realm, but not wholly to my liking. The caverns were much roomier, but the atmosphere was vaguely disagreeable with the odor of smoke. "Where am I ?" I wondered, as I approached an open space, where acres of huge cardboard boxes were piled to a height of fifty feet, surrounded by tall barbed wire fences. But, on consulting my map, I was unable to solve the enigma; it was impossible to say whether I was in the "Storage Grottoes," "The Surplus Food Chambers," or the "Military Warehouses," all of which looked alike on the chart. The one thing certain was that I was lost.

Nevertheless, I felt it best not to worry; and, pressing on my way around the mountains of boxes, I soon discovered the source of the smoke. A few hundred yards ahead of me, the door of an enormous furnace opened, revealing gigantic flicker-
ing flames, whose heat disturbed me, even at this distance.

Undoubtedly, had I been a cautious man, I would now have retreated. But I was possessed by the demon of corriosity, particularly as I saw two men working in front of the furnace, stripped to the waist and grimy with soot and perspiration, while with rapid movements they reached for the cardboard boxes, throwing them one after another through the furnace mouth.

At first I thought they were madmen; but soon decided that the boxes contained waste matter or fuel, with which to keep the fires burning; and with this belief in mind, I hastened eagerly forward. Never have I forgotten the surprise I received!

As I drew near, the men paused to rest from their exertions, while mopping their steamy brows, and panting heavily.
"Well, partner," I heard one of them declare after closing the furnace door, "that makes eleven gross so far this wake!"
"Nearer twelve, if you're asking me!" stated the other. "Say, have we got to those food capsules yet ?"
"Not yet! We're still working on the clothes! There's a couple of hundred tons more to burn. After that, I don't know how many thousand tons of food!"

- Bewildered, I returned to my original supposition that the men were mad. Yet it seemed to me that they looked normal enough.
"Beg pardon, friends," I asked, stepping to within a few feet of them, "I don't like to intrude, but I'm a stranger around these parts. Wonder if you'd mind telling what's in those boxes?"

I was now so close to the men that they could not see me clearly.
"You must be a stranger, if you don't know what's in them!" ejaculated one of the laborers. "I thought everyone knew!"
"Just what we've been saying!" added the other. "Food and clothing, of course!"
"Not good food and clothing?"
The two workers stared at me oddly. "Why not?" demanded the first of the
pair. "The very best! We're getting rid of the country's overproduction!"
"Say, haven't you ever been to school?" challenged the second. "Don't you know that overproduction is bad for business? It causes depressions, low dividends, and low wages! So when we've made more of a product than anyone can buy, the only thing to do is to burn it! 'Burn your way to prosperity'-that's an old motto! The more we burn, the more prosperity!"
"Why, that's elementary!" added the first worker. "It's taught to every child in kindergarten! By destroying things, you will raise prices, which is the chief object of civilization; since the more we have to pay for things, the more prosperows we will be. Everybody knows that! It's the First Law of Thoughtlessness, taught by all leading economists."

Personally, I have never claimed to know anything of economics, which has always struck me as a subject too deep for my comprehension; still, I could not see why so much good food and clothing need be destroyed when so many Third Class citizens hadn't enough to eat or wear. And so I humbly asked why the surplus, instead of being burned, could not be distributed among the poor.
But I had little expected the effect of my inquiry. Even before the words were out of my mouth, I could see the faces of my hearers growing wry with horror.
"Say, brother," exclaimed the more pug-nacious-looking of the pair, "you must be one of those anarchists we've been hearing about! How can we give the food and clothing to the poor? They haven't anything to pay for it, have they ?"
"Raise their wages!" I suggested.
But my words went unheeded. "By my father's pink eyes!-we haven't time to waste on anty red revolutionist?" snaried the man. "Radicals like you want to ruin the country! Now get out of here, with your crazy new-fashioned ideas, or I'll report you to the militia! Get out quick!"

This final argument being a clinching one, particularly since backed up with two heavy pairs of fists, I conceded the point, and started away hastily. As I turned
down a side-gallery and caught my last glimpse of the men, the furnace door stood open again, and they were pitching great boxes into the flames with furious energy, as if eager to make up for lost time!

## CHAPTER XVI

## The Green and Vermilion

- Not half an hour after my encounter with the furnace workers, I had an even more surprising experience. I was still gradually working my way upward through the interminable labyrinths, when unexpectedly I came out on a broad thoroughfare, where great multitudes of chalk-faces were convening. From the manner in which they lined themselves along the sides of the avenue, leaving the center clear, I knew that some sort of a spectacle was expected; and this excited my curiosity, so much so that I again forgot caution, mingled with the crowds, and pushed forward so as to secure a position in the front row. Once more, fortunately, I was protected by the inability of the natives to see things near at hand; I was now so hemmed in by them that they did not view me as I really was, and accordingly I felt safer than if observed at a distance.

No sooner had I edged my way to the front than the crowd broke into cheers, which were dinned and repeated in evergrowing volume, while the spectators seemed to grow mad with excitement, and jumped and stamped in glee, and flung their arms high in air, and shouted till their lungs were hoarse. What they were shouting about was not quite clear to me, although I made an effort to join in the chorus; I thought, however, that I could make out something like, "Long live the green and vermilion! Long live the green and vermilion!" and at first the impression came to me that I was about to witness a football game. Only on this ground could I explain the mad agitation of the people.

But as the tumult subsided, a great banner hanging from the ceiling reminded
me that green and vermilion were the national colors of Wu. I would now have guessed the nature of the celebration, even had it not been for my conversation with the jovial-looking, portly chalk-face just to my right. This gentleman, whose cheers had roared into my ears until I was almost deafened, turned to me genially as soon as the shouting had died down, and made a remark to me, with an expectant smile.
"Well, guess they'll be coming any minute now!"
"Guess they will!" I agreed, although I still had only the vaguest notion who "they" might be.
"This is General Bing's greatest triumph!" went on my garrulous neighbor. "Just imagine, he's retaken threefifths of the lower left-hand corner of Nullnull-at a cost of only a million and a quarter lives! Marvelous, I call it!"
"Marvelous!" I concurred.
"True, he couldn't hold it very long;" went on my companion, ruefully. "He was outnumbered too strongly. But he did keep it a good three-quarters of a wake! And they say that, when retreating, he didn't have to vacate more than four-fifths of the lower left-hand corner of Nullnull, at a cost of another million and a quarter lives. An extraordinary strategic victory, I call it!"
"Extraordinary!" I acknowledged.
"So it's only proper, isn't it, that Thuno Flâtum, our good Dictator, should grant a triumphal procession, in order that we may pay public tribute to the greatness of General Bing? Look! here they come!"

Suddenly the mob let out such a howl of acclaim that I had to clap my palms to my ears for protection. To the accompaniment of blaring horns, and of a clanging instrument known as a "bange," which made a noise resembling a cannonade, an elegant-looking procession of dignitaries rode into view on slow-moving little "scootscoots." On one of the foremost cars,' surrounded by a bodyguard of a hundred warriors and several scores of obsequious valets, rode a man in a gorgeous crimson uniform-none other than General Bing himself! The exalted rank
of this personage would, of coarse, have been apparent from many facts: the long ear-tubes, the projecting eye-tubes, the nose-tubes and mouth-tubes, and his dwarfish stature and weazened legs, all of which proved him to be a kinsman of Dictator Thuno Flâtum-in short, a First Class Citizen!

Just why the General should have been so popular with the Second and Third Classes was more than I could understand; but so great was public admiration that many heads bowed themselves into the gutter as he passed, while countless eyes shed tears of happy emotion.
"You see, he bears a charmed life," stated the portly neighbor to my right. "All generals bear charmed lives; that's why we honor them as heroes. In order to keep their lives charmed, they direct the battles from a distance of fifty miles, sometimes more; for what a loss to the country if they should be er-turned over!"
"Yes, what a loss!" I coincided.

- The main body of the procession was now passing-and a gallant sight it was! There were several other generals who, like Commander-in-Chief Bing, were dressed either in crimson, or in crimson striped with black; there were hundreds of banners of green and vermilion, and several yellow-and-purple banners said to have been captured during the strategic retreat from Nullnull; there were scores of large-sized "scootscoots" laden with blackened uniforms taken from the enemy; there were several dozen warheroes, who had received the "Dictatorial Badge of Honor," and were so covered with decorations that it was impossible to see their faces; there were innumerable placards proclaiming the vastness of the recent victories, which, it seemed, were without precedent "in the history of civilized massacre'; and there were, finally, thousands of common soldiers, who walked twenty abreast with the peculiar high-swinging foot motion of the native infantry, reminding me once more of prancing horses, except for the slowness
and automatic precision with which they advanced.

All these men wore helmets, of the peculiar hatchet shape I had already observed; and in their hands, instead of swords or rifles, they carried long poles. On the top of each of these I observed curious round glittering objects which, at the first glimpse, looked most attractive, for the wiry sheaths caught the light and flashed it back resplendently. But, on a closer view, I shuddered and turned pale. Under each of the gleaming metallic coverings, there leered a naked skull!

While I reeled backward, horrified at this sight, I heard the cheers of the throng. "Look at the proofs of our victory! The proofs of our victory! Proofs of our victory! Hurrah! Hurrah! Hurrah!" they howled, pointing to the shining protuberances on the poles. Evidently their vision was so poor that they could not see beneath the sparkling surface!

Following the foot soldiers, dozens of huge vans came rumbling down the avenue, electrically propelled, and bearing great machines that I can only describe as dragons of a hundred necks, since their steel bodies bristled with scores of long tapering tubes, twenty feet high, and pointing in all directions, like the throats of siege guns.
"Just look at them! Just look!" excitedly sputtered the neighbor to my right, while I was wondering what these engines might be. "If there's not the lightningspitters!"
"The lightning what ?" I demanded.
"Lightning-spitters!" he cried, his voice barely audible above the rumbling of the machines. "Of course, you've heard of them! One of the most remarkable inventions of modern times!"

Even as he spoke, a blade of orange electricity shot from one of the machines, darting to the ceiling in a swift zigzag, and was succeeded instantly by blades of green and crimson light, while miniature thunders rolled.

Now all at once I understood the nature of the machines! They were the source of those lightnings which had wiped out
whole armies in the battle cavern, before the dazzled eyes of Clay and myself ! They were the same lightnings that had threatened us both, and that might, for all I knew, have taken Clay's life!
"Of course, those are only toy lightnings, for demonstration purposes," my portly neighbor rambled on, while other shafts of colored light shot harmlessly upward. "But these same machines have wiped out whole armies!"
"What's the principle behind them?" I asked.

My neighbor shrugged his shoulders. "How do I know ? It's a carefully guarded secret of the authorities. However, they say that the power of Mulflar is used to generate electricity in the machine-to generate it in such excessive quantities that the engine becomes supercharged and releases its energy through the tubes in tremendous lightning blades."
"I see," said I. "The machine becomes somewhat like a thunder-cloud, supercharged with positive electricity-"
"Thundercloud?" demanded my companion. "What's that?"

- I perceived that I had used the wrong
illustration, for, of course, thunderclouds were not known underground.
"The only trouble," proceeded my neighbor, after I had vainly tried to convey an idea of the nature of a thunder-cloud-"the only trouble is in aiming the lightnings. Of course, we try to direct them accurately through the different tubes, but they don't always go where we want them to. You can never tell where the lightning will strike."
"I should call that a fatal difficulty," said I.
"Not at all! Wherever it hits, it's certain to kill-that is to say-" here he paused, greatly embarrassed-"that is to say, to turn over some of the enemy. And that, after all, is the only thing that counts!"

I was about to reply, remarking that I perhaps owed my life to the inexpertness of the foe in aiming the lightnings, when all at once the crowd broke into song,
chanting the National Anthem in a tumultuous chorus as the last of the lightningspitters rolled past.

Unfortunately, I have forgotten all the stanzas except the first two; but these, which I give in a translation that does scant justice to the magnificence of the original, will illustrate the theme and idea of the whole:

> Let us fight forever
> We'll be conguered never
> While we've heads to sever From our brutish foeal
> Let us fight forever
> With a gay endeavor!
> We are keen and clever
> With electric blowal
> Where the lightaing flashes
> In mechanic clashes,
> And the thunder crashes, Griad our foes to dust! How our fury slashes, Dealing scarlet gashes, Till the earth is ashesLord, in Thee we trust!

The crowd had just completed the twenty-first stanza, and was singing the chorus with resounding gusto, when I suddenly observed something that made me lose all interest in the celebration. Among the throngs across the gallery, I caught sight of an ugly-looking chalkface, with thin slits of eyes and a twisted nose, who was staring at me with such an intent scrutiny that I felt a chill traveling down my spine. Did he suspect me of being a spy?-or was he an agent of the government, sent to arrest me for breaking my Oath of Fidelity and running away from the Ventilation Office?

Now all at once I remembered that I was a fugitive from justice; and, with a tremor of terror, I pushed my way back into the crowd, resolved on instant flight; while the neighbor to my right, having finished singing the National Anthem, stepped forward with an excited cry, and exclaimed, "Oh, just look! The Subterrains are coming; the Subterrains are coming!"

But I did not wait to see the Subterrains, whatever they might be. The vision of that man with the thin slits of eyes and twisted nose drove all other thoughts from my mind as I wormed my way deeper into the mob; and the dread of being taken back to face the violet-ray
or marry Loa lent haste to my footsteps.
Yet it was not to be long before I would learn the nature of the Subterrain.

## CHAPTER XVII

## Through the Phonoscope

- I can scarcely recall where I wandered in my haste; I only know that I followed long twining aisles in a half-darkness, beset by the vision of a man with slit eyes and twisted nose. I must have traveled half a mile before at length I turned to glance behind me, confident of having thrown off my pursuer. But how cruelly I was surprised! About a hundred yards down the gallery, advancing toward me at no uncertain pace, strode a chalkface whom I thought I recognized by his slit eyes. Owing to the distance, I may have been mistaken; but, in any case, I thought it wiser to flee than to investigate, and put on my best sprinting gait as I slipped around a bend in the corridor and off along a narrow, down-curving passageway.
Less than a minute later, I passed another turn in the gallery, and came out, to my surprise, among a crowd of natives in a wide grotto dominated by a sign in glowing crystalline letters: "Phonoscope Theatre: Admission, One Silver Finger."

Now I had no notion what a "phonoscope theatre" might be, but I knew that a "silver finger" was a fair-sized sum of money-equivalent to the returns from an average day's labor. Needless to say, I had never yet had such a sum; hence it might have seemed sheer madness to follow the idea that leaped into my mindto seek refuge in the theatre. Yet I had not a moment's hesitation. Mingling with the crowd, I pressed forward in a long line filing past a ticket-taker; and since, of course, I was without the requisite slip of paper, I determined upon strategy to admit me. Taking advantage of the chalkfaces' inability to see things near at hand, I seized a little strip of cardboard which chanced to be in my pocket (it had been used for jotting down some notes during my lessons from Loa) confidently thrust
this into the ticket-taker's hand, and cried, "Free pass!" knowing that he would have to hold it off at a distance and examine it with binoculars before discovering the fraud. Then, while the puzzled official was inspecting the ticket, I allowed the impatient mob behind to press me forward and lost no time about passing the theatre door.

It seemed to me that, as I entered, I heard a confused shouting outside, and some imprecations calling down the Seven Furies on someone's head. However, I paid little attention, but remained nicely hidden in the midst of the crowd as I shuffled down a long aisle in the most peculiar amusement place I had ever seen.

It had, indeed, some resemblance to theatres as I had known them, but was nearer in appearance to the amphitheatres of the Greeks. Beneath a ceiling that arched to a hundred feet or more, long rows of benches sloped down toward an open central space or stage, on which a tall chalk-face with a long three-pointed beard was holding forth sonorously; while all the spectators, curiously enough, were looking and listening through queer instruments projecting from the benches, and rarely seemed to heed the speaker.

As quickly and inconspicuotrsly as possible, I slipped into one of the seats, feeting that I had at last eluded my pursuer, and began to examine the instruments in front of me, of whose purpose I remained in doubt. There were tubes like earphones, attached by wires to a little electric socket; and there were other tubes resembling small telescopes, also attached by wires to a socket. What use could there be for telescopes in this auditorium?

So I asked myself, as, following my neighbors' example, I tried to adjust the instruments. But so cumbrous were they that it was minutes before I had discovered their purpose.
While I was struggling with the tubes, I heard the voice of the speaker.
"Fellow citizens of the Second and Third Classes, you are about to witness an extraordinary exhibition. Until three
years ago, when that marvelous invention, the Phonoscope, was perfected, it would not have been possible safely to witness what you are now about to see. For the benefit of those still unacquainted with this masterly machine, I would say that if you will arrange the eye and ear pieces, and step on the little lever to your left, you will be just in time for the beginning of the performance."

In a few seconds more, I had managed to adjust the earphones and the telescopelike tubes; and, following the speaker's advice, I stepped on a little steel rod reminding me of the brake of an automobile. And instantly there occurred the most remarkable transformation I have ever witnessed.

- So sudden was the change that I would have rubbed my eyes like one in a daze, had they not been pressed close to the lenses. At first I imagined I was dreaming; the theatre, the long rows of benches, the tall form of the speaker, had vanished from view; the shuffling, grating noises of people passing down the aisles, the sonorous voice of the long-bearded one in front, had all been obliterated. But new sounds, new sights crowded upon my bewildered senses.

Looking out upon an enormous cavern like the one where Clay and I had witnessed the battle, I saw swarms of warriors, tens of thousands strong, moving in serried ranks across a smooth stone fioor, while a crashing as of many spears was in my ears and a booming like distant thunder.
"You now behold a battlefield a hundred miles away," I heard the speaker proclaim, when, in order to relieve my aching ears, I had removed the earphones. "The Phonoscope, you see, is connected by wires with scores of points on the battlefield. Mution picture cameras, at the other end of the line, are constantly photographing the sights, which are conveyed to you by an apparatus like television, except that you may see directly instead of gazing at a screen. At the same time, radio transmitters catch the sounds and bring them
to your ears, so that you may see and hear the battle from a safe distance. It is hardly necessary to remind you that before the invention of the Phonoscope, no one except generals and field-marshals could enjoy such a privilege."

I was still observing how the army, with yellow and purple banners afloat, was advancing across the field; but I was so interested in the speaker's words that I was reluctant to clap on the easphones again.
"Thanks to the Phonoscope," he went on, "war has become much more interesting than ever before. Previously we had to observe it threugh the newspapers, which was altogether too tame. Or else we had to go to war ourselves-in which case we were all too likely to be-er-turned over. But now, for the payment of a fee, we can enjoy the spectacle without enduring any of its hardships. You do not know how much more popular this has mrade the fighting. Besides-" here the speaker paused, and a smile of glowing pleasure overspread his countenance- "Besides, it has at last put war on a business basis. The fees from the Phonoscope Theatre have been most satisfactory-most satisfactory. Last year alone the Government reaped dividends of eleven per cent!",

It was at this point that my attention was distracted from the speaker to the battlefield. Out of little round orifices on the cavern walls, showers of pale phosphorescent silvery orbs suddenly flashed, falling like shooting stars upon the floor where the purple-and-yellow army was maneuvering. And all at once those regular, serried ranks became like a column of ants on whom one has poured hot water. The wildest disorder prevailed; squadrons of men seemed literally to wither away; I saw a myriad forms convulsed on the ground, writhing and gesticulating in mortal anguish, while other myriads fled pell-mell in all directions.

At the same time, slipping on the earphones, I heard a confused wailing and groaning, like the agonized cries of a multitude; and so iesolate, so heart-rend-
ing was this sound that I had to snatch the earphones off instantly.
"You have just beheid the attack of the radium bombs," the speaker was stating, in matter-of-fact tones. "Radium bombs, as you are aware, represent the most advanced method of scientific slaughter. They are more effective than dynamite or even than Mulflar, for they not only kill all who happen to be near when they fall, but, after falling, they continue indefinitely to be radioactive, so that all who approach are afflicted with terrib!e and incurable sores. That is why you see the surviving soldiers fleeing so madly. For the same reason, whole vast regions, far beyond the present battle lines, have been transformed into a permanent public menace."

I wondered how the chalk-faces obtained radium enough to use so widely; but the speaker was not long in informing me.
"At one time, you know, we could secure the element only in insignificant quantities. But science is great, and surmounts many obstacles. About twenty years ago, the renowned chemist Blo Bla discovered that, by means of a new solution composed of a chromium-phosphorus compound (the exact formula of which is strictly guarded) we might extract it efficiently from the pitchblend that abounds throughout our caverns.
"It was then that we first conceived the idea of using it for military purposes. Our main difficulty was not so much in securing the radium as in manufacturing it into bombs; and this problem we solved by devising a missile with a body of some less deadly metal, such as iron or lead, and with a radioactive surface. Unfortunately, there is one minor disadvantage ; the bombs can be made only at a considerable cost to the workers, whowell, whose turnover, I am sorry to say, is one hundred per cent every ninety wakes. But such, my friends, is war! Is it not all for the honor of the country? To end one's days in a radium factory is considered a glorious turnover!"

- For several minutes the speaker rambied on in this vein, telling how the enemy. Zu , had been so dastardly as to duplicate the radium bombs, at a great cost to the army of Wu Then, suddenly stopping in midsentence, he broke into an exclamation I could hardly catch: "Look carefully, my friends! Look carefully! The Subterrain is coming! The Subterrain! The Subterrain!"

Anxious not to miss anything of interest, I clapped the earphones on agai: and glanced once more at the battlefield. And, as I did so, a scene of shattering fury burst upon my view.

For one instant. I was aware of the wide cavern floor, with the stricken multitudes still writhing piteously, while other multitudes still fled toward the safety of the walls. But, the next instant, all this had vanished. There was a terrific upheaval of earth and rock, which for a fraction of a second covered all things in a great blur; the walls of the cavern sagged, and in places collapsed in avalanches; the floor became jagged as a lunar landscape, with sharp craters and deep ravines, and hillocks, bluffs, and guiches where all had been flat and smooth a moment before. And in my ears was such a thundering that I reeled and was all but knocked over.

Hastily snatching off the earphones. I remained gazing with absorbed interest upon that hideous scene. To my horror, I could no longer see any trace of the purple-and-yellow army. The fugitives, no less than the victims of the radium bombs, had all disappeared! And, as the visible sign of their destruction, a long, thin, dark metallic tube was projecting from the broken center of the floor, like the neck of some great carnivorous dinosaur.
"Ah, that is fine, isn't it, my friends? A very satisfactory enemy turnover! Vory satisfactory, indeed!" the voice of the speaker rang out, with gloating pleasure. "You see that long tube jutting above the Aoor. That is the tip of the Subterrain! You all lnow, of course, about this marvelous engine. It is generally conceded to be the greatest invention of modern times. No other contrivance has ever produced
half so great a turnover. It was the creation of the renowned engineer Hizz Crazz, who, about fifty years ago, decided that war was getting too tame, since it was fought all on the surface of the galleries. Why not make a machine, he asked, which would travel underground as our submersible vessels travel beneath rivers and lakes?
"The result was the Subterrain. The principles behind it are admirably simple; the weapon, which is a relatively slender steel cylinder accommodating five or six men, gradually works its way through a narrow excavation already prepared for it by a machine like a powerful well-borerthe 'cave-blaster,' which operates by the power of Mulflar, and has made it possible to dig our gigantic war-galleries.
"But let me go on to tell about the Subterrain itself. Affixed to its prow is an electric dredge which tears up the earth before it and deposits it behind; by this means, the Subterrain digs its way forward at the rate of a quarter of a mile an hour. Meanwhile, its crew, confined in their narrow compartment, are kept alive by air supplied through long connecting tubes, in the manner of divers. A delicate instrument, with a radio attachment, informs the men when they are in the neighborhood of an enemy cavern-for, of course, the machine is never used except in wartime. Being within a few feet of a hostile gallery, the Subterrain halts, retreats a short distance into the tunnel it has bored, and launches a Mulflar torpedo -whose effects, as you have observed, are terrible beyond description."

- It seemed to me that I had now seen enough of the Phonoscope exhibition for one day, and I began to glance about me for the most inconspicuous way of retreating. But since a crowd of new arrivals were coming toward me down the aisle, the moment did not seem opportune.
"Great as are the merits of the Subterrain," the speaker continued, "it cannot be denied that it has some minor drawbacks. One of these is that there is no longer any security for the civilian
population during wartime. One never knows when a Subterrain, boring unnoticed beneath one's feet, may launch a Mulflar bomb directly at one. It is impossible to say how many thousands of noncombatants have been turned over in this manner since the war began. Even First Class Citizens have not been spared -an intolerable form of barbarity, which will now-thank the Lord!-be ended by a humanitarian treaty which has just been negotiated, confining attacks of the Subterrains to regions occuipied by Second and Third Class Citizens."

It was at this point that I lost interest in the speech. The newcomers having by this time reached their seats, I had risen to leave . . . . when my eyes were riveted on a chalk-face just appearing at the door. Whether he had come by accident or by design I was never to learn; but there at the entrance, staring at me with a fascinated gaze, was my friend of the slit eyes and twisted nose!

Not waiting to make his closer acquaintance, I darted toward a dark passageway marked "Exit." And instantly he set up such a howl that the whole theatre was aroused, and the speaker, startled, halted midway in his address. "Thief! Robber! Bandit!" was dinned from behind me. "Catch him! Catch him! Catch him! He's a deserter from the war! Catch him! Catch him!"

As I darted into the passageway at a speed that did justice to my college track training, it was only too evident that the slit-eyed one, who was apparently a detective, had mistaken me for someone else. But I did not wait to inform him of his error. Well knowing that the penalty for a war deserter was death by the violetray, well knowing that the chalk-faces would execute me first and exonerate me afterwards, I did not check my pace for so much as a fraction of a second as I dashed away with half the theatre audience at my heels.

The violet-ray would not have been needed after all, had that bloodthirsty mob laid hands upon me. "Lynch him! Lynch him! Lynch him!" screeched the
leaders of the multitude, as they raced after me along the curving galleries. "Lynch him! Burn him! Tear him to bits! The rat! Cur! Viper!"

