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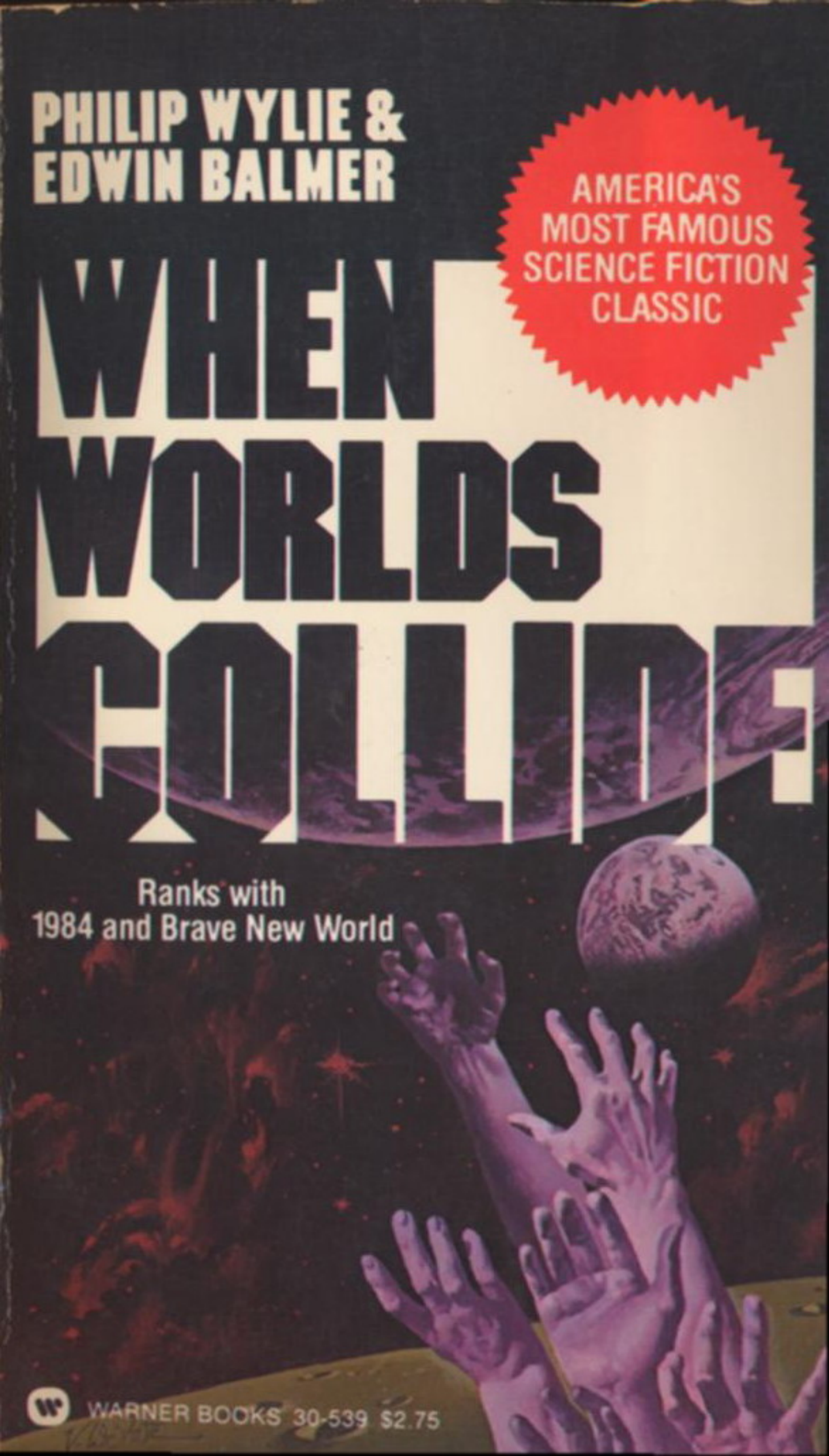

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That was the edict—take it or leave it. But if they left it, so would they leave their lovers and, indeed, their lives. ...

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WHEN WORLDS COLLIDE

BY PHILIP WYLIE and EDWIN BALMER

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Dedicated to Sally and Grace

WARNER BOOKS EDITION

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Chapter 1—The Amazing Errand

THE secret itself was still safe. It was clear that the public not yet could have learned it. No; the nature of the tremendous and terrific Discovery remained locked in the breasts of the men who had made it. No one had broken so badly under the burden of it that he had let slip any actual details of what had been learned.

But the fact that there was a secret, of incomparable importance, was out.

David Ransdell received plenty of proof of it, as he stood at the liner's rail, and the radiograms from shore were brought to him. He had had seven, all of the same sort, within the hour; and here was another.

He held it without opening it while he gazed across the sparkling water at the nearing shores of Long Island beyond which lay New York. Strange that, in a city which he could not yet see, men could be so excited about his errand, while the fellow-passengers, at his elbow, glanced at him with only mild curiosity at the sudden frequency of radiograms for him.

They would be far less indifferent, if they had read them.

The first, arriving less than an hour ago, offered him one thousand dollars for first and exclusive information—to be withheld from all others for twelve hours—of what he carried in his black box. It was signed by the most famous newspaper in New York.

Hardly had the messenger started back to the radio station when a second boy appeared with a message from another newspaper: "Two thousand dollars for first information of your business in New York."

Within ten minutes the offer had jumped to five thousand dollars, made by another paper. Plainly, the knowledge that there was a secret of

utmost importance had spread swiftly!

The offer remained at five thousand for twenty minutes; indeed, it dipped once to twenty-five hundred dollars as some timid soul, on a more economical newspaper, ventured to put in his bid; but quickly it jumped again and doubled. It was ten thousand dollars, in the last radiogram which Dave had opened. Ten thousand dollars cash for first information, which now needed to be withheld from others only for six hours, regarding what he was bringing to New York.

The thrilling and all-absorbing fact of it was that David Ransdell himself did not know what he carried which could become of such amazing concern. He was merely the courier who transported and guarded the secret.

He could look in his box, of course; he possessed the key. But he had the key, as also he had custody of the heavy black box, because those who had entrusted it to him knew that he would never violate his word. Least of all, would he sell out to others. Moreover (if curiosity tried him beyond his , strength) he had Professor Bronson's word for it that the contents of the box would be utterly meaningless to him. Only a few men, with very special training, could make out the meaning.

Cole Hendron in New York—Dr. Cole Hendron, the physicist—could make it out. Indeed, he could determine it more completely than any other man alive. That was why Dave Ransdell, from South Africa, was bound for New York; he was bringing the box to Cole Hendron, who, after he had satisfied himself of the significance of its contents, would take the courier into his confidence.

Dave gripped the rail with his aggravated impatience for arrival in the city. He wondered, but with secondary interest only, under the circumstances, what it would be like in America. It was the native land of his mother; but David had never so much as seen its shores before. For he was a South African—his father an Englishman who had once ranched in Montana, had married a Montana girl and had taken her to the Transvaal. Dave had been born at Pretoria, schooled there, and had run away from school to go to war.

The war had made him a flyer. He had stayed in the air afterward, and he was flying the mails when, suddenly, at the request of Capetown,—and he did not yet know from how high an official source,—he had been granted a special leave to fly a certain shipment of scientific material to America. That is, he was instructed to fly it not only the length of his ordinary route, but to continue with it the length of Africa and across to France, where he was to make connection with the first and fastest ship for New York.

Of course, the commission intrigued him. He had been summoned at night to the great mansion of Lord Rhondin, near Capetown.

Lord Rhondin himself, a big, calm, practical-minded man, received him; and with Lord Rhondin was a tall, wiry man of forty-odd, with a quick and nervous manner.

"Professor Bronson," Lord Rhondin said, introducing Ransdell.

"The astronomer?" Dave asked as they shook hands.

"Exactly," said Lord Rhondin. Bronson did not speak at all then, or for several minutes. He merely grasped Dave's hand with nervous tightness and stared at him while he was thinking, patently, of something else—something, Dave guessed, which recently had allowed him too little sleep.

"Sit down," Lord Rhondin bade; and the three of them seated themselves; but no one spoke.

They were in a big, secluded room given to trophies of the hunt. Animal skins covered the floor; and lion and buffalo and elephant heads looked down from the walls, their glass eyes glinting in the light which was reflected, also, by festoons of shining knives and spears.

"We sent for you, Ransdell," said Lord Rhondin, "because a very strange discovery has been made—a discovery which, if confirmed in all details, is of incomparable consequence. Nothing conceivable can be of greater importance. I tell you that at the outset, Ransdell, because I must refrain for the present from telling you anything else about it."

Dave felt his skin prickling with a strange, excited awe. There was no doubt that this man—Lord Rhondin, industrialist, financier and conspicuous patron of science—thoroughly believed what he said; behind the eyes which looked at David Ransdell was awe at knowledge which he dared not reveal. But Dave asked boldly:

"Why?"

"Why can't I tell you?" Lord Rhondin repeated, and looked at Bronson.

Professor Bronson nervously jumped up. He stared at Lord Rhondin and then at Ransdell, and looked up from him at a lion's head.

"Strange to think of no more lions!" Bronson finally muttered. The words seemed to escape him involuntarily.

Lord Rhondin made no remark at this apparent irrelevance. Ransdell, inwardly more excited by this queerly oppressive silence, at last demanded:

"Why will there be no more lions?"

"Why not tell him?" Bronson asked.

But Rhondin went abruptly to business: "We asked leave for you, Ransdell, because I have heard that you are a particularly reliable man. It is essential that material connected with the discovery be delivered in

New York City at the earliest practicable moment. You are both an expert pilot who can make the best speed, and you are dependable. If you will take it, I will put the material in your care; and—can you start to-night?"

"Yes sir. But—what sort of material, I must ask, if I am to fly with it?"

"Chiefly glass."

"Glass?" Dave repeated.

"Yes—photographic plates."

"Oh. How many of them?"

Lord Rhondin threw back a leopard-skin which had covered a large black traveling-case.

"They are packed, carefully, in this. I will tell you this much more, which you may guess, from Professor Bronson's presence. They are photographic plates taken by the greatest telescopes in South Africa, of regions of the southern sky which are never visible in the Northern Hemisphere. You are to take them to Dr. Cole Hendron in New York City, and deliver them personally to him and to no one else. I would tell you more about this unusual errand, Ransdell, if the—the implications of these plates were absolutely certain."

At this, Professor Bronson started, but again checked himself before speaking; and Lord Rhondin went on:

"The implications, I may say, are probably true; but so very much is involved that it would be most disastrous if even a rumor of what we believe we have discovered, were given out. For that reason, among others, we cannot confide it even to you; but we must charge you personally to convey this box to Dr. Hendron, who is the scientific consultant of the Universal Electric and Power Corporation in New York City. He is now in Pasadena, but will be in New York upon your arrival. Time is vital—the greatest speed, that is, consistent with reasonable safety. We are asking you, therefore, to fly the length of Africa along the established routes, with which you are familiar, and to fly, then, across the Mediterranean to France, where you will board a fast liner. You should reach Dr. Hendron not later than a week from Monday. You may return, then, if you wish. On the other hand"—he paused as crowded considerations heaped in his mind,—"you may be indifferent as to where you are."

"On the earth," added Professor Bronson.

"Of course—on the earth," Lord Rhondin accepted.

"I would go myself, Ransdell, you understand," Bronson then proceeded. "But my place, for the present, certainly is here. I mean, of course, at the observatory. ... It is possible, Ransdell, in spite of

precautions which have been taken, that some word of the Bronson discovery may get out. Your errand may be suspected. If it is, you know nothing— nothing you understand? You must answer no inquiry from any source. None—none whatever!"

At the landings during the fast flight north along the length of Africa, and in France, and during the first four days aboard the transatlantic vessel, nothing had happened to recall these emphatic cautions; but now, something was out. A boy was approaching with another radiogram; and so Ransdell swiftly tore open the one he had been holding:

"Twenty thousand dollars in cash paid to you if you grant first and exclusive interview regarding the Bronson discovery to this paper."

It was signed by the man, who, an hour ago, had opened the bidding with one thousand dollars.

