

(Illustration by Ruger)

"For twenty-three hours the people of earth will enjoy the spectacle. Then every vestige of life will perish in a rain of burning hydrogen and calcium."

HERE was nothing opposite my name on the assignment list, and though a promising crap game was going on in the engraving room the prospect of even such mild exercise as rolling the bones was unpleasant on so hot a night. At the risk of being nabbed for re-write duty I slipped into the city room, composed myself at my desk and began to look over the paper. I might have spared myself the trouble; the

world wagged on without excite-ment; nothing ever happened any more. And out of sheer ennui I began to work the cross-word puzzle.

One side of an irritating conversation that McCarthy, the city editor, was holding over the phone with somebody began to impress itself on my consciousness and I looked up. Just at that moment he hung up the receiver; his eye lit up with the ghoulish glee city editors always have when they can give one an unpleasant task, and he called, "Furness!"

"Go out to thirteen Argule Road," he said, shoving me a slip of paper, "and see Professor William A. Brooke. Get that? Brooke, not Brooks. He's the astronomy professor at Lyon U., and he lives

there. Has his observatory in the back. Got some kind of a story about a comet hitting the earth or something. Find out what there is to it, and get all the pictures you can. Might make a Sunday story if it looks good. And be back by ten-thirty; I want you to do some re-write on the A. P. mail stuff for fillers."

It wouldn't have happened on any paper but the *Times*, I told myself angrily. But McCarthy always had more reporters hanging around the city room than he knew what to do with (provided by a muni-

CINCE practically the beginning of history, there have D been predictions about the so-called "end of the world." Many of these predictions have been taken from Biblical quotations and others originated from the delusions of men who styled themselves as prophets.

Of course when they spoke of the "end of the world" they meant the destruction of the earth; for the cosmos itself is such an immense thing that it is almost hard to conceive of its total destruction.

There is no doubt, however, that what brought our earth into being-the collision of a great star and our own sun-might also destroy our earth. And, as our wellknown author points out, it is not necessary, for the destruction of the earth, for a body to actually strike the earth.

It is certain that we, on our little earth, live a very precarious existence. We are practically at the mercy of the great cosmic forces about us, and there is no telling when some strange body entering our solar system may not end our short but glorious career.

ficent and enthusiastic management which advertised a policy of "Covering every event, no matter how small.") To keep them in a proper state of subordination he felt it his duty to give them all a wild-goose chase once a week at the least. McCarthy! That fat tub of-butter! What makes him think he's a news-paper man? (I was boarding a car full of various sweaty individuals and wishing them all in Gehenna). How unpleasant he was with his moonlike face shining with tiny globules of perspiration.

The builders of Lyon University, wishing it to have the advantages of nearness to the city without the at-tendant disadvantages, had planted it far on the outskirts. Even beyond the main buildings of the place, and a good long walk from the end of the street car line on that hot night, was Professor Brooke's observatory-a little round tower with one long wing running out toward the street, perched atop the only eminence the county boasted. It had been the professor's home and workshop for a good many years.

Let's see now. . . . He had discovered the big comet there, good Lord, how many years ago? There he had conducted his researches into the motions of the planets. I remember the little parade when the ambassador of some foreign power had come to town to tender

him a decoration in the name of his government, also long ago. Since the death of his only daughter, last year, the professor had been more or less in retirement. It was considered not good form to disturb the old man by signing up for one of his personal courses. There was even a rumor running through the whispering gallery of the newspaper offices that he had gone a little off his chump. Hadn't he got religion or something? Some queer story about his actions on the occasion of a noted evangelist's visit to town seemed to be just eluding my memory . . . At any rate, most people thought of him as a figure of the past, and it would probably have surprised even the readers of his many books to know he was still liv-

ing. I toiled up the steps to the professor's front door. The bell was of the old-fashioned pull type; the house utterly dark. I gave a couple of vigorous yanks and heard a faint echo of the clamor, far away. No answer. I pulled again-and down toward the end of the long hall a yellow pennon of light shot out and an indistinct form was outlined against the glare.

It proved to be a woman, tall and muscular, with a face hardened by years of labor and grey hair pulled back tight

from her forehead to a knot on the nape of the neck. "What do you want?" she inquired ungraciously, holding the door open a fraction of an inch.