There were also other epithets, some of them quite untranslatable; while, as I rushed around the bends of those branching corridors, I could feel the blood-lust of the rabble behind me, could hear their cries growing more excited, could hear the rattling of pebbles and great rocks flung after me by the ardent onsweeping patriots.

Then, suddenly, above the din and screaming of the throng, my ears caught the screech of a whistle, and I knew that the police were being summoned, and that, in another minute, I would be trapped beyond possibility of escape.

In that critical moment, while my breath came hard and fast and my heart hammered like a great weight, I slipped around a turn that hid me temporarily from my pursuers. And, at the same instant, the saving suggestion came to ne. There, on the pavement in front of me, was an iron lid as large as the manhole of a sewer; its top bore the prominent letters, "Property of the Ventilation Company! Keep off!"

Clearly, this was no time for hesitation. With a swift downward lunge, I thrust the iron lid out of place; with a leap and a plunge. I dropped into the gaping black hole; and with a desperate wrench of my arms, as I came to a halt on a slippery steel surface, I pulled the lid into place above me.

The next instant, secure in that cranny amid the darkness, I could hear the mob surging and stamping above my head.

## CHAPTER XVIII

## Mishap Upon Mishap

- It is impossible to say how long I lay there cramped in the gloom. It may have been only minutes, but it seemed hours, while the howls and wailings of the rabble came to my ears through the thin slit of iron that saved me from their fury. "This way! No, that way! No, you
fools, the other way!" I heard them shrilling in their confusion, as their feet went scampering in a hundred directions. "Catch him! Catch him! Don't let the villain get away! We'll teach him; we'll teach him! We'll make mincemeat of the devil!'" And then, more sinister still, I heard someone exclaiming, "Hey, boys, got the rope? Knot it tight there!
At these words I felt an intense desire to creep farther down into my hiding place, but was unable to do so. My feet were resting on a ledge only a foot or two wide, and beneath me vacancy seemed to yawn. I felt sure that I was on the brink of a precipice, for a pebble or fragment of metal, accidentally dislodged by my foot, rattled for a long while as it descended. Meantime I was in as uncomfortable a position as one could imagine; hudalled against the iron most awkwardly while a chilly breath of air continually blew over me. I was not only catching cold, butmuch worse-had reason to fear that I might sneeze at any moment, so betraying my hiding-place.

At last, however, the tumult of the multitude subsided, and I could hear the shouting of my pursuers at a distance, and then at a farther distance, and then die out entirely . . . . so that I knew, to my enormous relief, that they had gone off on the wrong scent.

Even so, it did not seem safe to lift the iron lid as yet - who knew what member of the mob might not be lurking about? And so I remained crouched there in the darkness, waiting, waiting

But I had delayed too long. After a while, I again heard the sound of voices, of voices lifted in loud excitement. Were my pursuers returning? Not so! As I held my breath and listened, I recognized that these were different voices. "The ventilation! What's happened to the ventilation?" I could hear one of the newcomers crying. "Something must have blocked it! It's not been working right!"
"Been out of gear half an hour, at least!" returned another. "They say the disturbance centers somewhere up this way!"
"Hard to tell where the trouble is!" grumbled a third. "Complaints coming in for miles around!"
"Well, if anything got into one of those pipes," declared the first, "it would stop the air currents over the whole district!"

As I listened to this conversation, a thrill of horror and a sense of guilt shot over me. All too well I understood what was blocking the ventilation!
"Remember that last time!" continued one of the men. "Some big rats got caught in one of the tubes! We had to shoot in some Mulflar, and blow them to cinders!"

By this time the men were almost directly above me, and I was fervently praying for them to pass on without suspecting my presence. But such, alas!-was not to be. Just as the heavy feet of the foremost rattled on the iron lid above my head, I was overwhelmed by the desire to sneeze. The impulse came so suddenly that it was impossible to check; the best I could do was to muffle it, so that it had a stifled sound not at all like a sneeze-though still, unfortunately, all too audible.

I could hear the men pausing just above my head, with surprised exclamations. I knew that they were listening, waiting; I could almost feel their attention focused in my direction.
"What's that?" one of them snapped. "Didn't it sound like a rat?"
"Sure enough!" cried another. "A rat! That's what's stuffed up the ventilation!"
"Most likely a whole colony of rats!" added a fourth. "They grow big down here, you know!"
"And here's the very place!" took up the first. "Right in this air-tube! Well, we'll fix them all right?' And I could hear the man rattling at the iron lid above my head.

Never before had I wished so ardently for the power of invisibility. Never had I had such a desire to compress myself to a thimble's size. Hopelessly I huddled against my iron ledge; then, fearing that I would be seen, I resorted to the desperate expedient of hanging over the brim, belding on to the ledge with both hands, while my body lay along an iron surface
sloping at an angle of forty-five degrees.
No sooner had I gained this position than I heard the lid heavily clanfing out of place ; and a flood of light burst upon me. In the glare above, several chalk-faces were staring down at me!
"There it is! A big rat! A mighty big one! One of the biggest I ever saw !' exclaimed one of the men, in awed tones.

- Evidently, because of their inability to
see things near at hand, they had mistaken me for a rodent!
"Well, we'll get rid of him fast enough!" a second man declared. "Just one minute there! Let me have that brush! I'll spray him with poison!"

It had never occurred to me, until that moment, to have any sympathy with a trapped rat. But I could feel boundless sympathy as a huge brush, malodorous with some vile-smelling concoction, was thrust through the opening directly at my face.

I do not know whether I cried out in my terror. But I do know that my hands, as I struggled to evade that foul oncoming weapon, lost their precarious grip on the ledge. And, the next instant, I had gone shooting off int the darkness.

To this day, I believe that it is a miracle that I survived. Certainly, the gods of good fortune were with me in the ensuing plunge. I could easily have broken my head or caved in my ribs against the steel projections of the ventilating system. Only sheer lucky chance, and the fact that the ventilating tubes were not perpendicular, saved me from what, in the words of the natives, would have been a sudden and horrible "turnover." Down, down, down, I shot, skimming around curves, banging against unseen bends and corners, tumbling head over heels in a mad dash, wherein it was impossible to regain my balance. Surely, no circus performer ever took so strange, so perilous a dive! Only now and then could I momentarily check my speed, when the tube, for a few feet, became almost horizontal; but aifways it would dip sharply again, and I would go falling once more through the darkness.

It seemed that I had traveled thus for miles when suddenly, with a terrific bang, I collided with a wall, and came to a halt, stunned, bruised, and bleeding in fifty places. With painful difficulty, I picked myself up, while noting with relief a slit of light through the partition I had just struck. It was, in fact, not a wall at all, but a partly opened door!

Then, as my dazed senses gradually cleared, I became aware of something familiar in my surroundings. Did this not resemble the ventilating duct, which epened on the office where I had worked, and which I had so disliked to clean with a mop?

Still feeling somewhat dizzy, I crept out of the doorway and found myself in a large, well-lighted chamber-not, indeed, my former place of employment, but so similar that I knew it to be another office of the Ventilation Company.

Before I had had time to reflect on my plight, or wonder what next to do, I was startled to see four or five men who, drawn by the noise of my arrival, came rushing out of several adjoining rooms.

Upon seeing me, they stopped short with loud, excited cries, whose import I could not quite gather. I only knew that they were employees of the Ventilation Company ; that they were pointing in much agitation to my pitiful self, with my torn clothes and blood-smeared features-and that, in another moment, they would seize me and carry me away to some new punishment.

Had I had the energy, I would have crawled back into the ventilating tube for safety. But so weak had I become that I could only fall sagging to the floor and wait despairingly while the chalk-faces drew near.
"Who in the name of Thuno Flâtum are you? Where did you come from?" demanded the foremost of the strangers, as he regarded my battered form. "You know, it's forbidden to enter the ventilating ducts!'
"Yes, I know!" I moaned. And thenI cannot say by what inspiration-I added, "I am an employee of the Company."
"Oh, an employee of the Company?" The chalk-faces stared at one another significantly, and their manner became more friendly. "Of course, that's different!"

Yet their next words struck me like a deadly shock.
"We had better go and report to the Manager!" they all decided while I sought to dissuade them with my last remaining gasp of energy. Into my mind had flashed visions of the penalty for my various breaches of duty. Well I knew that any Underworld judge would be justified. three times over, in sentencing me to the violet-ray!

But, plead as I might, the ventilating men were inexorable. "No, we must report to the Manager! The rules require it!" they insisted, as one of them set off to perform his dread duty.

This assertion was to me as the last straw. Weakened by the day's torments and by loss of blood, terrified at the thought of the ordeal that awaited me on the Manager's arrival, I could not endure this new shock; a merciful unconsciousness swept over me, numbing my pain aad blurring my mind to nothingness.

## CHAPTER XIX Affliction and Triumph

- Great as had been the surprises of the last few hours, still stranger events awaited me

After swooning away in the Ventilation Office, I remained unconscious for a long while-so I was afterwards told. When I came to myself again, it was after a period of blankness, varied by nightmares in which I saw Loa bending over me solicitously, her milky face more wrinkled than ever, her fat form bulging until she resembled à monstrous dumpling. 'Awakening from a long-protracted dream of this character, wherein I fled down endless labyrinths in the vain attempt to elude the enchantress, I found myself in a place so mysterious that I cried out involuntarily in my bewilderment.

I was lying at full length, in a sort of bed or couch, with a sheet drawn over me
utp to the neck; and I was conscious that ail my clothes had been removed, except for a single shirt-like covering, and that my head was swathed in bandages. To my right sose a bare wall, and above me, at a height of three or four feet, stared a blank ceiling ; while to the left, across an aisle little more than a yard wide, I beheld a sight that gave me the confused impression that I was back again in the Overworld, in a Pullman car. In neat rows of berths, arranged one above the other, three tiers high, dozens of men were reclining, one to each cot, all of them buried up to the neck beneath the sheets!
Where was I? In prison? In a ward for the insane? In a death-cell, awaiting execution by some new device more terrible than the violet ray?
As these questions, and others equally frightening, rushed across my mind, I began gradually to observe other details. I saw the wires, with pulley-like attachments, which ran through minute holes in the ceiling to each of the berths and carried little rattling cars no larger than a small ink bottle; I saw the vials and tubes, filled with variously colored liquids and powders, which stood on a neatly numbered shelf just above my head; and I noted that a copper wire, attached to my left wrist, ran the length of the bed and out through an opening in the wall, and that similar wires led to each of the other berths.

Although the suspicion came to me that these might be intended for the simultaneous electrocution of us all, I was so weak and weary thiat even the dread of imminent death could not disturb me for long; I sank back upon a pillow composed of some straw-like substance, closed my eyes, and fell into a refreshing slumber. ...

From this sleep I was aroused with a start by the sound of someone talking in a voice of thunder. How my heart hammered as I awoke from that pleasant doze! How I shuddered! What chills crept up and down my spine! In my bewildered state of mind, it took me a minute to discover that there was no speaker visible, and that the voice-transmitted by radio
-issued from a huge hoon projecting from the ceiling behind me.

Unfortunately, I had missed the first words of the talk; but, judging from what I later heard, I believe I can reproluce it fairly accurately.
"Mechanical Hospital Number 807 QL. Third Class! It is now precisely fifteen minutes and eleven seconds after the start of the wake! Time to take your morning tonic! This you will find on the shelf above you: Number 36 A , in the blue vial. Dissolve two pellets in the distilled water which you will find in Number 36 B . Drink slowly, and finish with an ounce of the liquid in 36 C . Then recline, and return to sleep. Our next announcement will be for the mid-morning repast!"

With an uncanny suddenness, the machine snapped into silence, while the occupants of all the other berths, rising slightly out of bed, reached for the indicated vials and consumed the contents as the voice had directed. For my own part, however, I was too sick and too bewildered to seek to follow instructions; I merely sank down into bed again, thinking that if this were a hospital, certainly it was the queerest I had ever viewed.

But still stranger experiences awaited me. The very next moment I unwittingly made a blunder that led to new discoveries. Finding that the wire about my wrist irritated me, since it dug into the flesh and checked the circulation, I pulled at it viciously, and succeeded in removing it. But no sooner had I disentangled the obstruction than I. was shocked by hearing a bell clanging just above my head, reminding me of a burglar-alarm. And, from the radio-speaker on the ceiling, a voice bawled reprovingly.
"The patient who has just removed his wrist-register will kindly fasten it on again. We cannot expect to cure him unless this is left securely in place. For the benefit of any persons still ignorant of the facts, we may repeat that the wrist-register is the essence of modern medicine. By means of a faint but constant electric current, it records the patient's pulse, temperature, and respiration, which are
noted down in the chart-room by autematic wired connections. Thus we are aware of the patient's condition minute by minute, and are able to eliminate the necessity of expensive attendants. It is this device which has made the Mechanical Hospital possible, and has enabled This Class citizens to enjoy the benefits of modern medical knowledge."

- As I hastily readjusted the wire, I marveled at the medical advances of the chalk-faces, who have progressed so far above us of the Overworld. None the less, how I would have welcomed the presence of a flesh-and-blood physician!

Let me now pass over the space of a few hours, during which I dozed from time to time, and from time to time took foed or drugs in accordance with the radio instructions, which were constantly awakening me from the most invigorating slumbers. The next important event occurred toward the close of the "wake," when the radio announced "Visitors' Hour."

Needless to say, this announcement did not interest me at first, for who was there to see me? Who, in fact, even knew of my presence here?

Yet once again I had miscalculated. I was to receive not one visitor, but several -in fact, two distisct groups! And one group was to be more alarming than the other.

No sooner had "Visitors" Hour" begun than I heard four or five heavy pairs of feet shuffling down the aisle in my direction; and, peering out of the bed toward the newcomers, I was electrified with fright at the sight of several familiar faces. There were the very men, the employees of the Ventilation Company, who had met me yesterday after my ignominious descent, and had threatened to call the Manager. And among them-might heaven preserve me!-I noticed the tigerish face of the Manager himself!

Only on one other occasion-when I had begun work in the Ventilation Office -had I encountered this individual, who answered to the name of Go Grabl. But
never could I forget the occasion; he had insisted so severely on my duties to the Company, and had pointed out the penalties for violation of the rules se explicitly, that I had thought of him somewhat as the small boy thinks of the rodwielding pedagogue.

And now here he was, cornering me where I was not able to escape him! Could he not at least wait until I was well?

Shuddering, I turned my face toward the wall, so as to shut out the sight of the intruder. But all to no avail! I heard him, along with the other men, halting opposite my berth; and I could not but catch the tones of their conversation.
"There he is!" exclaimed the first of the visitors; and I could imagine with what contempt he pointed to me. "All beaten up and abraided from knocking about inside the tube!"
"No wonder!" declared a second. "He must have gone through at least two miles of pipe!"
"When did you say he would be well again?" I heard the powerful voice of the Manager. "Naturally, we can do nothing until then!"
"They say he'll be out in a few wakes," returned the first. "Only suffering from shock, along with surface scratches and bruises."
"Good!" bawled the Manager. "It would be awkward if he had been turned over!"

Oh, would these men never go awzy and leave me in peace? In despair, I turned toward them, and opened my mouth to speak. Alas!-they would not let me get a word in edgeways!

- But what was this that they were say-- ing? Could I believe my ears? Or was I only dreaming?
"It was a wonderful performance," one of the ventilating employees was declaring. "Yes, a wonderful performance! Personally, I never saw anything like it. To creep for miles through the ventilation tubes, all the way from his office to ours! To dust them out and brush away all ob-
structions, at the risk of his life! Why, I assure you, Go Grabl, it was heroism! We were all dumbfounded! The best of it was he succeeded! He repaired the ventilation! From the moment he left the duct, the air currents were working properly again!"

Could it be that I was not dreaming, after all ?
"Such modesty I never saw before!" a second employee was relating. "Can you believe it, Go Grabl, when we promised to report the affair to you, he tried to dissuade us! He seemed positively eager not to take the credit!"
"Such selt̂-effacement," rang out the heavy voice of the Manager, "is much to the credit of any worker! It is the ideal that the Company demands! We will not forget such devoted service!"

And then, nodding to me with a smile, while I vainly strove to get in a word at last, he counseled, 'Quiet there, my good man, quiet! In your condition, it is best not to speak; you need all your energy to get well. But I want you to know that your heroic deeds will not be soon forgotten. You will be rewarded, my dear man, you will be rewarded. And now, good-bye! Good-bye!"
"Good-bye! Good-bye!" echoed the other ventilation employees, and all bowed low to do me honor.

Spellbound, I had no word to say; but as they filed off down the aisle, I could hear the Manager's pleased voice.
"We will report this exploit in our monthly Company booklet, as an example to all our workers! It will live in the annals of the Company; yes, it will live in the annals of the Company!"

While I was wondering if they were crazy or I, I heard heavy footsteps thumping toward me along the aisle and glanced out of bed to receive a new shock.

Waddling forward as fast as her corpulent form would permit, and with an ingratiating smile on her wrinkled face, was none other than Loa! And behind her, benignantly beaming, loomed her father, Professor Tan Trum!
"Well, well, well, my boy!" rattled the
latter, as he made his way toward my berth. "Here you are at last! We have been waiting for you in the reception room a full hour-a full hour, by my watch! They are not very courteous in these Third Class hospitals! But Loa wanted to come -so here we are! It would hardly be proper to let a respectable girl come alone to such quarters," he finished, as he surveyed the three tiers of berths with a disapproving sniff of his uptilted nose.
"Oh, my dear, my dear, I'm so glad we've come!' enthused Loa, scarcely waiting for her father to end. "We've heard all about it! The Wakely Screamer tells the story in headlines! It even has pictures, showing how you climbed up the Ventilation Tube! How brave you were, my dear! How very brave! It makes me feel so honored to know-well, to know that I can call such a man my very own!"

And she reached out her capacious arms as if to enfold me-with the result that I felt ready to swoon again.
"You can't imagine how nervous I was about you last night, my dear. when you didn't come home!" continued Loa, in a fluent stream. "I was afraid you were lost! But father-father here wasn't worried. He was so absorbed in his researches into the antiquity of the hyphen, he only growled and said, what if you did get lost? The streets are as safe as our own home! But I didn't get a wink of sleep -not one wink!-until I read the news in the Screanner. Now, of course, I understand why you didn't come back!"

No defeated general, suddenly realizing that his most carefully laid strategy has failed, could have had a more bitter sinking sensation than overcame me at that moment. Evidently Loa and her father had not even guessed that I had run away!
"My dear boy," the Professor continued, still glancing disparagingly about the room, "what a miserable rat-hole they've given you to sleep in! You can't remain here! We'll arrange to take you back home immediately!"
"Yes, of course, we'll arrange immediately!" coincided Loa, beaming upon me
with a devouring smile. "You poor dear! We'll give you better treatment! I'll take care of you myself!"

Overwhelmed at this idea, I opened my mouth to protest; but the words stuck in my throat and would not come. Instead, I uttered something halfway between a gasp and a sob.
"No, no, dear, don't exert yourself!" urged Loa. "Don't thank us yet! You're still too weak to speak! But we'll see the authorities-and have all the arrangements made."

- The truth is that I was too weak to speak-much too weak! As Professor Tan Trum nodded good-bye and disappeared along the aisle, followed by his daughter, who smiled at me in the most infatuated way imagimable, I relapsed momentarily into a state of coma, from which I was a long while in recovering.

It is doubtful if I would have recuperated at all, in less than several "wakes," had it not been for a message that came to me an hour or two later, sealed in an envelope that shot to my bedside through a pneumatic tube. This was so unexpected, and so heartening, that it helped me more than all the hospital tonics, and even enabled me, for a time, to drive away the dread vision of Loa.

The letter, written on the embossed stationery of the Ventilation Company, ran as follows:
> "No. 44;667,023 XZ, Third Class, c/o Mechanical Hespital No. 807 QL, Third Class.

"Dear Sir:
"By virtue of your distinguished services on the line of duty, we are honored, on the recommendation of our Manager, Go Grabl, to promote you from Ventilating Clerk to Ventilating Inspector, the appointment to take effect 25 soon as you are able to return to work. In your new capacity, your hours will be half what you formerly served, and by way of compensation, your salary will be doubled. We remain,
"Appreciately yours,
"THE VENTILATION COMPANY OF WU,
" (Per Do Quil, Ninety-Eighin VicePresident)."

It is from my appointment as Ventilating Inspector that I date the beginning of my phenomenal rise in the affairs of the Underworld.

## CHAPTER XX

## Ordeol and Crisis

- For seven "wakes" I remained in the hospital. Even though I did not at all like the place, with its automatif service and its total absence of living attendants, still I lived in hourly dread of being removed and sent back to Professor Tan Trum's home. I knew that, true to his word, he had put in an application to have me taken out; but what I did not know was that a thousand formalities had to be observed before the application could be granted. There were blanks to fill out, and signatures to secure, and affidavits to sign, and fees to pay, and half a score of clerks to affix their approval; hence, while Tan Trum and Loa were doing their frantic best to obtain the release permit, the "wakes" continued to slip past, and I remained in the hospital. In the course of time, indeed, Tan Trum's application was duly approved-but not before I had already been discharged as cured.

It is a testimony to a naturally strong constitution that I was able to escape in seven "wakes"; for my worries and torments while in that hospital were innumerable . . . . I shall not describe them all; let me only say that the newspaper reporters alone were enough to give me a daily attack of chills and fever. The gentlemen of the press, thanks to the special privileges of their profession, did not confine theniselves to "Visitors' Hour"; at any time of the day or night they would rouse me from pleasant slumbers, in order to secure my personal story for the Wakely Blare, or in order to learn my views on the topics of the day, such as the reasons for the peculiar charms of the women of Wu , or the desirabitity of improving men's clothing styles by further enlarging the $V$-slit on the back.

Natusally, I was irritated by such questions, and persistently refused to reply,
for I did not see how my work for the Ventilation Company qualified me to express myself on native fashions, feminine beauty, or politics. The reporters, however, seemed to feel otherwise; and, in no way discouraged by my failure to speak, they were so obliging as to make my opinions for me when I would not mention them myself. Thus, I was later shown long articles in which I was described as "speaking volubly," and in which I read the views credited to me on subjects so diverse as "The Merits of Thuno Flatum," "The Natural Superiority of Wu to Zu," "The Future of the Sceotscoot," "Why I Am in Love With Wrinkles," etc.

It was with intense misgivings that I awaited my release, for how now avert the day of rechoning? How save myself from the fatal necessity of returning to Tan Trum's home ? Luckily, this problem was solved for me by the Ventilation Company. Upon presenting myself for work, I was informed that the Company provided living quarters for its Inspectors in a great dormitory, so that they might be subject to call at any hour. While it was not compulsory to reside there. I had not the least hesitation about my course. I hastily dictated a letter to Tan Trum and his daughter, thanking them for past favors, but assuring then that, "much to my regret, the exigencies of my new work make it impossible for me to continue to accept your hospitality." I also promised that, as soon as I was able, I would pay back the sum I owed Tan Trum.

Unhappily, this was not the last I was to see of the Professor, nor of the Professor's daughter. But before reporting my next encounter with them, let me tell of my new duties for the Ventilation Company.

As was to be expected, in view of the doubling of my salary, my new labors were much less' exacting than the old. It was my duty to travel from place to place, inspecting the ventilating tubes and outlets, and removing obstructions (this being assumed to be my specialty); and
in order to accomplish this task, wherein I was pretty much my own master, I had to ride one of the Company-owned little vehicles, or "scootscoots," which I so intensely loathed. However, I found it easy enough to run the machine, whose driving mechanism, which was guaranteed as "moron-proof," was as simple as that of an elevator. But I was never able to balance myself on it cross-legged with the native ease, which came only of long practice; nor could I ever quite master my dread of an early and sudden "turnover," for I constantly observed collisions on all main thoroughfares; and since there were no traffic rules, speeding drivers shooting recklessly at one in all directions, survival was a matter of sheer good huck.

But by taking roundabout ways and choosing the less frequented thoroughfares. I succeeded in reducing the risk, till I estimated that I was about as safe as a voyager through a sulmarine zone in wartime, or a lone transoceanic aviator. So fortunate was I, indeed, that in the first few months I only suffered half a dozen minor mishaps. Except for some bruises on the head and shoulders, an abrasioned knee and a sprained wrist. I might be said to have escaped unscathed.

- In the course of my new activities, $]$ had an opportunity to inspect the ventilation in all its details, learning by precisely what system of motors, punps, valves, and pipes the fresh air was forced down from the Overworld and distributed throughout Wu , somewhat as the lunga distribute oxygen to the body. Being an engineer not only by profession but by inclination, I made a more careful study of the details than duty required, until I had mastered the facts as a watchmaker masters the mechanism of a clock. But as yet I had no thought beyond my own natural mechanical interests, and had no anticipation of the striking part my newly acquired knowledge was to play.

It did, indeed, occur to me that, 6y exploring the ventilating connections with the outer world, I might find a way to escape from Wu. But, remembering my
harrowing experiences on my first attempt at escape and knowing that a second attempt might not end so fortunately, I decided to bide my time and make no rash or premature dash for freedom.

Had it not been for one fact, I should have found life as Ventilating Inspector almost pleasant. The fly in the ointment was the menace of Loa. I use the word "menace" advisedly, for this is what it seemed to me. Not even by removing to the Ventilation Dormitory could I relieve myself of her attentions! Of course, I scrupulously avoided her whenever pos-sible-but this proved to avail me little. Before I had been working in my new position for ten "wakes," disconcerting rumors began to reach my ears.
"Well, partner," another Inspector exclaimed one day, slapping me on the back with comradely good humor, "we hear you're in luck! Say, invite us to the wedding, won't you? How did you ever find such a lovely girl? So fat and wrinkled, they say! And the daughter of a Second Class professor! Congratulations! May you have fourteen sons, to provide a glorious turnover for our country!"

Naturally I grew indignant at these words, and strenuously denied having matrimonial intentions. But my companions smiled knowingly, nudged one another, and protested, "Oh, you can't fool us! We know! We know! The rumor is everywhere about! You've been engaged for wakes and wakes! Why, the Screamer announced it issue before last!"
"The Screamer-announced it?" I gasped.
"Of course! Can't keep it secret any longer, partner!"