Dave crumpled it and tossed it overboard. If the man who had sent it had been in that trophy-room with Bronson and Lord Rhondin, he would have realized that the matter on their minds completely transcended any monetary consideration.

The evening in New York was warm. It pressed back the confused uproar of the street; and the sound which ascended to the high terrace of the Hendron apartment seemed to contain heat as well as noise. Eve found that her search for a breath of fresh air was fruitless. For a moment she gazed into the mist and monotone that was Manhattan, and then stared over the city toward the channels to the sea.

"Suppose those lights are the ship's?" she asked Tony.

"It left quarantine before seven; it's somewhere there," Tony said patiently. "Let's not go back in."

His cigarette-case clicked open. The light of his match made a brief Rubens: buff satin of her bare shoulders, green of her evening dress, stark white of his shirt-bosom, and heads bent together. Some one inside the apartment danced past the French windows, touched the door-handle, perceived that the terrace was occupied, and danced away to the accompaniment of music that came from the radio.

"Guests take possession these days," Eve continued. "If you suggest bridge, they tear up the rugs and dance. If I'd asked them to dance,—and had an orchestra,—they'd have played bridge—or made fudge—"

"Or played District Attorney. Why have guests at all, Eve? Especially to-night?"

"Sorry, Tony."

"Are you, really? Then why did you have them, when for the first night in weeks the three thousand miles of this dreary continent aren't between us?"

"I didn't have them, Tony. They just heard we were home; and they came."

"You could have had a headache—for them."

"I almost did, with the reporters this afternoon. This is really a rest; let's enjoy it, Tony."

She leaned against the balustrade and looked down at the lights; and he, desirous of much more, bent jealously beside her. Inside the apartment, the dancing continued, making itself sensible as a procession of silhouettes that passed the window. Tony laid his hand possessively on Eve's. She turned her hand, lessening subtly the possessiveness of his, and said:

"You can kiss me. I like to be kissed. But don't propose."

"Why not? . . . See here, Eve, I'm through with Christmas kisses with you."

"Christmas kisses?"

"You know what I mean. I've been kissing you, Christmases, for three years; and what's it got me?"

"Cad!"

He put his hand on her shoulder, and turned her away from the panorama of the city.

"Is there some real trouble, Eve?" he inquired gently.

"Trouble?"

"I mean that's on your mind, and that stops making tonight what it might be for us."

"No; there's no trouble, Tony."

"Then there's somebody else ahead of me—is there? Somebody perhaps in Pasadena?"

"Nobody in Pasadena—or anywhere else, Tony."

"Then what is it, to-night? What's changed you?"

"How am I changed?"

"You drive me mad, Eve; you know it. You're lovely in face, and beautiful in body; and besides, with a brain that your father's trained so that you're beyond any other girl— and most men too. You're way beyond me, but I love you; and you don't listen to me."

"I do!"

"You're not listening to me even now. You're thinking instead."

"What do you want me to do?"

"Feel!"

"Oh, I can do that, too."

"I know; then why don't you—and stop thinking?"

"Wait! Not now, Tony. . . . Do you suppose that's the ship?"

"Why do you care? See here, Eve, is there anything in that newspaper story your father and you have been denying all afternoon?"

"What story?"

"That something unusual is up between all the big scientific leaders."

"There's always something up in science," Eve evaded. . . .

The doors were flung wide open. Music blared from the radio. In the drawing-room a half-dozen people continued to dance. Another group surrounded the punch-bowl. The butler was passing a tray of sandwiches. Some one stepped out and asked Eve to dance, and she went in with him.

Tony wandered in from the terrace.

The butler stopped before him. "Sandwich, Mr. Drake?"

"Keep three of the tongue for me, Leighton," Tony said solemnly. "I want to take them home to eat in bed."

The butler nodded indulgently. "Certainly, Mr. Drake. Anything else?"

"Possibly an anchovy."

"Very good, Mr. Drake."

An arm encircled Tony's broad shoulders. "Hello, Tony. Say—give me the low-down on what shot the market to hell's basement to-day."

Tony frowned; his eyes were following Eve. "Why do you compliment me with thinking I may know?"

"It's something happened in Africa, I hear. Anyway, the African cables were carrying it. But what could happen down there to shoot hell out of us this way? Another discovery of gold? A mountain of gold that would make gold so cheap it would unsettle everything?"

"Cheap gold would make stocks dear—not send them down," Tony objected.

"Sure; it can't be that. But what could happen in South Africa that—"

Tony returned alone to the terrace. His senses were swept by intimate

thoughts of Eve: A perfume called Nuit Douce. Gold lights in her red-brown hair. Dark eyes. The sweep of a forehead behind which, in rare company, a woman's instincts and tenderness dwelt with a mind ordinarily as honest and unevasive as a man's. All the tremendous insignificances that have meaning to a man possessed by the woman he loves.

He stood spellbound, staring through the night. . . . Anthony Drake was an athlete—that would have been the second observation another man would have made of him. The first, that he owned that uncounterfeitable trait which goes with what we call good birth and breeding, and generations of the like before him.

With this he had the physical sureness and the gestures of suppressed power which are the result of training in sports. He had the slender waist of a boxer, with the shoulders of a discus thrower. His clothes always seemed frail in comparison with his physique.

He also had intelligence. His university companions considered it a trivial side-issue when he was graduated from Harvard with a *magna cum laude;* but the conservative investment-house with which he afterward became affiliated appreciated the adjunct of brains to a personality so compelling. His head was large and square, and it required his big physique to give that head proportion. He was blue-eyed, sandy-haired. He possessed a remarkably deep voice.

He was entirely normal. His attainments beyond the average were not unusual. He belonged more or less to that type of young American business man upon whom the older generation places its hope and trust. Eve was really a much more remarkable human being—not on account of her beauty, but because of her intellectual brilliance, and her unique training from her father.

Yet Eve was not the sort who preferred "intellectual" men; intellectualism, as such, immensely bored her. She liked the outright and vigorous and "normal." She liked Tony Drake; and Tony, knowing this, was more than baffled by her attitude to-night. An emotional net seemed to have been stretched between them, through which he could not quite reach her; what the substance of the net was, he could not determine; but it balked him when, as never before, he wanted nearness to her. He believed her when she told him that her tantalizing abstraction was not because of another man. Then, what was its cause?

Tony was drawn from his reverie by the appearance of Douglas Balcom, senior partner of his firm. His presence here surprised Tony. No reason why old Balcom should not drop in, if he pleased; but the rest of the guests were much younger.

Balcom, halting beside Tony, reflected the general discontent of the day by waving at the city and murmuring: "In the soup. Everything's in

the soup; and now nobody cares. Why does nobody care?"

Tony disagreed, but he deferred to Balcom by saying: "It seems to me, a lot of people care."

"I mean nobody who's in the know cares. I mean the four or five men who *know* what's going on—underneath. I mean," particularized old Balcom, "John Borgan doesn't care. Did you see him to-day?"

"Borgan? No."

"Did you hear of his buying anything?"

"No."

"Selling anything?"

"No."

"That's it." Balcom thought out loud for a while. Tony listened. "Borgan's the fourth richest man in America; and normally the most active, personally. He'll be the richest, if he keeps up. He wants to be the richest. Oil—mines—rails— steel—shipping—he's in everything. He's only fifty-one. To my way of thinking, he's smarter than anyone else; and this looks like a market—superficially—which was made for Borgan. But for two weeks he's gone dead. Won't do a thing, either way; takes no position. Paralyzed. Why?"

"He may be resting on his oars."

"You know damn' well he isn't. Not Borgan—now. There's only one way I can explain; he knows something damned important that the rest of us don't. There's an undertone— don't you feel it?—that's different. I met Borgan to-day, face to face; we shook hands. I don't like the look of him. I tell you he knows something he's afraid of. He did a funny thing, by the way, Tony. He asked me: 'How well do you know Cole Hendron?"

"I said, 'Pretty well.' I said: 'Tony Drake knows him damn' well.' He said: 'You tell Hendron, or have Drake tell Hendron, he can trust me.' That's exactly what he said, Tony—tell Hendron that he can trust N. J. Borgan. Now, what the hell is that all about?"

"I don't know," said Tony, and almost added, in his feeling of the moment: "I don't care." For Eve was returning.

She slipped away from her partner and signaled to Tony to see her alone. Together they sought the solitude of the end of the terrace.

"Tony, can you start these people home?"

"Gladly," rejoiced Tony. "But I can stay?"

"I'm afraid not. I've got to work."

"Now? To-night?"

"As soon as I possibly can. Tony, I'll tell you. The ship is in, and Ransdell was taken off at quarantine and brought here. He's in Father's study now."

"Who's Ransdell?"

"Nobody I know. I haven't set eyes on him yet, Tony. He's just the messenger from Africa. You see, Tony, some—some things were being sent rush, by airplane and by messenger, to Father from Africa. Well, they've arrived; and I do his measuring for him, you know."

"What measuring?"

"The delicate measuring, like—like the position and amount of movement shown by stars and other bodies on astronomical plates. For weeks—for months, in fact, Tony—the astronomers in the Southern Hemisphere have been watching something."

"What sort of a something, Eve?"

"Something of a sort never seen before, Tony. A sort of body that they knew existed by the millions, probably, all through the universe—something they were sure must be, but the general existence of which has never been actually proved. It—it may be the most sensational fact for us, from the beginning to the end of time. I can't tell you more than that to-night, Tony; yet by to-morrow we may be telling it to all the world. Rumors are getting out; and so some scientist, who will be believed, must make an authoritative announcement. And the scientists of the world have selected Father to make it.

"Now, help me, Tony. You clear these people out; and then you run along. For I've measurements to make and report to Father; and he has to check over calculations made by the best men in the southern half of the world. Then, by tomorrow, we may know, for certain, what is going to happen to us all."

Tony had his arm about her; he felt her suddenly trembling. He swept her up and held her against him; and kissing her, he met on her lips, a new, impetuous passion which exalted and amazed him. Then some one came out and he released her.

"I—I didn't mean that, Tony," she whispered.

"You must have."

"I didn't! Not all of it, Tony. It was just for that moment."

"We'll have a thousand more like it—thousands—thousands!"

They both were whispering; and now, though he had let her go, his hand was over hers, and he could feel her quivering again. "You don't know, Tony. Nobody really knows yet. Come, help me send them all away."

He helped her; and when the guests had gone, he met, at last, the man who had come from South Africa. They shook hands, and for a few moments the three of them—Eve Hendron and Tony Drake and Ransdell, the mail-flyer from under the Southern Cross—stood and chatted together.

There must be presentiments; otherwise, how could the three of them always have carried, thereafter, a photographic memory of that moment of their meeting? Yet no one of the three—and least of all Eve, who on that night knew most of what was to come—could possibly have suspected the strange relation in which each was to stand to the others. None of them could have suspected, because such a relationship was, at that moment, inconceivable to them—a relationship between civilized men and women for which there then existed, indeed, no word in the language.

Chapter 2—The League Of The Last Days

THE lobby of Tony's favorite club was carpeted in red. Beyond the red carpet was a vast room paneled in oak. It usually was filled with leisurely men playing backgammon or bridge or chess, smoking and reading newspapers. Behind it, thick with gloom, was a library; and in a wing on the left, the dining-room where uniformed waiters moved swiftly between rows of small tables.

As Tony entered the club, however, he felt that it had emerged from its slumbers, its routine, its dull masculine quietude. There were only two games in progress. Few men were idling over their cigars, studying their newspapers; many were gathered around the bar.

The lights seemed brighter. Voices were staccato. Men stood in groups and talked; a few even gesticulated. The surface of snobbish solitude had been dissipated.

Tony knew at once why the club was alive. The rumors, spreading on the streets, had eddied in through these doors too.

Some one hailed him. "Hi! Tony!"

"Hello, Jack! What's up?”

"You tell us!"

"How could I tell you?"

"Don't you know Hendron? Haven't you seen him?"

Jack Little—a young man whose name was misleading— stepped away from a cluster of friends, who, however, soon followed him; and Tony found himself surrounded. One of the men had been one of the

guests whom Tony, half an hour before, had helped clear from the Hendrons'; and so he could not deny having seen Hendron, even if he had wanted to.

"What in hell have the scientists under their hats, Tony?"