Down the hall another streamer of light shot out. "I'm from the *Times*," I began, "Professor Brooke-" "Anna!" came a deep voice, "Anna! If it's the young

man from the newspaper, send him in."

He met me at the door of the room-a big man, well over six feet, now slightly bowed with age, with small eyes under a huge leonine mane of white hair, peering at me in a manner just barely courteous. (An irascible Professor Brooke, I thought). "Professor Brooke?" I began, in my best manner, "I'm from the—" "Yes, from the *Times*. Come in. I have something

of the utmost interest to the general public." He stood aside for me to enter, holding the door open with hands that trembled with the palsy of age. "You are a college graduate? I asked particularly for a college graduate. The ordinary reporter would not understand the importance of the discovery I have made. It is necessary that it be set forth clearly as it is my final legacy to the world. I shall not be here long."

"Yes, I'm a college graduate. Cornell, '21." (Reporting teaches one to lie quickly and without effort.)

One had an impression of dusty age and Victorian furniture in his study. Pity Lyon U. couldn't put things in shape for its most distinguished professor. Or maybe he didn't want them to. . . High ceiling, fireplace surrounded by gimcrack carving. Shelves and shelves of books reaching away up into the gloom—a dusty gloom overhead where the rays of the old-fashioned oil burning student lamp on the desk could not reach. Victorian swivel chair in which the professor seated himself with a creak. No carpet—my footsteps echoed hollowly. Altogether an eerie place, like a room long abandoned by living things.

"Pull up a chair, young man. I dislike raising my voice." (His eyes, big and deep-set, caught queer gleams from the student lamp, like opals. A slight shiver of discomfort ran through me). For a moment he looked me up and down, like a new specimen. (Do astronomers examine specimens, I wondered?) I was recalled by his voice.

"Did you take an astronomy course at college?" "No."

"Ah, too bad. My old friend, Professor Burgess has ... pardon me, I had forgotten for a moment that he is dead... And doubtless you have forgotten a good deal of your mathematics. However, it is not important; the main thing is that you apprehend the facts correctly. I suppose I can trust you that far?"

I stirred in my chair and to encourage him produced the folded sheets of copy paper that are every reporter's notebook. (Singular beginning to an interview, I thought.) The student lamp guttered a trifle. He adjusted it, making tall shadows leap among the jig-saw decorations of the fireplace, and then fumbled in his papers.

"The world is coming to an end!" he ejaculated with startling suddenness, looking me square in the eyes.

"Yes?" I said (Too bad, I thought, the old man is giving out.)

"Yes!" Half rising from his chair. His voice went deep with solemnity. "You are skeptical. 'Hear now this, oh, foolish people without understanding; which have eyes and see not; which have ears and hear not.' The world is as sunk in material concerns as it was in the days of Jeremiah, the great prophet. But I can prove what I say; I can prove the necessity of contemplating the infinite." He paused, breathing hard. "You shall be my mouthpiece unto the generation, and I will reward you by preserving you from the wrath to come. The world must be convinced of its doom and given the opportunity to set aside material thoughts. I can no longer keep silent. I have consulted my conscience and find that I must speak."

"How can I help you?" (This was going to take delicate handling.

"Take down what I have to say. I have made one of the greatest discoveries in the history of astronomy and mathematics. But I take no credit. I am merely the Heaven-sent messenger, as you are the mouthpiece ordained. Hear me—"

The Great Problem

A GAIN he stirred among his papers and the mouth was set in a grim line, while the deep eyes burned. It was very hot in the study.

"You know what the problem of three bodies is, no doubt. I have solved it, and with it, the problem of four, five or an infinite number of bodies."

"I understand. But wouldn't you explain it in your own words? A statement always carries more weight if it is a direct quotation, especially on good authority."