In despair. I sank down upon a seat, my face buried in my hands, my spirit a prey to the darkest melancholy. Apparently everyone was bent on forcing me into a union with Loa!

Meanwhile the girl herself went her way in the blithe assurance that our nuptials would soon be celebrated. Only one "wake" after the ventilating employees mentioned the article in the Screamer, Loa
herself visited me in the company of her father.

As they announced themselves unceremoniously into my rooms in the dormitory, they succeeded in cornering se beyond hope of escape.

I noticed that Loa, as she entered, was pouting a little, and was eyeing me reproachfully, and for a moment the wild hope came to me that perhaps she was angry, and had come to release me from the entanglement.

No such optimism, however, was justified. "Why haven't you come to see me all this time, dear?" she began, somewhat accusingly, but in a manner that showed her willingness to be forgiving,
"Now, Loa darling," remonstrated the Professor, "haven't I told yout a thousand times that it isn't becoming for a Third Class man to call on a Second Class lady? -no, not even when they're engaged! So, of course, Loa, you must come to him instead. He has a right to feel offended at your neglect."

But I confessed to feeling no offense, and Loa, her resentment quickly dissipated, advanced toward me with a smile.
"See, dear, what I have for you," she announced, taking a little gleaming object from her handbag. "It's all yours! Your wedding ring!"
"My wedding ring ?" I ejaculated, feeling ready to sink through the floor.
"Of course," she declared. "Don't you know it's the custom for the lady to give the gentleman a ring?"
"Now, Loa, how could you expect him to know?" demanded Tan Trum reprovingly. "After all, he was born a barbarian, and still isn't familiar with civilized ways."
"Yes, I had forgotten," admitted Loa, apologetically. "Here, dear, is the ring!" And while I sank down in consternation, wishing to fight off the gift but not knowing how to refuse, she slipped a little rubystudded silver band onto the small finger of my left hand.
"There, dear!" she went on rapturously. "Isn't it beautiful? It's ruby, the color of your heart's blood!"

- I mumbled something, expressive neither of thanks nor of appreciation, but apparently my hearers did not quite catch my words. As I snatched at the ring, with the idea of removing it, I was diverted from my purpose by feeling Loa's arms about my neck, and for a moment we were locked in an embrace more satisfying, I hope, to her than to me.

It was Professor Tan Trum who, at this point, unwittingly saved the day.
"Here, my dears," he said, unfolding an enormous document with a silver seal. "Here, my dears, is the license! There are only a few minor details to be filled out."

I do not know why, but some strange, irrational hope flashed into my heart at sight of that document.
Yet as I glanced over the paper, I saw very little to inspire hope. I read that, as my one and only legal wife, I guaranteed to take, Loa, the daughter of Professor Tan Trum; that I agreed to obey the Population Laws and produce as many sons as possible for the benefit of the Fatherland; and that I promised to rear my children and conduct my own married life according to the best accepted principles of Thoughtlessness. At the bottom of the page, I noticed, there was a space for a notary's signature, which had not yet been filled out; and under Loa's name I read, written elaborately in gilded letters, "Eugenically approved!"; while beneath my own name no such inscription appeared.

As delicately as I could, I called this fact to the attention of Professor Tan Trum. But he, as if bent on destroying my last remaining shred of hope, answered me.
"Oh, my dear boy, don't let that worry you! Don't let that worry you at all! A mere formality, I assure you! A fine, stalwart man like you-even if you were born a barbarian-won't have any trouble meeting cugenic requirements. Not the least. In fact. I'm determined to clear away this last technical obstacle at once. So I've a little surprise for you. I've brought the Eugenics Inspector here with
us. He's waiting right now in the gallery!'

While I gave a horrified gasp, the Professor went to the door, flung it open, and called to someone outside. And immediately a rat-faced little runt of a native, whose tall pointed hat bore an engraved steel sign, "Eugenics!" entered and bowed low. "Is this the bridegroom?" he inquired, pointing at me.
"Yes, yes," acknowledged the Professor. "Come right this way! My daughter and I will withdraw, leaving you to perform the tests by yourself. We will be waiting outside."

Since there was no choice in the matter, I had to agree to the ordeal. And the Inspector, who declared himself to be a practicing physician, put me through a severe examination, in which he tested my heart, my lungs, and all my other organs by means of a wonderful little instrument which, upon being placed on the skin, immediately registered any pathological condition, by recording the exceedingly faint electrical reactions of the body.

But alas!-he could find nothing wrong with me! "My dear young man," he congratulated me at the conclusion of the test, "you bewilder me! It is rarely that I have come across so perfect a case! I will rate you 99 and $44 / 100$ per cent! From the point of view of Eugenics, you are Grade A!"

Probably the Inspector did not understand why I looked so downcast at this pronouncement, and why I begged, almost forlornly, "But is there no other test? You're sure you can't disqualify me?"
"Have no fear!" he assured me.
And then, glancing at a little document across the room from him, he added, "To be sure, there are a few questions I must ask, in accordance with the law. But they are mere matters of form which, I am certain, will give you no trouble."

Thereupon he began to fling out scores of queries, in regard to my age, my occupation, my father's age, my mother's age, the age of my sisters, brothers, cousins,
aunts, uncles, grandparents, great-grandparents, etc., when they were "turned ever." To all these questions, most of which struck me as utterly silly, I replied as best I could; and always the Inspector would nod with a pleased "Very good!" and congratulate me on my perfect record.

- At last he had come to the final question, and inquired, in a perfunctory manner, "Military experience? Military experience of your father, grandfathers, and great-grandfathers?"
"Well," said I, not in the least anticipating the effect my words were to have, "I served among my own people in a World War, being in the Commissary Department for three months. My father never was in any war; neither were my grandfathers nor great-grandfathess, so far as I know."

Suddenly the Inspector shot out of his seat and leaped toward me as though I had confessed complicity in a crime.
"What?" he demanded. "Your family has never been to war? It has no military record at all?"
"My family were all distinguished scluolars and scientists."
"Scholars and scientists?" he flung back, wrathfully. "Scholars and scientists? What do they amount ta? When did they ever fight for their country? How do you expect, young man, to bring forth a capable progeny to be turned over in the next war unless you have a good fighting ancestry?"

Before this question I remained mute. The first wild surge of hope was beginning to well up in my heart.
"How do you expect, young man," repeated the Inspector, growing more irate every moment, "to bring forth a capable progeny unless you have had a good fighting:ancestry? No, sir, I am sorry to say I cannot approve of you as eugenic! To permit your marriage would be to encourage the growth of an unfit, nencombatant population! I regret it vers much, sir, but I must stamp your application, 'Disapproved!'"'

And, with that, the Inspector made a
contemptuous bow, and went stamping out of the room.

A few minutes later, after Loa had heard the news and had left my apartment with heartbroken sobs, I executed a solitary dance of joy. At last I was free, completely free! And how I blessed my father and my father's father for having had no fighting experience!

## CHAPTER XXI

## Strike! Strike! Strilee!

- The "wakes" went by and gathered into months, and the months lengthened into a year, and still I performed my duties as Ventilation Inspector, and could discover no way of escape to the Overworld, and no prospect of a change in the ordered monotony of my existence. Was I to pass my whole life thus, and to end my days among the labyrinths of Wu ?

So I often asked, while wondering if it would not be wise to attempt some new dash for liberty-even though the end might be arrest and the violet ray! Then all at once, when I was just finishing my first year as Inspector, my life underwent an extraordinary change.

The occasion was one of those periodic strikes which menace the economic security of Wu and enable the people to enjoy the perils and horrors of warfare even when war has not been officially declared. On this particular occasion, the strike was especially dangerous; for those guardians of the public health, the Ventilation employees, were determined to leave work. Not, indeed, had all the Ventilation employees so resofved, but in some sections they were unanimous in their revolt, and the uprising had become so serious that Dictator Thuno Flâtum was said to have interrupted a fishing expedition for mearly an hour while he debated the situation with trigh officials.

Personally, I looked upon developments with gravest misgivings, for the Ventilation Brotherbood, composed of fifty thousand workers, bad issued the following ultimatum:
"To the Directors of the Ventilation

Company of Wu , Unlimited, we pay our respects, and submit that
"Within three wakes, they must grant all our demands, or we will turn off the country's air supply.
"Not a ventilation wheel will turn, not a breath of fresh air will blow until our terms are complied with.
"If thousands of citizens, including many First Class men and women, should be suffocated as a result, we shall profoundly regret their fate, but sentimental considerations, naturally, cannot deter us."
The demands of the strikers-who were mostly Third Class citizens, of the kind that did a maximum of work for a minimum of returns-were as follows:

1. That wages be high enough to permit the men to eat every other "wake."
2. That hours be short enough to permit them to sleep every other night.
3. That the Company supply free air to the homes of all its employees.

These demands-which were variously hranded by officials of the Company as "Tnordinate," "Preposterous," and "Im-passible"-were condemned in no uncertain terms by all First Class citizens, who uphraided the unpatrictic attitude of the strikers and pointed out that, should their terms be met. the Ventilation Company could not guarantee to pay its stockholders more than eleven per cent a year.
"The arrogance of the people knows no limits!" stated one high dignitary, who was believed to enjoy the confidence of no less a personage than Thuno Flâtum himself. "If we were to grant these exactions, the next thing they would ask would be separate houses for each family, or Grade A air, or reduction of taxes on the food, clothing, and water of the Third Class! Doubtless they would expect the First Class, who are legally tax-exempt, to meet these bills instead! No! Obviously such insubordination must be checked before it poisons the entire life of society!"

This sentiment being echoed by First Class citizens everywhere, a battle to the finish was promised. "We will smother rather than submit!" rang out the defiance
of the rulers . . . "Then we will all smother together!" thundered the retort of the strikers. And already, two "wakes" before the expiration of the ultimatum, serious complications were reported; dozens of strikers, going quietly about their way bearing banners, "We demand a breathing wage!" had been shot in the back by electric bolts launched by the police, in return for what the Wakely Screamer denounced as "their treasonous and seditious interference with business."

If this were but the beginning, a civil war seemed in prospect!

- Now, I personally had little interest in the strike, for my work as Ventilation Inspector was fairly easy, my wages were fairly good, and I could see no advantage in facing suffocation merely in order to improve laboring conditions. Besides, I had had the temerity to consult a historical reference work, and knew that ventilation strikes had been occurring at intervals of about thirty years for centuries, and that in every case hundreds of thousands of persons-mostly invalids, women and children, in no wise connected with the strike-had been turned over as a result of interference with the air supply; while the strikers, if they had been permitted to return to work at all after the settlement, had done so on worse conditions than before.

For this reason, I steadily refused to join the protesting group.

As the time approached for the strikers to put their ultimatum into effect, I could see how excited the people were growing. Business had virtually come to a standstill; along avenues once crowded with dashing vehicles, the "scootscoots" had almost ceased to run; in every side-gallery one could see little knots of chalk-faces anxiously talking, their drawn features and worried eyes bearing testimony to the concern they felt. "And so you think they will really strike ?" one would ask . . . . "Undoubtedly!" another would reply. "I stored up containers of oxygen months ago, for an emergency!" . . . . "Oh, what will I do about the baby's air!" a
third would sigh. "I'm sure there'll be a terrible turnover if this keeps up!" . . . . "Never fear!" would be the response. "What's the army for? The government has saved it for just this occasion!"

Meanwhile, the Screamer reported that Dictator Thuno Flâtum was still enjoying his fishing expedition. He had just caught a seven-ounce minnow, it was said, which he had been able to draw out of a subterranean lake by means of a new automatic fishing reel.

At the beginning of that wake on which the ultimatum expired, I reported for work as usual to the Ventilation Office. But, to my surprise, the place was almost deserted ; the dozens of regular employees were conspicuously absent; only a worn old drudge of a janitress, languidly mopping the floor, greeted me upon my arrival.

She seemed, indeed, astonished to see me. "Say!-but you are brave, young man!" she gasped. "Don't you value your life?"
"Don't I value my life?" I echoed.
"Bless me, it won't be worth much if those strikers find you!" she exclaimed, looking up from her pail of sops. "They wouldn't do anything to me, for I'm only a useless old woman. But you, sir-they'll wipe the floor with you for not joining the strike!"
"Oh, have no worry ; I'm able to defend myself!"
She stared at me as if wondering whether I were a prodigy or a madman.
"Do you think so ?" she shot out. "Well, then you ought to see what they did to my neighbor, young Mr. Ty Tan. He was as big and brawny a young man as you ever saw-took all the prizes in boxing and wrestling. Well, he wouldn't join the water workers when they went out year before last, and turned off our drinking supply. Poor fellow! I've always felt so sorry for him!"
"What did they do to him?"
"Poor fellow!" she reiterated. "Poor fellow! It was so foolish of him, so foolish! When Mr. Ty Tan wouldn't strike-"

Abruptly she halted. I saw her staring toward the door, an expression of surprise and fear in her eyes, while she shrank back as if from some approaching menace.

Wheeling about, I saw half a dozen ugly-looking men just entering. On their breasts were prominent banners, reading: "Ventilation Strike. Sub-committee No. 116."

With a threatening expression, the newcomers drew near. "We were just looking around, to see that no one was working!" snarled the leader, as he glared in my direction. "You know, brother, it isn't good for the health to be working nowadays."

Steadily I eyed the men, and deliberately drew a step nearer. "Is that a threat, or a challenge?" I demanded.
"Have it as you will!" he growled. "I give you a fair chance, brother, if you want to walk out of here alive-"

Already I had resolved on my course. Striding forward before the man could finish his sentence, I put my full one hundred and seventy pounds into an uppercut that caught him squarely on the point of the chin, and sent him reeling to the floor.

Not being able to see clearly close at hand, he had been unable to ward off the blow!

Even as he fell, I followed up my advantage. Being now within arm's reach of his companions, I began to rain blow upon blow, which they also, because of their defective vision for things close at hand, were unable to guard against. In less time than it takes to recount, three of the men had followed their leader to the floor; while the remaining two, not knowing what sort of a fighting tornado they had encountered, had turned and taken to their heels.

With eyes of admiration and wonder, the scrubwoman stared at me as I returned from the encounter. "If only Ty Tan could have fought like that!" she sighed. "Poor Ty! He mightn't have ended as he did!" And then, warningly, "Still, sir, I would advise you to look out. They won't let it go at that. They'll see that you're
turned over, if they have to bring out a whole striking brigade."
"Let them do their worst!" I snorted. And I sat down, crossed my legs, and complacently awaited developments. I could foresee that I was to have a busy day.

## CHAPTER XXII

## Blows and Counter-Blows

- Less than twenty minutes later, a second Striking Sub-committee arrived. Its members were eight in number, and their method of swaggering hostility was such that I had no difficulty in repeating my previous tactics. Before they realized what I was about, I had gotten too close for them to see me clearly and I aimed my blows so accurately that, in less than a minute, half the gang lay stretched upon the floor. The others, not quite realizing what had struck them, were not long in resorting to that discretion which most men prefer to valor. Dashing to the door, they leaped upon their "scootscoots," which awaited just without, and darted a way with a lunatic recklessness, while I stood staring after them with an amused smile. As yet I did not suspect how tragic the occasion was to be.

While my felled opponents were staggering to their feet and retreating by a side-entrance, the sound of a frightful crash came to my ears; and, rushing out and around a bend in the gallery, I saw that a crowd had gathered, while in their midst was a shapeless mass that I could hardly recognize.

Horrified, I shielded my eyes from the sight; and only by degrees did the dread truth dawn upon me; the escaping members of the Sub-committee, in their haste, had collided with some other "scootscoots," and all four members had been "turned over."

But such incidents being of daily occurrence, I tried not to let my mind dwell upon it ; and, returning to my seat in the Ventilation Office, I quietly awaited the next development.

Not being good at presaging the future,

I could not have known how the news of my exploit was to spread; and how, fanned by rumor, it was to grow to gigantic proportions. As luck would have it, a reporter for the Wakely Blare, on the rampage for materiai, happened to be present at the scene of the collision; and though he had small idea what had happened, he had no hesitation about accepting the word of onlookers who knew as little about the affair as he did. Consequently he radioed his paper a story so good that the editor decided to make it headline material-in other words, he printed it in red ink all over the front page, while other news items were driven to footnotes on back pages.

This article-which is too long to repeat in its entirety-was to the effect that a regiment of strike-breakers had appeared, no one knew where from, under the leadership of a redoubtable giant capable of "turning over" any adversary at a blow. So tremendous was the power of this group that opponents were said to be under a fatal spell, so that even fugitives from their vengeance came to certain disaster. As proof of this fact, the paper cited the destruction of the four members of the Sub-committee-whose numbers, however, were given as fourteen... .

Now the speed of the papers of Wu in printing the news is phenomenal. Thanks to automatic typesetters, which take down the articles from radio dictation, a matter of only minutes need elapse between the occurrence of an event and its appearance in print. In fact, on some occasions the news is reported in "extra-extra" and "super-extra-extra" editions even while the event is happening; it is recorded that once the Screamer, in a special "scoop"or "raid"" as the natives call it-announced the death of a high official seventeen minutes before he actually breathed his last.

Hence it is not surprising that, less than half an hour after I had routed the second Sub-committee, papers telling of the exploit were being flaunted in all the main galleries by the newsgirls (there were no
newsboys, since all the boys had gone to war).

Now if truth be told, the Blare was extremely glad of the opportunity to print this story, since, like all the papers, it was owned by a group of First Class citizens, and therefore was profoundly "antistrike," and eager to play up any account hostile to the strikers. This it was which, along with the desire for circulation-for which several newspaper proprietors had been known to commit murder-explained the prompt featuring of the article.

Even so, the effect of the article would not have been possible had it not been for one little weakness of the people of Wu . In most ways, they are not a credulous folk; indeed, one may show them a plain fact ninety-nine ways without convincing them; but when a statement is once in print, they consider it inviolable. Never would it occur to them to question any remark, once it has been subjected to the sacred art of typography. They imagine that there is a sort of magic connected with printer's ink, which abhors falsehood somewhat as water abhors fire, and in this superstition the educated seem to share along with their more ignorant brothers.

As a consequence, the rumor of my prowess, once it had attained the dignity of a place in the Blare, had taken on the sanctity of established knowledge.

- In view of the fact that the circulation of the Blare was somewhere in the millions (it being prescribed as compulsory reading for all persons with a mental age of twelve or under), it was not an hour before I, along with my imagined regiment of supporters, had become a subject of discussion for all Wu . And the effect upon the strikers may well be imagined. It hit them in that vital spot, their morale, with the result that many began to hesitate whether to remain on strike, and in some districts it was reported that the men were going back to work and ventilation was being restored. Most of all, the ignorant were disturbed by that passage in the story which told of the "mysterious spell"
afflicting all opponents of the new strikebreaker. As this was nothing tangible for anyone to combat, it was all the more capable of arousing the terror of the masses, who, being well grounded in all the precepts of thoughtlessness, were unable to save themselves by reason.

The consequence was such as to endanger the strike itself. The members of the Central Strike Committee, threatened with disaffection on all sides, began to fear that their movement would collapse ignominiously. Hence they took immediate measures to hit back at the source of their trouble.

It was only about two hours after the little episode between myself and the second Striking Sub-committee, and I was lounging in my chair in the Ventilation Office, finding things becoming just a little boresome. The heavy, languid air, growing hot and foul now that the ventilation had been turned off, was telling upon my nerves; I was getting anxious to go into action again and do something more to end the strike. How I would have welcomed the appearance of another Subcommittee!

But no Sub-committee called. Evidently none could be found to meet me face to face, after the tales of my prowess! Instead. I was startled to hear a rattling sound in a pneumatic tube just to my right, and to note the arrival of a letter in a little steel container, which stated:

## "TO WHOMEVER IT MAY CONCERN

"But most of all, to the strikebreaker who has been decimating our men with an army corps of hired thugs.
"We extend our greetings, and suggest that you immediately withdraw your horde of brigands.
"If you do not see fit to comply with this recommendation hefore the close of the present wake, and to surrender your arms and position, we shall make a complete turnover of you and your men.
"Yours, with many remembrances of the day.
"The Central Striking Committee,
By order of the Grand Commander of the Silver Legion of Wu.

Now I must confess that I read these words not without a shudder. The mem-
bers of the Silver Legion, having been to war, had had long experience in crime and hence were renowned for the blackness of their deeds ; and it seemed possible that they would make good their threat, and, by means of Mulfar, the violet ray, or some other nefarious device, would speedily "turn me over."

However, I had now gone too far to retreat; ; if I were to die, I would at least die fighting. After thinking the matter over for a few minutes, I came to the conclusion that, as I had little actual power, my only hope lay in a good old-fashioned "bluff."
And so, without further waste of time, I wrote the following message:

## "To the Central Striking Committee:

"I thank you for your respected communication, and for your greetings, which I return herewith.
"I beg leave to iniorm you that I have no intention of withdrawing with my host of patriotic followers. I suggest, for my part, that you send in peace terms and settle the Ventilation Strike immediately.
"Should you not do so, I shall lose no time in giving a manifestation of my wrath.
"Yours, with the utmost courtesy,
"High Chief Commander Citizens' Anti-Strike Leagus."

Having awarded myself this title as a final stroke of genius, I dispatched the letter through a pneumatic tube and sat down to await results.
(The conclusion to this novel, filled with Coblentz's best satire, is $9944 / 100 \%$ pure amusement and contains the real Grade-A cream of the story. If you have read this far, we are assured that you wouldn't miss ne.xt month's issue for anything!)

## GET IN WITH THE GANG!

Just a year ago we organized the Science Fiction Lengur for our readers, the loyers of science-fiction. The movement is making tremendous strides, even beyond our bopes, and new members are joining every day. Why not be one of them? We want you to fill in the coupon in the Science Fiction League department in the rear of the magazine and send it to us according to directions. Then write to the Director of the Chapter nearest you, offering to join. It will not cost you any money - it is only to bind the lovers of fantasy together into one unit, rather than leave them merely individuals with others of the clan all around them without their knowing it. At least, don't fail to read the Lengur department in this issue - after that we are sure you will want to join. Get in with the gangl Don't hesitate! Join now-

## SCIENCE FICTION LEAGUE

## ATtedition, Reaners ano Authons!

Hugo Gernsback has once again pioneered! A new kind of sciencefiction is about to be provided for the fans and a new market for authors 1 You will now find a magazine that will print fantastic stories of short-waves as they will be used in the future-weird communications between worlds and odd short-wave incidents upon our own earth. Don't fail to get a copy of this new magazine at your nearest newsstand! Hugo Gernsback himself has a story in the first issue-now on sale:

## A SUITOR BY PROXY

By Harry Collier

(Continued from page 1315)

in the first mad moments of struggle, mocked his efforts to cut short that hideous broadcast. The Bookworm's feet found no hold on the smooth steel balls. He slipped, fell, and became the unlucky nucleus of a mewing, cursing, scratching mass of flesh and fur.

Violet light lit the room like the menacing glow of ball lightning. The glow from above crackled with surcharged electricity. Sparks leaped from exposed points of the apparatus. The cats, fur bristling, howled with pain, surpassed only by the roars of Spindledrift himself.

Dair, balanced on the open window ledge and laughing uproariously, suddenly lost his balance. Whirling about with outflung hands, he fell squarely into the squirming group below.

His coat caught a bit of projecting metal. There was a ripping sound, a hiss of suddenly unleashed electrical energy, and a white flame, as brief as it was intense. With a rending crash, the ponder-
ous superstructure gave way, part of the framework catching and pinning Dair under the wreckage.
Alarmed tenants found Dair so, but no sign of Benjamin Spindledrift. Whether the man who had solved the problem of being in two places at once had used his talents to transmit himself to safer ground, or whether he fled in humbler manner, was never learned. He was never again seen at Eastmore.

Professor Ohmpere for some weeks carried bandages as the result, some say. of a purely imaginary encounter with nonexistent cats. No trace of such beasts was ever found in the ruined Ohmpere living room, but those who enjoy the company of his pretty daughter concede that the affair, whatever its true nature, had a salutory effect on the old Dean of Physics.

He has never since discussed his once famous paper, "The Illusion of the Physical World."

# Man and the Cosmos 

## By August W. Derleth

Death lies athwart the frozen dark Where never the song of a lark Has echoed; here breeds the unknown spawn Of evil, here where there is no dawn.

None but man deserts the light
For probing in this endless night;
None but he dares the icy breath
Of the lurking cosmic death.
Only a tiny atom of flesh
Webbed in an unanswerable mesh
Of questions and burning doubt,
Wanting to know what Life's about.

# THE INSECT WORLD 

By Thos. S. Gardner<br>(Continued from page 1319)

were far developed, they had not even learned the use of tools or even fire. When they got started, their development was much faster than the insects. Within the space of fifty radioads, they had changed from fearful hunted creatures to a seeming complete domination of the planet. Their cities towered into the sky and they delved deep for the secrets of nature.

I was amazed to learn that they had even conquered space and had traveled to the other bodies of their system. It was at this time that the great relic had been wrought. A terrible earthquake had shaken the islands off the coast of a nearby land.

This catastrophe had killed many inhabitants of a country named Japan. The names of the victims had been preserved and it was this receptacle with their names that was the last relic of man. Of all the great things that man had accomplished, only the names of the victims in a natural catastrophe had been thought worthy of permanently preserving.

Then two things started their downfall. The termites had been slowly developing, and in a period known as the Twentieth Century (the meaning of this term is lost), began to expand farther north. The barbarous temperate zone termites gave way to the highly socialized giant termites of the tropics. Man depended upon cellulose-the termites lived on it. Thus man retreated as the enemy advanced. The scientists of this race-for they had scientists also-evolved a superant to combat the menace.

This super-ant-had all the qualities and characteristics of all the highest speciesbut the ant could not cope with the insidious advance.

The change in man's mind was the deciding factor. Man refused to fight back. This specie had developed only because it had outwitted, out-killed, and out-thought its enemies. But in this Twentieth Century, a movement of nonresistance, of pacifism arose. Man had evolved by struggle and he voluntarily ceased to struggle. Man began to die-slowly at first, but the termite invasion hurried his demise. Soon cities were abandoned to the enemy and the remnant were gathered in the far north where the enemy could not penetrate. Even then man did not have the heart to struggle-some could have escaped to other solar systems, and may have, but the majority made nonresistance a religion and died in the cold that crept remorselessly down at the coming of a new ice age. There had been other ice ages, for the ants remembered, but this one destroyed man. All this did not happen in a short period of time, but slowly and surely the end came. Just when the last survivor had died, no one remembered. The enemy had won.