"I don't know. Honest," Tony denied.

"Then what the devil is the League of the Last Days?"

"What?"

"The League of the Last Days—an organization of all the leading scientists in the world, as far as I can make out," Little informed him.

"Never heard of it," said Tony.

"I just did," Little confessed; "but it appears to have been in existence some time. Several months, that is. They began to organize it suddenly, all over the world, in the winter."

"All over the world?" asked Tony.

"In strictest and absolutely the highest scientific circles. They've been organized and communicating for half a year; and it's just leaking out."

"The League of the Last Days?" repeated Tony.

"That's it."

"What does it mean?"

"That's what I thought you might tell us. Hendron's a member, of course."

"The head of it, I hear," somebody else put in.

"I don't know anything about it," Tony protested, and tried to move away. Actually, he did not know; but this talk fitted in too well with what Eve had told him. Her father had been chosen by the scientists of the world to make some extraordinary announcement. But—the League of the Last Days! She had not mentioned that to him.

League of the Last Days! It sent a strange tingle under his skin.

"How did you hear about it?" Tony now demanded of Jack Little.

"From him," said Jack, jerking toward the man who had heard that Cole Hendron headed the League.

"I got it this afternoon," this fellow said importantly. "I know the city editor of the *Standard.* He had a reporter—a smart kid named Davis—on it. I was there when the kid came back. It seems that some months ago, the scientists— the top men like Hendron—stumbled on something big. So big that it seems to have scared them. They've been having meetings about it for months.

"Nobody thought much about the meetings at first. Scientists are always barging around visiting each other and having conventions. But these were different. Very few men— and all big ones; and no real reports coming out. Only camouflage stuff—like about progress in smashing the atom. But the real business that was exciting them wasn't given out.

"Nobody knows yet what it is; but we do know there is something mighty big and mighty secret. It's so big and so secret that they only refer to it, when writing to each other, by a code.

"That's one thing definitely known. They write to each other and cable to each other about it in a code that's so damned good that the newspapers, which have got hold of some of the messages, can't break the cipher and figure it out."

"What's the League of the Last Days got to do with that?" Tony asked.

"It's the League of the Last Days that's doing it all. It's the League of the Last Days that communicates with its members by the code."

That was all any one knew; and soon Tony left the circle. He did not want to talk to men who knew even less than himself. He wanted to return to Eve; and that being impossible, he wanted to be alone. "I need," he said to nobody in particular, "a shower and a drink." And he pushed out of the club and started home.

His cab lurched through traffic. When the vehicle stopped for a red light, he was roused from his abstractions by the hawking of an extra. He leaned out and bought one from the bawling newsboy. The headline disappointed him.

SCIENTISTS FORM SECRET

"LEAGUE OF THE LAST DAYS."

A second paper—a tabloid—told no more.

SENSATIONAL SECRET DISCOVERY

World Scientists Communicating in Code.

When he reached his apartment, he thrust the papers under his arm. The doorman and the elevator boy spoke to him, and he did not answer. His Jap servant smiled at him. He surrendered his derby, threw himself in a deep chair, had a telephone brought, and called Eve.

The telephone-company informed him that service on that number

had been discontinued for the night.

"Bring me a highball, Kyto," Tony said. "And hand me that damn' newspaper." And Tony read:

"A secret discovery of startling importance is exciting the whole world of science.

"Though denied both by American and foreign scientists, the *Standard* has come into possession of copies of more than a score of cablegrams in code exchanged between various physicists and astronomers in America, and Professor Ernest Heim of Heidelberg, Germany.

"This newspaper has sought out the American senders or receivers of the mysterious code messages, who include Professor Yerksen Leeming at Yale, Doctor K. Belditz of Columbia, Cole Hendron of the Universal Electric and Power Corp., and Professor Eugene Taylor at Princeton. Some of these scientists at first denied that a secret code communication was being carried on; but others, confronted with copies of messages, admitted it, but claimed that they referred to a purely scientific investigation which was being conducted by several groups in cooperation. They denied that the subjects under investigation were of public importance.

"Challenged to describe, even in general terms, the nature of the secret, each man refused.

"But matters are coming to a head. To-day it was discovered that a special courier from South Africa, sent by Lord Rhondin and Professor Bronson of Capetown, had flown the length of the Dark Continent with a mysterious black box; at Cherbourg he took the first ship for New York and upon his arrival, was taken off at quarantine and hurried to Cole Hendron's apartment.

"Dr. Cole Hendron, chief consultant of the Universal Electric and Power Corp., only to-day returned to New York from Pasadena, where he has been working with the scientists of the observatory on Mt. Wilson…

"To add to the disturbing and spectacular features of this strange scientific mystery, it is learned that the scientists associated in this secret and yet world-spanning investigation are in a group which is called the League of the Last Days. What this may mean . . ."

There was nothing more but speculation and wild guesses. Tony tossed aside the newspapers and lay back in his chair; he could speculate for himself. The League of the Last Days! It might, of course, have been manufactured by one of the tabloids itself, and thus spread about the city. But Tony too vividly recollected Eve Hendron.

Kyto appeared with his highball; and Tony sipped slowly and thoughtfully. If this which he had just read, and that which he previously

had encountered to-day, had meaning, it must be that some amazing and unique menace threatened human society. And it was at a moment when, more than ever before in his life or in his dreams, Tony Drake wanted human society, with him in it—with him and Eve in it—to go on as it was. Or rather, as it would be, if things simply took their natural course.

Eve in his arms; her lips on his again, as he had had them to-day! To possess her, to own her completely! He could dream of no human delight beyond her! And he would have her! Damn this League of the Last Days! What were the scientists hiding among themselves?

Tony sat up vehemently. "A hell of a thing," he said aloud. "The whole world is haywire. Haywire! By the way, Kyto, you aren't a Japanese scientist, are you?"

"How?"

"Never mind. You don't happen to send code messages to Einstein, do you?"

"Cold messages?"

"Let it pass. I'm going to bed. If my mother calls from the country, Kyto, tell her I'm being a good boy and still wearing woolen socks against a cold snap. I must have sleep, to be in shape for work to-morrow. Maybe I'll sell five shares of stock in the morning, or possibly ten. It's wearing me down. I can't stand the strain."

He drained his glass and arose. Four hours later, after twice again having attempted to phone Eve Hendron, and twice again having been informed that service for the night was discontinued, Tony got to sleep.

Chapter 3—The Strangers From Space

IT was no tabloid but the *Times*—the staid, accurate, ultra-responsible New York *Times*—which spread the sensation before him in the morning.

The headlines lay black upon the page:

"SCIENTISTS SAY WORLDS FROM ANOTHER STAR
APPROACH THE EARTH

DR. COLE HENDRON MAKES ASTONISHING STATEMENT IN
WHICH SIXTY OF THE GREATEST PHYSICISTS

AND ASTRONOMERS CONCUR."

Tony was scarcely awake when Kyto had brought him the paper.

Kyto himself, it was plain, had been puzzling over the news, and did not understand it. Kyto, however, had comprehended enough to know that something was very different to-day; so he had carried in the coffee and the newspaper a bit earlier than customary; and he delayed, busying himself with the black, clear coffee, while Tony started up and stared.

"Dr. Cole Hendron, generally acknowledged to be the leading astrophysicist of America," Tony read, "early this morning gave to the press the following statement, on behalf of the sixty scientists named in an accompanying column."

Tony's eyes flashed to the column which carried the list of distinguished names, English, German, French, Italian, Swiss, American, South African, Australian and Japanese.

"Similar statements are being given to the press of all peoples at this same time.

" 'In order to allay alarms likely to rise from the increase of rumors based upon incorrect or misunderstood reports of the discovery made by Professor Bronson, of Capetown, South Africa, and in order to acquaint all people with the actual situation, as it is now viewed, we offer these facts.

" 'Eleven months ago, when examining a photographic plate of the region 15 (Eridanus) in the southern skies, Professor Bronson noticed the presence of two bodies then near the star Achernar, which had not been observed before.

" 'Both were exceedingly faint, and lying in the constellation Eridanus, which is one of the largest constellations in the sky, they were at first put down as probably long-period variable stars which had recently increased in brightness after having been too faint to affect the photographic plate.

"'A month later, after photographing again the same locality, Professor Bronson looked for the two new stars and found that they had moved. No object of stellar distance could show displacement in so short a space of time. It was certain, therefore, that the newly observed bodies were not stars. They must be previously unobserved and unsuspected members of our solar system, or else objects, from outside our system, now approaching us.

"They must be new planets or comets—or strangers from space.

" 'All planets known to be associated with our sun move

approximately in the plane described by the earth's orbit. This is true, whatever the size or distance of the planets, from Mercury to Pluto. The two Bronson bodies were moving almost at right angles to the plane of the planetary orbits.

" 'Comets appear from all directions; but these two bodies did not resemble comets when viewed through the greater telescope. One of them, at the time of the second observation, showed a small but perceptible disk. Its spectrum exhibited the characteristic lines of reflected sunlight. Meanwhile, several observations of position and movement were made which made it plain that the two Bronson bodies were objects of planetary dimensions and characteristics, approaching us from out of stellar distances—that is, from space.

" The two bodies have remained associated, approaching us together and at the same speed. Both now show disks which can be measured. It can now be estimated that, when first observed, they had approached within the distance from the sun of the planet Neptune. It must be remembered, however, that they lie in an entirely different direction.

" 'Since coming under observation, they have moved within the distance of the orbit of our planet Uranus, and are approaching the distance of Saturn.

" 'Bronson Alpha—which is the name temporarily assigned to the larger of the two new bodies—appears in the telescope similar in size to Uranus. That is, its estimated diameter is something over forty thousand miles. Bronson Beta, which is the smaller of the two bodies, has an estimated diameter of eight thousand miles. It is similar in size, therefore, to the earth.

" 'Bronson Beta at present is in advance of Alpha in their approach toward the solar system; but they do not move in parallel lines; Beta, which is the smaller, revolves about Alpha so that their positions constantly change.

" 'They have both come definitely within the sphere of gravitational influence of the sun; but having arrived from interstellar space, their speeds of approach greatly exceed the velocities of our familiar planets in their orbits around the sun.

"'Such are the observed phenomena. The following is necessarily highly speculative, but it is offered as a possible explanation of the origin of the two Bronson bodies.

" 'It has long been supposed that about other stars than ours—for of course our sun is only a star—are other planets like the earth and Mars and Jupiter. It is not presumed that all stars are surrounded by planets; but it has been estimated that probably at least one star in one hundred thousand has developed a planetary system. Among the many billions of

stars, there are probably millions of suns with planets. It is always possible that some catastrophe would tear the planets away. It would require nothing more than the approach of another star toward the sun to destroy the gravitational control of the sun over the earth and Venus and Mars and Jupiter and other planets, and to send them all spinning into space on cold and dark careers of their own.

" This world of ours, and Venus and Mars and Jupiter and Saturn, would then wander throughout indefinite ages—some of them perhaps eternally doomed to cold and darkness; others might, after incalculable ages, find another sun.

" 'It might be assumed, for purposes of explanation of the Bronson Bodies, that they once were planets like our earth and Uranus, circling about some life-giving sun. A catastrophe tore them away, together with whatever other of her planets there might have been, and sent them into the darkness of interstellar space. These two—Bronson Alpha and Bronson Beta—either were associated originally, or else established a gravitational influence upon each other in the journey through space, and probably have traveled together through an incalculable time until they arrived in a region of the heavens which brought them at last under the attraction of the sun. Their previous course, consequently, has been greatly modified by the sun, and as a result, they are now approaching us.'"

At this point, the prepared statement of Cole Hendron terminated.

Tony Drake was sitting up straight in bed, holding the paper before him and trying, with his left hand and without looking away, to strike a match for the cigarette between his lips. He did not succeed, but he kept on trying while his eyes searched down the column of questions put by the reporters to Dr. Hendron—and his answers.

" 'What will be the effect of this approach upon the earth?'

" 'It is impossible yet to tell.'

"'But there will be effects?'

" 'Certainly there will be effects.'

" 'How serious?'

Again Cole Hendron refused to answer.

" 'It is impossible yet to say.'

" "Will the earth be endangered?'