A piercing glare from the deep-set eyes. "Young man, I believe you have been lying to me. If you ever knew anything about mathematics, you have forgotten it totally. However, better a reed than no staff. I will tell you:

"You know that every astronomical body exercises a certain influence upon every other in accordance with the laws of gravitation. For your convenience,"—he accented the pronoun with what was almost a sneer— "I will state that law, which you ought to know. 'Any two particles of matter attract each other with a force proportional to the product of their masses and inversely proportional to the square of the distance between them.' That is, the larger two bodies are, the more they tend to draw together; the further apart they are, the less they tend to draw together.

are, the less they tend to draw togenificant as it is, "Under this law our earth, insignificant as it is, places a certain pull on every star in the heavens, even Sirius, which is many times the size of our sun." The strange light in his eyes seemed to be dying now; he had become the professor of astronomy, lecturing to a class. "You follow me?"

"I understand," I said, making notes rapidly.

"Now naturally the forces exerted upon each other by our wretched little planet and the star Sirius are very small, the distances between them being so great in proportion to their size. On the other hand, the force exerted by the earth upon say, a ball tossed into the air, is very great, as the two are so near each other. The ball falls to the earth at a speed which increases as it falls. You follow me?"

"Perfectly."

"You might think that the force of gravitation would cause the planets to collide or to fall into the sun in this case. It would, but for one thing: the planets are in motion. According to Newton's first law of motion, a moving body on which no force is acting tends to travel in a straight line with uniform speed. If a force is acting on the moving body it will change the direction of its motion. Now the planets are in motion; they would tend to travel in a straight line at uniform speed off into space were it not for the force of gravitation. Since they are, the force of gravitation, which would pull them into the sun were they at rest, merely changes their line of motion from a straight line into the path of an ellipse."

"May I ask a question, sir?"

"You may," with a regal gesture of the leonine head. "Why didn't the planets fall into the sun in the first place before they got into motion?"

"There are various theories on the subject, but none of them are germane to the present subject. Permit me to continue. . In short, the solar system is in a state of balance; the motion of the planets and the influence of gravitation keeps them relatively in their present position.

"Now it is possible to calculate the positions of two astronomical bodies of given mass at any given time under the influence of their own gravitational force and whatever motion they possess. That is, it is possible to determine how they will affect each other's motion and what their positions will be at any given time."

He swung his arm up with a wide sweep. "God has given to the astronomer of the past an ability to solve this problem which is known as the problem of two bodies. It is accomplished with the aid of the calculus, which you should, but probably do not, understand.

"This method is used in determining the positions of the planets. It is comparatively successful because the sun bears practically the same relation to the planets that the earth would to a ball tossed in the air. It is so very large that its gravitational influence overwhelms all minor forces.

"The same method is used in calculating the movement of the moon with relation to the earth. But in this case it results in small inaccuracies because the moon is far enough from the earth to be influenced by the attraction of other bodies, particularly the sun. Similarly there are small inaccuracies in calculating the positions of the planets by the method of two bodies, since they are influenced by the gravitational attraction they have for each other. The changes in their motions caused by this influence are called perturbations."

The Instrument of Destruction

E stopped to let me catch up. The light quivered and the shadows moved; the heat pressed upon one with a weight almost physical.

"These perturbations are not serious. They alter the planetary orbits in small details alone, not the stability of the whole system."

He stopped again and cleared his throat, then rising from his chair began to pace the room, the long shadows following him before and behind as he walked, his white hair hanging about his face, his head bent. He stopped suddenly, and as the light caught his eyes there was again that opaline gleam.

"Now that the moment has come," he said, "I find it difficult to speak. What does the Bible say? 'As a thief in the night.' And yet . . . why was I allowed to discover this but to give my warning to the world to turn from material things before it is too late. . .

"Suppose you have three instead of two bodies to calculate. The masses of all three must be ascertained; their normal motion aside from gravitational and other influences; the influence of each on the other two. Obviously the problem is of immense complexity . . . In fact, let us take a case. Suppose there were a small planet revolving about the sun in a peculiar orbit. The earth's orbit is readily calculated. So is that of our hypothetical small planet. At a given time this planet comes very close to the earth, almost as close as the moon. Now the gravitational attraction of the earth will change its motion; in fact, the earth will seek to draw it from its path and make another moon of it. But the powerful attraction of the sun will not permit this to happen. The net result will be that our small planet will be thrown off its old orbit into a totally new one; in other words, the perturbations, the inaccuracies due to the attractions of other bodies than the sun, will be immense. Sometime in the future it will again pass through the spot where the disturbance occurred at the same time the earth does. There will be another perturbation, and the second one will be greater than the

first; in fact, so great that the small planet may be hurled off into space, never to return. To calculate the path of the small planet through all these perturbations is the famous problem of three bodies. You follow me.'