In time, all his cities and machines disappeared - only this last relic was preserved by this colony of termites - for what reason, we could not gather. Now the planet was dying and their civilizations that had almost outlived the planet itself will die unless we transport representative types to some other system.

O Councilors, you may be sure that a blanket of sadness lay over us as we left this amazing planet, left it to its memories of a past greatness, of a brave people who refused to live.

This is a true account. I take oath $\mathrm{b}_{\mathrm{i}}$ the eternal flame.

N2. Commander of I. S. E. V. C2X.

## THE MISSING HOURS

## By Morton Brotman

(Continued from page 1329)
hypnotized in the same manner. They themselves opened the door for the criminal. At their awakening, they could never recall what had taken place or even that the time had passed."
"But what about Fleigh? I was right there-"
"It's quite simple enough. You yourself and Blake were hypnotized the same way. To prove this, the criminal even
borrowed your pencil and took a piece of paper from your scratchbook, and you didn't know or remember it."

Five minutes were up. The fat officer stopped his dancing. He came out of the trance, his perspiration flowing freely.
"Well?" he demanded of Finney. quizzically, "what did you tell me to come over here for?-Say! What in the world am I sweating about so all of a sudden?"

# SCIENCE-FICTION FAN MAKES A DISCOVERY 

Robert Albert Lewis, who is a sev enteen-year-old high-school student in Columbia, South Carolina, has been interested in science-fiction for years. We have always said that sciencefiction is inspirational, and here is a case where our theories have materialized. Young Lewis discovered by himself the star Nova Herculis. He would have established himself as a great astronomer when he reported his finding to Dr. S. A. Mitchell of the Leander McCormick Observatory at the University of Virginia, had not another astronomer in England beat him to the discovery by a few day s. Lewis has a wonderful knowledge of the star-maps and is now constructing a new teninch telescope. He is making a little money by handling a newspaper route in Columbia and hopes to enter either the University of Virginia, or the University of South Carolina this fall-and his paper route will help see him through.

At first, when he first read science-fiction, young Mr. Lewis had only a slight interest in astronomy, which has grown so that he now intends to make the science his life work. Eventually, he wants to teach the subject.

Science-fiction is very new as a classified literature and it will take decades for its effects to be felt throughout the scientific world-but Mr. Lewis, we hope, will be one of the great scientists of the future who received their first inspiration through scientific fiction.

# THE PROPHETIC VOICE 

By Laurence Manning<br>(Continued from page 1335)

intelligence and in science. Nor were any traces of new mines or excavations apparent afterwards. No! We can depend upon it that the expedition was sent to explore our planet and what possible reason is there for such exploration save that it might be colonized by these visitors?
"Ah! You say that they went away again. Therefore they probably found that this earth was not suitable to them and we may forget the whole matter as unimportant. In all seriousness, I ask you, supposing the wild beasts in our imaginary jungle returned after the explorers had left, and presuming them capable of even such simple reasoning as this, might they not have said the same? Once African jungles were without civilization. Today almost the entire continent is overrun with cities and factory units. And as for this jungle called Earth, filled with none too bright animals called Men, how soon may we find ourselves driven out from our earthly heritage, acre by acre?
"The future? How far ahead have we been able to communicate?-only a few thousand years. And the whole business
is under strict contre] from that dim unknown Future. There is revealed to us only what has been censored for our consumption. By whom? We suppose by our descendants. But supposing they are not human at all? Or suppose that they are the last of the humans- (why can we not reach fifty or even a hundred thousand years into the future?)
"There are too many dangers that may lie concealed behind any of these mysteries for us to sit back quietly and in idleness. Of course, the whole thing may be a fabric of imagination built up upon insufficient evidence, but I for one am not satisfied and I beg that all my readers who may feel as I do will get into communication with me at once."

- With such speculations, history can have little to do. The matter is interesting but still remains a mystery. None the less, we may learn from it as from all history how to better conduct ourselves in the present-which after all is the mother of History, just as it is the father of the Future.


## WHAT IS YOUR SCIENCE KNOWLEDGE?

## Test Yourself by This Questionnaire

[^4]ScienceQuestions and Answers

$T$
FIIS department io conducted for the benefit of readers who have pertinent querien on modern ableotfle facts. As apace is bimited, we candot ondertalse to answer more than three questions lor ceeb betev. The food of correapondence received makes it impractical, also, to print answers an anon as we suedro questions. However, quegtions of general intereat will receive careful attention.

## TBE ASSOCIATE SCIENCE EDITORS OF WONDER STORIES

 are nationally-knomn edacatora, who pass upon the scientific principles of atl storleaASTROHOMY<br>Do. Clyde Fiober. Ph.D. Le.D.<br>Curator, The americsin Museum of Natcrat Histor.<br>Pakor willian d. Lusea, Po D.<br>Uolsecily of Minsmeveta.<br>\section*{ASTROPHY8ICS}<br>Degeld H. Menzel, Ph.D.<br>siervers Conego Onservatory<br>AVIATIDN<br>14. Col. Willtam A. Bovzn, B.s., M.8., M.E. Ir Corph Reserve. Professor of Aeronau- <br>Prefener Eart B. Hay, B.S., MZ, M.E. Eead Department. Mectanical and Indug: trial Engincering and Professor of Afronevitice, Unirefity of Ksmas.<br>Protus Learet J. Hiogins,<br>8.8. Acro. Ene.<br>Anetote Proferect of Aerbiautsen zan: Clmering, Unirersity of Detrott.<br>Pratise Felix W. Pawlowskl,<br>M. \& E.E., M. 8<br>Doprement of Apronatutical Dreforering. cotversity of Michigan.<br>Presmer Joha E. Younger. M. M. B., Ph.D.<br>Dopartment Mfechanical Magineeribg, Duiveralty of California.<br>gotany<br>Profeseor Elmer R. Oancteith Traspivania Cothepe.<br>Profave Mermet Chay Farsern Pho. Wollecley Callege.<br>Profner C. E. Oress<br>Orecgo Agrionltucei Coliege.<br>GHEMTSTBY<br>Prafouer Corald Weart<br>Enter, Chembeal Rericmo<br>ELECTRICITY<br>Protene F E Aveth<br>Fryedy of Dartiouth college.<br>\section*{ENTOR OLOAY}<br>Willan m. Wheoter<br>Dean. Bassey Institution for Bace $m$ Appllad Biology, Harpard Oniviris.<br>MATHEMATIC8<br>Prefeseor Wallo A. Titswerth E.M.<br>Alfred Tiniversity.<br>\section*{MEDACINE}<br>Oovid M. Kefler. M.S.<br>PHTSICS AND BADO<br>Let NoFrmet, Ph.D. Oc.<br>Prufocer A. L. Flith<br>Untreats of Mralne<br>PSYCHOLSEY<br>Dr. Wajfin E. Baboek<br>Actior Dlraier. Pyponimytus<br>Cilitic, University of examall<br>2001esy<br>Dr. laseph C. YosMcka<br>Yelo Unizersity.

## Robots, Esophagus, and Gasoline

## Editor, SCIENCE QuESTIONS AND ANSWEBS:

Your Science Questions and Ansuocs depsrtment is of great benefit to Wonder Storibs renders. It is not only very interesting, but it is also very edncational to the people. I hope thast the department will always be peblished regriarly and never chalked out.

I wieh that wou would please answer the following three questions far me, which I consider important.

1. Is it true that Dr. Harry May inpedted a talking robot called Alpha, which can stand up, sit down, move his aras, shake his head, and reply to various questions, and on what basis does this talking rebot function?
2. Is not the esophagus, si organ of the haman body, unnecessary, and that man could easity live without it, in fact much better, as he could never then be choked by particles of food lodged in the throat?
3. Is it not possible that the supply of made gasoline, in time to come, will be exhausted and all used up, and therefore do away with our present automobile?

Please answer the above questions at your convenience.

LeRoy Christian Bastore, Lebanon, Pa.
(1. For the past few years, we have read of several remartable robot inventions whlch, made in the shape of man, become very astonishing. These mechanisms have been taoght to answer telephonce, open dooms to admit people, answer simple questions, and do other helpint, mechanical tasis\%. Thes cannot, of course, think for therometres any more than a printing preso or a threshing machine could. They are pat inte mo tion by rempote controi, usuainy throngh photselectric reaction of by ertain sounds made by the heman voice, a tetephone ben, etc., accordins to their intermal constraction. Wiant artomatic cevioce, fowtrer, are in Ese, though they do not take the shape of anen.

At present, the photoelectric cell is being used at Pennsylvania Station in New York City. The dorio hatareen the gates and the waiting room open acto maticaly egon the approach of a pereon.
2. The esophagus is the tube, afso calied the Eribet, throach which mesticated food pasges from the month to the stomach. It is a vitat necessity, an yon will see by any chart showing the digestive system of the troman body, and could not be dane oway with. Remember that there are many other tubez, both of the circulatory and respiratory systems, passing dows the throat. The appendix is an unnecessary part of the human body, but it was probably needed when the ancestors of man were crapling around on all fourg. This, by the wey, upholds the crevotiomary thearies, for a two-lecsed creatare has no soed of the appendix, and there is no toobt that after perhape handreds of thoasindis of seart, the appendix will have atrophied itself out of eristence because of camstant cistere.
3. Gesoline, fike coal, does not replenish itself-at least, not for millions of yearo and there is no dowit, as you gay, that there will come a day when the of supply of the earth is exhausted. But from the present outiook, this will probably be hundreds of years in the future, and by that time gasoline will most likely be replaced by something better for automotive transportation anyway-perhaps by some simple, easily made, inexhaustible chemical, and we might even go so far as to hope for atomic power.-EDITOR.)

## Protons and Electrons

## Editor, ScIence Questions and Answers:

I do not quite understand the elemento. Il roa can anserer these questions in your coinens. I ward appreciate it vers much.

1. Is it correct that the atom of element mand one hydrusen, has only one proton, and number two,
helium, has two protona, etc.., or is it that number one has one electron, number two, two electrona, efc. ? 2. What does the atomic weight of the elementa mean ?

## Roy Test, JR. Los Angeles, Oalif.

(1. As - cenieral ralo, there aro an equal number of protons and electrona in each element. Therefore, hydrogen contains one electron and one proton, and helium has four electrons and four protors, etc. In the heavier elements, half of the electrons and all the protons aro in the nucleus, as a rule, and the rest of the electrons fiy around this nucleus in orbits, much as the planets fy around the sun.
2. The atomic weight of the elements is besed upen the relation of ang particular element to hydrogen, which, as the basis, has the atomic weight of onemuch the same as the density of the planets is based on Earth as one. Likewise, an astronomical unit is the distance of the earth from the sun. This makes it easier to comprehend the meaning of relative fig-ures.-EDITOR.)

(At one-time, Volta disagreed with Galvani, for whore calvanic electricity was named in the latter's "rnimal electricity" theory, and declared that an animal was not necegsary to produce electricity. Later he gade the first voltaic battory, named after him, which is illustrated on this page. In this Gegure. "C" ctands for the copper plates, and " 2 "' for the zinc oneo. Volta learned that when the copper and zinc plates were connected by wires and placed in brine. an electrical charge was created after the connections had been made as illustrated. It has been learned that dilute sulphuric or hydrochloric acid will give as good results as the brine, which is a solution of sodium chloride.-EDITOR.)

## Oxygen on the Sun

Editor, Scibnce Questions and Answars:
Please answer the following problem in your Science Questions and Anowers department:

It is understood that, for a thing to burn. oxygen must be present. The sun is a burning body of matter and scientific authorities agree that there is oxygen there. Now. the sun has been burning for millions, perhaps billions, of years. Surely, during that period of time, what oxyzen there was on the sun would have burned ages ago. Why is this not 60?
Also. despite the phrase "for a thing to burn oxygen must be present," why can't it be some unknown gas or substance on the sun which keeps it in its present burning state? Have acientists proven beyond the slightest shadow of a doubt that there is oxygen an 1 not something else on the sun? If they have "proved" it. what is this proof based on? . . . experiments on the earth-or theory?
Another thing: is there really oxygen on the sun? I have not read of there being clouds and water on the sua . . . . and if there are no clouds and water, how can there be oxygen?

Theodore Lutwiniak,
Jersey City, N. J.

## The Theory of Vulcaii

Editor, Scrence Questions and Answers:
I can't resist the temptation to ask a few questlons which I hope you will answer in gour Science Questions and Answers.

1. Is there a possibility that the planet Vulcan actually exists, and do you suppose that it would only turn one face to the sun, the other half in darkness?
2. If I had a rocket ship, do you think I could visit Vulcan without falling into the sun?
3. What do you think Vulcan would be mostly composed of?

> Robert J. Bind ${ }^{\text {Mir }}$ Milwaukee, Wis.
(1. There is very little posslbility that a planet of any appreciable size exists closer to the sun than Mercury. If such were the case, photographs of the sun would, at certain times, show Vulcan, as you call it, on the plates. There might be bits of fiying rock with orhits smaller than Mercury's, but none large emonch to be called planets. If guch a world did exist, however, there is reeson to believe that it should always face one side io the sun and the other to outor apace, because of its nearness to the sun.
2. A rocket ship, speeding towand the hypothetical planet Vulcan, 'would undoubtedly have much trouble with the tremendous gravitation of the near-by sun and its witheriag heat. In fact, it is very doubtful if a ship made of known metals could approach the sun so closely without fatal results.
3. Vulcan would most likely be composed of the heavier elements with no moisture of any kind.m EDITOR.)

## The Voltaic Battery

Erditor. Science Questions and Answers:
Would you please tell me in your acience corner how a voltaic battery works and why? I would appreciate it very much.

Rickard Pentz.
Elizabeth. N. J.
(Scientista know that oxygen exists on the ann by the use of the spectroscope, which detects the presence of the eloments in the bodies of the solar system through observing the spectrum in the light of the sun or that relected by the various planets. However, if the sun were burning constantly through ordinary combustion, as twe are famillar with it on Earth, it would, as you say, have been burnt out long ago: also, the heat produced would not be come parable to the tremendous energy given out by the sun today. Many belleve that the incandescence of the sun is due to radio-activity, mostly-a very logical theory. However, the seeret may lie in a substance within the sun itself, begond the penctration of man's instruments. This is most likejy an unknown bubstance, as you suggest. The oxygen on the sun is in a free form and the temperature is too great for it to form into compounds with the other elements.EDITOR.)

## Celestial Mechanics

## Editor. Science Qubgtions and Answers:

Tell me what is your definition of the term "celestial mechanics." I like your magazine yery much and find it instructive in science and other knowledge.

Georob Ali.wood.
Columbus, 0.
(Celestial mechanics is the science of the motions of the bodies of the universe, especially the solar system, caused by the gravitational effecta they have upon each other. No one could predict what radical changes would take place if one of our planets sheald suddenly cease to exist. It is most likely that the other planets would take up new orbits, or perhaps the balance of the solar ayotem would be upset, causing the planets to ly into the ean or or into epace. Many think this balance to be very delicate, and oven a space-ship leaving Earth might upset it.-EDITOR.)


0UR organization, the Science Fiction Leagum will be one year old March 29. 1936. On this day in 1934, we enrolled our first member. We now have thirteen organized and chartered Chapters thnoughout the United States with dosens in the making. We feel that the Lranus hat made fine progress during the past year-all that coald bo expected-and we hope that the next year will show steady, ever-increasing advancement. Some of our Chapters might feel inclined to celebrate our firat birthday, and we hope that Headquartere can offer something extra-special by the time the second one rolls around. Perhaps we can organize a giant campaign to celebrate. All suggestions from members will be carefully considered and kept on hand for future reference. Remember. March 29, 1934 was the day in which the Science Fiction liagus came into existence !

## THE LINCOLN CHAPTER

This is to announce that on January 8, 1935, the Lancoln Science Fiction League, Chapter Number Nine, was formed and organized by P. H. Thomson, the Director, and given Cbarter. Charter members include the following (member number follows name); James Kierstead (290), Miles J. Breuer, M.D. ( 668 ), Stanley Breuer (669), Max Jenkins (670), G. W. Baltzley (671), and P. H. Thomson (574). You will recall Miles J. Breuer, M.D. as a very popular sciencefiction author of past years, and he promises to find a regular meeting place for the Chapter.
All those who would like to join this Chapter should address: P. H. Thomson, Director, Lincons Science Fiction League, 6347 Lexington Ave., Lincoln, Neb.

## THE NEW YORK CHAPTER

This is to announce that on January 8, 1935, the New York Science Fiction League Chapter Number Ten, was formed and organized by William $S$. Sykora, the Director, and given Charter. Charter members include the following (member number follows name) : Donald A. Wollheim (24), Julius Schwartz (44), Conrad M. Ruppert (72), John B. Wrichel (651), and William S. Sykora (208).

Readers of WONDER STORIEs will recognize all of these names as belonging to very prominent fans, many of whom are among the first members, as can be seen by the member numbers above. Donald A. Wollheim is distinguished for his outstanding letters in "The Reader Speaks" and a short story in orr January, 1984 issue; Julius Schwartz is the lamed editor' of "Fantasy' Magazine," a fan publication for lovers of science-fiction, which is the product of "The Time Traveller" of 1982 and "Science Fiction Digest" of 1933-and as one of the most active fans in the country; Conrad H. Ruppert has lent bis services as printer, making it possible for "FanCasy Magavine" to exist, and you may recall him as one of the winners of," our "What I Have Done to Bpread Science Fiction", contest of several years 880 ; John B. Michel and William S. Sykora are oficials in the International Science Correapondence Club and have done much to advance science-fetion. With these well-known fans as the Charter members. there is very little doubt that the New York Chapter will soon be one of the most outatanding in the Lrager

## The SCIENCE FICTION LEAGUE


 ad its promotion. We ureve manbers so comitilate an itema of interest that they believe will be of valoe to the oryminmetion

## EXECUTIVE DIRECTOR:

Forrest J. Acmpinan Rando Binder Jack Darmown Edmond Hamilton<br>David H. Kellig, M. D. P. Schuyler Mien Clabe Ashton Smere R. F. Starzi<br>Buco Gransance, Execusive Secravery<br>\section*{Chables D. Horneg,} Aesiefans Sacroter

At an unofficial meeting held on January E, 1985, John B. aifichel was chosen Secretary of the Cimptex. A regular dues of ten cents was suggested by N. Ruppert, who also brought forth the move that money be collected to buy stationery for the Chapter's correspondence.

The first meeting of this Chapter under Charter was held in the messanine of the Horn and Rindart Automat at 34th St. and 7th Ave. in the Boroveh of Manhattan on Saturday, January 19, 1985, with all members present. Visitors included Isidore Manson and Charles D. Hornig, the Assistant Becretary at Headguarters. The complete minutes of this meeting will be forthcoming. Meetings will usually be held the first and third Saturday evenings of esch month, 8:00 p.m., at the homes of William S. Spinora 81-51 41st St., Long Island City, and Conrad II. Rappest, 87.86 162nd St., Jamaica, alternately, Doth towns being in the City of New York. Messro. Ruppert and Schwartz were appointed as the Program Committee for the next meeting, which will be held on Febrars 9, 1935, at the home of Mr. Sykora. The third meeting, on the 28rd of the same month, will take place in Jamaica. Following meetings will be hejd the first and third Saturdays of each month, as originally planned. Charles D. Hornig has been asked to give a speech on the aims of the Science Ficrion Lange at the February 9 th meeting.

Members who would like to join this Chaptar should addrees: John B. Michel. Secretary, NEW YOAE ECIENCB Fiction League, 8214 Beverig Rd., Brooklyn. N. Y.

## THE PHILADELPHIA CHAPTER

This is to announce that on January 8, 1935, the Priliadelphia Science Fiction League, Chapter Number Eleven, was formed and organized by witon A. Rothman, the Director, and given Charter. Charter members Include the following (member namber fot lows name): Charles H. Bert (688), Paul A. Funter (239). Raymond Peel Mariella (18), and Milton A. Rothman (34).

All of our members who would like to belone to this Chapter should address: Miton A. Rothman, Director, PHILADEMPRIA SCRENC: FicTios Linous, 2500 N. 5th St., Philadelphia, Pa.

## THE OAKLAND CHAPTER

This is to announce that on January 11, 1986, the OAKlan Scmice Fiction Leagus, Chapter Number Twelve, was formed and organized by Bebert $P$. Keith, the Director, and IVven Charter. Charter membe
bers include the following ( $n$ ember number leDow name): Fred Anger (513), Bob Myrbach (703). and Robert F. Keith (877). The Director is certain that he can secure many new members in tho near future. If you would like to join this Chapter, addrea Robert F. Kelth, Director, OAkinind Science Fiction Laague, 771 Fifty-fourth St. Oaklabd. Calif.

## THE ELIZABETH CHAPTER

This is to announce that on January 17. 1985. the Ecizabeth Soignce Fiction Laaque, Chapter Number Thirteen, was formed and organized by Alfred Fried lander, the Director, and given Charter. Charter members include the following (member number follows name): Norma Friedlander (705). Bernard Lipton (699), and Alfred Friedlander (700). This Chapter being in his home town, Charles D. Hornig, the Assistant Secretary at Headquarters, is usually present at meetings.

Members of the Lfacue who would like to join this Chapter should address : Alfred Friedlander, Director, Elizabric Scisnce Fiction Leagueg 443 Jerbey Ave. Elizabeth. N. J.

## NOTICE ABOUT CHAPTERS

Members will notice that a Chapter is formed and chariered now and then with only three members to start. as we have allowed in order to get things underway-for after a Chapter is formed, it is relatively simple to secure new local members. Many of these "three-members-to-start"' Chapters have a! ready secured many new names, if not all of them. and we intend to publish a list of all Chapters with a complete list of their members once each year. The first list of this kind will appear in our August issue, as of our first birthday, March 29. 1995.

## THE LEWISTON CHAPTER

Chapter Number Two held its fourth meeting, an informal gathering, on the evening of December 30. 1934. with one member absent-Duane W. Rimel of Asotin. Washington, who was forced to remain with a sick friend. There were several prospective member 3 at this meeting, who are expected to join soon. Much of the time was used to discuss various sciencefiction and scientific subjects and their benefits to the public.
Members in or near Lewiston why would like to join this Chapter should address: Stuart Ayers. Director, Lewiston Science Fiction Leagus, 1411 Tenth Ave., Lewiston, Idaho.

## THE LEBANON CHAPTER

Chapter Number Seven held its second unofficial meeting on Tuesday, December 18, 1934, called to order at 7:30 p.m. by the Assistant Director, Mr. Bashore. Member Demmy gave an interesting report en Darwin's Theory of Evolution, followed by a discussion on this subject during which two articles on science were read by Mr. Bashore. The Director was unable to attend this meeting due to more important work elsewhere.
The Lebanon members held their first meeting under Charter on December 27. 1934, postponed from Christmas day. The Director asked the prospective members to have their applications ready by January 4. but this time limit was later extended. Mr. Bashore then gave a brief talk on the various phases of science-fiction, followed by a lecture on the moon by Raymond Harvey. Director Shounder spoke on the diferent science-fiction magazines, after which the meeting was adjourned.

At the second official meeting of this Chapter. held on January 3, 1985 at the home of the Assistant Director. Mr. Bashore, a basketball team was formed by the members. Because of the absence of the Secretary, Member Oberly, Mr. Bashore undertook the secretarial duties for the meeting, and later gave a talk on eugenics. The members of this Chapter intend to construct a model rocket-ship and suggest that other Chapters copy this idea. They are also going to do their best to put science-action on the radio and increase the number of motion pictures of this type.

Our members who wish to join this Chapter should address: John S. Shounder, Director, Leranon Scibnce Fiction Leagus. 830 Lehman St., Lebanon, Pa.

## THE JERSEY CITY CHAPTER

## Chapter Number Eight held its first meetios on

 January 3. 1985. at the home of one of its members, Joseph M.' Uhorchak, 825 York St., Jersey City, N. J'.The first official meeting was pastponed to Januars 10th, at the same place, $8: 80$ p.m. The Director waata to make a special plea to the members of this Chapter to be sure to attend all meetings. becarne there are oaly five members and none can be spared Visitors are always welcome at meetings.

We urge all of our members in or near Jersey City to join this Chapter. Address: Theodore Lutwiniak, Director, Jersey City Scibnce Fiction L®nguf, 172 Pavonia Ave., Jersey City. N. J.

## OTHER CHARTERED CHAPTERS

We want every member to join some Chaptereither one of those in the above paragraphs, in thia list, or under the "Proposed Chapter" heading.

Brooklyn Soience Fiotion Lrague, Chapter Numaber One: George Gordon Clark, Director. 8709 Fif teenth Ave., Brooklyn. N. Y.

Erib Science Fiction League, Chapter Number Three: Jack Schaller, Director, 324 E. Fifth St.. Erie, Pa.

Los Anoeles Science Fiction League, Chapter Number Four: E. C. Reynolds, Director, $32351 /$ Descanso Dr., Los Angeles, Calif.

Monticello Science Fiction Leagub. Chapter Number Five: William Rothleder, Director, P. $O$. Box 663, Monticello, N. Y.

Maypield Sciency Fiction Lemoue, Chapter Number Six: John Tomezyk, Director, 687 May St., Box 272, Mayfield, Pa.

## PROPOSED CHAPTERS

Here is this month's list of volunteers for the directorship of local Chapters of the LRAGU日:

Akron Science Fiction Lqadue (Proposed). Arch J. Kinzel, 708 Sunnyside Ave., Akron, 0.

Ark Valley Science Fiction Leagun (Propozed). Lewis F. Torrance, 802 College Ave., Winfield. Kan

Austin Science Fiction League (Proposed). D. R. Welch, Box 96, Austin, Tex.

Bakersfield Science Fiction Leacue (Projosed). Robert E. Booth, Rt. 6. Box 153. Bakersfield, Calif

Baltimore Scibnca Fiction League (Proposed). Robert A. Ward, 544 E. 38th St., Baltimore, Md.