"Answer: 'There will undoubtedly be considerable alterations of conditions of life here.'

" What sort of alterations?'

" 'That will be the subject of a later statement,' Dr. Hendron replied. 'The character and degree of the disturbance which we are to undergo is now the subject of study by a responsible group. We will attempt to describe the conditions likely to confront all of us on the world as soon as they clearly define themselves.'

" 'When will this supplementary statement be made?'

" 'As soon as possible.'

" 'To-morrow?'

" 'No; by no means as soon as to-morrow.'

" Within a week? Within a month?'

" 'I would say that it might be made within a month.'

Tony was on his feet, and in spite of himself, trembling. There was no possible mistaking of the undertone of this astonishing announcement. It spelled doom, or some enormous alteration of all conditions of life on the world equivalent to complete disaster.

The League of the Last Days! There was some reference to it in another column, but Tony scarcely caught its coherence.

Where was Eve; and what, upon this morning, was she doing? How was she feeling? What was she thinking? Might she, at last, be sleeping?

She had been up all night, and at work assisting her father. The statement had been released at one o'clock in the morning. There was no mention in the paper of her presence with her father; Cole Hendron apparently had received the reporters alone.

How much more than this which had been told, did Eve now know? Plainly, manifestly the scientists knew more— much, much more, which they dared not yet tell the public. Dared not! That was the fact. They dared, to-day, only to issue the preliminary announcement.

Chapter 4—Dawn After Doomsday?

KYTO, who usually effaced himself, did not do so this morning. Kyto, having the untasted coffee for an excuse, called attention to himself and ventured:

"Mister, of course, comprehends the news?"

"Yes, Kyto; I understand it—partly, at any rate."

"I may inquire, please, perhaps the significance?"

Tony stared at the little Jap. He had always liked him; but suddenly he was assailed with a surge of fellow-feeling for this small brown man

trapped like himself on the rim of the world.

Trapped! That was it. *Trapped* was the word for this strange feeling.

"Kyto, we're in for something."

"What?"

"Something rather—extensive, Kyto. One thing is sure, we're all in for it together."

"General—destruction?" Kyto asked.

Tony shook his head, and his reply surprised himself. "No; if it were just that, they'd say it. It would be easy to say— general destruction, the end of everything. People after all in a way are prepared for that, Kyto." Tony was reasoning to himself as much as talking to Kyto. "No; this can't be just—-destruction. It doesn't *feel* like it, Kyto."

"What else could it be?" questioned the Jap practically.

Tony, having no answer, gulped his coffee; and Kyto had to attend to the telephone, which was ringing.

It was Balcom.

"Hey! Tony! Tony, have you seen the paper? I told you Hendron had something, but I admit this runs considerably beyond expectations. . . . Staggers one, doesn't it, Tony? . . . Now, see here, it's perfectly plain that Hendron knows much more than he's giving out. . . . Tony, he probably knows it *all* now! ... I want you to get to him as soon as you can."

As soon as possible, Tony got rid of Balcom—another rider on the rim of the world, trapped with Tony and Kyto and all the rest of these people who could be heard, if you went to the open window, ringing one another to talk over this consternation.

Tony commanded, from before the bathroom mirror, where he was hastily shaving: "Kyto, make sure that anybody else that calls up isn't Miss Hendron, and then say I'm out."

Within five minutes Kyto was telling the truth. Tony, in less than five more, was at the Hendrons'. The place was policed. Men, women and children from Park Avenue, from Third and Second avenues crowded the sidewalks; sound-film trucks and photographers obstructed the street. Radio people and reporters, refused admittance, picked up what they could from the throng. Tony, at last, made contact with a police officer, and he did not make the mistake of asserting his right to pass the police-lines or of claiming, too publicly, that he was a personal friend of the family.

"There is a possibility that Dr. Hendron or perhaps Miss Hendron might have left word that I might see them," Tony said. "My name is Tony Drake."

The officer escorted him in. The elevator lifted him high to the penthouse on the roof, where the street noises were vague and far away, where the sun was shining, and blossoms, in their boxes, were red and yellow and blue.

No one was about but the servants. Impassive people! Did they know and understand? Or were they dulled to it?

Miss Eve, they said, was in the breakfast-room; Dr. Hendron still was asleep.

"Hello, Tony! Come in!"

Eve rose from the pretty little green table in the gay chintz-curtained nook which they called the breakfast-room.

Her eyes were bright, her face flushed the slightest bit with her excitement. Her hands grasped his tightly.

Lovely hands, she had, slender and soft and strong. How gentle she was to hold, but also how strong! Longing for her leaped in Tony. Damn everything else!

He pulled her within his arms and kissed her; and her lips, as they had last night, clung to his. They both drew breath, deeply, as they parted—stared into each other's eyes. Their hands held to each other a moment more; then Tony stepped back.

She had dressed but for her frock itself; she was in negligée, with her slim lovely arms in loose lace-decked silk, her white neck and bosom half exposed.

He bent and kissed her neck.

"You've breakfasted, Tony?"

"Yes—no. Can I sit with you here? I scarcely dreamed you'd be up, Eve, after your night."

"You've seen the papers? We were through with them before three. That is, Father then absolutely refused to say any more or see any one else. He went to sleep."

"You didn't."

"No; I kept thinking—thinking—"

"Of the end of everything, Eve?"

"Part of the time, I did; of course I did; but more of the time of you."

"Of me—last night?"

"I hoped you'd come first thing to-day. I thought you would. . . . It's funny what difference the formal announcement of it makes. I knew it all last night, Tony. I've known the general truth of it for weeks. But when it

was a secret thing—something shared just with my father and his friends—it wasn't the same as now. One knew it but still didn't admit it, even to one's self. It was theoretical—in one's head, like a dream, not reality. We didn't really *do* much, Father and I, last night. I mean do much in proving up the facts and figures. Father had them all before from other men. Professor Bronson's plates and calculations simply confirmed what really was certain; Father checked them over. Then we gave it out.

"That's what's made everything so changed."

"Yet you didn't give out everything you know, Eve."

"No, not everything, Tony."

"You know exactly what's going to happen, don't you, Eve?"

"Yes. We know—we think we know, that is, exactly what's going to happen."

"It's going to be doomsday, isn't it?"

"No, Tony—more than doomsday."

"What can be more than that?"

"Dawn after doomsday, Tony. The world is going to be destroyed. Tony, oh, Tony, the world is going to be most thoroughly destroyed; yet some of us here on this world, which most surely will come to an end, some of us will not die! Or we need not die—if we accept the strange challenge that God is casting at us from the skies!"

"The challenge that God casts at us—what challenge? What do you mean? Exactly what is it that is going to happen, Eve—and how?"

"I'll try to tell you, Tony: There are two worlds coming toward us—two worlds torn, millions of years ago perhaps, from another star. For millions of years, probably, they've been wandering, utterly dark and utterly frozen, through space; and now they've found our sun; and they're going to attach themselves to it—at our expense. For they are coming into the solar system on a course which will carry them close—oh, very close indeed, Tony, to the orbit of the earth.

They're not cutting in out on the edge where Neptune and Uranus are, or inside near Venus and Mercury. No; they're going to join up at the same distance from the sun as we are. Do you understand?"

In spite of himself, Tony blanched. "They're going to hit the earth, you mean? I thought so."

"They're not going to hit the earth, Tony, the first time around. The first time they circle the sun, they're going to pass us close, to be sure; but they're going to pass us—both of them. But the second time they pass us—well, one of them is going to pass us a second time too, but the other one isn't, Tony. The smaller one—Bronson Beta, the one about the

same size as the earth and, so far as we can tell, very much like the earth—is going to pass us safely; but the big one, Bronson Alpha, is going to take out the world!"

"You know that, Eve?"

"We know it! There must be a margin of error, we know. There may not be a direct head-on collision, Tony; but any sort of encounter—even a glancing blow—would be enough and much more than enough to finish this globe. And an encounter is certain. Every single calculation that has been made shows it.

"You know what an exact thing astronomy is to-day, Tony. If we have three different observations of a moving body, we can plot its path; and we've hundreds of determinations of these bodies. More than a thousand altogether! We know now what they are; we know their dimensions and the speed with which they are traveling. We know, of course, almost precisely the forces and attractions which will influence them —the gravitational power of the sun. Tony, you remember how precise the forecast was in the last eclipse that darkened New England. The astronomers not only foretold to a second when it would begin and end, but they described the blocks and even the sides of the streets in towns that would be in shadow. And their error was less than twenty feet.

"It's the same with these Bronson bodies, Tony. They're falling toward the sun, and their path can be plotted like the path of Newton's apple dropping from the bough. Gravity is the surest and most constant force in all creation. One of those worlds, which is seeking our sun, is going to wipe us out, Tony—all of us, every soul of us that remains on the world when it collides. But the other world—the world so much like this—will pass us close and go on, safe and sound, around the sun again. ...

"Tony do you believe in God?"

"What's that to do with this?"

"So much that this has got me thinking about God again, Tony. God—the God of our fathers—the God of the Old Testament, Tony; the God who did things and meant something, the God of wrath and vengeance, but the God who also could be merciful to men. For He's sending two worlds to us, Tony, not one—not just the one that will destroy us. He's sending the world that may save us, too!"

"Save us? What do you mean?"

"That's what the League of the Last Days is working on, Tony—the chance of escape that's offered by the world like ours, which will pass so close and go on. We may transfer to it, Tony, if we have the will and the skill and the nerve! We could send a rocket to the moon to-day, if it would do us any good, if any one could possibly live on the moon after he got there. Well, Bronson Beta will pass us closer than the moon. Bronson

Beta is the size of the earth, and therefore can have an atmosphere. It is perfectly possible that people—who are able to reach it—can live there.

"It's a world, perhaps very like ours, which has been in immutable cold and dark for millions of years, probably, and which now will be coming to life again. '

"Think of it, Tony! The tremendous, magnificent adventure of making a try for it! It was a world once like ours, circling around some sun. People lived on it; and animals and plants and trees. Evolution had occurred there too, and progress. Civilization had come. Thousands of years of it, maybe. Tens of thousands of years—perhaps much more than we have yet known. Perhaps, also, much less. It's the purest speculation to guess in what stage that world was when it was torn from its sun and sent spinning into space. "But in whatever stage it was in, you may be sure it is in exactly that stage now; for when it left its sun, life became extinct. The rivers, the lakes, the seas, the very air, froze and became solid, encasing and keeping everything just as it was, though it wandered through space for ten million years.

"But as it approaches the sun, the air and then the seas will thaw. The people cannot possibly come to life, nor the animals or birds or other things; but the cities will stand there unchanged, the implements, the monuments, their homes—all will remain and be uncovered again.

"If this world were not doomed, what an adventure to try for that one, Tony! And a possible adventure—a perfectly possible adventure, with the powers at our disposal to-day!" Tony recollected, after a while, that Balcom had bid him to learn from Hendron, as definitely as possible, the date and nature of the next announcement. How would it affect stocks? Would the Stock Exchange open at all?

He remembered, at last, it was a business day; downtown he had duties—contracts to buy and orders to sell stocks, which he must execute, if the Exchange opened to-day. He did not venture to ask to have Hendron awakened to speak to him but, before ten o'clock, he did leave Eve.

He walked to the subway. His eyes stared at the myriad faces passing him. His body was jolted by innumerable brief contacts.

"Gimme five cents for a cup of coffee?"

Tony stopped, stared. This panhandler too was trapped, with him and Kyto and Eve and all the rest, on the rim of the world which was coming to its end. Did he have an inkling of it? Whether or not, obviously to-day he must eat. Tony's hand went into his pocket.

Speculation about the masses assailed him. What did they think this morning? What did they want? How differently would they do to-day?

Near the subway, the newsboys were having a sell-out; a truck was dumping on the walk fresh piles of papers. Everybody had a paper; everybody was reading to himself or talking to somebody else. The man with the half inch of cigar-stub, the boy without a hat, the fat woman with packages under her arm, the slim stenographer in green, the actor with the beaver collar; they all read, stared, feared, planned, hoped, denied.

Some of them smirked or giggled, almost childishly delighted at something different even if it suggested destruction. It was something novel, exciting. Some of them seemed to be scheming.