"I think so. If one of the bodies is very small and comes very close to another it will-run wild. And it's

very hard to tell where it will go to." "Excellent, excellent . . . That is the problem of three bodies. Now a mathematician named Sundman of Helsingfors has worked out a solution for this problem. But it is a solution involving so much effort and so great a time, that it is a mathematical curiosity of no great practical value. . . . An error of less than half of one percent in the weight of one of the bodies involved, for instance, would change the whole solution; and it is impossible to weigh astronomical bodies without an error of half of one per cent. . . . But I have now solved this problem of three bodies; or of four or five or an infinite number of bodies, and with a practical formula.'

"Isn't that a matter mainly of scientific and technical interest, sir? How does it—" "Be still! You are thinking on a material plane. . .

None of the planets, most astronomers hold, are in danger of colliding with others, or of falling into the sun, or of being hurled off into space by the influence of other planets. There are numerous calculations to show But the calculations are incomplete. They are this. based on the solution of the problem of two bodies. A very small planet strongly attracted by others is related to the problem of three or four bodies, not the problem of two. Everyone recognizes this, but under the best formulae now known to the world it was not supposed that any planet would deviate far from the normal. However-" he drew a deep breath, reared himself to the whole of his magnificent height and shook his hand before my face, "there is such a planet." He glared at me from those deep-set eyes blazing now. " There is

such a planet !" he cried again. "Mercury . . . "I began hopefully. "Fiddlesticks! If you had studied astronomy—if you had even an elementary education you would know that between Mars and Jupiter there are a number of tiny planets. The largest is hardly large enough to make a good-sized island on even this small planet of ours. They are called the asteroids. Some of their orbits are very peculiar, and that of the asteroid named Eros is so peculiar that at the one end it is near the earth, while at the other it is beyond Mars, far out toward Jupiter."

"Yes?" I said as he stopped.

"Eros is the instrument for the destruction of this world," he replied, resuming his march about the study, the vast mane of hair shaking like a white flame above his head.

"How ?" I made bold to ask. "If it is so small, a collision with the earth would hardly-"

"It Will Strike the Sun!"

OLLISION with the earth! Who spoke of a collision with the earth? Absurd! Eros will not collide with the earth. If it did the only damage would be the passing from the material plane of some thousands of individuals within the immediate vicinity of the disaster. Eros will not strike the earth, but the sun!'

(I was evidently supposed to be impressed, and growing a little nervous under the impact of his mounting vehemence, thought it best to appear so. Though why the collision of Eros with the sun should make a difference ninety-three million miles away, I did not see.) However:—

"You say you can predict this by means of your formula, professor. May I ask when the collision with the sun will take place?"

"What does it matter? 'She shall be utterly burned with fire, for strong is the Lord God who judgeth her.' ... But wait, I forget myself; they will not believe unless I descend to their own petty plane and furnish them with material proofs. Here—"

He thrust at me a sheef of papers covered with the hieroglyphic signs of mathematical astronomy. "Have your paper print these. Take them to any astronomer. None of them are such fools that they will fail to recognize facts as obviously presented as these. Let them apply the solution I have here to the motions of Eros. It will at once become evident that Eros will approach the earth so closely on January 30, 1931, as to be seriously disturbed in its orbit. On January 22, 1933, it will again approach the earth along its new orbit and this time will be deflected into a path which under the influence of Venus (which it will also approach very closely) will hurl it right into the Sun on March 16, 1934. Twenty-three hours later life will cease to exist on earth. 'For the great day of his wrath is come; and who shall be able to stand?' But I will be beyond that; it has been revealed to me that I am not much longer for this world. I must hasten —oh, make haste," he broke off muttering.