Bermont Scienca Fiction Lbagus (Proposed). Cu. L. Bedford, Jr., 42 Harvard Rd., Belmont, Mass.

Bessemars Science Fiction League (Proposed). Craig Davis, 1705 Third Ave., Beasemer. Ala.

Bio Horn Science Fiction League (Proposed). L. M. Jensen, Box 512, Lovell, Wyo.

Boston Scionca Fiction Leades (Proposed). Philip W. Faden, 803 Fairmount Ave., Hyde Parl.. Boston, Mass.

Bronx Science Fiction Leagut (Proposed). Julius Morris, 1416 Croes Ave., Bronz, N. Y.

Buffalo Science Fiction League (Proposed). Leo Rogers, 616 Jeflerson Ave. Butilo, N. Y.

Cabdeetl Scirnct Fiction Lracus (Proposed). Paul Freehafer, 1901 Cleveland Blvd., Caidwell. Ida.

Chicago Science Fiction Leadue (Proposed). William H. Dellenback, 732 Burton Court. Unlversity of Chicago, Chicago, Ill.

Clevbland Soience Fiction Leagub (Proposed: Clarence J. Wilhelm, 7102 Linwood Ave.. Cleveland, 0.

Corn Bet.t Scirnce Fiction Leaque (Proposed). Bob Tucker, 210 E. Greve St., Bloomington, IL.

Danvilee Science Fiction Leagum (Proposed). Robert H. Anglin, 252 Jefferson Ave., Daivilie, Va.
Darien Science Fiction Leacua (Proposed). Robert W. Lowndes, Box 132. Darien, Conn.

Denver Science Fiction League (Proposed). Olon F. Wiggins, 2418 Stout St., Denver. Colo.

Des Moines Science Ficiion Lrague (Proposied). Vernon H. Jones, 1806 Sixth Ave., Des Moines, Iowa.

East New York SGibnce Fiotion Libagut (Proposed). Harold W. Kirshenblit. 928 New Lots Ave. Brooklyn, N. Y.
East St. Louis Science Fiction Leagua (Proposed). Day Gee, 1513 Broadwzy, E. St. Louis, III.

Far Rockaway Scibnce Ficion Lmagum (Pioposed). A. M. Lilienfeld. 2119 Mott Ave., Far Reckiaway. N. Y.
Houstion Sctence fiction Lraque (Proposed). Alen R. Charpentier, 4541 Rusk Ave., Houston Tex.

Indianapolis Science Fiction Liagud (Proposed). Henry Hasse, 1236 Wade St., Indianapolis, Ind.
Joh nson City Scinnce Ficition Lragun (Proposed). Thoo. S. Gardner, 204 W. Locust St., Jobneon City, T.enn.

Johngtown Science Fiction League (Propoeed). Hilton R. Bowman, 243 Vine St., Johnstown. Penna. Lawrence Science Fiction League (Propased). Joseph Hatch, 334 Maiden Lane, Lawrence. Kan.

Liverpool Science Fiction Leaguz (Proposed). Leslie F. Johnson, 46 Mill Lane, Old Swan, Liverpool 13, England.

Mancelona Science Fiorion Leagud (Propoged). Arthur Green, Mancelona, Mich.

Minwavkiar gorence Ficion Irague (Proposed). Raymond A. Palmer, 1406 W. Washington St. Mir waukee, Wis.
Molsno Scienct Fiction Leagut (Proposed). Carl R. Canterbury, 1527 Eleventh Ave., Moline, Ill.

OAFU SCRENCD Fiction League (Proposed). Bir ney Montcalm, Army and Navy Y.M.C.A., Honodulu, T. $\mathbf{H}$.

Philippine Science Fiction League (Propooed). J. R. Ayco Bacolod, Neg. Occ., Philippine Islands. Quinoy Science Fiction Lzagus (Propooed). Arthur L. Widner, Jr., 19 Germair Ave., Quincy, Mess. Rockpale Scrence Fiction League (Proposed). Alvin Eari Perry, Box 265, Rockdale, Tex. Sacramento Science Frction Lgagus (Proposed). Arthur Jones, Jr., 2717 Santa Clara Way, Sacramento, Cal.

San Francisco Science Fiction Lragua (Proposed). James McGreery, 3561 Pierce Sto: San Fradcisco, Calif.

SEATTLE SOENCE Fiction LRAGUB (Pro osed). Harold Taves, 1507 E. $172 n$ d St., Seattle, Wesh. Staten Island Science Fiction Lragud (Proposed). Rudolph Gentsch, 50 Holly St., Dongan Hills, Staten Island, N. Y.

St. Louis Scisnce Fiction League (Proposed). Harold Rice, 1129 Washington Blvd., St. Louis, Mo. Shanghai Science Fiction Lengue (Proposed). A. V. Bleiden, 208 Avenue du Hoi Albert. Shanghsi, Chipa.
Washington Scirnce Ficijon Leagub (Proposed). T. J. Mead, 1819 G St., N. W., Washiggton. D. C. Wichita Science Fiction League (Proposed). Lionel Dilbeck, 1884 Gold St., Wichita, Kan.

When a reader would like to become a part of any Chapter, he must first join the parent body, then send in his name and addreas to the Director the one who wishes to form the Chapter he wants to join?. Such person should live in the district in which the Chapter is locsted so that he can attend meetinge.

If you wish to form a Chapter, let us know, and we will publish the fact. When you have a number of names on your list of those who want to join the local Chapter (three will be enough to start a Chapter -aiter which securing new members will be an easy matter) send the list to us and, providing all the names are entered as members at Headquarters, the local Chapter will be declared. Do not spply to start a Chapter in any city mentioned arready in theee lists. One Chapter in each city (except Greater New York) will be enough to start with. Later on, more will be organized when demand warrants it.

We will give Jour Chapter an official name and number. From then on, the $n$ me and address of your Chapter will be printed in every issue of WONDER Storias, so that those who become members of the Science Fiction langum from time to time, who live in your neighborhood, may join, increasing the bize of the Chapter. Dues or fees of any kind may be charged within lacal Chapters, in order to carry on special activities, only upon the agreement of all the members. Thoee members who do not wish to contribute, will not be expelled from either the Chspter or the Langu® by not doing so. In other words, all contributions must be voluntary, though a specific amount mas be decided upon. This will be done only within local Chapters-there will be no dues or fees of any kind conducted by the Lanout Headonarters. Treasuries accumulated by this method may be used to issue pamphlets, hire halls or lecture rooms. or any other reasonable thing that the Director and local members see fit to use it for. This also includes outings, parties, etc. The Director or $h$ ls appointee will be the presiding officer at each meeting. Assiatant Director, Secretary, and Treasurer may also be elected by the local members. However, accurate minutes must be kept, a duplicate of which will be bent to Headquarters dfreetly after they have been appraved at the next meeting. Important activities recorded in
the minutes will be digcussed in this department, which will be the voice of the LEAGub and all its Chapters. Meetings may be held at any frequency, everything to be decided by the local members. All helpini augses: tions m de by members during any meeting will, of coures be recorded in the minutes and therefore prove of value to otber Chapters. There is to be no competition between Chapters-they are ta co-operate, and perhaps, after a while, we will have a grand convention somewhere with delegates from the various Chapters. Would you like to be a Director of a local Chapter of the Leaguz? There will be very little responsiblitity on your part, and it is not hard to find a meeting place. If you can't start off, with a lecture room or hall, or one of the members homes, then you can maeet in the nearest public park until the Chapter is lareer and can afford something better.

## FIRST TEST RESULTS

Following is a list of the members of the Scunces Fiction Leagus who took our First Science Fiction Test, published in our January. 1935 isoue, and passed, with the marks they received. The list is chronological, according to the dates that tests wero received by Headquarters. The forty-one names in the list were awarded First Class Membership. Fortyfour tests were received, three of which were marked less than $70 \%$, the passing grade. Those that failed the test will not be mentioned in these columna, although they have been awarded Active Membership for their efforts. The F'irst Class Members ase (member number follows name):
David A. Kyle (359) .................................. $92 \%$
Morris Miller (274) ........................................ $79 \%$
G. L. Bedford (160) .................................... 80\%

Milton A. Rothman (34) ................................................ 95\%

Robert $W$. Lowndes ( 630 ) ............................................ 94\%
Philip W. Faden (486) ................................ 87\%
Vernon H. Jones (364) ................................... 90\%
Forrest J. Ackerman (Hon. 1) ....................... 97\%
Lewis F. Torrance (165) ................................ 97\%
A. L. Selikowitz (53) .................................. $99 \%$
L. M. Jensen (640) .................................... $82 \%$

Harold W. Kirshenblit (642) .......................... 87\%
Clarence J. Wilhelm (641) ............................. 95\%
Dwight Edwards (231) ...................................... 86\%
Stuart Ayers (60) ................................. 88\%
Arthur L. Widner, Jr. (429) ..................... 76\%
Lionel Dilbeck (447) .................................... 92\%
Thos. S. Gardner (357) ............................... $98 \%$
Arch J. Kinzel (136) ........................................ 82\%
Hilton R. Bowman (652) ........................ $95 \%$
Arthur B. Gnaedinger (598) ........................ 98\%
William H. Dellenback (5) .......................... 97\%
Raymond A. Palmer (553) ........................... 88\%
Day Gee (560) ............................................ . . . . 84\%
John S. Shounder (115) . . . . . . . . . . . . . . . . . . . . . . $75 \%$
Harry Boosel (10) ...................................... $98 \%$
Donald A. Wollheim (24) . . . . . . . . . . . . . . . . . . . . . . . . 9 . $74 \%$
D. R. Wejch (434) . . . . . . . . . . . . . . . . . . .

Philip Silverman (312) . . . . . . . . . . . . . . . . . . . . . . . 98\%
D. H. Green (96) ........................................ . $76 \%$

Robert Reddy ( 310 ) ........................................ $89 \%$
Richard G. Kerlin (402) ............................ 94\%
Alvin Earl Perry (265) ................................. 89\%
P. R. Thomson (574) ................................ $94 \%$

Joseph Hatch (71) ....................................... 87\%

William Frankel (331) …......................................... 93\%
You will notice that Forrest J. Ackerman. Lewis F. Torrance, and William H. Dellenback tied for the highest score, $97 \%$, while runners-up include Mitton A. Rothman, Julius Schwartg, Clarence J. Wilhelm. Hilton R. Bowman, Harry Boosel, and Philip Silyer man, with the next highest mark, $95 \%$. A slmilar test to this will be published in every January and July issue of WONDER STORIES to enable new members, those who failed earlier tests, and others who did not enter previously, to earn their First Class Memberships: All those whose names appear in the above list can become Ace Members, the highest honor a member can attain, by writing to Headquarters for details or referring to the information in our January, 1935 issue.

We have tabulated the personal opinions that the test-takers were required to give in Part Six of the testo and find the results as follows:
Of the forty-four entries. one omitted Part six completaly. Dr. David H. Keller wins the hoare as
lavorite uuthor with twelve votes. A. Merritt is the runner-up with nine, John W. Campbell, Jr. received seven, and Stanton A. Coblente, two. The following authors were awarded one vote each: Otfrid von Hanstein, Eando Blader, Nathan Schachner, Clark Ashton Smith, E. E. 8mith, Ph.D.. P. Schupler Miller. Edear Rice Burroughs, H. G. Wells, John Taine, and Jack Willismson. Three members have no favorite. "The Moon Pool" wing as the favorite science-fiction story of our First Class Members with seven votes. E. E. Smith's "Skylark" tales and "Exile of the Skies" tied with four, while "The Human Termites," "The Second Deluge," and "The Final War" tied with two votes each. Other favorite stories. each receiving one vote, were: "The Alien Inteligence," "The Wrack of the Asteroid," "Exiles of Space," "Invaders from the Infinite." "Dr. Lu Mie." "The Mian Who Awoke," "After Worlds Collide." "Tbe "Man from Tomorrow"" "The Face in the Abyss"" "Rebirth," "Torrano the Conqueror," "Cosmos," "The Time Machine," "The Sunken World." "The Moon Conquerors," and "The Voyage of the Asteroid." Four members have no farcrites and two gave a description of their favorite type of story, instesd of naming any particular one. A. Merritt, while giving way to Keller as favorite author. wins the honors as the author of the favorite story.

In the third question of Part Six, we asked tbe test-takers to tell us their honast choice as their favorite science-fiction magazine. The results show that twenty-four like Wonder Stopibs the beat. while all three other magazines together total eighteen votes. One member has no favorite.

A huse majority, forty, really believe that sciencefiction has a very promising future, two doubt that it wiil. and one thinks that it is auestionable. Many of those who voted "yes" claimed that their answer would be "no." were it not for the Science Fiction League, which is awakening the country to the existence and value of science-fiction.
After the tests were graded, shects were sent to each one who took the test. individualiy listing the correct answers to those question missed by the particular member, so that each could know where he was in error. This we have foum more advisable than giving all the correct answers in these co!umn.s. The latter procedure would not only take up a lot of valuable space in the magazine, but pould provide a great amount of diversified information which would not be fair to those who take future testsit would make too easy for them.

However, we will give a summary here of results on the outstanding questions:

There were many "catch" questions in the teat. such as the true-and-false statement that Astonishing Stories printed seven issues. There has never been a magazine by that name, although many members answered "True" to that question. There were many others throughout the test.

Only one answered that "Paul" was the artist"s first name, while all the others remembered that he is Frank R. Paul. In answer to "Who are the two most active fans in the country." Forrest J. Ackerman answered "Remember our modesty!" We marked it correct. We allowed for either "thirty-six" or "two" as the corract answer to the number of auar. terly magazines of science-fiction published. There were 36 issues published, and two brands. or three. if a differentiation is made between SCIANCE WONDER QUARTERLY and WONDER STORJES QUARTERLY. On!y three numbers of the former were publighed.

In number one of Part Two. Taine could be marked either as an author or a character or both. We allowed that the science in science-fiction could be either dominant or subordinate, as it is all a matter of opinion, but marked the answer incorrect if it stated either technical or practically absent. Any of three answers were accepted for "Inca-land revolted in $\ldots \ldots$ by Wood Peters." the name of the story, the issue of the magazine in which it appeared. or the year in which the fictional revolt took place.
Many questions in the completion part were optiona!. ari others throughout the test. Several readers, in the True-and-False section, stated that it was false that many stories have appeared in which mad scientists had conquered the world. This was marked incorrect, even though many explained that the scientists were usually stopped before they had cone too far-for, though we realize this is true. there have still been many stories in which the scientists had succeeded in their efforts. Arthur Leo Zagat, it was stated in another of this aroup. once collaborated with Nathan Schachner. This question was poorly worded. It should have read. at one time
instead of once. because some misunderstood it th mean on only one story.

All of the assay and opinion questions were given full credit unless they were either cmicted entirely or contained much les. 3 than the required wordage. In one other case, credit was marked off. Though tive particular member had enough woris, he broke ofl in the middle of a plot-outiine beeause "of lack of time." "hose readers who had roo favorite story outlined, in question two of Part Five, the plot of a story that they liked very much-except one.
In the scientific questions, "crater" could be put. down as reminding the member of either the moon or a voleano-both were correct. In the radioactive elements, any number could be mentioned. but radium and uranium were required, and we were very lenient in mariking the answer to the location of the North Magnetic Pole, but were we surprised when one person stated that Venus had nine moons!
In our next two issues we will print a few of the best essays submitted in the results of this test. Many are of real vaiue and will be appreciated by other members.

## SCIENCE FICTION ON THE RADIO

Alvin Earl Perry suggests that the Lanaus work to put a program on the radio, not necessarily dramatizing stories, but for interviews of authors. editors, fans, etc. This is an excellent idea, of course, except for the fact that there are not enough radio fans in the country at present who are interested in sciencefiction to make such a thing practicable. We are now negotiating with a Memphis radio station which has asked us for permission to put some tales from Wonder Stories on the air. When we learn more about their plan, wo will publish the detaids in this magazine.

## SCIENCE ARTICLES

Several of our members. LeRoy Christian Bashore and John Doyle, for instance, have submitted scientific articles of interest to us for publication s: fillers in WONDER STORES. We want these member. to know that we greatly appreciate these effort; anit intend to use the articles wherever and wheneve: possible. They are not. however adopted to thild department, but will be used throughout the mariazine. giving credit to the persons who have submitted them.

## A NEW SUGGESTION

"I am a student in High School." writes James Michael Rogers. Member Fiumber 618. "and have recently been writing short science-fiction stories for the school newspaper. These seem to have plea.; il the student body, as I have been asked for more.
"Many other members seem to be in High School. and I suggest that these write the stories instead oi editorials, etc. They are more interesting and more likely to be read. Science-fiction should be mentioned in a prologue."

You should be proud to possess the ability to write science-fiction stories that please the students in yonr achool. You may be able to compose material that is even suitable for the professional science-fiction magasines-in other words, you may be a buddin? author, and the editors of WONDER STORES would b: glad to look at some of your work. You must realize. however, that it is not any easy task to write a good science-fiction story that present-day fans will like. and that is why we ask our members to write editorials. It is not only easier. but will enable others to see the valuas of science-fiction more than any single story could. As you say. if the member write: a story, he should make a mention in a prologu: about science-fiction, so that the reader of the Hish School paper or magazine will know that more stories of the type can be found.

## SCIENCE FICTION PLAYS

In the February, 1935 issue of this department. we announced that Joe Kucera of Omaha was oftering to have made, without any cost to the LaNOUB records of science-fiction plays dramatized from your favorite science-fiction stories, to be sent to the various Chapters of the LaAGU\& for the enjoyment of local members. By this method, members will be able to hear ocience-fiction dramas as they would if broadcast over the air.

We have received a letter from Mr. Kucera, datet January 6, 1935, in which be says: "We are extremely happy to note the interest that the SFL is taking in our proposed recording project.

We are sorry that we failed to answer gour request for details. At the time it was our idea that eveh an expenditure would not gain large enoush following to merit its expenditure of time and Smance.
"Understand that this is not a money-making proposition. It is to be done solely for the benefit of the Science Fiction Lzague:
${ }^{\circ}$ In other words: Of acience-fiction, by the ScIence migion League, for the Science fiction LBAgUz.

We must have heip. We hope to hear from the members soon, regarding famous classics that can easily be adapted to play form, or better still we would weicome original hour-long scripts. Eacb original drama submitted will be given careful consideration: Not hasy plots alone, but completed scripts. Amy member intereated should begin insmediateis.

FWe would like to receive communications from SFL members residing in Omaha who are incerested in dramatice and who would be willing to lend their afd in the production of the first science-fiction recording.
${ }^{-W}$ Therefore, any suggestions anyone may have are welcome. Every member has his own favorite classic. If we conld learn just what stories are most in demend, we could better judse which are cost cojed for dsaruatization. So worite, please! If there will be any difineulty in adapting an old story to play form, we will resort to working on one of your original seripts.
"So, Mr. Rornig, we await an answer from Jou, as well as from many other league members."

The first thing that is necessary, so far as we can see, is for the members of the League to write to Mr. Kucera, telling him what gtorie thes would like dramatised for recordings, so that he and his acsocistee may be able to chooee the best ones. After that has been done, we want to hear more of the cetails from Mr. Kucera, which we will bring to the members of the Leagure through this departorent -telling how Chepters may secure these pisys. We want every member of the Lbacus to write tods cencerming this question to Joe Kucera, 7102 S. 37th St. Oratha, Neb., the production manager of the project, or Byron Tharp, 3028 Haskell St., Omana, Neb. the recording engineer. If you will co-operate in this manner, you will soon have somethime of equal value to science-fiction play radio braadeaste.

## FUTURE SCIENTIFILMS

The following letter, as of January 5, 198B, has been received from Forrest J. Ackerman, one of onr Executive Directors:
${ }^{4}$ I ams in Los Angeles at the present time, and had the pleasure of meeting Mr. Reynolds, sponsor of the drive for science-fiction movies, the other Cummins, of the Universal Studios ctory department, the following day, and phoned to arrange it that I might accompany him as a visiting officer of the SFL and interested party on scientifims. The appointment was yesterday, January fth.
"Mr. Cumming proved a very nice chap, and listened to our ideas attentively, as chient outlined by Mr. Reynolds. Mr. Reynolds showed him a number of the heartening letters he has received enthusiastically asking for more scientifilms, and Mr. Cummins booked through these. He listened to a synopsis of several scientifiction stories Mr. Reynolds thonght would make cood films and chose to ten. Mir. Cummins said there were two drawbacks to producing the type of stories we desire: one, the expense isvolved for fantastic scenery and machinery, which would be about $\$ 500,000$ for a otory such as had just been described, on which the producer had to gamble $2 s$ to whether the film would be a success or not. Also, he said, films might be made about visions, dreams, or even life after death, and the public would credit them, but the scientific ones were not always convincing to the people at large who, as he said thes found at the studio, desire a human' story, something that could actually happen to an everyday person. Taking the latter as a cue, MF. Resnolds spoke of 'Derelicts of Ganymede,' by John W. Campbell, Jr., fnom Wander STOPIES, as a otory of this tipe; narrated its romance, humor, excitement, ete., all with the added interest of its future setting and interplanetary travel. Mr. Cummins asain, however, fointed out that this would involve $a n$ unucana expense.
It does seem that in a scientifim there vill be the added cost of providing out-os-theordinary cootomery, machinery, nettings, 'efrects,' ete. Pro
ductions like 'Cleopatra,' 'Scariti Emoness,' 'Madame DuBarry, etc., it is true, have Rivays required lavish settings and pompish costumes: Dowever, I suppose the producers feel more certain of their returns from pictures such as these than liey congider they can from rentares in scientifiction.
"One great advantage of seientifilms, as I see it, is their possibility of interesting the public through spectacle: rocket armadas, space battles, destruction of porlds, ete., which, as in "Deluge'. or "Just Imagine,' it would seem to me could be done much in miniature. Expense? But consider the amornts which go up in munitions, ctc., in any of these war pictures where planes are crashed and ships surk and buildings and battlefields set aname and bjown to bits-year in and year out! As Mr. Cummins oald, however, these themes (as, say, 'The Invisible Man') are rather difficult to frim-and also. he said, to preaent to the public and not bave them incredulous. He foresaw a difficulty in manufacturing men of other planets, etc., which audiences would view witho out laughter.
"IL asked him about 'Automaton,', The Wizara,' 'Gulliver's Travels,' 'The Billionaire,' 'Murders Ino visible,' 'Trip to Mars," etc.-the picturee-for-pro duction which have been announced from time to time. He was unable to tell us at rhat date wo might expect these to be made. However. a new scientifilm has been annonnced-"Zeas"-which is to show the devastating destruction of a war of 1940 when men-of-tomorrow would be equipped to kill with super-slaying machines. Night Life of the Gods," the story of a soung inventor with a rins releasing a ray turning statues into living people, or living people into statues, has doubtless Deen neleased by this time, if not 'Jife Returns!' slso. Be told us that "Bride of Frankenstein," the seouel to the original story of the scientifically-created soulless monster, has been campleted.
"Our main conclusion from the meeting, $I$ believe, was this: that the studio feels the filming of fantass involving spaceships, other worlds, the futare. etc., is generally too dificult a task both to film and to make audiences believe, and that the whole procedure is generalls too costly to risk for satisfactors retanm The filming of stories, then, involving animsted monsters (hike 'King Kong') or strange worlds, rockets, or the like, it seems will be rather limited for some time to come. A 'special,' perfaps, now and then: hut not often. I would suggest, therefore, we concentrate on interesting producers in pictures where expensive sets and such things as a population of men with wings, are not necessary. Make our endeavors on scientifilms of a milder form. A suitable story, for instance, I beliere, would be The Truth Gas.' It would seem this would be material flmable at no cost over the ordinary picture, at the same dime having the elewents of sciencefantasy, and humor to please the audiences. 'You've Killed Privecy' is another story I think producers might reasonobly be expected to consider. It tells, brieffy, of whet the underworld might do if confronted with the Drobleme of television perfected so that it might be seen at its work and visually followed and heard anywhere its members might go. This would be scientific in theme, should be generally interesting, and not involve extra expense. Mr. Reynolds or myeel will probably make these suggestions to Universal Mr. Cummins said if we came upon a story which we thought would be fimable material. ta send it to him and it would be passed through the resular channels and given attention. I believe Mr. Reynolds intends submitting Enslaved Brains.' If you will provide me with copies of The Truth Gas' and 'Vensardee of a Scientist,' I will send them to Mr. Cummins with a note about them, and see if we can't set that studio interested in them. Be patient. readers, and realive that we cannot have a 'Skylark of Space' or 'Moon Pool' or 'Second Swarm' just yet.
"If those interested will see my Scientifint snap shots in Fantasy Magazine, they will find the announcement with which Mr. Cummins astonished and heartened os just before we left. It conessis the screening of a story of a certain famous scieptincartoon character of the newspapers i-righto to which the studio has just bought.
"A final ward, this of mose interest to Lea Angeles readers of Wonder Stories and members of the 801ENCB FICTION LRAGUE: I am working on abother angle of scientifim shows, while here. Fisve been trying to interest the Fimarte, foreign fibw cester of Hollswood, in showing some of the ov-raen sef entifilms since it has recently reopered. Theoe. sech
 tress of Atlantis,' etc., have already been livolued:
though, as far as I can find out, thes have never been released here, and acientifictionista in the city are only waiting to see them. Along with the revivals in New York, I have beon trying (and Mr. Remolds is about to lend his assistance) to cot these foreisn fantasies played in Los Angelos. I have received a cordial letter from Hugo Riesenfeld, famous manager of the theater, and be informs me one fancusy is already scheduled-Poe's 'The Tell-Taie Keart.'
"Just before I came down here, 'The End of the Wordd' ('Fin du Monde') showed in San Francisco. and I had started stirring up interest in showing 'The Tunnel,' and other science-screen storles from abroad. This program I shall continue upon mJ return.'