Chapter 5—A World Can End

AT ten o'clock the gong rang and the market opened. There had been no addition to public knowledge in the newspapers. The news-ticker carried, as additional information, only the effect of the announcement on the markets in Europe, which already had been open for hours.

It was plain that the wild eyes of terror looked across the oceans and the land—across rice-fields and prairies, out of the smoke of cities everywhere.

The stock market opened promptly at ten with the familiar resonant clang of the big gong. One man dropped dead at his first glance upon the racing ticker.

On the floor of the Exchange itself, there was relative quiet. When the market is most busy, it is most silent. Phones were choked with regular, crowded speech. Boys ran. The men stood and spoke in careful tones at the posts. Millions of shares began to change hands at prices—down. The ticker lagged as never in the wildest days of the boom. And at noon, in patent admission of the obvious necessity, New York followed the example already set by London, Paris and Berlin. The great metals doors boomed shut. There would be no more trading for an indeterminate time. Until "the scientific situation became cleared up."

Cleared up! What a phrase for the situation! But the Street had to have one. It always had one.

Tony hung on the telephone for half an hour after the shutting of the mighty doors. His empire—the kingdom of his accustomed beliefs, his job—lay at his feet. When he hung up, he thought vaguely that only foresight during the depression had placed his and his mother's funds where they were still comparatively safe in spite of this threat of world-cataclysm.

Comparatively safe—what did that mean? What did anything mean,

to-day?

Balcom came into his office; he put his head on Tony's desk and sobbed. Tony opened a drawer, took out a whisky-bottle which had reposed in it unopened for a year, and poured a stiff dose into a drinking-cup. Balcom swallowed it as if it were milk, took another, and walked out dazedly.

Tony went out in the customers' room. He was in time to see the removal of one of the firm's clients—a shaky old miser who had boasted that he had beaten the depression without a loss—on a stretcher. The telephone-girl sat at her desk in the empty anteroom. Clerks still stayed at their places, furiously struggling with the abnormal mass of figures.

Tony procured his hat and walked out. Everyone else was on the street—people in herds and throngs never seen on Wall Street or Broad Street or on this stretch of Broadway, but who now were sucked in by this unparalleled excitement from the East Side, the river front, the Bowery and likewise down from upper Fifth and from Park Avenues. Women with babies, peddlers, elderly gentlemen, dowagers, proud mistresses, wives, schoolchildren and working-people, clerks, stenographers—everywhere.

All trapped—thought Tony—all trapped together on the rim of the world. Did they know it? Did they feel it?

No parade ever produced such a crowd. The buildings had drained themselves into the streets; and avenues and alleys alike had added to the throng.

The deluge of humanity was possessed of a single insatiable passion for newspapers. A boy with an armful of papers would not move from where he appeared before he sold his load. News-trucks, which might have the very latest word, were almost mobbed.

But the newspapers told nothing more. Their contents, following the repetition of the announcement of the morning, were of a wholly secondary nature, reflecting only the effect of the statement itself. A hundred cranks found their opinions in big type as fast as they were uttered—absurd opinions, pitiful opinions; but they were seized upon. There were religious revivals starting in the land. But the scientists—those banded together who had worked faithfully first to learn the nature of the discovery and then to keep it secret until today—they had nothing more to say.

Tony dropped into a restaurant, where, though it was only afternoon, an evening hilarity already had arrived. The Exchange was closed! No one knew exactly why or what was to happen. Why care? That was the air here.

Two men of Tony's age, acquaintances in school and friends in Wall

Street, stopped at his table. "We're going the rounds. Come along."

Tony returned with them to the warm, sunlit street where the exhilaration of night—the irresponsibility of after-hours with offices closed and work done—denied the day. . . . Their taxi squeezed through, Broadway in which frantic policemen wrestled vainly with overwhelming crowds. It stopped at a brownstone house in the West Forties.

A night-club, and it was crowded, though the sun was still shining. The three floors of the house were filled with people in business clothes drinking and dancing. On the top floor two roulette-wheels were surrounded by players. Tony saw heaps of chips, the piles of bills. He looked at the faces of the players and recognized two or three of them. They were hectic faces. The market had closed. This was a real smash,—not merely a money smash,—a smash of the whole world ahead. Naturally money was losing its value, but men played for it— cheered when they won, groaned when they lost, and staked again. The limit had been taken off the game.

Downstairs, at the bar, were three girls to whom Tony's two friends immediately attached themselves. They were pretty girls of the kind that Broadway produces by an overnight incubation: Girls who had been born far from the Great White Way. Girls whose country and small-town attitudes had vanished. All of them had hair transformed from its original shade to ashen blonde. Around their eyes were beaded lashes; their voices were high; their silk clothes adhered to their bodies. They drank and laughed.

"Here's to old Bronson!" they toasted. "Here's to the ol' world coming to an end!"

Tony sat with them: Clarissa, Jacqueline, Bettina. He gazed at them, laughed with them, drank with them; but he thought of Eve, asleep at last, he hoped. Eve, slender as they, young as they, far, far lovelier than they; and bearing within her mind and soul the frightful burden of the full knowledge of this day.

The room was hazy with smoke. People moved through it incessantly. After a while Tony looked again at the motley crowd; and across the room he saw a friend sitting alone in a booth. Tony rose and went toward the man. He was a person—a personage—worthy of notice. He was lean, gray-haired, immaculate, smooth. His dark eyes were remote and unseeing. First nights knew him. Mothers of very rich daughters, mothers of daughters of impeccable lineage, sought him. Wherever the gayest of the gay world went, he could be found. Southampton, Newport, Biarritz, Cannes, Nice, Deauville, Palm Beach. He was like old silver—yet he was not old. Forty, perhaps. A bachelor. He would have liked it if some one of authority had called him a connoisseur of life and living—an *arbiter elegantiæ,* a Petronius transferred from Nero's Rome to our day.

He would have been pleased, but he would not have revealed his pleasure. His name was Peter Vanderbilt. And he was trapped too,—Tony was thinking as he saw him,—trapped with him and Eve and Kyto and the panhandler and Bettina and Jacqueline and all the rest on the rim of the world which was going to collide with another world sent from space for that errand; but a world with still another spinning before it, which would pass close to our world —close and spin on, safe.

Tony cleared his brain. "Hello," he said to Peter Vanderbilt.

Vanderbilt looked up and his face showed welcome. *"Tony!* Jove! Of all people. Glad to see you. Sit. Sit and contemplate." He beckoned a waiter and ordered. "You're a bit on the inside, I take it."

"Inside?"

"Friend of the Hendrons, I remember. You know a bit more of what's going on."

"Yes," admitted Tony; it was senseless to deny it to this man.

"Don't tell me. Don't break confidences for my sake. I'm not one that has to have details ahead of others. The general trend of events is clear enough. Funny. Delicious, isn't it, to think of the end of all this? I feel stimulated, don't you? All of it—going to pieces! I feel like saying, "Thank God!' I was sick of it. Every one was. Civilization's a wretched parody. Evidently there was a just and judging God, after all.

"Democracy! Look at it, lad. Here are the best people, breaking the newest laws they made themselves. Imagine the fool who invented democracy! But what's better on this world anywhere? So there is a God after all, and He's taking us in hand again—the way He did in Noah's time. . . . Good thing, I say.

"But Hendron and his scientists aren't doing so well. They're making a big mistake. They've done splendidly— hardly could have done better up to to-day. I mean, keeping it under cover and not letting it out at all until they had some real information. They had luck in the fact that these Bronson bodies were sighted in the south, and have been only visible from the Southern Hemisphere. Not many observatories down there—just South Africa, South America and Australia. That was a break—gave them much more of a chance to keep it to themselves; and I say, they did well up to now. But they're not well advised if they hold anything back much longer; they'd better tell anything—no matter how bad it is. They'll have to, as they'll soon see. Nothing can be as bad as uncertainty.

"It proves that all those names signed to this morning's manifesto are top-notch scientists. The human element is the one thing they can't analyze and reduce to figures. What they need is a counsel in public relations. Tell Cole Hendron I recommend Ivy Lee."

Rising, he left Tony and vanished in the throng. Tony started to pay the check, and saw Vanderbilt's ten-dollar bill on the table. He rose, secured his hat and went out.

The latest newspaper contained a statement from the White House. The President requested that on the morrow every one return to work. It promised that the Government would maintain stability in the country, and inveighed violently against the exaggerated reaction of the American people to the scientists' statement.

Tony smiled. "Business as usual! Business going on, as usual, during alterations," he thought. He realized more than ever how much his countrymen lived for and believed in business.

He wondered how much of the entire truth had been told to the President, and what the political angle on it would be. Amusing to think of the end of the world having a political angle; but of course, it had. Everything had.

He took a taxi to the Hendrons' apartment. More than a block away from the building, he had to abandon the cab. The crowd and the police cordon about the apartment both had increased; but certain persons could pass; and Tony learned that he still was one of them.

Several men, whose voices he could overhear in loud argument, were with Cole Hendron behind the closed doors of the big study on the roof. No one was with Eve. She awaited him, alone.

She was dressed carefully, charmingly, as she always was, her lovely hair brushed back, her lips cool to look at, but so warm upon his own!

He pressed her to him for a moment; and for that instant when he kissed her and held her close, all wonder and terror was sent away. What matter the end of everything, if first he had her! He had never dreamed of such delight in possession as he felt, holding her; he had never dared dream of such response from her—or from any one. He had won her, and she him, utterly. As he thought of the cataclysm destroying them, he thought of it coming to them together, in each other's arms; and he could not care.

She felt it, fully as he. Her fingers touched his face with a passionate tenderness which tore him.

"What's done it for us so suddenly and so completely, Tony?"

" 'The shadow of the sword,' I suppose, my dear—oh, my dear! I remember reading it in Kipling when I was a boy, but never understanding it. Remember the two in love when they knew that one would surely die? 'There is no happiness like that snatched under the shadow of the sword.' "

"But we both shall die, if either does, Tony. That's so much better."

The voices beyond the closed door shouted louder, and Tony released her. "Who's here?"

"Six men: the Secretary of State, the Governor, Mr. Borgan, the chief of a newspaper chain, two more." She was not flunking about them. "Sit down, but don't sit near me, Tony; we've got to think things out."

"Your father's told them?" he asked.

"He's told them what will happen first. I mean, when the Bronson bodies—both of them—just pass close to the world and go on around the sun. That's more than enough for them now. It's not time yet to tell them of the encounter. You see, the mere passing close will be terrible enough."

"Why?"

"Because of the tides, for one thing. You know the tides, Tony; you know the moon makes them. The moon, which is hardly an eightieth of the world in mass; but it raises tides that run forty to sixty feet, in places like the Bay of Fundy."

"Of course—the tides," Tony realized aloud.

"Bronson Beta is the size of the earth, Tony; Bronson Alpha is estimated to have eleven or twelve times that mass. That sphere will pass, the first time, within the orbit of the moon. Bronson Beta will raise tides many times as high; and Bronson Alpha—you can't express it by mere multiplication, Tony. New York will be under water to the tops of its towers—a tidal wave beyond all imaginations! The seacoasts of all the world will be swept by the seas, sucked up toward the sky and washed back and forth. The waves will wash back to the Appalachians; and it will be the same in Europe and Asia. Holland, Belgium, half of France and Germany, half of India and China, will be under the wave of water. There'll be an earth tide, too."

"Earth tide?"

"Earthquakes from the pull on the crust of the earth. Some of the men writing to Father think that the earth will be torn to pieces just by the first passing of Branson Alpha; but some of them think it will survive that strain."

"What does your father think?"

"He thinks the earth will survive the first stress—and that it is possible that a fifth of the population may live through it, too. Of course that's only a guess."

"A fifth," repeated Tony. "A fifth of all on the earth."

He gazed at her, sober, painless, without a sense of time.

Here he was in a penthouse drawing-room on the top of a New York

apartment, with a lovely girl whose father believed, and had told her, that four-fifths of all beings alive on the earth would be slain by the passing of the planets seen in the sky. A few months more, and all the rest—unless they could escape from the earth and live—would be obliterated.