"Why will the collision of Eros and the sun cause life on earth to cease?" I asked. "I don't quite see—" "Any fool should know that. Look! If a body of

even smaller dimensions than Eros strikes the surface of a star-I assume you have the elementary intelligence to know that our sun is a perfectly normal star -it will rush into it at a high velocity, thanks to the force of gravitation. In the denser layers of the interior of the star it will come to a stop, and its energy, which has by this time reached enormous figures, will be transformed into heat. I have calculated the amount of this heat; it is millions of degrees. So intense a spot of heat in the interior of the star, a pocket so much hotter than the surrounding matter, will bring about a further release of heat-energy from sources inside the star, and the center around this body will become still hotter. The temperature generated will be quite adequate to blow off the whole upper layer of the sun, at a speed so great that it will escape the gravitational force of the sun's attraction.

"The gases of the outer shell, at incandescent heat, will rush out into space at speeds of the order of 1700 kilometers* per second. For twenty-six hours the people of the earth will enjoy the spectacle. Then every vestige of life will perish in a rain of burning hydrogen and calcium."

I shuddered. The prospect was not attractive, the date dreadfully near. But would people understand the professor's technical terminology any better than I did?

"I'm afraid, professor," I said," that we couldn't use the story—"

"Couldn't use it!" he cried, his voice fairly making the ancient lamp on the table tremble. "Couldn't use the last warning of the doom that will inevitably strike the earth! Of—"

"Couldn't use it without having it couched in some-

* Slightly over 1,000 miles.

what less technical language," I finished as firmly as I could manage.

"Oh!" He was silent for a brief moment, then strode to the door. "Anna!" he shouted, "Anna!" Interval of silence, then the pat, pat of slippered feet. "Will you call Mr. Schlecter?" He turned back to me. "I have an assistant who, however superficial and material he may be, is capable of accurately expressing the tabloid tendencies of this age. I was not minded to show him my researches, but he shall now convince you." He thrust his hand behind his back, sweeping back the folds of his old-fashioned frock coat, and began to pace the floor, his head shaking.

Schlecter, a thin, prematurely aged man with gold eye-glasses, came in almost soundlessly to be pounced upon at once by Professor Brooke.

"Here!" cried the old man, snatching the papers from my hands with the same imperious gesture with which he had placed them there. "Here, Schlecter, look over these and tell this young man in your modern jargon what they mean." He thrust them under his assistant's nose almost threateningly. The assistant took them without a word, and pulling up a third chair to the circle of light from the student lamp sat down and began to examine them. An assistant used to occasional tantrums on the part of his chief, evidently. If he could be so colorless under it . . . I began to recover something of my poise.

It's All Up with Us-

I was infernally hot; my hands were clammy. The room was silent. Schlecter bent closer over the papers, turning a sheet with a rustle that was like a crack of thunder in that quiet and stuffy place. Abruptly, Professor Brooke resumed his promenade, muttering to himself—"sword of the Lord of Hosts," I heard him say as he passed close. Almost a trifle mad, I thought. Curious . . .

A frown leaped suddenly into Schlecter's forehead; again he adjusted his glasses, and his fingers made the motions of a man writing figures as he concentrated on the checking of some calculation. I looked at my watch. Nine-fifteen; I would have to get on with it if I were to be back in time to write McCarthy's A. P. mail stuff. But then, I decided, with a wave of indignation, it would be his own fault for sending me out on such a chase if I didn't get it done . . .

I was recalled to my senses by a sudden ejaculation from Schlecter. "Good God!" he had said, in a low tone, and then, with his face low over the papers, he began to ruffle rapidly back through them, checking his results. Professor Brooke paced the floor, paced the floor, back and forth, unheeding.

Nine-thirty; forty-five. An hour back to the office; the bulldog edition would be going to bed; fat McCarthy in a temper. I must get out of this mad house where they either talked in quotations from Revelations or did not talk at all. I stirred uneasily.

Schlecter stood up, and I noticed his face was a trifle pale. He turned not to me but to Professor Brooke. "This is terrible, sir. Do all the results you have here check? Are you certain—"

"Certain!" it was a bellow. "Of course. I do not deal in unproved theories. Would God have given me this light for nothing? There is yet time. In the little over three years remaining, man may still forsake his material standards and justify his existence before the Great Throne. I shall be the instrument of deliverance, and this is my mouthpiece." He touched me on the shoulder. (Quite definitely mad, I thought; the gleam behind his eyes had gained complete control.)