## OUR MEMBERS DECIDE

Mr. William S. Sykora, you will remember. complained recently because another member. Bernard Novitsky, offered him some sciencefiction for sale. We put the question up to our other members and you will find the decision following Mr. Sykora's latest letter to us, which reads as follows:
"Please let me take this opportunity to thank you kindly for the very fair way in which you presented my complaint in the current issue of our masazine. WONDER Storiss. I believe, however, that you misunderstood the basis of it. I have no quarrel whatever as regards the worth of Mr. Novitsky's magazine offerings. To be sure, there is no reason at all fo: any objection against permitting anyone to sell all or part of his collection, or even to make a business of selling magazines. You yourself, Mr. Hornig. publish and sell a fan magazine, to bay nothing of odd bits of science-fiction material. Nor am I myself entirely free of attempting to sell science-fiction and other magasines, as well as laboratory supplies. My argument lies neither in the quality of Mr. Novitsloy's goods, nor in his right or lack of right to sell them to members of the Science Fiction League. I have to members of the scisnce Fiction Lencur Lenave members from circularization, advertising, or highpressure salesmanshlp. But I do strenuously object to the use of 'Science-Fiction essentials' such as letterheads, labels, buttons, etc., for these purposes.
"For instance, you will no doubt admit that the primary purpose for issulng theoe letterheads was to facilitate members personal correspondence. And isn't this entirely within keeping with the principles of our society. The SFL is a friendly organization. It is a brot erhood of sclence-fiction fans. It is not particularly interested in becoming a tool to be used by sellers of anything, magazines included.
'You are wrong, however, when you say that there is nothing in the League that puts me under obligation to Mr. Novitsky. Rule 8 in the May issue otates that a member must promptly answer all correspondence addressed to him by LisaOus members. Since Mr. Novitsky's circular was addressed to me on Lsacue stationery, am I, nevertheless, to judge it to be other than Lanaus correspondence? Am I forced to answer every advertisement addressed to me on L®AOUS paper? This circular used type very similar to typewriter type, it used a color of ink almost identical with that found in some typewriter ribbons, and were it not for the fact that I have had a little experience with various kinds of printing type, it would have completely fooled me into thinking it was typewritten. As a matter of fact. I am sure that Mr. Novitaky will admit that thig minor form of deception was actually in his mind when he chose this type form.
"I really do not understand what you mean by real objections, if the above and those in my other lettere are not considered so. If you mean by this, proof of actual dis onesty on the part of Member 152, that. I must say. I do not have. You surely do not expect me to wait until I have been groped bo fore complaining to you. Far be it from me, though, to accuse anyone of dishonesty. My only objection (the reasons for it are given above and in my other keters) is that no member should be permitted to sell anything by means of, or with the help of Lyauge essentials.
"Let me thank you again for publishing this complaint. if for no other reason than that it will save me conshderable postage. Usually a magazine covera up this sort of thing, or doesn't give it any consideration whatever. I can do nothing else, therefore, than admire your courage and sense of fair play. as evidenced by your willingness to bring this thing out into the open. I trust the masenbers will settle it on the side of the right, but in any case, I promise to abide by taelr decision."

You are right when you state that the third rule of the Lagub requires you to answer correapondence sent to you by other members, but you must aleo be able to discriminate between correapondence and advertising matter. The latter you would not, as your common sense will tell you, be expected io answer unless you wanted to purchase something offered. Furthermore, we mentioned in this department in our July issue, 1934, page 241, the following. under the heading "Members' Correspondence": "You must answer all mail that you receive, filling the requisites of your entry in this department. and you must not write to anyone $w$ o does not request correspondence from members of your age or from your neighborhood. Such correspondence can bo ignored without "unpleasant reaults from members or Headquarters." This statement was repeated in our August, 1934 issue. As you did not ask for Mr. Novitsky's prices on science-fiction magazines, you were not, of course, required to answer him. Ha would not expect you to answer anyway, unless you wanted to buy something from him.
You mention that the $S$ ien e Fi mon Lencur in a friendly organization. You are perfectly risht. Itm prime purpose is to bring science-fiction fans cloger together and interest new fana. It should be considered a brotherhood. Every member should wovk to help his brother members. This sentence has more significance than the force of the printed word can give it. We do not doubt that Mr. Novitsky has helped many of our other members alreecty in completing their collections of science-fiction magazines at his very reasonable prices. Though you spenk of the Lanaub as being a friendly organization, you attack Mr. Novitsky in a most unfriendly manner. You insinuate in the above letter that Mr. Novitaks might be trying to "gyp" members by high-pressure sales manship. The most friendly thing that you could have done in the first place was to ignore his letter entirely. You also accuse him of deception by having his form letter multigraphed or mimeographed. Most form letters are made in this manner, no matter what they are advertising or announcing. This books much better than a printed circular and saves the trouble of typing each one separately. We think that you owe Mr. Novitsky an apology.

You are also right when you state that the renove is not particularly interested in becoming a tool to be used to secure "filthy lucre." There is certainly nothing filthy about the lucre honestly earned
But here's what settles the whole argumeat. Wo put the question up to our other members as wo promised we would, and the results show thst wen. bers do not object, though they may not particulards desire such things, to receiving such letters in the mail as are being sent out by Mr. Novitsky. Few have taken the trouble to reapond, but all who did, without exception, were on Mr. Novitaky's side. No one could possibly see how you could so violently object to such a thing. In fact, some of your personal friends wrote in their votes requesting that we did not let you know their names, so that you would not become angry because they did not agree with you. and perhaps lose your friendship. You gaid that we were fair enough to put the problem befare our other members. and we trust that you will be fair enough to abide by their decision, as you said you would.
We thank you immensely for your kind compliments in your first and last paragraphs of the above letter. We hope that we never get like "most mase zines" and conceal from our readers important questions because we disagree with them. We believe in absolute fairness at all times and we hope that all of our members will always be fair to the Lnacus their brother members, and eversthing connected with science-fiction. We ask members to remember this at meetings of local Chapters.

May we consider thls matter settled?

## ARTICLES OF THE MONTH

Theodore Lutwiniak, the Director of our Jerses City Chapter, is doing his best in writing artioles to stimulate the imeginations of "The Ukrainian Weekly"' readers. You will perhaps recall reading an article on science-fiction which he had pubitahed in this paper and reproduced in our January. 1985 number. He has submitted another long, editoris that appeared in "The Ukrainian Weekly" for De cember 28. 1934. It concerns $t-$ future of mankiad and the society of the world. from a scientific stand point. Its tone shows that Mr. Lutwiniak has a vivid imagination of the finst water and we hopo that he will continue to do his part in broedenine
the minds of his followers. He thoroughly deserves his Active Membership in the Scnencs Fiction Lbadus.

The last item in the "Oracker Barrel" department of the Lebanon (Pa.) Morning Telegraph, reads as follows :
"Leroy Christian Bashore, of 310 N. 7th St., Lebanon, who signs himself Member 667 . . . . writes B...you stated that anybody could join the Cracker Barrel party anytime, so will you plaase tell your readers my hobby is the Sc\&aNCz FICIIN LaAGUE and I'm sure a lot of them would like to join if they only know what a grand organization it is to me. I'l tell them all about it if they write Thank you, Mr. Bashore.

## A POTENTIAL ENGLISH CHAPTER

"I am the Secretary of a small English Science Society known as the Institute of Scientific Reaparch," writea Douglas W. F. Mayer of Leeds, England. "Incorporated under this comewhat ambitious name are the following organizations: Amateur society for Experimental Radio Research, Canterbury Science Society, International Scientific Correspondence Club. Leeds Physics and Chemistry Society, and World Radio Research League (Leedo Branch)
"The Headquartors of this club are at Leeds, and besides being \&ecretary of the entire club, i am President of a branch at Leeds. At this branch we have an extensive library of sc entlific and Scientifiction periodicals and books. WONDRR Sroermin finds an important part in this library, and we have read with interest the accounts of the Sorsince Fiomion Lsague, so much so, that we wish to become, among other thinge, a Chapter of the Lanour.
"The Chapter mould be run exactly as suggeated in WONDER STORTEs and I am sure we should be a very active Chapter, for beaides possessing an extensive library, we have also at our disposal a large laboratory and a private cinema where Scientiliction flors could be shown. The branch consisto at present of twelve members, and we would all like to join. However, as we do not wish to mutilate our magazines, we wondered if you would be good enough to send suficient application forms, also encloolng further detalls and letting us know the price of badsen, certificatee, etc., at this side of the Atiantic."

We have sont Mr. Mayer the necessary application blanks and information required and sin erely hope that his gathering will become a Chapter of the LaAOUR-perhaps the first foreign Chapter, for, though many others are being proposed, none outaide of the United States have yet secured their Charters. We are sure that such an ambitious group would be a real credit to the Langus.

## SCIENCE FICTION MOVIES

We want everroae, whet er you are a member of the Laacuic at present or not. to write immediately to E. C. Reynolds, if you have not already done 00 , Member Nuaber 818, at 82s51/4 Descanso Dr., Los Angeles, Calli., tailing him that you will be eager to attend any aclence-fiction movies that are to be made by the Hollymood producers. You mig $t$ also tell him which stories you think would make the best pictures. When Mr. Reynolds gets a list of atoout ten thousand names, he will present them to the film magnates to show that there is a big demand for fantastic pictures.

We want to make a special appeal here to the Directors of local Chapters. Get all of your membera to sign the petitions and send them to Mr. Reynolds. Two of our Chapter Directors have already done this. Co-operate with Mr. Reynolds.

## NOTICE TO DIRECTORS

We want to call to the attention of volunteer Chapter Directors the fact that it does not take a greas many members to form a local Chapter. Because we bellove that it is relatively easy to secure new menberg after the Chapter is formed, we will authorise a Chapter with only three members to start.' If you are a Director and only a few have written to you. offering to join your Chapter, send us the ligt now and we will declare the existence of your Chagter. or you can secure a list of members in your locality from Feadquarters, and solicit each one, either by mail or personal call. This will eventually bind together all the lovens of science-fiction in your neighborbood into one group. Why work alone? Get together! Remember. three members are enough to start a Chapter, and you will find it much easier to secure new members after the Chapter is organized.

## BOOK DISCOUNTS

Several members have written in asking how chey can seoure the discounts on eclence-fletion books that we said publishers will allow. When the Lanous whe formed. All you have to do to get these discounts is write to $t$ e book publisher, ondering the book (whleb must be science-fiction) and ask for the discound ophich you are entitled to as a member of the Lradu. Most publishers wlil heed your request.

## YOUR CERTIFICATE

To date, several members have not claimed their certificatea, although their applications have been received and approved. The certificate is given free to all those who find it possible to call at Headquartens for it. However, when it has to be mailed.

## Application for Membership SCIENCE FICTION LEAGUE

> I.

> THE UNDERSIGNED, herewith desire to apply for membership in the SCIENCE FICTION LEAGUE. I have read the rules of the LEAGUE, and hereby pledge myself to abide by all the rules and regulations of the SCIENCE FICTION LEAGUE. Enclosed find fifteen cents (15c) to cover the mailing and handling charges for this certificate.

## Name

Address
City and State

## Country

Date
(It is important the reverse of thio blant be filled ont.
No applieation valid without.)
a mailing and handling cont of Arceen cento is charged. We urge you to send in your filteen conts if you caniot call for your certificate. Xou will find it Doceeary to have a certificate in order to enter any Chapter; and for other times when Identification ts tecesary.

## PAMPHLET OF INFORMATION

We have prepared a four-pace leaflet adopted from our editorial in the May, 1934 insue of Wonder Stornes, which outlines the rules and purposes of the Leacum, with an application. These will be provided iree of charge to those who wish to join and have not already done so, or to members who want to convert others. Please send a stamp to cover mailing cost.

## CORRESPONDENTS

All members are free to enter their names upon this list, telling just who they wond like to write to (ages and sex), where they should live, and perbapa what thes should be interested in.
This correspondence list is for members of the SciEnc. Fiction Lenaug and those entered are warned against Guestionsble letters they may receive from outaiders. If gour entry does not hring the resulta you desire, make your next one take in a wider feld, either in ages, locality, or hobbies. By motifying Headquarters when the isaue appears containing your name, you may have it repeated the second month following, and by doing this every two monthe, have the entry six times per year. However, you will probably not wish to do this, for you are likely to secure alt the correapondents You desire with the first insertion.

Florence Reider, 6138 S. Bishop St., Chicago, 111. Member No. 516, would like to correspond with menbers interested in any kind of acience-fiction who are over twenty-two years of age.

Nelson H. Hobenstein, 60-47 Palmetto St., Brooklyn, N. Y., Member No. 250, wants to hear from other members between the ages of ifteen and elghteen who are interested in chemistry and bjology. Locstion unlimited.

Henry Lewis, Jr., La Roche, S. D., Member No. 682, wishes. to write to those of our members in other countrien and those who would like to exchange science-fiction magazines for his stamp collection.

James Rathbone, 26 Heriot Pl., Edinburgh, Scotland, Member No. 688, wants to correspond with boys of his own age (fifteen) who like rockets and the fourth dimension.
Clarence Rudegeair, 1004 Cumberland St., Lebanon, Pa., Member No. 580, is interested in trapping, fishing, and science, and would like to hear from other members of either sex and any age who live east of the Mississippi River.

Vincent Anyzeski, 19 Pardee St. New Haven, Cenn. Member No. 515, wants correspondence with anyone, anywhere on the subject of electronics and aified sciences, rockets and the study of the prosreas of science as reported in our science magasines. He is twenty-four years of age.

Laurence Henry, 23 E. 117th St., New York City, N. Y., Member No. 125, would like to communicate with members from any state in the country outsids of New York and from any other country, maie or female, over eighteen years of age. He is a New York National Guardsman, rank of Corporal, and is interested in radio, especially short waves, and aviation. He is twenty-one years of age.

James Pomerene, 6420 Northwest Hwy., Chicago, Ill. Member No. 49, contends that an invisible man could not see, and hopes that this will start a few arguments with other members living in Chicago, whom he would like to hear from.

James Michael Rogers, Dallas Apts. B, Muskogee Okla., Member No. 618, would like to correspond with any lover of science-fiction.

Thomas James Ronan, 14 Coleman St., Dorcheoter, Mass., Member No. 709, is interested in everything in the mechanical line that flies, dives under water, or remains stationary, and would like to hear from other members.

Philip McKernan, 130 Palm Ave., Mimbrae. Calif., Member No. 667, requests that some male and femaje pen-pushers push a little something in his direction. He would like to hear from those around fourtees years old, his own age.

## SUGGESTIONS

Here are a few advance suggestions of bow you can help the Science Fiction League:
(1) If you wish to form a local Chapter of the Legaqum get a newspaper to print a notice in the society or club section. They will do this iree of charge and it will aid you in securing many membera.
(2) Send to Headquarters all the suggeations that you believe will improve the ScIBNCB FIGMON LBacui and its activities. You may have some raluable dieas that will greatly aid the cause of science-fiction. Taio department will appear monthiy in the magasine and will be used as the voice of the membern and execus tives, 80 do not hesitate to use it freely,
(3) If you are a student in high school or college, try to form a Chapter of the LeAgU in the building. with students as members. Most educational institutions allow for clabs of all sorts and would be plessed to harbor one more, especially one with standards as high as the SCIENCE Fiction Lsagus. These school Chapters will be treated in Headquarters as any other Chapter. In order to form a Chapter of the LencuE, (Continued on page 1403)

# (REVERSE SIDE) 

## I consider myself belonging to the following class: (Put X in correct square.)

Professional (State which, such as doctor, lawyer, etc.)
$\qquad$
Business (State what business)
$\qquad$ Author $\qquad$ Student
$\qquad$
$\qquad$
Age
Remarks:


IN this department we shall pablish every month gour opinions. After all, this is your magasine and it is edited for you. If we fall down on the choice of our stories, or if the editorial board slips up occasionally, it is up to you to voice your opinion. It makes no difference whether your letter is complimentary. critical, or whether it contains a good,
old-fashioned brickbat. All are equally welooma All of your letters, as much as space will allow. will be published here for the benefit of all. Due to the large influx of mail. no communicathona to this department are answered individually unless 25 c in stamps, to cover time and postage. is remitted.

## "The Fatal Glance"

Editor, Wonder Stories :
Paul's cover this month seemed to take me back to those days when he drew and painted pictures for the first stf. magazine: it reminded me of his illustration for "To the Moon by Proxy" in particular, although, for the life of me. I do not know why. The old picture represented a metal man grappling with a lion: this one depicts a war scene-wholly unlike, and yet when I think of one, the other also comes to my mind. Perhaps some fan can tell me wherein lies the similarity, for they must be alike in some way.

Without a doubt, the best tale in the February WONDER is that odd shortoshort by Derwin Lesser. "The Fatal Glance." Maybe the author is right; perhaps man shouldn't try to pierce and see through the concealing cosmic distances; perhaps if he did. he would go atark mad at what he saw . . . . "for His ways are passing strange."

Edmond Hamilton's "Truth Gas" struck a new note in some spots, but as a whole I can't say Edmond did his best.

I've read many Kelleryarns without being disappointed, and "The Life Detour" was no exception: but neither did it show the good doctor at his peak. Or maybe that sentence is a bit disjointed: anyway. it, adequately conveys the thought - 80 what?

Please cease printing foreign serials; not one of them has ever yet come up to even second-class American or English atandards. Punkl is too good a word for them!

Binder is plenty good
The League is progressing nicely, so it seems, and thanks again for making me an Active Member.

Alvin Earl Pbrry.
Rockdale, Texas.
(The similarity between the two covers which is puzzling you is perhaps due to the fact that both contain animated mechanisms. Speaking of covers, notice that the cover on our current issue is the first one with a green-background since the September. 1931 number.
"The Fatal Glance" received just the reception we expected it to. That is, not only were there readers who just thought it O.K. and others who didn't care for it so much, but some praise it with the high. est terms, while others condemn it altogether for being incomprehensible and purposeless. "The Fatal Glance" contained a brand-new conception which either left a forceful impression on the reader. just as it had in the mind of the author when he wrote it, or else fell fiat by passing right "over his head." It is gratifying to us, though, to note how many readers caught its full significance. The story would certainly be a "flop" in any but a science fiction magazine, for the reader must have the most vivid of imaginations to appreciate its point. A nother unusual fact about the story is that its theory can satisfy both the scientific and the religious mind.EDITOR.)

## A Real Friend

## Editor. Wonder Stories :

Your consideration of issuing a reprint annual intereste me very much, because I believe that reprints would prove of interest to a great many of your readers who have never read the early issues of ScIENCE WONDER STORIES, AIr WONDER STORIES and SCIENC: WONDER STOR

Of course you must know better than I what mas terial you should wee in such an edition, but I have several specific stories to suggest, and reasons why these stories would be a good choice.

In the first place, Mr. Hornig, I believe that the ten best stories you have published in the past near seven years are, in order of merit and taking into account more the theme and the style, etc.: "Tho Final War." "The Time Stream." "The Ark of the Covensnt." "A Conquest of Two Worlds." "The Exile of the Skies," "Electropolis," "The Shot into Infinity," "The Vengeance of a Scientist." "Beyond Pluto." and "The Warlord of Venus."

You will immediately recognize in these ten stories certain themes, or situations, that are bound to ultimately confront the human race in its attempt to progress along the road to knowledge. Now believing as I do that science fiction does foretell to a general extent what we will in time face, it geems to me that the more this knowledge (or call it conception if you like) of what is sure to come to pass is put before the reader's mind the better off he ls. It is much better for him to know what is coming and prepare for it, than to have it thrust upon him unexpectediy-only to leave him groping blindiy in a mire of perplexity while those who know of those events soar far above him in understanding. That is one of the reasons I placed "The Final War" at the head of my list. It is a great shame that a story of the calibre of "The Final War." if not that very story itself, could not be placed in such a position that more people could have read it. It is a classic. It is real science fiction. It is the ideal towards which science fiction authors should work. That is why I would select-if it were my duty-"The Final War" for reprinting.
My second choice was "The Time Stream" because of its great conception of time and space. Although dry in spois, it contained an idea so brilliant that it should rank very high in the estimation of students of the subject on which it dwelt. It was different, thought-provoking, and would well deserve to see ink a second time. If not a third-fifth-tenth time.
The others are either too recent or have already been reprinted or published in book form.
But there is one thing I am sure of-and that is that WONDER STORIES has been taking the gaff admirably these past two or three trying years. Gernaback certainly showed his brilliancy by getting you, Mr. Hornig, a real fan to run the bonk. More power to you-there are hundreds of ua back of you-pushing-helping-trying to do our part.
And your February production shows ub-and 60 have your past few issues-that you are really and honestly glving us the best-and that's no foolin' You are giving us the utmost in science fictionand we're with you because of it-and by the shades of Frank $R$. Paul. we'll get you those needed readers or else

And can you pick stories! "The Fatal Glance" by Derwin Lesser (don't kid us. Hornig) was the prime story in February.

And Paul's cover was passable-but come on and give poor old Paul a chance to show his stuff!

So to science flction-and you, Mr. Hornig, till Wonder Storirs becomes the worst in science fo-tion-which is another way of saying

Yours forever.
Lewis F. Torrance,
First Class Member. 165
Science Fiction Leaque
Winfield, Kan.
(Your list of stories suggested for our proposed reprint annual is commendable and many of them wif undonbtedly be used. The annual is still "On the belf." Impatient readers should realize that it somesimes takes years to carry out plans, but the fact reeasins that we realfy want to put out a reprint annasi and intend to do so as boen as conditions permit.

Thank you inmensely for your kind, encouraging words. Such friendiy wishes warm the cockles of our pearts and make u* try ever harder to give you the beat that is in us and our authors. Here's to you, Mr. Torrance :-EDJTOR.)

## Thumbs Down on Puns

Editor, Wonori Stories:
During the last few months, numerous things have been read in the pages of WONDER StORIES which I fail to like; therefore, I am taking it upon myself to vent clouds of pent-up hate and swarms of diabolic brickbats.

Perhaps this first missile is cansed by my natural dislike for a person or persons who like to make fools out of themselves. Not that I want to be violent or rude, but I certainly want to start thrashing out a dificult social problem. Hoy Ping Pong of Bloomington, lllinols, is one great big gripel His rank poetry which appeared in the current issue, his putrescentlyinclined letters, and numerous other atrocities which be perpetrates, are real cause for argument. Watch out, Mr. Hoy Ping Pong Tucker-I'm gunning fer you 1
Next in line are the Editor's aggravatins puns used in connection with Miss Virginia Kidd of Catonsville, Maryland. They are totally uncalled for. Although I may not be a book of etiquette, I am smart enough to deduce a simple lact-they (those rank puns) are bad taste!

Another thing that makes me want to turn hermit is the fact that Donald Wollheim is still holding the World War against the Germans. I ask you, in the name of common sense, isn't that rather an insipid prejudice? Par be it from me to hold a man's nationality against his literature.

Well, outside of the few breaches of sanity elucidated upon in the preceding paragraphs you (WONDAR STOAIES) are taking the lead as far as progressiveness goes.

> Frad ANGER,
> Ass't. Dir. Oakland SFL., Oakland. Calif.
(We are pleased to see that your criticism strikes only at the readers' department, and not at the stories themselves, which, after all, is the important thing.

Hoy Ping Peng should be glad, anyway, that you cave him a warning that you're gunning for him. and can look for protection from his pal, Bob Tucker.

You'll have to pardon us for using an occasional pun in our comments. It's just one of our weaknesses. We knaw it's the lowest form of joke, but "better a poor joke then no joke"-or maybe no joke roould be better. Anyway, we notice that the most popular radio humorists seem to thrive on the use of puns. Pun our word! Bad taste, you say? Well, the best medicines have the worst tastes, you know-or at jeast they had until the advertisers came along with "Now you can take it this pleasant way!"

We allow the readers to say anything they like in this department, as you will notice-we never discriminate. You can praise us so much that we etart patting ourselves on the back to let us know how good we are-or you can call us everything that will pass the post ofsce authorities, and we'll print either one or both. So why shouldn't the editors say what they think once in a while and have a little sun? What do ¥ou think?-EDITOR.)

## Darrow Harrows

Editor, WONDER Storise:
Without a doubt "The Robot Aliere" by Eando Binder is the best story in the February issue. It is not only one of the author's best, bat is one of the best novelettes you've printed in months. Wel written, true to life, good humor, good plot; eversthing an A-1 science flction story should have is found in "The Robot Aligra"
"The Truth Gaf" by Edmond Hamilton is my second choice. It, also, is one of the author's best. And lunnyl I thought I'd fall ofi my chair when the
candidate for governor made his radio apeeoh. Come often, Mr. Hamilton, come often.
"The Hidden Colony" by Otfrid von Renstain is very interesting, but it seems to be quite: aimilar to some of his other novels.

Almost needless to say, Paul's illustrations are well done.

As to your "editorial" on page 1130: asking the readers to interest others in WONDER STORN is all right, but asking them to buy an extra copf of the magazine is going too far. If the readers volunteer to do this, that's O.K., but you're being unethical in suggesting it.

Jack Darrow,
Chicago, III.
("The Robot Aliens" struck us the same way as it did you. It was one of the most realistic stories wo have received in a long time. That goes for practically all of Binder's published works. Ris chie? ability is in making things seem as though they really could happen, and, at the same time, his stories are the height of fantasy. Few authors can comblne these two qualities as masterfully as Eando Binder.

You will remember that in that editorial you refer to that we did not put our readers under the obligation of purchasing an extra copy of the magasinein fact we said that there were other ways of spreading science fiction. We realize that many fans can just about spare their monthly quarter for the maga-zine-and we certainly wouldn't want to work any hardships on them by requiring their purchave of another issue. But many of our readers csn afford to put quarters into game machines, etc., and to them was directed the suggestion that they purchase an extra Wonder Stoares to interest a friend, who would show his appreciation of his friendia sacrifice by reading the magazine and most lifely Decome a regular fan. We wouldn't want anyone to speod the extra quarter, who would notice it in his budset. We hope that you weren't offended by the editorial. Please accept our apologies if that is the case. -EDITOR.)

## The Effects of Science-Fiction

## Editor, Wonder Stories:

I am not totally insane or mentally deranged. I only get this way once in a while.

I gaze up at the firmament, emblazoned with billions of countless stars, burning out in comparison to blazing jewels embossed upon a velutincas canopy. Then I begin to ponder the how and why of it all. I close my eyes and wish that God would but grant me the power to careen off into that majentic gulf, to feel the powerful surge of acceleration that would make the blood pound in my brain.