Such words could stir no adequate feeling; they were beyond ordinary meanings, like statements of distance expressed in light years. They were beyond conscious conception; yet what they told could occur. His mind warned him of this. What was coming was a cosmic process, common enough, undoubtedly, if one considered the billions of stars with their worlds scattered through all space, and if one counted in eternities of endless time. Common enough, this encounter which was coming.

What egotism, what stupid vanity, to suppose that a thing could not happen because you could not conceive it!

Eve was watching him. Through the years of their friendship and fondness, she had seen Tony as a normal man, to whom everything that happened was happy, felicitous and unbizarre. The only crises in which she observed him were emergencies on the football-field, and alarms in the stock-market, which in the first case represented mere sport, and in the second, money which he did not properly understand, because all his life he had possessed money enough, and more.

Now, as she watched him, she thought that she would meet with him—and she exulted that it would be with him— the most terrific reality that man had ever faced. So far as he had yet been called upon, he had met it without attempting to evade it; his effort had been solely for more complete understanding.

A contrast to some of those men—among them men who were called the greatest in the nation—whose voices rose loud again behind the closed doors.

Some one—she could not identify him from his voice, which ranted in a strange, shrill rage—evidently was battling her father, shouting him down, denying what had been laid before them all. Eve did not hear her father's reply. Probably he made none; he had no knack for argument or dialectics.

But the ranting and shouting offended her; she knew how helpless her father was before it. She wanted to go to him; not being able to, she went to Tony.

"Somebody," said Tony, "seems not to like what he has to hear."

"Who is he, Tony?"

"Somebody who isn't very used to hearing what he doesn't like. . . . Oh, Eve, Eve! My dear, my dear! For the first time in my life, I'd like to be a poet; I wish for words to say what I feel. I can't make a poem, but at

least I can change one:

"Yesterday this day's madness did prepare;

To-morrow's silence, triumph, or despair;

Love! For you know not whence you came, nor why;

Love! For you know not why you go, nor where."

The sudden unmuffling of the voices warned them that a door from the study had opened. Instantly the voices were dulled again; but they turned, aware that some one had come out.

It was her father.

For a few moments he stood regarding them, debating what he should say. Beyond the closed door behind him, the men whom he had left increased their quarrel among themselves. He succeeded in clearing his mind of it.

"Father," Eve said, "Tony and I—Tony and I—"

Her father nodded. "I saw you for a few seconds before you realized I was here, Eve—and Tony."

Tony flushed. "We mean what you saw, sir," he said. "We more than mean it. We're going to be married as soon as we can—aren't we, Eve?"

"Can we, Father?"

Cole Hendron shook his head. "There can't be marrying or love for either of you. No time to tell you why now; only— there can't."

"Why can't there be, sir?"

"There's going to be altogether too much else. In a few months, you'll know. Meanwhile, don't spoil my plans for you by eloping or marrying in the Church Around the Corner. And don't go on doing—what I just saw. It'll only make it harder for both of you—as you'll see when you figure out what's before you. Tony, there's nothing personal in that. I like you, and you know it. If the world were going to remain, I'd not say a word; but the world cannot possibly remain. We can talk of this later."

The study door again opened; some one called him, and he returned to the argument in the next room.

"Now," demanded Tony of Eve, "what in the world, which cannot possibly remain, does he mean by that? That we shouldn't love and marry because we're going to die? All the more reason for it — and quicker, too,"

"Neither of us can possibly guess what he means, Tony; we'd be months behind him in thinking; for he's done nothing else, really, for half a year but plan what we — what all the human race — will have to do. He means, I think, that he's put us in some scheme of things that won't let us marry."

The argument in the room broke up and the arguers emerged. In a few minutes they all were gone; and Tony sought Cole Hendron in his big study, where the plates which had come from South Africa were spread upon the table.

There were squares of stars, usually the same square of stars repeated over and over again. There seemed to be a score of exposures of the identical plate of close-clustered stars.

"You were downtown to-day, Tony?"

"To-day they took it, didn't they? They took it and closed the Exchange, I hear; and half the businesses in town had a holiday. For they've known for quite some time that something has been hanging over them, hanging over the market. This morning we half told them what it is; and they thought they believed it. Just now I told six men the other half — or most of it — and — and you heard them, Tony; didn't you?"

"Yes; I heard them."

"They won't have it. The world won't come to an end; it can't possibly collide with another world, because — well, for one thing, it never has done such a thing before, and for another, they won't have it. Not when you dwell upon the details. They won't have it. To-morrow there'll be a great swing-back in feeling, Tony. The Exchange will open again; business is going on. That's a good thing; I'm glad of it. But there are certain drawbacks.

"The trouble is, men aren't really educated up to the telescope yet, as they are to the microscope. Every one of those men who were just here would believe what the microscope tells them, whether or not they could see it or understand it for themselves. I mean, if a doctor took a bit of cell-tissue from any one of them, and put it under the microscope, and said, 'Sorry, but that means you will die,' there isn't a man of them who wouldn't promptly put his affairs in shape.

"None of them would ask to look through the microscope himself; he'd know it would mean nothing to him.

"But they asked for Bronson's plates. I showed them; here they are, Tony. Look here. See this field of stars. All those fixed points, those round specks, every single one of them are stars. But see here; there is a slight — a very slight — streak, but still a streak. There, right beside it, is another one. Something has moved, Tony! Two points of light have moved in a star-field where nothing ought to move! A mistake, perhaps?

A flaw in the coating of the plate? Bronson considered this, and other possibilities. He photographed the star-field again and again, night after night; and each time, you see, Tony, the same two points of light make a bit of streak. No chance of mistake; down there, where nothing ought to be moving, two objects have moved. But all we have to show for it are two tiny streaks on a photographic plate.

"What do they mean? 'Gentlemen, the time has come to put your affairs in order!' The affairs of all the world, the affairs of every one living in the world— Naturally, they can't really believe it.

"Bronson himself, though he watched those planets himself night after night for months, couldn't really believe it; nor could the other men who watched, in other observatories south of the equator.

"But they searched back over old plates of the same patch of sky; and they found, in that same star-field, what they had missed before—those same two specks always making tiny streaks. Two objects that weren't stars where only stars ought to be; two strange objects that always were moving, where nothing 'ought' to move.

"We need only three good observations of an object to plot the course of a moving body; and already Bronson succeeded in obtaining a score of observations of these. He worked out the result, and it was so sensational, that from the very first, he swore to secrecy every one who worked with him and with whom he corresponded. They obtained, altogether, hundreds of observations; and the result always worked out the same. They all checked. . . .

"Eve says she has told you what that result is to be."

"Yes," said Tony, "she told me."

"And I told these men who demanded—ordered me—to explain to them everything we had. I told them that those specks were moving so that they would enter our solar system, and one of them would then come into collision with our world. They said, all right.

"You see, it really meant nothing to them originally; it stirred only a sort of excitement to close the Exchange and give everybody a hilarious holiday.

"Then I told them that, before the encounter, both of these moving bodies—Bronson Alpha and Bronson Beta—would first pass us close by and cause tides that would rise six hundred feet over us, from New York to San Francisco—and, of course, London and Paris and all sea-coasts everywhere.

"They began to oppose that, because they could understand it. I told them that the passing of the Bronson bodies would cause earthquakes on a scale unimaginable; half the inland cities would be shaken down,

and the effect below the crust would set volcanoes into activity everywhere, and as never since the world began. I said, perhaps a fifth of the people would survive the first passing of the Bronson bodies. I tried to point out some of the areas on the surface of the earth which would be completely safe.

"I could not designate New York or Philadelphia or Boston. . . . They told me that to-morrow I must make a more reassuring statement."

Cole Hendron gazed down again at his plates.

"I suppose, after all, it doesn't make much difference whether or not we succeed in moving a few million more people into the safer areas. They will be safe for only eight months more, in any case. For eight months later, we meet Bronson Alpha on the other side of the sun. And no one on earth will escape.

"But there is a chance that a few individuals may leave the earth and live. I am not a religious man, as you know, Tony; but as Eve said to you, it seems that it cannot be mere chance that there comes to us, out of space, not merely the sphere that will destroy us, but that ahead of it there spins a world like our own which some of us—some of us—may reach and be safe."

Chapter 6—First Effects

TONY took Dave Ransdell home with him. The South African wanted to "see" New York.

They awoke late; or at least Tony did, and for a few moments lay contentedly lazy, without recollection of the amazing developments of the day that was past.

Only a vague uneasiness warned him that, when he finally roused, it would be to some sort of trouble. Tony, being a healthy and highly vigorous young man, had drowsed through such semirecollections before. ... He had fought with and "put out" another policeman, perhaps? Tony became able to recollect "showing" some one the city; but who?

Now Tony could visualize him—a tanned, quiet-humored, solid chap who could look out for himself anywhere. And girls liked him; but he was wary, even if he hadn't been to New York before. Even if he did come from South Africa!

There, Tony had it! Dave Ransdell, the Pretoria flyer, who had brought the plates of the sky from Capetown to New York. Why? Because there were two little specks on those plates of the southern skies, which meant that two strange planetary bodies were approaching the earth—to wipe it out!

That was the trouble Tony had to remember when he fully awoke. It wasn't that he'd knocked another policeman for a goal. It was that—that this room, and the bed, and the chair, everything outside, everywhere and every one, including you yourself, were simply going to cease to exist after a while. After a very definite and limited time, indeed, though the exact period he did not know.

Eve had refused to tell him; and so had Dr. Hendron. No; the exact amount of time left for every one on the world, the members of the League of the Last Days would not yet impart.

Tony stirred; and Kyto, hearing him, came in and began to draw his bath.

"All right, Kyto; never mind," Tony greeted him. "I'll take a shower this morning. Is Mr. Ransdell up?"

"Oh, entirely!"

"Has he had breakfast yet, Kyto?"

"Only one."

"You mean?"

"He said he would have a little now—that was an hour ago—and finish breakfast with you."

"Oh. All right. I'll hurry." And Tony did so, but forgetting Ransdell, mostly, for his thinking of Eve.

To have held her close to him, to have caught her against him while she clung to him, her lips on his—and then to be forbidden her! To be finally and completely forbidden to love her!

Tony arose defiantly. Last night he had been rebellious; this morning he was only more so. Never had he known or dreamed of such dear delight as when he had claimed her lithe body with his arms, and she had clung to him; the two of them together against all the world—even against the end of all the world, against the utter annihilation!

It was, he realized now, the terror of the approaching destruction which had thrown her so unquestioningly info his arms. Who could stand alone and look at doom? All nature, every instinct and impulse, opposed loneliness in danger. The first law of living things is self-perpetuation. Save yourself; and when you cannot, preserve your kind! Mate and beget— or give birth—before you die!

Nothing less elemental, less overwhelming, than this threw Eve Hendron and Tony Drake together; and no joy compared with the result. What had he heard said, that he understood now: "There is no happiness like that snatched under the shadow of the sword!"

But her father forbade that joy. He not only forbade it, but denied its

further possibility for them. And her father controlled her, not merely as her father, but as a leader of this strange society, the uncanny power of which Tony Drake was just beginning to feel: The League of the Last Days!

A pledged and sworn circle of men, first in science all over the world, who devoted themselves to their purposes with a sternness and a discipline that recalled the steadfastness of the early Christians, who submitted to any martyrdom to found the Church. They demanded and commanded a complete allegiance. To this tyrannical society Eve was sworn; and when Cole Hendron had spoken to her, he commanded her and forbade not only as her father but as her captain in the League of the Last Days. . . .

Tony found Ransdell at a window of the living-room. The morning paper was spread over a table.

"Hello," said Tony. "Hear you've been up awhile. You've altogether too many good habits."

The South African smiled pleasantly. "I'll need more than I have for a starter, if I'm joining the League of the Last Days," he observed.

"Then you've decided to?" asked Tony. It was one of the topics they'd discussed last night.

"Yes. The New York chapter, for choice."

"You're not going back to Capetown?"

"No. Headquarters will be here—or wherever Dr. Hendron is."

"That's good," said Tony, and glanced toward the paper, but did not pick it up. "Any special developments anywhere?"

"Apparently a rather unanimous opinion that yesterday's announcement may be wrong."

"Hendron said there'd be general reaction. When you think of yesterday, you'd see there'd have to be."

And Tony took the paper to the breakfast-table, where Ransdell joined him for another cup of coffee.