The assistant turned to me, his colorless voice just a trifle trembly. "From Professor Brooke's calculations," he said, "it is possible to draw only one conclusionthat the world will come to an end, or rather life on it will, on March 17, 1934."

"Would you mind explaining?" I began.

"I-well, see here," Schlecter began. "Have you ever heard of steel workers being burned to death be-cause a drop of water fell in their buckets of hot steel and made them explode? ... Or, better, have you ever seen smoking hot grease fly all over a room when something cold was put into it—a drop of water, for in-stance?" I nodded. "Well, that is roughly what will happen when the planet Eros hits the sun. Only more so. . . You know what makes meteors flash through the sky? They are solid stones which are set on fire when they come in contact with the atmosphere, travelling at the immense speed they do. Well, now imagine a meteor as big as New York City, striking an atmosphere several hundred times as dense as ours. It would make a tremendous blaze, wouldn't it? And the heat around the spot where it struck would be something terrific, wouldn't it? Well, that is about what will happen when Eros plunges into the sun. Now the sun is mostly a gas; and when you heat a gas several times beyond the heat it is at already, the gas expands very rapidly; in other words you get an explosion. So that the arrival of Eros in the sun alone would be enough to cause a big explosion there.

"Now on top of that the sun produces heat on its own account, and the arrival of such a disturbance in its interior would be quite sufficient to increase this production to a point that would make the explosion more violent than ever. It would, in fact, blow the whole hide right off the sun at a speed that would cause it to reach the earth in just about one day . . . And the hide of the sun is made of red-hot hydrogen and metals," he added, reflectively.

A moment's breathless silence. "You see," Schlecter continued, "this sort of thing is happening all the time in the universe. At least ten, and more likely more, novae appear every year. Do you know what a nova is?"

I shook my head.

"Well, a nova is a very dull star which suddenly becomes very bright. This means that it has grown much bigger or much hotter. But after a short time the nova always returns to its former state, which means that the change is temporary.

"Now it has been found by spectroscopic observation that novae are surrounded by shells of gas, which are expanding in all directions at immense velocities. There is only one explanation capable of meeting all these facts, and that is an explosion in the star itself. If it ran into something it might be bigger and brighter,

but it wouldn't have the expanding gas around it. "It must be that these explosions are caused by some small body falling into the stars that become novae, just as I have told you. In other words, the same thing that has happened to a good many other suns is going to happen to ours. . . It's tough on us, that's all," he finished with a wry smile.

"But what is going to cause Eros to fall into it?" I asked.

"Attraction of the earth," said Schlecter, briefly. "The earth will send it off on a new orbit which will bring it so close to the sun that it will fall into it through gravity." He shook his head, gravely. "I'm afraid it's all up with us, young man."

In a Madman's Hands

PROFESSOR BROOKE cut in. "That's all, I Schlecter. Thank you very much for checking over my calculations." He led him to the door and as his footsteps faded down the hall, turned to me.

"Now, young man, do you understand and believe? 'And I will smite the inhabitants of this city, both man and beast,' says the good book. 'For the day of the Lord draws nigh, when the heavens shall burst in flame."

"I think I understand," I answered. "But there have been so many prophecies like this before, profes-sor, that I think the public at large will demand some definite proof before they will accept it. Could you give me something like that-some present indication of what will happen?" (End of the world stories are the bunk, unless they have a solid base on facts; and if I could get one for this story, it might soothe the wrath of tubby McCarthy over my tardiness.)

'Fiddlesticks! Anybody-

"May I suggest that you test it on your housekeeper, professor? If you can say to her the world is going to end, she won't believe you; but if you tell her the world is going to end, and that comet there proves it she will."

He glared at me, lion-like-lion in anger. Then he stepped to the door. "Anna!" he called again, and as the hard-faced woman appeared, "Come in. I wish to tell you something."

She entered, head high, wiping her hands nervously on her apron. "Anna," he said, drawing himself to his full height, and towering down on her, "the world is coming to an end. It is time to make your peace with God."