Your magazine gives me that power, not physically, however, but in my imagination. I do careen off in space and feel that surge of power. I dwell on other worlds and battle alien entities.

Your magazine is saperb. Most of the stories are fine. The cover is grand. Paul is a past master in his work. Winter is mediocre, but Paul is stupendous. The man is a genius in his line.

Now don't think because I have hurled no brickbats or indulged in any satirical panning that your stories are all perfect; by all means no. Some are poor; the general run, however, are excellent. All, nevertheleas, are oke with me.

The cover is fine, the edges are all right too. and I do not read the advertisements. Before it goes 400 far, however, may I speak up and say I did prefer the old nine by twelve size with the glazed paper?
W. J. FRONEX, JR.,

Sand Springs, Okla.
(Our magazine seems to have the desfred efiect upon you. The stories are written to take you away from our matter-of-fact world for a while and make you forget everything except the things that are get to come. Science-fiction is like a mental time-machine, for those with imagination, and fans seek it as an addict seeks his opium.-EDITOR.)

## Science Lifts Us

Editor, WONder Storiss :
Let me congratulate you on the September number of Wonder Stories. Your (may I say our ?) magazine is not only entertaining but educational as woll. Apropos of the question of evolution, in "Whe Ques"
tion and Anawer" department, gou mas find come very valuable commentary on the rointion between instinct and intellect, and the part each plays in evolution, in Bergson's "Creative Bvolution.

Someone objecto to Jour printing a German atory. The person who wrote that letter forgets science, and science-fiction, are above national boundaries. The grand thing about science is that it lifts us above petty jealousies, tribal feuds, and makes us do our thinking in larger terms. The rapid progress of science is largely due to the free exchsinge of ideas and work between workers of difierent nationalities. A true scientist belongs to the world.

## Bernhard Mollonhauer,

San Diego, Calif.
(There are innumerable books written on evolution, all of which are intensely interesting and we certainly recommend them to our readers. In fact. moot scientific books are not as dry as the general public seems to think. Authors are now writing scientific books in a more popular vein, so that some of them read almost like fiction, though they are flled with amazing facts. You certainly will find more of interest in a book of pure science than you will in many of the cheap love novels which are now circulating.

You are vers correct in stating that "science lifts us above petty jealousies, tribal feuds. and makes us do our thinking in larger terms." We will have a scientific government when there is but one in the entire world, gained not by conquest. but by voluntary union. This Utopia, however, is still but a dream. In "A Martian Odyssey"" Standey $G$. Weinbaum showed as the results of anarchy, which is no government at all. It is all very beautiful among the Martians in the story, but it cer ainly would not work with us-at least, not as long as we are human beings. It would be an altogether different thing if everyone obeyed the Golden Rule, but as long as mars is man, the idea could never work out.-EDITOR.)

## The British Society

Editor, Wonder Stories:
Thank you for the certifica es of the ScIENCB Fiction Leagers and for the lapel buttons for $m y$ brother and myself.
I have just finished reading the October issue of WONDER STORIEs and have a few comments to make upon it. The cover is quite good, and I prefer the dull background to the vivid ones we have been getting recently. The space-ship in the background looks a bit childish but it fits the description. so I suppase the author's really to blame!

Mr. Gernsback's editorial, as usual, was interesting, but I must say that there isn't enough reading matter in each of these. Why not give us a page and a half of editorial?
"The Brain of Ali Kahn" is by far the best in this issue and is one of the best that has appeared recently in the complete story class. Try and get more that are really different like this story. "The Thieves from Isot" was interesting, and, like most of Mr. Binder's stories, seemed reminiscent of the older days of stf around about 1930 or $s 0$ when stories seemed to have a special flavor that is usually missing these days.
I am afraid I didn't like the "Final Struggle." In fact I am inclined to label it bunk only the word seems to be somewhat too damning and I don't like absolutely condemning anything. Still. I, personally, don't want to see any more of this new (?) style of stf. I wonder if the author had seen the film "Old Dark House"?
"The Fall of the Eifiel Tower," I find quite intereating and well told, but no classic. I am glad you are getting a sequel to "A Martian Odyssey," for I found that a very fine story.
I see that Paul has only two inside drawings in this number. I would like to see all the drawings by either Paul or Wesso, for I don't like Winter. I thonght, however, that Schneeman's drawing for "Into the Infinitesimal" was very good. I would like to see more by this artist.

As for the BCIENCE Ficrion Leaous, I mould like to take part in anything in connection with science bction degreas. I bope this idea materializes.
I would very much like to see $\mathbf{W}$. S. back again in the large size with smooth edges, but I suppose I most blame the depression for this, even if sou don't admit it. At the moment I get my magadnes trimmed by a printing firm, and thes look like difierent magasines altogether.

Will all readers interested in the Britiah Interplanetary society (I think the name is self-explanatory) please arite to me for a specimen copy of our Journal and other particulars?

I have already bent the Editor of W. S. pasticulars of the Society, as well as the latest Journal.

LGOLIE J. JOHNSON,
SFI: Member 888.
Nom. Sec., BIS,
46, Mill Lane.
Liverpool 13, England.
(From reading "The Brain of All Kahn," many of our readers thought that the author, L. A. Eohbach. is arain specialist. Mr. Brhbach recently paid us a visit and admitted that be knew practically nothing about the construction of the brain before writins the story, but had to do a great deal of scientific research in order to include 80 much excellent ocience in the story. This shows the result when an author is willing to put some real thought into his work. Without the science, his story would probably not have been accepted.

We hode that the conclusion of your letter succeeds in securing many new members for your commendable society.-EDITOR.)

## On Scientifilms

## Editor, WONDER STOASE:

In the beginning, allow me to state that were I production manager for some major producing company planning to film a science-fiction story. I would most surely hire Paul to design the eets, as well as the costumes for the characters. That should tell what I think of Paul. And Herr Zimmer should wash his hair and strain his soup!

And so we have started to discuss sclentific motion pictures. And to continue, it seems that the WONDER Storigs scientific film campaign of a couple of years back has resulted in nothing. Scientifilms occur with the same frequency as belore.
But what then? There are no men here that can successfully handle a science story. (Although "The Mysterious Lsland" was nearly perfect.) It required a group of Germans at Gaumont-British to make "F. P. One," the wonder-film that it was. And "The Girl in the Moon," Germany-"Metropolis," Germany. Could a person ask for better films ? If you have the money to finance the filming of your favorite story-deal with UFA.

And now let's come home and take a look. "Franken-stein"-not science-fiction-just a horror thriller. "Just Imagine"-a fool musical. But why go on knocking? "The Mummy" and "The Invisible Man" are two excellent films-and by accident, I think. The importation of Eric Pommer by Fox may have a decided influence upon the future of scientifilms in America. As you all know, Pommer handled the production of "F. P. One." Let's all drop him a line. We may sitil have a chance to see "Torrano the Conqueror" on the screen. And further, very few independent concerns bother with any theme aside from romance, mystery, and horse-operas. But Monogram (at least I think it's Monogram films) is working out plans for "Stratosphere." Write in your sentiments. Show Monogram how many persons it can cater to. Ten thousand names don't mean a thing. Ore thousand sincere letters will do more good, owing to the fact that most producers are aware that almost anyone will sign $h$ is name to anything.

And apologizing for my superfluous use of "ands," "buts," and "althoughs," I close, having nothing to say about your magazine because I am satisfied with it "as is," Just sit tight and wait for a recorded dramatization of "Nothing but Mud."

Jos Kuowea,
Omaha, Neb.
(We are sorry that the time was not yet ripe when we secured petitions for those who wanted more "ecientifilms," as Forrest J. Ackerman calls sclencefiction motion pictures, back in 1931 and 1982. Perhaps, as you say. Mr. Reynolds will have better luck.

You will notice that we had a filler in our February isaue calling all of our New York readerg and their friends to support the revival of science-fiction morias of the past in this city. As this is written, the February issue bas not yet been published, and we do not know what reaults will be, but we are hoping lor the beat. Our Intentions are to revive first "The Mgsterious Isiand," which we consider a great triumph for M-G-M and, for three reasons, the Ereatest aciencefiction motion pictare ever produced, to date. First,
it was truly a science-fiction story. Second, it was produced in fantastic and beautiful Technicolor. Third, it was masterfully accompanied by symphonic music which carried the atmosphere of the story. "The Invisible Man" was the greatest trlumph in trick photography. We shall bring back also the great foreign masterpieces, such as "By Rocket to the Moon," "The End of the World," etc. We are surprised ,that you class "The Mummy" above "Frankenstein." In the first place, "The Mummy" was not science-fiction, and "Frankenstein" was-although we will admit that its atmosphere was one more of horror and terror than acience, and it will be a long time before we revive this picture. "Just Imagine" was an excellent burlesque.-EDITOR.)

## Alias Hoy Ping Pong

Edilor, Woneer Stories :
As a gentleman, a scholar, and a coupla other things, I resent the remarks Mr. Kaletsky made concerning this honorable person in the December issue.

In the first place, Mr. Kaletsky read the letter in the wrong light. It was written in lighter vein, and intended to be read as such. If he will take the trouble to look up what few letters and MSS of mine that have been published, he will find that in the main, all serious work has had my real name signed to it, while letters and articles, and other various MSS written in lighter vein have the Chinese pen-name nttached. I assure you Mr. Kaletsky, right here, that I did not attempt to hide behind any pen-name for the purpose of making an attack upon you. In fact, I did not make an attack upon you. I merely "razzed" you and science-fiction in general, but meant not one word of it, for I doubt if anyone likes scientifiction better than I .

If you fall to see it in that light, however, I offer my apologies for having offended you. If you intend to etop writing letters to the Readers' Department on account of me, among other things, please do not do so, for I have enjoyed your letters immensely, and believe the majority of the readers would rather read anything you have to say, than read mine. So if I am one of the causee of your leaving, I will. gladly cease writing and leave the Department to you.

Another gent pans me, too, but unfortunately for me he is right. I am sorry, Mr. Lenard and Mr. Ray. I again apologize. Everything hunky-dory now?

I notice that Forrie Ackerman makes up for his absence in the columns by appearing with two letters. Hooray for himl Also, hooray for you, editor, in selecting (I take it for granted that you do select covers) a really beautiful cover. Am very much pleased to see that the old Earth still has a blue sky, instead of a yellow or red one. Many thanx.

I have never read Palmer's stories outside of the fan magazines before; but if he bas any more on hand as fine as "The Time Tragedy," let's have them! (Even if the gent did kill his grandfather, which to my view, is razzing somebody about an old argument.)

## BOB TUCKER.

Alias Hoy Ping Pong,
Bloomington, IIl.
(We don't want anyone to stop writing to this department because of another reader, and hope to receive many more letters from you and "Hoy Ping Pong." Mr. Kaletsky, as we stated before, has dropped out of science-fiction. [For a while, we say].EDITOR.)

## Our Friend Jack

Editor, WONDER Stories:
Well, "Dawn to Dusk" again takes first place. This oecond installment surpasses even the first. There isn't much action in this story, but then some of the best science-fiction has contained little action. Too much action spoils some stories; in others action is necessary. I like both types. Paul's illustration for this story is great.
"The Black River" by John M. Corbett was good, but the "awakening" sort of spoiled it. I dislike to have stories turn out to be dreams.

Glad to see the return of Raymond A. Palmer. "The Time Tragedy" was a unique tale.

I Biked the idea in "The Alien Room," although the story was written rather amateurishly.
Paul's cover and illustrations were exceptionally
well done this time. I wish you would have Paul illustrate every story.

I don't call the cycle of red, yejlow, and boo backgrounds variety on covers. All of gour covers have solid colored backgrounds. A little detaif there would give variety. Then too, there are other calosis and shades.

## Jack Daprow, <br> Chicago, IH.

(You will notice that we use more than three different colors for the backgrounds on the covers of WONDER Stories. We use red, yellow, orange, black, and several shades of blue. Eando Binder has had material in every issue of our magazine from July, 1934, to February, 1935, a record for consecutive issues in recent years.-EDITOR.)

## An English Letter

## Editor, Wonder Storiew:

This is the first occasion on which I have written to WONDER STORIEs, but as you say, you are always pleased to hear from overseas readers, so here goes.

I am only fifteen, and had my first intinoduction to Science Fiction, and incidentally WONDER Bronms, aboant three years ago, quite by accident. I happened to be looking in the window of the local bookshop when I saw a magazine with a lurid cover of a gigantic gan from which projectiles were being fired at the Earth. I immediately became fascinated. Seeing the magarine was called SGENCE WONDER STORIEs, I became further intrigued. because anything scientific was my weakness, and bought it there and then. I have never regretted my action, for since that memorable occasion, I have read WONDER STORIES quite regularly.

I consider WONDri Stories quite fifty per cent bettor than its two contemporaries which we get over in England. I read these only to quench my burning thirst for science-fiction and yet more science-fiction. But, alas, I never quite enjoy them half as much as I do reading WONDER STORIEN.

Some of your grousing readers ought to live in England and have a taste of what it's like to have no science-fiction. Then they would be content to let little faults in WONDER STORIES, such as "rough edges," "poor quality paper," "artists," "reprints," and the like, pass by. By some of the letters I have read in your column, American readers must be jolly hard to please; even WoNDER Storids cannot piease everyone.
Since your change of policy, the magazine has been steadily improving until it is now a hundred per cent better than it was even in the good od Scisnca WONOER days. You have never satisfactorily explained why you dropped the "Science" out of the title. I suppose there is no chance of ita being reinstated.
I am always pleased to read stories by Britiah authors, those of Festus Pragnell being particularis good. I enjoy the greater majority of your American authors' works, and my favorites include Sterel, Keller, Williamson, Vaughan, Manning, Binder, Coblentz, Cummings, Vincent, and many others I cannot recall for the moment. I know I will bring a storm of criticism on my head from your loyal Amexican fans when Isay that Clark Ashton Smith's stories are ghastly. Pure tripe. They savor distinctly of the utterly fantastic and do not contain enough science to merit their inclusion in WONDER OTORNRS:

Before I close this lengthy and uninteresting letter, I would like to express my opinion on artists. Pavis drawings are simply magnificent. His conceptions of monsters, colossal machinery, alien creatures end life, and his futuristic cities, are a tribute to his genius. He is the science-fiction artist supreme. But his human figures are very doll-like and wooden. Why does he always portray men in leggings? Surely the bumen race wears other garments. Also, I notice his figures of men always have black curly hair. Are there not other types of hair? Still, for all his faults, he is best of all science-fiction illustrators. I think that Wesso is the next best artist after Paul; he beats Winter easils. Can you take him on? I see be is not illustrating for the other two science-fiction mags, and no doubt many of your readers prefer him to Winter. I do not like Winter's work; it is 80 crude and unfinished looking, although his drawings of men are superior to Paul's. Is there any possibility of you dropping Winter, or ts he on contract? His drawings spoil the whale magazine. I think you should give Saaty a break. His picture for the "Heat Destroyers" was excellent, and he certainly has talent for this kind of work. Money, Burian, Sigmond, Fleming-Gould, Schneeman, and Marchioni and the rest are simply cruel. Their draw
ings look as if they were dramen in the dark. If you want to maintain a good meandand of art work in Wonder Storigg, have an all-Paul-and-Wesso illustrated magazine forever.

Well, I guess I have rambled somewhat too much for the sorely tried Editor's patience, and I suppose this letter will have found its way to the fire by now, which will mean good-bye to my ever seeing it in print. But before I close down, mas I put focward my point of view on a puzzling mystery? I have a notion that Mr. Epaminondas T. Snooks, D.T.G., the eminent lunatic, is artist Paul. I have nursed this theory ever since I read the above-mentioned gentleman's "Why the Heavens Fell." I ask you a question, Mr. Editor, for heaven's sake let us know the master maniac's true identity.

## H. Dennis Wilson <br> Yorkshire, England.

(We rarely receive such an intelligent letter from one so young as yourself, and we are always giad to hear from our readers in our brother-country England - 80 that makes your letter doubly welcome.

It makes us very happy to see how many of our readers are noticing the improvement in WONDER Storibs since our change in policy over a year ago. We should be ashamed of ourselves if the magazine were not steadily improving.

Richard Vaughan, one of your favorite authors, is a Canadian.

We are sorry that you do not like Clark Ashton Smith's stories. He is a genius in pure fantasy, if not science-fiction, and many science-fiction fans read both types.

Paul will always draw the covers and much of the inside work for the magazine. Saaty, Schneeman, Winter, and Marchioni receive occasional jobs from us also. Please do not accuse Paul of being Epaminondas T. Snooks, D.T.G.-EDITOR.)

## "Once a Week!"

## Editor. WONDER Storiws:

I hope you will be good enough to print this letter in The Reader Speales. I have before me as I write all the 1984 issues of WONDER STORIES. I want to talk about Paul's fine covers. Out of the twelve I have picked out, five I consider the most striking. They are the May, June, September, October, and December issues.

May-a scene from Morrison Colladay's ."Earth-spet"-the Empire State Building toppling before the ocean's mighty flood. The building is drawn extremely well. The rushing water is so natural that I can almost feel the spray.

June-a beautiful view taken from Kaye Raymond's "Into the Infinitesimal." Paul's men and women here are perfect. The buildings of that atomic city make a pretty background and the machine in the foreground is wonderful.

September-illustrating "The Man From Beyond" by John Beynon Harris. The Venusian landsc pe is truly alien. The bizarre vegetation is distinctly different from what we are accustomed to see on Earth. The coloring of the plants is superb. Paul's imagination is marvelous !

October-a scene from Eando Binder's "The Thieves from Isot." Every detail of the extraordinary hoisting machinery is clear. The space-ship in the background is unique. The way in which Paul draws machines is remarkable.

December-picturing "The Alien Room" by W. P. Cockroft. The blue sky, the mountains, the snow. the astonished explorer, and the rocket ship-they all combins to make a really attractive scene. Show me the artist who could do better!

Without doubt, Frank R. Paul is the best illustrator of science-fiction. He has no equal in cover work or inside drawings. May he continue to do his good work for many years to come.

Now for the two best authors of 1984-Stanley G. Weinbaum and Eando Binder have that distinction. A. Gelula, J. B. Harris, R. Vaughan, L. Manning, Dr. Keller, and M. Colladay have also done well.

Mr. Weinbaum's "A Martian Odyssey" and ita sequel, "Valley of Dreams," were the best yarns of the year. I have seldom read tales so refreshingly natural ("peppy") and so full of strange, original, and interesting features. The story was told in such a logical fashion as to be decidedly realistic. I would like to read more about Jarvis and the curious Martian, Tweel, along with the reat of the adventurons "Ares" crew.

Wonder Stories did well during the past geer. Here's wishing our "mag" continued improvernont in 1985.

How about becoming a cemi-monthly? I do not Mro to wait a whole month for each issue. I hope to eee the day when WONDe: STorites comes out ornod a wesk (large size like "The Satarday Evening Post" and printed on the same aort of paper); Until that day comes, I cannot be wholly satisfied with my favorito magazine.

## Oharlag Pizzano. <br> East Dedham, Mass.

(If there's anything we find impossible to do, it is your request at the end of your sixth paragraph. We have always agreed with your atatement following that.

Recently, we have accepted a very beautifully written story by your favorite author, Stanley G. Weinbaum, entitled "Pigmalion's Spectacles," a new policy story, and he has promised us, upon our persistency, to produce more work of the "Martian Odyssey" type for our readers.

The size and price of a magazine in the pulp faid is an indication of its quallty. You can find many magazines much larger than WONDER Stosnes for 15 c per copy, but try to compare their material with the science-fiction our authors provide you with! We would rather fail than feed our readers with a lot of trash at a low price,-EDITOR.

## Answer to Mr. Kaletsky

## Editor, WONDER Sterung :

It seems as though my slight effort to help the Scirnce Fiotion Leacus has developed a gudden recoil -in re Mr. Kaletsky's letter in this month's edition.
I admit that I cannot name an "impoctant" educator, who made the debated statement, but my basis for the statement was through my personal experiences in High School. I have been reading science-fiction since 1926 and can truthfully aay that it braadened my knowledge in science. For example, in 192.7. my Junior year in High, we $r$ eived an intelligence test throughout the state: and through the knowledge gained from science-fiction, I was able to answer, on an average, at least ten questions I would have left blank. Incidentally, one of the questions was-who wrote "The Time Machine"? Naturally all readen of science-fiction could answer that one-H. G. Wels. After the test, I was talking to some of my teachers and mentioned the above facts and they all agreed they would rather see their pupils reading that type of literature than "Love Stories," etc.

Mr. Kaletsky (I hope he has purchased this copy of W.S.). I hope you will reconsider your statement "this will probably be my last letter to 'The Reader Speaks" " for I have always enjoyed your comments and "belleve it or not." have gained some tidbits of knowledge through your questioning of the authors on the facts used in their stories. (Editor, I hope he doesn't think I am "soft-soaping" him.)

I have written only three letters to any sciencefiction magazine and WONDFR STORIBS received all three. I notice that a great many readers will write to (1) say it is the best in the field (2) they will add a little more "hooey," and probably (8) will take a "kick" or vice versa. I know WONDEs Storyas doesn't have all of the best stories, for I have quite a few rival mags I am saving for their well-written stories-but-WONDER STORIEs has on an average better stories every month.
I know my limitations as a letter writer and for that reason my letters are few: but I am trying to spread the gospel of science-fiction in my city (pop. 25,000 ) as far as possible, for I know there are many who would enjoy this type of literature. Incldentally. have you received Mr. Bashore's application?

Well, I guess I have said enough, or maybe too much, 80 I had better bring this to a close, and wish the sciences Fiction League to be able to say"Veni, Vidif, Vici."

## Jorn S. Shoonder SFL Member 115. Lebanon, Pa.

P. S. Thank you for the distinction of being an Active Member. No matter how slight it is, I am proud of it.
(You will notice that we defended you in our answer to Mr. Kelotsky's last letter, and brought lothe many "big" names connected with science-fiction.

Speaking of Intelligence Tests, we'd like to bet anyone that science-fiction fans rate higher than other students-in fact, we have seen this to be a fact now and then, not because science-fiction gives you the answers to some questions, but it raises the intellect above average, particularly in our younger readers.

Mr. Bashore has not only joined the Liageve as Nember Number 567, but he has volunteered to form the Lebanon Sctence Fiction League Chapter, which you have heiped him with, and has brought so many new members into the Learije that we are making him an Active Member.-EIU (TOR.)

## "Much More Distinctive"

Editor, WONDER STORES:
There has been-I have noticed-some discussion and detoate on the subject of artists.

What science-fiction magazine has the most attrac. tive, imaginative cover? WoNoER STORIES. And why is the W.S. cover, painted by Paul, so much more distinctive than the omber depressing ictures on the rival magazines? Imagination is the answer-imagination which displage striking details and fantastic effect. Only one artist, of those who illustrate all the science-fiction magazines, can create an immortal picture. And the artist is immortal Paul! Certainly, I'm raving-because Im correct. Many other readers and 1, tco, have turned the problem of artists over in our minds, have concluded that Paul is superior. His fame ijes in his imagination. Some mincis prefer different impressions, like Merey's work, for example. But though opinions may lie where they please, Paul remains the king-tin of them all.

Tom likes "Bob" Denson's stories-he likes them well; but Bill cares more for Rembrandt's works. Who is right? Probably one, but Rembrandt is a better writer than the fictitions "Bnb" Donson. Coincidentally, Paul is a better artist than any of the others. Keep him.

Another thing. I agree in part with the latter portion of Harold $L_{\text {. Zimmer's letter which appeared on }}$ the December issue of W.S. Don't put too much science in the stories. If there must be science, let it be correct. And if there is not any science, then let the story be probable, readistic. Science-fiction stories broaden the reader's mind and act as ingpirations more than anything else. Zimmer's views on this oubject ofier plenty to consider.

Please, please, please, please-please, for the oake of Wonoer Stomiks and thousands of fans, circula-tion-frame the cover aquarely, akd free from wording, marks, emblems, tci!?

Good luck to the League! Hope it collects thousands more members. Also, the more local Chapters, however small, the better. Prospective members are very willing to join when a Chapter has been organtzed. They want to see something concrete. A slip of paper means less to some, than a band of Lisanue enembers holding a meeting.
Good luck to W.S., the best all science-fiction magazine on the newartands!

## Stuart Ayers,

Director, Lewiston SFL, Lewiston, Idaho.
(If it weren't fer Paul's broad-mindedness, we should be afraid that all these letters praising his work would go to his head-hut we know that they act only as encouragement toward greater heights.

We have considered framing the cover illustration free from all kinds of wording and have found it inadvisable for many reason:s-soriy.-EDITOR.)

## The LOSFI

## Editor, W0NDE* Storics:

This lengthily epistle expresses my entire ansper to the fact that 1 have been falling down on the job of getting my monthly letters to you. To tell the truth. I feel that I have not presented enough thoughtful criticisms. The result, this letter.

1 have decided to endeavor to form an organization by the name of "The Legion of Science Fiction Improvement" or the LOSFI. This will include the bettering of the magazine, class of stories, illustrations, letters, and all other things in science-fiction. A peraon can become a loyal follower by simply mentioning an intelligent auggestion and associating it with the LOSF1. The other readers should in their etters pass upon it, and in thig way we, and you, the editor, ghall know whether or not the comments should be actually
carried out, providing it is fessible. There have been many wonderful things put forth in the past issues, but only to fade aday from lack of unity among the readers. An organization such as this is neceded. Below are listed a few that can serve as starters.