The two young men, of widely differing natures and background and training, sipped their coffee and glanced at each other across the table.

"Well," questioned Tony at last, "want to tell me how you really feel?"

"Funny," confessed the South African. "I bring up the final proof that the world's going to end; and on the trip find the dear old footstool a pleasanter place for me than I ever figured before it might be. ...

"To mention the minor matters first," Ransdell continued in his engagingly frank and outright way, "I've never lived like this even for a

day. I've never been valeted before."

Tony smiled. "That reminds me; wonder if they'll let Kyto into the League?"

"Not as our valet, I'm afraid," the South African said. "I hope you permit me the 'our' for the duration of my stay. I do fancy living like this, I must admit. I'll also tell you that I appreciate very much just being around where Miss Hendron is. I didn't know there really was a girl like her anywhere in the world."

"Which is going to end, we must remember," Tony warned him. "Every time we mention the world, we must remember it is going to end."

"Will you permit me, then, a particularly personal remark?" inquired the South African.

"Shoot," said Tony.

"It is—that if I were in your place, I wouldn't particularly care what happened."

"My place, you mean, with—"

"With Miss Hendron. In other words, I heartily congratulate you."

"You don't know what you're talking about," said Tony— too brusquely, and realized it. "I beg your pardon. I mean, I thank you. . . . The Stock Exchange, I see, is going to be open to-day. In fact, it undoubtedly is open now; and I am not at my office watching the ticker and buying A. T. and T. on a scale down, and selling X—that's United States Steel— whenever it rises half a point, for somebody who wants to go short from lack of faith in the future. What am I talking about? Where is the future? What's happened to it?"

"It seems to have regained its feet a bit to-day."

"Yes. The stock market is open. . . . There's the phone— probably my office. Mr. Balcom wants my personal advice after my last talk with Cole Hendron. I'm out or asleep, and you won't disturb me. You have my permission to put me into a coma—anything. ... I ought to have said to you, Ransdell, I'm glad you're staying on. Stay on right here with me, if you like.

"There's no sense in my going to the office. There's no sense in anything on the world, now, but preparing and perfecting the Space Ship which—besides watching the stars— has been the business of the best brains in the League of the Last Days."

"How far have they got?"

"Not far enough; but of course there's no mother to invention like necessity. And necessity seems to be distinctly visible —at least through a telescope—now."

Tony went downtown; he visited his office. Habit held him, as it was holding most of the hundreds of millions of humans in the world this day. Habit—and reaction.

What was threatened, could not be! If Cole Hendron and his brother-scientists refused, there were plenty of other people to put out reassuring statements; and the dwellers on the rim of the world regained much of their assurance. The President of the United States pointed out that, at worst, the sixty scientists had merely suggested disturbances of importance; and he predicted that if they occurred, they would be less than was now feared.

Professor Copley, known to Tony as a friend of Cole Hendron's, called at the office.

"I've some things to sell," he said, plucking the *pince-nez* from the center of his ruddy, cheerful face. "When do you think you can get me the most for them?"

And he laid down upon Tony's desk an envelope full of stock certificates. "I'm just back from Peru," he explained, "where I have been watching the progress of the Bronson bodies. Hendron tells me that you know the whole truth about them."

"It is the truth, then?" asked Tony.

"Do you mean, do I agree? Do you agree that the sun will rise to-morrow morning?" Professor Copley returned. "My dear friend, the Bronson bodies move from the effect of the same forces."

"But," pursued Tony, "exactly what do you think will happen to us?"

"What will happen," retorted Professor Copley, cheerfully enough, "if you toss a walnut in front of an eighteen-inch gun at the instant the shell comes out? The result, I should say, would be quite decisive and entirely final. So, I say, sell my stocks. My family, and my personal responsibilities, consist of only my wife and myself; there are many things we have desired to do which we have sacrificed in exchange for a certain security in the future. There being no future, why not start doing what we want immediately?—if now is the day to sell."

"Your guess on that," said Tony, "will be as good as mine. To-day is better than yesterday; to-morrow the market may be nearer normal again—or there may be none at all. How do you find that people are taking it?"

"Superficially, to-day they deny; but they have had a terrible shock. Shock—that's the first effect. Bound to be. Afterward—they'll behave according to their separate natures. But now they react in denials, because they cannot bear the shock.

"All over the world! Some are standing in the Place de l'Opéra in Paris,

hour after hour, I hear, silent for the most part, incredulous, numb. These are the few that are too intelligent merely to deny and reject, too stunned to substitute a sudden end of everything for the prospect of years ahead for which they scrimped and saved.

"In Berlin there are similar groups. And imagine the reaction in Red Square, my friend! Imagine the Russians trying to realize that their revolution, their savage effort to remodel themselves and their inner nature, has gone for nothing. All wasted! It will be knocked aside by a mere pebble—a grain of sand sifting through the cosmos on an errand of its own. Knocked aside and annihilated, as if no Russian had ever lived! It is stupendous! Imagine being Stalin to-night, my friend. What horror! What humor! What merciless depths of tragedy!

"Imagine the haughty Mussolini, when he finds that the secret he could not exhort from his iron-souled men of learning is the secret of Fascism's vanity. Vanity of vanities! All, in the end, is vanity! Dust!

"He has jutted out his chin and lifted his hand in salute to his Black Shirts, mouthed his ringing sentences, and defied any one or anything to stay him; and behold! Ten billion, billion, billion miles away some trifling approach of stars made unstable the orbits of a couple of planets and sent them out into space so long ago that Mussolini's ancestors were not yet hairy apes—and now they appear to confound him. Imagine our President trying to decry, now, this! Ah, I could weep. But I do not. Instead—I laugh. I laugh because few men—but some—some—some, my friend—even in the face of this colossal ignominy of fate, go on and on through the night, burning out their brains yet in the endeavor to guide their own destinies. What a gesture! But to-day—what appalling shock! And afterward—what a scene! When the world—the fifteen hundred millions of human beings realize, all of them, that nothing can save them, and they cannot possibly save themselves. What a scene! I hope to be spared for it. Meanwhile, sell my stocks for the best prices you can obtain, please; for my wife and I—we have saved for a long time, and denied ourselves too much."

In a taxi later in the day, Tony found the street suddenly blocked by a delirious group of men with locked arms, who charged out of a door, singing—drunk, senseless.

Tony was on his way to the Newark Airport, where a certain pilot, for whom he was to inquire, would fly him to the estate in the Adirondacks which had been turned over to Cole Hendron.

Chapter 7—Some Demands Of Destiny

EVE awaited him in a garden surrounded by trees. In the air was the

scent of blossoms, the fragrance of the forest, the song of birds. It bore new qualities, a new interpretation of the external world, distinct from the tumultuous cacophony of the city.

She was in white, with her shoulders and arms bare, her slender body sheathed close in silk. All feminine, she was, too feminine, indeed, in her feeling for the task she set for herself. Would she succeed better at it if she had garbed herself like a nun.

An airplane droned in the twilight sky and dropped to its cleared and clipped landing-field. Eve arose from the bench beside the little pool, which was beginning to glint with the reflection of Venus, the evening star. She trembled, impatient; she circled the pool and sat down again.

Here he came at last and alone, as she hoped.

"Hello, Tony!" She tried to make it cool.

"Eve, my dear!"

"We mustn't say even that! No—don't kiss me or hold me so!"

"Why? ... I know your father said not to. It's discipline of the League of the Last Days. But why is it? Why must they ask it? And why must you obey?"

"There, Tony. Just touch my hands, like this—and I'll try to explain to you. But first, how was it in the city to-day?"

Tony told her.

"I see. Now, Tony, let's sit here side by side—but not your arm around me. I want it so much, I can't have it. That's why, don't you see?

"We're in a very solemn time, Tony. I spent a lot of to-day doing a queer thing—for me. I got to reading the Book of Daniel again—especially Belshazzar's feast. I read that over and over. I can remember it, Tony.

" 'Belshazzar the king made a great feast to a thousand of his lords, and drank wine before the thousand.

" 'They brought the golden vessels that were taken out of the temple of the house of God; and the king, and his princes, his wives and his concubines, drank in them.

" 'They drank wine, and praised the gods of gold, and of silver, of brass, of iron, of wood, and of stone.'

"Isn't that a good deal like what we've—most of us—been doing, Tony?"

" 'Now in the same hour came forth fingers of a man's hand, and wrote over against the candlestick upon the plaster of the wall of the king's palace; and the king saw the part of the hand that wrote.

" 'Then the king's countenance was changed; his knees smote together. The king cried aloud to bring in the astrologers, the Chaldeans and the soothsayers.'

"And Daniel, you may remember, interpreted the writing on the wall. *'Mene, Mene, Tekel, Upharsin.* God hath numbered thy kingdom and finished it. Thou art weighed in the balances and art found wanting. And in that night was Belshazzar, the king of the Chaldeans, slain.'

"It is something very like that which is happening to us now, Tony; only the Finger, instead of writing again on the wall, this time has taken to writing in the sky—over our heads. The Finger of God, Tony, has traced two little streaks in the sky—two objects moving toward us, where nothing ought to move; and the message of one of them is perfectly plain.

" *'Thou art weighed in the balances and art found wanting,'* that one says to us on this world. 'God hath numbered thy kingdom and finished it.' But what does the other streak say?

"That is the strange one, Tony—the one that gives you the creeps and the thrills when you think of it. For that is the afterthought of God—the chance He is sending us!

"Remember how the Old Testament showed God to us, stern and merciless. 'God saw that the wickedness of man was great in the earth!' it said. 'And it repented the Lord that he had made man on the earth. And the Lord said, I will destroy man, whom I have created, from the face of the earth; both man, and beast and the creeping things, and the fowls of the air; for it repenteth me that I have made them.' And then, God thought it over and softened a little; and He warned Noah to build the ark to save himself and some of the beasts, so that they could start all over again.

"Well, Tony, it seemed to me the second streak in the sky says that God is doing the same thing once more. He hasn't changed His nature since Genesis; not in that short time. Why should He? It seemed to me, Tony, He looked us all over again and got disgusted.

"Evolution, you know, has been going on upon this world for maybe five hundred million years; and I guess God thought that, if all we'd reached in all that time was what we have now, He'd wipe us out forever. So He started that streak toward us to meet us, and destroy us utterly. That's Bronson Alpha. But before He sent it too far on its way, maybe He thought it all over again and decided to send Bronson Beta along too.

"You see, after all, God had been working on the world for five hundred millions of years; and that must be an appreciable time, even to God. So I think He said, 'I'll wipe them out; but I'll give some of them a chance. If they're good enough to take the chance and transfer to the other world I'm sending them, maybe they're worth another trial. And I'll

save five hundred millions of years.' For we'll start on the other world, Tony, where we left off here."

"I see that," Tony said. "What's in that to forbid my loving you now, my taking you in my arms, my—"

"I wish we could, Tony!"

"Then why not?"

"No reason not, if we were surely to die here, Tony—with all the rest of the world; but every reason not to, if we go on the Space Ship."

"I don't see that!"

"Don't you? Do you suppose, Tony, that the second streak in the sky—the streak that we call Bronson Beta which will come close to this world, and possibly receive us safe, before Bronson Alpha wipes out all the rest—do you suppose, Tony, that it was sent just for you and me?"

"I don't suppose it was sent at all," objected Tony impatiently. "I don't believe in a God Who plans and repents and wipes out worlds He made."

"I do. A few months ago, I wouldn't have believed in Him; but since this has happened, I do. What is coming is altogether too precise and exact to be unplanned by Intelligence somewhere, or to be purposeless. For those two streaks—the Bronson bodies—aren't cutting in on our little system out by Neptune or Jupiter, where they'd find no living thing. They've chosen, out of all space near us, the single sphere that's inhabited—they're directed for us. Directed—*sent,* that is, Tony. And if the big one is sent to wipe out the world, I don't believe the other is sent just to let me go on loving you and you go on loving me."

"What is your idea, then?"

"It's sent to save, perhaps, some of the results of five hundred million years of life on this world; but not you and me, Tony."

"Why not? What are we?"

Eve smiled faintly. "We're some of the results, of course. As such, we may go on the Space Ship. But if we go, we cease to be ourselves, don't you see?"