Anna looked up in wondering Teutonic stolidity. "So

the preacher tells us, sir. We may die at any moment." "I do not mean that," said the professor. "I mean that the world will be burnt up . . . in about three years.'

"Yes, sir," she said. "Thank you for telling me, sir." I could not repress a smile of triumph. Professor Brooke caught it out of the corner of his eye. "You may go," he told the old woman, and then as she left:

"You are right . . . I shall not cavil. Out of the mouths . . . But what shall I do?" He took up his pacing of the floor again, quite definitely mad, his walk a stumbling shuffle now, and the gleam in full possession of his deep-set eyes. Suddenly he stopped "I have it !" he cried. "Here." He sat down at the desk, rummaged out a sheaf of paper.

"Sit down, young man. I might have known. No prophet has honor while he still exists on this material plane. I have made the grievous error of thinking too much in the material plane myself. Self-sacrifice, that is the only method. My life for the salvation of the world. Hosanna!" The last word was a shout.

I folded up the papers and stuck them in my pocket. "Thank you very much for the opportunity to be your spokesman, professor," I said in the most business-like tone I could muster. "I will be going." (It would be just as well to escape this madman.)

"Can you not forget material considerations with me? You understand, you shall be called this very night." (I started.) "You are the chosen mouthpiece; you shall write your story here and now and Anna can mail it in for you. I will save you with myself from destruction and the flame that endureth forever. You will have done well. Now-" his voice boomed out suddenly, as I made a move to rise, "do as I tell you. Sit! and write!"

I was looking squarely into the steel ring of an oldfashioned Colt held in a none too steady hand. The hair rose on the back of my neck and my forehead

burst into a gentle perspiration. "'Thou fool!"" the madman before me burst out again, "'this very night thy soul shall be required of thee.' By sorrow and self-sacrifice, and thus alone, can we win the great victory. Think how glorious it will be to die that the world may live spiritually; to turn it from the path of material things."

(What to do?) I swallowed hard. (I might at least play for time in the hope that pale Schlecter would (What to do?) I swallowed hard. come back or someone else call. And then, with a shock of horror I realized that the university was closed for the summer and the chances of a caller were almost nil. And if one came, it might precipitate the -tragedy. I visualized the headline "Times Reporter Slain by Madman.") I shuddered, and began to write, thinking furiously of how I might escape. "Professor William A. Brooke," I began, "head of

the astronomy department of Lyon University" (My God, would these be the last words I ever wrote?) "announced today his discovery that the world and indeed all life in the solar system, would be blotted out on March qe&quocemehxx—" (The inspiration! I had it at last! But would it work?) "By the way, professor," I turned from my type-

writer with a flinch as I saw the muzzle of the gun still pointing in my direction, "you want this story to be played up pretty big, don't you? May I suggest that we'd have to have illustrations of some kind for it to gain attention. You know how it is . . . Have you got a good photo of yourself and some diagrams that would make the point clear?"

"Foolishness. That is a matter purely material—" "Yes, I know," I said, "but you're dealing with mate-

rially-minded people. Of course, if you don't want-"

The Rescue

H E hesitated for a moment. "I have the small pho-to that was used by the university in its catalog," he offered, "do you think . . ."

"Wouldn't do," I shook my head decisively. "You wouldn't want our story spoiled for that. Your own name, professor, is the big thing about this story. I'll tell you-let me call up the office and have them send out a photographer. The story would certainly be great if it had pictures of us just before we-left."

"Why-ah-

"A thousand people would read it for every one who would if it had no pictures," I pressed.

"True . . The material mind is impressed by mate-rial formulae," he mused, but a quick movement of the hand holding the gun followed me as I stirred in my chair. Then he seized the tempting bait. "Come. It is true that I owe it to the world to give it every opportunity. I will go with you to the telephone."

Our feet echoed in the empty and death-like silence of the dark hall. It was hot-but the perspiration on the back of my neck was cold.

"Seaside 3200," I said, and with an oddly detached feeling, noted that I stuttered as I said it.

"Hello! Give me the city desk. Is this Mr. Mc-Carthy? This is Furness-out at Professor Brooke's. I've got a story out here that looks great . . . Yes . . . Take quite a lot of illustration. Send Hannigan out with his camera, right away, will you?"