Resolved:
I-THAT WONDER StoriEs should return to the large sizc.
II-THAT the gaudy strip on the top of the cover should be abolimbed.
III-THAT there should be more illustrations.
IV-THAT Paul bhould always illustrate the majority of the stories.
Wonder Storibs, in my opinion, should have a half page set aside each month in which all the comments of the month and preceding month are put. The votes cast in favor or against will either eliminate or allow any number to remain in that box. If it remains there four months, it should be classified as a major problem and then it should be voted upon earnestly by the readers. If passed by a three-fourths yote, it should be put into effect. Now how does this berdache sound to all of you?
The November issue I consider to be one of the best that I have ever read in the small size. Every story met with my intense approval-that prehistoric story, that superb little story of the growth promoter, that splendid Weinbaumtale (great!), thofe excellent remaining ones; all gave me a warm feeling and were up to every expectation. Paul, to mg knowledge, has made his frst mistake! The siory definitely stated that the blunt nose sprouted numerous propulsion tubes, and yet the cover depicts a grotesque face. My faith has lost but one electron in Paul, however. "Old Reliable" has before outdone himself to be sure that the scene was exact to every tiny detail. No harm done.
This December issue looks like a whopper! I can hardly wait to read all of it. Boy! What a cover. I like that SFL seal in color; try to have them each month. I read Milton Kaletsky's letter. He is undoubtedly one of the greatest readers and ctif fans that I have ever noticed, net, or hope to meet. He should have an honorary degree in the SFL; I mean possibly Fintasy Fiction Doctor. Everyone should, and does, appreciate his work. The LOSFI I know will vots una nimously for such degree. Mr. Kaletsky, you deserve it.

Dayid A. Kyze.
Monticeila, N. Y.
(Your LOSFI idea is impractical for tro main reasons. First, you sbould realize that we can tell what - er readers want and phat they don't want without casting ballots. If a thing is wanted badly enough, we receive many requesto for it, and if we find it mechanically or editorially possible, we do everything in our power to bring it about. Second, the ballot idea is inadvisable because the great majority of our readers, or the readers of any magazine for that matter, do not respond to ballots, and the results would only show the desires of a very small part of our readers.-EDITeR.)

## Roses and Thorns

Editor, WONDER STORIES:
You played me a dirty trick this month foy sending me the magazine in the middle of the week, right in the midst of school work, and me having to read a five hundred page Sir Walter Scott book for a book report. And that's net all. For the last few months the condition of the magazine as I receive it through the mail has been getting constantly worse. You know I have never complained about uneven edges, but when the magazine comes with a nice tear right down the middle . . . Well, tou know how we collectors are about that. If things keep on like that, I don't think I will renew my subscription. But never you fear about me buying Wonoer Stomiss. I will keep getting it if it takes my last quarter, which it generally does, anyway.

There is one fault 1 have to ind about most of the atories of the last few months. That is, they bave no action. Most of the gtories are just conversation, description, and explanation. I think action is what Mr. Ackerman means by "that indefinable something." I have used that phrase before in my letters, and for a while I was not sure what it was, but now I am convinces that it is at least partly action. Action of the type Smith and Campbell can write. . . . which brings me back to that aubject again. I am soing to holler for Smith and Campbell every month until 1 cet
them. If there is anything to put the magazine decisively on its feet, it is a story by those masters.

The stories in the present issue were all perfect except for the fault mentioned above. I especially Jiked "The Black River." That sure was some ending I "Dawn to Dusk" seems to be getting along very well, except that it is the fourth story of the far future I have read this month. The other three were in another magazine. It seems that science-fiction is like the movjes. We have cycles of various types of stories. You can't imagine how glad I am to see Ray Palmer and Edsel Newton back. How well I remember Palmer's first story, "The Time Ray of Jandra." All time stories are more or less paradoxical, but Palmer's seem to be the less so than any other author's. Edsel Newton's story was written well, with some action, but the plot looks as though he had been going graveyard digging. I thought that kind of story was dead and buried years ago. "The Sleep Scourge" was original and thought-provoking. Up to Kostkos' standard. "The Water Spout" I liked very much, especially for the good science in it. There is one bit in it I am doubtful about, but this is overwhelmed by the originality and correctness of the rest of the story.

Now here comes one of my worst kicks against Paul for months. At last the relapse bas come. The cover is good, as covers go, but the brilliancy that has been present in the last year's work is gone. You'd better give Paul a vacation. Anyway, the people who have been screaming for soft colors ought to be satisfied. But this is not the main thing I wanted to discuss. It is actually a shame how the cover wrecked the story, "The Alien Room." In the blurb you said that it was suppesed to have an 0 . Henry ending. Well, because of the cover, I was actually waiting for that to happen. That's not fair to either the author or to the reader. 'Tell Paul to use better judgment next time.

For the edification of some morons who somehow got their letters into The Reader Speake, I would like to clear up the matter once and for all. Sciencefiction is Science fiction, and without science it is not science-fiction. So what is all the argament about? You have to have science in it, whether you want it or not, and if you don't want science, go read detective stories. So the moral to the story is : give us more science and better science (Smith and Campbell type).

The requirements for science-fiction awards seem pretty stiff, but I'll try my best.

At the first provocation, I am going to get a letter printed in oome newspaper and thus help the Chapter along and make myself an Active Member.

I just got my seals this morning. They are oomewhat smaller than I expected, but they will do. So as not to make you think this letter is a story, I will close.

## Mhton A. Rothman, <br> Philadelphia, Pa.

(There $\$ 8$ very little we can say in answer to your letter, except that we are glad to see that your roses over-balance the brickbats. We think it is a good test of self-control when you receive the magazine in the middle of the week and have to keep it aside until you finish some impor ant work. Self-control is a wonderful thing to have, and you should not say that we "played you a dirty trick" becanse we helped to develop it in you!

We wish you much success with the Priladeripala Sclence Fiction League.-Editor.)

## He Forgot "Tremendous"

## Editor, WONDER STORIES:

The January issue almost makes me shriek for joy. It's colossal. gigantic, stupendous, marvelous, wonderful, superb, and so on, far, far through the dictionary. The stories are top-notch, and Paul's drawings are as good as ever. But I would like to see Paul's covers with a darker background. He seems to do better work on them. And please don't yell that the light backgrounds make the magazines show up better, because in all my experience buying WoNDes Storifs, I have discovered that I can always locate it quicker if it has a dark background, mainly. I suppose, becanse of the contrast it makes with the loud covers of other mags.

Another suggestion (these aren't brickbats or kicks) is that you chuck the foreign science-fiction (except a diversity now and then) and buy from authors in this country. The blue easle on the cover leads me
to believe that you belong to the N.R.A. The N.R.A. recommends home buying, so why not buy Americant And while we are on the subject of stories, what about those story series such as "The Man Who Awoke" and "The Revolt of the Scientists" that went over so big? We readers received hints galore that we would get more of them, but that was lons ago and they haven't seemed to have arrived. What about it? Do we get them?

Now for a kick. In the back of the magazine, almost lost in the advertisements, is a ketter which $I$ think should have been placed first, where everyons could see it. Instead, missives (of which Joseph Hatch's and Donald Wollheim's form excellent, if not too drastic, examples) clutter up.the conspicuous places and such letters are thrust back out of sight. The reverse should be true. Frances Tebbetts' letter should have taken a conspicuous place while others were thrust back. For that letter was a masterpiece, the best I have had the pleasure to see in the department for some time. Keep sending letters. Frances Tebbetts, and may your next letter, if only half as goed, be put on the cover in red ink.

And before I forget, I wish to cast my vote for more interplanetary stories. They seem to be about extinct in WONDER STORIES. JACK Scy ALlas?,

## Director. Eria SFL, <br> Erie, Penna.

(Thank you for your kind thoughts and suggestions. As the Director of a local Chapter of the Lqagu8, your opinions have an added significance.

You will notice that WONDEL STCRIES has a dark background almost as often as a light one. We put as much diversity on the covers as possible, for even illustrations can become hackneyed.
For your information, most of the money paid for foreign stories goes into the pocket of the American translator, so we stick very close to all the policies of the N.R.A.

We are giving you series of stories like the ones you mention in your second, paragraph. Laurence Manning's new "Stranger Club"' yarns, running every few issues since November, 1033, are of this type, though we find it inadvisable to place one in every issue.

Every month we attempt to lead off this depart ment with some exceptionally interesting lettex, such as those written by Andrew Lenard and Rice Ray. We have explained the lack of interplanetary fiction in WONDER STORIEs elsewhere.-EDITOR.)

## "Remains About the Same"

Editor, Wonder Stories:
I cannot agree with the statementa made by some of your correspondents that WONDER STORJEs has fallen off in standard recently, nor can I agree that WONDER STORIEs is getting better with every issue. In my opinion the level remains about the samegood, but capable of improvement. In recent issues, the best stories have been "Exile of the Skies," "A Martian Odyssey," "The Man from Ariel," and "Spore, Doom," while the worst, were "The Lunar Consul," "The Inquisition of 6061," "The Last Shrine," "Invisible Monsters," and the awful shorts that you publish to fill space like the "Sense Twister" or "A Hair-Raising Tale."

All your artists are good, but why must a spaceship in one of their pictures be streamined? There is, from what I have heard, no air to make resistance in space. And while I am on errors, in the August number Eando Binder says that the new acid was a compound of helium and chlorine; then it was not an acid, for it contained no hydrogen, though it might have been a very corrosive substance.

I am enclosing an application for membership in the Science fiction League, which I bope will fourish.

Donald G. MacRas<br>Glasgow, Scotland.

(Many of the stories you do not like, especially the short-shorts, were very well received by the majority of our readers and we bope that you realize the gay. ing about "one man's meat" applies very closely to magazine stories.

Space-ships would be streamlined because of the air resistance in approaching and leaving, planets, which would be much greater, at the speeds space ships would bave, than is the case with air vessels.

We will have to assume that the acid used in Eando Binder's story that gou mention also contained hydrow gen in addition to the helium-chlorine compound. We
are either to assume this or that by the time the story takes place, acids without hydrogen will have been perfected-EDITOR.)

## In Answer to Kaletsky

## Editor, Wonder Storims:

Now that the mighty Kaletsky has unhorsed our oditor and is riding in triumph to his pavilion. methinks the time for action has come. Hola, Sir Mitton I I ase striking your shield with the tip of my lance, and the fray will be hot and heavy.

Of course you have a perfect right to your opinion, but a mind as keen as yours should perceive all sides of the polygon before declaring what manner of figure it be.
You place a particularly low value on science-fiction as a whole, and on the readers therein: it seems that you have either over-lashed or grossly underrated several factions in your equation.
(1) The Educational Value.

Very well, perhaps what the editors have been aaying is just a lot of advertising ballyhoo. Take, then, $50 \%$ of the case off to allow for this. And take off another $25 \%$ for personal prejudices on my part. (Everyone, no matter how broad-minded he tries to be, is prejudiced on some point or author.) What have we left? Still a goodly amount enough to be worth the while of the average citizen who as a rule must go to the text-books for whatever knowledge he derives. You will immediately state that this is all wet because of the many misstatements and errors to be found here. To a scientist, perhaps it is. But not to the average citizen whoee highest understanding of science is a somewhat hazy recollection of the few elements he learned in school. Sciencefiction will arouse his curiosity, make him review What he knows, and want to learn more. Perhaps he will remember enough to see that such and such a tale is a bit unsteady. He will say to himsel $f$ : "Now I don't know much about science, but so and so looks screwy to me." And the chances are that he will look the subject up a bit. Then patting himself on the back for his keenness, he will look farther to see what else can be found and subconscjously realizing the fact, start an immature course-self-taught-in science. But, whether or not he finds any errors, his interest in science will have increased. He will find that. far from being the dead dry subject it always seemed to be bits of sacred knowledge, as it were, attained by only a select few-science is alive and peppy. Full of tricks as a kitten and just as much fun-in fact lots more-once he gets going.

And I do not believe that I am the only one who found Physles much more understandable and agreeable, due to my pre-physical course in science-fiction. So much for that.
(2) The Inspirational Value.

All right, suppose so and so's ideas are full of holes. You write a scathing letter either to the editor or the authors pointing out the leaks in the old tub. So and 60 plugs up the leaks, and you find water seeding through the patches. All the time, between the two of you-or three, all depending upon how many are in the melee-you are developing some thing which, when all is said and done, may have practical value, and not something miles ahead of science-fiction either. Outer planetary travel may be way off the trend of development, but do you realze that the sclence-fictionists have solved (on paper) every physical difficulty that is known to exist? Of course, there are loads of things that have not been touched upon as yet-the psychological prob-lem-and difficulties of which we, as yet, are unaware, but as new things arrive, they are dealt with.

Remember also that the scientist must stick to known data in his routine. But in fiction he is unlimited and can propound anything he likes without fear of ridicule. And in a field where absolute freedom and thought reigns. (I'm not saying it doee, yot, but we are coming to it). He may use all those ideas which in his routine were too fantastic or crazy. No matter how logical it may seem, a scientist cannot propound a theory that sounds fantastic in his routine. Witness Langley who was pratically ridden to his grave for propounding things that are in common usage today.

And last, but not least, a public that has been nurtured and nourished with science-fiction will not give its Morses, Galileos, and Langleys the reception they gave to so many who have gone before.

Vour turn, Mr. Kaletsky.
In conclusion, Mr. Editor, let me say that 1984 has been a fine year fof WONDER Stories. Lots of luck to you, and I hope you never run out of aapirins. Or better still, that you won't, in the future, need to reach for them.

Robert W. Lownoes.
Darien, Conn.
(Your arguments for science-fiction show that you know your subject well and bring out many points know your subject wel and bring out many point the real value of science-fiction. It is not to give you a complete scientific education, though much knowledge can be found through the stories, but rather it is to inspire the readers to wart to learn science. As you say, it creates the desire for knowl edge of pure science, and takes away the fear of it that so many people have. We sincerely believe that science-fiction is turning many people to science that would otherwise never have an interest in it, and perhaps some of thase converta will some day prove to be the world's greatest scientists, and will be abla to say "I owe it all to science-fiction !"
We doubt that Mr. Kaletsky will bother to answer your letter, as he is so thoroughly disgusted with science-fiction. but that does not detract from -the value of your letter.-EDITOR.)

## Celestial Bodies

## Editor. Wonder Stories:

Just a few words for The Reader Speaks.
I have always enjoyed W.S.. and have but few words of adverse criticism. I know that errors are inevitable in any magazine of the science-fiction type, and can excuse most that I see in yours.

Occasionally my enjoyment of an otherwise good story is much diminished by a rhetorical crassness of a few of your autbors; and again it may be due to an error in either logic or sclence, or perhaps both. But that I keep reading W.S. with great avidity testifies to my liking for it.

Now, as to a few of my favorite writers, I may mention : Jack Williamson; Clark Ashton Smith (who knows how to write, and is a man of marked talent. although some of his stories have had little or no real science): R. F. Starzl: Edmond Hamilton-I regret to see fewer stories by these latter writers: David H. Keller ; Nat Schachner: R. Vaughan. This is not disparaging many others, whose stories I greatly enjoy. A high literary standard should and can be maintained in science-fiction.

I should like to point out one error which is rather too frequently made by s.f. Writers: it is their assumption that a smaller body falling toward a larger one in space will almost invariably become a satellite of the larger body. Precisely the reverse would be true: the smaller body would be far more likely to crash directy into the larger. For a body falling toward anotber to become its satellite, several delicate facts would have to obtain, the main one, however, being that the angle of approach of the falling body must be exactly that which permits of a perfect equilibrium between the centrifugal and gravitational forces involved ; and this dellcate balance would be, in my opinion, far less likely to occur than a direct collision of the two bodies.

As a rule, I do not ene very much for time-traveling or hyper-dimensional fiction ; it is too utterly unthinkable.
R. Framarick Hester.

New York City, N. Y.
(It does not take such a delicate balance for a small body to become the satellite of another, it is our belief, because of the frequency of this in the universe. We might liken the balance to the elasticity of a rubber band. It would take an unusual disturbance in the solar system to bring the moon very much closer to the earth than it is, or very much farther away, but if such happened, it would either crash into the earth or fly ofi into space. You can take a ball and place it on the end of a string, say two feet in length, and then swing the ball around. The ball will revolve at a specific distance from your hand without flying away because it is fastened to the end of the string. The primciple of planetary attractions is very. similar excopt that the pull is not represented by strings, but the force of gravity.-EDITOR.)
(Continued on next page)

## SCIENCE FICTION LEACUE

(Continued from page 1896)
send your name to us with those of all other members who wish to form the Chapter and the name under which the Chapter will be known. We will send you an ofncially signed certificate, confirming the existence of the Chapter with its number.
(4) Try to write editorials propounding the merits of science-fiction in general and place them in your local newspapers. Stress the fact that science-fiction is educational and broadens the minds of the readera.
(5) Study science-siction carefully and form a series of conclusions in your mind as to its merite and accomplishments. Organize your ideas so that you can talk freely and convincingly to potential followers on the subject. Be able to tell at a moment's notice just what it is and why you are an enthusiastic advocete. This, with Suggestion Two, is very important to the purpose of the league. All members who are insticneental in securing any special attention to the LEAGUE will receive due acknowledgment and will find that it will be profitable to them to be 80 mentioned.

The Leagud has one prime purpose-to spread the worthy gospel of science-fiction. That is the basis of the Leagus, and its gasl will not be reached unti everyone knows of science-fiction and respects it as the most powerful literary force in the world. We can hardly hope for this for a long time to come. but every seheme, plan, or idea that will aid un in reaching that goal is welcome. New ones will be broached every month by the executives and members-will you do your part? We do not expect every member to have on inexhaustible reservoir of ideas, but wo will appreciate all suggestions offered.

If you have not as yet joined the Leagum and wish to do so. you will find application blanks in this department.

## THE READER SPEAKS

(Continued from preceding page)
"The Fly in the Ointment"
Editor, Wonder Storubs:
Some monthe you reach the boigeto, and some the depths, but this month it's both; I just can't resist writing when something like that happens. To conform with my natural behavior, Ill be mean farst-and could I throw things when I read fops like "House of Lifonstrosities"? 1 could, if you weren't so far away ; as it is, all I can do is to write violently, at length, and illegibly.
Knowing that to criticize, or rather, condemn. without stating reasons, is to be unfair to the editor, I proceed: in the first place, the man in the drawing looked only sliphtly bothered, and though the corso of his little playmate was a monstrosity, the expreasion is his eyea was that of a devoted puppy and made me long to scratch hia ears and stroke bia back. 101 ceurse, 1 realize this isn't about the story, bat don't get optimistic. Im coming to that.) In other words, 1 don't like Marchioni-most of the time. Now for the plot: I won't say it's exactly weather-beaten, but gruesome monsters, ''Frankenstein," etc. don't sound exactly original. The characters: Stancliffe was sort of dumb, I think, and the absent-minded reporter woas dumb. The author, I imagine, if he had a worth-while plot, would make rather a swell job of it, for he showed good descriptive abilities.
"The Sleep Scoarge" had a madeto-order ending. Wasn't particularly well-written, either, considering what the author has previously done. There's one 2ming l'll grudgingly admit; although the illustration was by Paul, I-miracle of miracles-liked it immense19. Goes to show that if he'd leave human beinga alone, be'd be good.
There's still another poor story to be slammed: "Tree Black River." Being laid on earth, this story needed expert handling. I almost thought it had recejved it, hut that was before 1 came to the endmerels a variation of the "wasn't-it-an-awful-dream q" Idea. Phooey!
Now for the best in the mag. (And am I glad to come to itl' Every story Eando Binder writes is better than the last, and in "Dawn to Dusk" he has all bot equalled "Exile of the Skies," which in itself surpasses any Skylark yarn ever written. I'll adonit


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## THE READER SPEAKS

(Continued from page 1403)
that Andrew is a little dumb in spots-but what man isn't? (You missed me: I ducked.)
The cover was not as bad as usual. In fact, for the first time a blue background by Paul turned out as hoped. And The Reader Spaaks was nice and intelligent, as it usually is. That is, except when I'm in it.

To return to the stories: "The Alien Room" was nice. Shrieks for a sequel can be heard in the distance. however.
"Higher Jurisdiction" is the best shori-short you have so far published, mainly because the great discovery doesn't turn out to be a hoar in the end. and secondly because it's by someone who knows how ta write.
"The Moth Message" was swell. The Stranger C'ub series is already as good as "Revolt of the Scientists," and almost as grand as the "Man Who Awoke." I wish there would be more of the latter, concerning a series of unconnected adventures of the same person. (In that I don't mean more of Norman Winter, but more of that type.)

Ray Palmer scored in the "Time Tragedy" yarn, although up to the last moment, I thought he had gone back in time to kill his grandfather and had missed the exact time (before he was born) in which he had meant to kill him.

Having disposed of the issue generally for December, I will devote the rest of this book to a few comments

I made a mistake when I said that The Reader Stpeaks was nice and intelligent. Mr. Kaletsky was the fly in the ointment. Nuts !

I'm enclosing my League application. Don't know why I delayed so long. Just lazy, I guess.

With all the best wishes for Wonoer and the League. Virginia Kiod. Catonsville, Md.
(We are always happy when we spy a letter from Miss Kidd in our day's mail, for we know that they are always enjoyable, even though they contain many friendly brickbats.

We can see your objection to "House of Mon. strosities." for we have discovered that our readers do not like the "Frankenstein" type of story, but we are at a loss to account for your dislike for "The Sleep Scourge." It was an unusually well-written and developed story and has been acclaimed one of the best stories in the issue. "The Black River" was not all a dream, as you will recall, and we thought that the division point between dream and reality was well worked in and imperceptible until the fact was re vealed.

We have been told very often that The Reader Speaks is well worth the price of the book and aurpasses that in any other science-flction magarine, in interest, and such letters as those from Milton Kaletsiny and Donald Wollheim, though the height of condemnation, adds to its value. We do not discriminate in printing letters or have to "fake" any.

You can throw things at us any time, and we won't even duck.-EDITOR.)

## "Competitors Cannot Compare"

## Editor, Wonder Stories:

I have been reading WONDER Stormes for quite a time and you ought to call it Wonderful Stories.

Your competitors cannot compare their magazines (so-called) to yours. Your magazine is so good. I can not express myself. Sometimes you have some terrible stories, but these are very few.

Paul is the best illustrator I have ever heard of or seen and I agree with my fellow member William Rothleder, but I will not make the mistake of disintegrating Long Island, but will set right to work on Manhattan if you fire him.
I like Eando Binder and Dr. Keller stories. Well. I've said about enough and don't forget to give Paul a pat on the back for me. So long till next time.
A. J. MODresatr.

Mineola, Long Island, N. Y.
(We shoukdn't like to change the name of the magazine, of course, though we appreciate your sentiments.

We also realize why gou are against the disintegration of Long Island.-EDITOR.)

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# Reduce Your Waistline $4 t 06$ Inches 

## How DIRECTOR Works

DIRECTOR is fitted to your individual measme without laces, hooks or buttons. Its elastic actióncavees a gentle changing pressure on the abdomen, bringing results formerly obtained only by regular massage and exercise. Now all you have to do is slip on Director and watch results.

## Improve Your Appearance

This remarkable belt produces an instant improvement in your appearance the moment you put it on. Note how much
 PREE Boolk
Tells How tet uaprove
our ciaime We'll send a Director for trial. If you don't get results you owe nothing.
Mail Coupon Now!

## LANDON \& WARNER

360 N. Miehigan Ave., Chieago, ill.
Gentlemen: Without cost or obligation on my part please send me details of your trial offer.

## Name

Address
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better your clothes fit and look without a heavy waistline topull them out of shape. You stand erect-improves posture.

## Restore Your Vigor

"I received my belt last Monday," writesS, L. Brown, Trenton, N. J. 'I feel 15 years younger; no more tired and bloated feelings after meals."

Director puts snap in your step, helps to relieve "shortness of breath," restores your vigor. You look and feel years younger the moment you start to wear a Director. No more "fagged-out" feeling.

## Break Constipation Habit

"I was 44 inches around the waist -now down to $37 / / 2$ feel better-constipation gone - and know the belt has added years to my life." D. W. Bilderback, Wichita, Kans Loose, fallen abdominal muscles go back where they belong. The gentle changing action of Director increases elimination and regularity in a normal way without the use of harsh, irritating, harmful cathartics,
"T more the Dijector Beltandres duced ny waistline from 42 te 33 inches. Practically all edipose tise sue can surely be eliminated ly it fauthful use. 1 have recommended it to many of my patients.

A Help to Health
I have found the Director Belf very efficient in reducing excess fat at the abdomen.
The massaging action of the belt streng thens the abdominal miuseles streng thens the abdominal muscles
and prevents fatty deposits in the and pree
It also increases activity of the stomach and liver, incuases the flow of bile and aids digestiop and elimination.
This is my experience and I con. sider these facts important enticugh to be stated in your advertise: ments. W.H.Morse, M. D.

Reduces 5 Inches I mant to say that your $I$ ry tor Belt is the finest thing I evel -re, easy and comfortable. I wayt another, but not as large, ass 1 K 5 inches smaller around the vain now.
F. R. Cowan, Pinehurst, N.C.

## Was An Athlete

Your belt received and worn for 30 days and is more than you said. I have been in profestional basket: ball and athletics for 15 years. Have beeninactive fors y years sind Have been inactive for 5 years and I have had your belt I have ret duced 4 inches and soing fine, feel great, R, Le Mart DEPT. A-10 CHICAC0, IIL


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[^1]:    *Radlosd - balf-life period of radium. About 2000 years.

[^2]:    - Appalled at the enormity of my offense, I gaped at the Professor in awe-stricken silence.
    "There's no use talking," mused Tan

[^3]:    "No, thanks!" I decided. "I don't care to be a spy-"
    "But think of the honer! No profession

[^4]:    1. What causes the bends, and who is subject to them? (See Page 1306)
    2. How is the bends relieved? (See Page 1306)
    3. Is liquid compressible? (See Page 1307)
    4. How is the magnifying power of a lens increased? (See Page 1307)
    5. What lenses must be very close to the objects observed? (See Page 1307)
    6. Name a few microscopic animals. (See Page 1307)
    7. What causes a painful sensation when gou are hit with a hammer? (See Page 1309)
    8. Name three insects that may be said to be socialistic. (See Page 1317)
    9. Describe the racial intelligence of the termite. (See Page 1318)
    10. What is the function of the queen ant? (See Page 1318)
    11. Where are the Pyrenees Mountains? (See Page 1333)
    12. Where are giant termites found? (See Page 1382)
    13. What is the scientific name for the gullet? (See Page 1385)
    14. Tell how the voltaic battery works. (See Page 1386)
    15. Could a planet exist closer to the sun than Mercury? (See Page 1386)