"Hannigan!" the voice floated angrily to me down the length of wire, "we haven't anybody named Han-

nigan. Blow your nose and clear your head!" "Yes, Dan Hannigan," I said. (A drop of perspira-

tion ran down my nose, tickling.) "Why, you young idiot, Dan Hannigan's the head of the detective bureau. Who the hell do you mean, any-

way?" "I know it. I've got something good here for him. Tell him to be all ready to shoot. The front door will be left unlocked for him. There's only one room with a light in it, down at the end of the hall. Tell him to bring plenty of film. There'll be quite a lot to shoot and we're in a hurry, so he'll have to work good and fast."

"Oh" a moment's silence. Then in an altered tone. "All right, boy. Don't worry. We'll have him come right out. Hold it till he gets there." The re-ceiver went on the hook with a bang. Good old Mc-Carthy! I never had appreciated him at his full worth. He had understood. If I could only last till Hannigan came! I leaned back in the chair, weak with a sense of relief, but the towering figure of the professor warn-

ed me that it was not over yet. "It's all right," I said, smiling wanly, "they'll send a man out."

"Excellent, excellent. Let us return and continue with your manuscript. It will be a convenience to have the photographer take it back with him, to save unnecessary delay.

As I wrote, he took the pages from my hand, making corrections and remarks. And to gain time, I took them back for recopying, writing each out with painful accuracy. (Would they never come?) The light was not good. Somewhere over at one side of the room a clock ticked monotonously. Tap, tap, went the typewriter . . And then, so suddenly that I jumped, the sound of a slammed door, the noise of feet and creaking boards in the hall. My muscles tensed; a little shiver ran around my heart. Then a glad sight met my

In the door beyond the white head of the professor the light picked out one, two, three forms-good solid, stupid, glorious policemen with not a thought of the end of the world in the lot of them-and behind them the face of McCarthy himself, lines of anxiety drawn through its pudgy good-nature. One of the men sprang; there was a flicker of motion. I ducked; three sharp reports, close together, and a multiple flash as the student lamp shattered suddenly above me. A tiny sliver of glass struck my head. I looked up to see a film of flame spread across the lamp's spilled oil as it dripped on the papers, while over beyond the desk, one of the policemen, breathing heavily, was getting to his feet. Professor Brooke lay on the floor . . .

And now I wonder. He was quite insane, of course. But he had always been a genius at astronomy and the line between genius and madness is so finely drawn that one cannot often tell where the one leaves off and the other begins. And suppose he should be right after all?

Most people laugh at the idea, I know. I put it into the story I wrote of his sensational death, of course, but the next day the paper must have received as many as two dozen letters calling our attention to the similarity between Professor Brooke's predictions and those unfortunate ones of William Miller.* And when the news services in turn passed the story around the country we began to get angry letters from astronomers pointing out that the solution of the problem of three bodies was only a little less difficult than the quadrature of the circle; that Eros has approached the earth before without being sensibly disturbed in its orbit; and various other objections to the extent of many pages.

Schlecter, at all events, still believes with an intensity that has cost him his post at Lyon University. He insists that he checked over Professor Brooke's calculations and that there was no error in them; and on the very day after the tragedy he sat down with what small fragments the fire had left of them to try to work out the correct solution. He is regarded generally as a man with harmless but vivid delusions, and the newspapers will no longer print his impassioned letters to the editor on the subject.

Not that there are not a few who agree with himand I am afraid I must almost number myself among them. I have looked into an astronomy book here and there and find it is perfectly true that Eros will pass close by the earth on January 30, 1931—closer than it ever has. What if Brooke were right after all and this fair green earth of ours is to be shrivelled up in fiery rain? But not until the day has proved the event can we be sure whether he was entirely a madman or only a genius whose mind became unseated by the contemplation of a horror greater than most men can bear.

*William Miller was a prophet who appeared in Washington County, New York, in 1831 with the prediction that the earth would be destroyed by flames from the sun in 1843. He based his prediction on a verse in Daniel, and obtained a large number of followers; so many that there was a considerable uneasiness in business affairs in the Eastern States as the appointed date drew near.

THE END

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