"I don't," persisted Tony stubbornly.

"I mean, when we arrive on that strange empty world,—if we do,—we can't possibly arrive as Tony Drake and Eve Hendron, to continue a love and a marriage started here. How insane that would be!"

"Insane?"

"Yes. Suppose one Space Ship got across with, say, thirty in its crew. We land and begin to live—thirty alone on an empty world as large as this. What, on that world, would we be? Individuals paired and set off,

each from the others, as here? No; we become bits of biology, bearing within us seeds far more important than ourselves—far more important than our prejudices and loves and hates. We cannot then think of ourselves, only to preserve ourselves while we establish our kind."

"Exactly what do you mean by that, Eve?"

"I mean that marriage on Bronson Beta—if we reach it— cannot possibly be what it is here, especially if only a few, a very few of us, reach it. It will be all-important then—it will be essential to take whatever action the circumstances may require to establish the race."

"You mean," said Tony savagely, remembering the remarks at breakfast, "if that flyer from South Africa—Ransdell—also made the passage on that Space Ship, and we all live, I may have to give you up to him—when circumstances seem to require it?"

"I don't know, Tony. We can't possibly describe it now; we can't imagine the circumstances when we're starting all over again. But one thing we can know—we must not first fix relations between us here which may only give trouble."

"Relations like love and marriage!"

"They might not do at all, over there."

"You're mad, Eve. Your father's been talking to you."

"Of course he has; but there's only sanity in what he says. He has thought so much more about it, he can look so calmly beyond the end of the world to what may be next that—that he won't have us carry into the next world sentiments and attachments that may only bring us trouble and cause quarrels or rivalry and death. How frightful to fight and kill each other on that empty world! So we have to start freeing ourselves from such things here."

"I'll be no freer pretending I don't want you more than anything else. What sort of thing does your father see for us —on Bronson Beta?"

She evaded him. "Why bother about it, Tony, when there's ten thousand chances to one we'll never get there? But we'll try for it—won't we?"

"I certainly will, if you're going to."

"Then you'll have to submit to the discipline."

His arms hungered for her, and his lips ached for hers, but he turned away.

Inside the house, he found her father, Cole Hendron.

"Glad to see you, Tony. We're going ahead with our plans. I suppose you knew I had been counting on you."

"For what?" Tony inquired brusquely.

"For one of my crew. You've the health and the mind and the nerve, I think. It's going to take more courage, in the end, than staying here on the world. For we will all leave— we will shoot ourselves up into the sky while the world still seems safe. We leave, of course, before the end; and the end of the world will never be really believed till it comes. So I need men of your steadiness and quality. Can I count on you?"

Tony looked him over. "You can count on me, Mr. Hendron."

"Good. ... I can guess that Eve has acquainted you with some features of the discipline of the League. I will tell you, in proper time, of others; nothing will be asked of you which will not be actually reasonable and necessary. But now I should advise you to learn something useful. Investment experience, and skill in trading, will scarcely be an asset on Bronson Beta, whereas knowledge of agriculture and proficiency in manual arts and elementary mechanics may be invaluable. You have time to learn the simple, primary processes by which life is maintained. You will have, I might say, approximately two years to prepare, before affairs here become acute with the approach of the planets on their first passage."

Chapter 8—Marching Orders For The Human Race

NO record could picture a thousandth part of the changes that came in those two years. No single aspect of human enterprise was left undisturbed.

It was on the half of the world which we call the Northern Hemisphere that the effect of the approach of the planets proved most disastrous. Of course, it was the north that possessed the continents teeming with people—Asia, Europe, North Africa, North America. The Southern Hemisphere, in comparison, was sparsely settled; and the South, moreover, had the advantage of seeing the strange stars slowly become visible and slowly, thereafter, brighten. The South became accustomed to their shining in the sky.

But at the end of the first year after the announcement of their approach, they stood for the first time in the northern sky. Partly this was due to their actual approach, which was bringing them not only closer but higher in the heavens; but chiefly it was due to the seasonal shifts of the earth which in spring showed more and more of the southern skies.

So there they stood, not high above the horizon as seen from New York or Chicago or San Francisco, but quite distinct and strange—two

new stars clearly connected, one much brighter than the other. Even in a good field-glass, the brighter showed a round, gleaming disk, and the dimmer one appeared more than a point.

It was yet more than a year before the first serious physical manifestations were expected; so the statement that Hendron signed merely read:

"It is still impossible to forecast the entire effect of the approach of the Bronson bodies. Unquestionably they will disturb us greatly. We may anticipate, *as a minimum,* the following phenomena: tides which will destroy or render uninhabitable all coastal cities and all inland cities within five hundred or more feet of sea-level. We have no terrestrial precedent for such tides. The existing sixty-foot rise and fall in the Bay of Fundy will certainly be trifling in comparison. The tides we anticipate will be perhaps several hundreds of feet high, and will sweep overland with a violence difficult to anticipate.

"The second manifestation, which will be simultaneous, will consist of volcanic activity and earthquakes of unpredictable extent and violence.

"The Bronson bodies, if they pass on a parabola, will approach the earth twice. If, however, their course becomes modified into an ellipse, the earth will meet them again in its journey around the sun. Direct collision with one or another of the bodies, or grazing collision due to mutual attraction when in proximity, cannot be regarded as impossible. The succession of tides and earthquakes caused by gravity and resultant stresses may instantly or in time render the surface of this globe wholly uninhabitable; but we cannot say that there is no hope.

"Certain steps must be taken. All coastal cities in all parts of the world must be evacuated. Populaces must be moved to high, non-volcanic regions. Provision for feeding, clothing and domiciling migrated peoples must be made.

"There remains considerable doubt concerning the origin and nature of the Bronson bodies. Efforts are being made to determine their composition, but determinations are difficult, as they are non-luminous.

"The scientists of the world are in agreement that the course outlined above is the only logical one to pursue. Since the first approach of the Bronson bodies may be expected to take place with effect upon the tides and seaboard on and about the end of next summer, general migration should begin at once."

On the morning succeeding the spread of this statement, Tony stood in the vast, populous waiting-room of the Grand Central Station. Yesterday there had been issued marching orders for fifteen hundred millions of human beings. If they did not now know that it was to be the end of the world, at least they were told that it was the end of the world

as it had been.

He listened to fragments of the conversations in progress in his vicinity:

"I tell you, Henry, it's silly, that's all. If anybody expects me to give up my apartment and pack up my duds and move off one Hundred and Eighty-first Street just because a few gray-headed school-teachers happen to think there's a comet coming, then they're crazy. ..."

"It's the end, that's what it is; and I for one am glad to see it. When the sea starts to rise and the earth starts to split open, I'm going to stand there and laugh. I'm going to say: 'Now what's the good of the Farm Relief? Now who's going to collect my income-tax? Now what does it matter whether we have Prohibition or not? Now who's going to stop your car and bawl you out because you drove on the wrong side of the street? Good-by, world.' That's what I'm going to say. 'Good-by! Good riddance!' I hope it wipes the whole damn' thing as clean as a billiard ball. ..."

"Don't hold my hand so tight, Daddy. You hurt me. . . ."

"It's ridiculous. They've been fighting about their fool figures for generations. They can't even tell whether it's going to rain or not to-morrow. How in the hell can they say this is going to happen? Give a scientist one idea, and a lot of trick figures, and he goes hay-wire, that's all. . . ."

"So I says to him, the big oaf: 'I'm a working-girl, and I'm gonna be a working-girl all my life, and you can tell me it doesn't matter on account of the world's coming to an end, and you can tell me the better I know you the better I'll like you, till you're blue in the face; but I'm gonna get out of this car right here and now, end of the world or no end of the world.' . . ."

"Laugh that off. Go ahead. Let me see you laugh that off. You've been laughing everything off ever since we were married. You laugh off the unpaid bills. You laugh off my ratty fur coat. You laugh off not being able to buy an automobile. Now let me see if you can laugh off an earthquake..."

"I drew it all out and bought gold. I got two revolvers. I filled the house with canned goods. I said: 'Here you are, Sarah. You've been telling me all your life how well you can run things. Take the money. Take the house. Take these two guns. I'm leaving. If we've only got a couple of months left, I'm going to see to it that I have a little fun, anyway.' That's what I said to her; and, by God, here I am. . . ."

Tony shook his head. Every word to which he had listened surfeited him with a sense of the immobility of humanity. Each individual related a cosmic circumstance to his particular case. Each individual planned to act independently not only of the rest of his fellows but of all signs and

portents in the sky. Tony's mind conceived a picture of huge cities on the verge of inundation—cities in which thousands and even millions refused to budge and went about the infinitesimal affairs of their little lives selfishly, with nothing but resentment for the facts which wiser men were futilely attempting to impress upon them. He heard his train announced, and walked to the gate.

He rode through a long dark tunnel and then out to the station at One Hundred and Twenty-fifth Street. His eyes rested uncomfortably on the close-pressed accumulation of ugly houses. It had been taken for granted too long; and upon the spawn who inhabited it, the best thoughts and dreams of the race fell unheeded. They lived and died and did not matter. A pollution ate steadily upward in every body of society from these far-reaching honeycombs of disease, dirt, stupidity, these world-wide remainders from the Middle Ages.

Tony, who had never been religious in any conventional sense, had begun to share the feeling of Eve about what was going to happen. She had not been religious; but emotionally, at least, she accepted the idea that God Himself had sickened with our selfishness, stupidity and squalor, and in disgust had tossed two pebbles through the sky on their errand which, night by night now, was becoming more apparent.

The train moved past the final outpost tenements into a verdant landscape with the river on one side—the Hudson, in which tides soon would rise to sweep high and far over the Palisades. Tony glanced back, once, toward the teeming city. The first flood would not top those tallest towers etched there; the pinnacles of man's triumphs would, for a while, rise above the tides; but all the rest? Tony turned away and looked out at the river, trying not to think of it.

Chapter 9—HOW THE WORLD TOOK IT

SETTLED in a chair, Tony glanced around the comfortable furnishings of the student's room and then gazed at the student himself. A lanky youth with red hair, good-humored blue eyes and a sprinkling of freckles that carried into his attained maturity more than a memory of the childhood he had so recently left.

"Yes," Tony repeated, "I'm from Cole Hendron. The dean told me about your academic work. Professor Gates showed me the thesis on Light which you turned in for your Ph.D. He said it was the finest thing he had had from the Graduate School since he'd held the chair of Physics."

Dull red came in the young man's face. "Nothing much. I just happened to have an idea. Probably never get another in my life."

Tony smiled. "I understand you were stroke in the varsity crew two years ago."

"That's right."

"That's the year you were rowing everybody out of the water, isn't it?"

"There weren't any good crews that year. We just happened to have the least bad ones."

Tony looked at the youth's hands, nervously clenching and unclenching. They were powerful hands, which nevertheless seemed to possess the capacity for minute adjustments. Tony smiled. "No need of being so modest, old fellow. It's just as I said. Cole Hendron in New York is getting together a bunch of people for some work he wants done during the next few months. It's work of a very private nature. I can't tell you what. I can't even assure you that he will accept you, but I'm touring around in the attempt to send him some likely people. You understand that I'm not offering you a job in the sense, that jobs have been offered in the past. I don't know that any salary is attached to it at all. You will be supplied with a place to live, and provided with food, if you accept."

The tall youth grinned. "I suppose you know that offering a chance to associate with Cole Hendron, to a man like me, is just like offering the job of secretary to St. Peter, to a bishop."

"M-m-m. By the way, why did you stay here at the university when most of the graduate students have left?"

"No particular reason. I didn't have anything better to do. The university is on high ground, so it didn't seem sensible to move for that reason, and I thought I might as well go on with my work."

"I see," Tony replied.

His companion hesitated to say what was obviously on his mind, but finally broke the short silence. "Look here, Mr.-— Mr.—"

"Drake. Tony Drake."

"Mr. Drake. I can't understand why on earth Hendron would want me. If he's planning to take a group of people to some safe spot in order to preserve scientific knowledge during the next year, he can find hundreds of people, thousands of people, that have more knowledge to save, and a better memory to save it in, than I have."

Tony looked at the good-humored blue eyes and liked the young man. He felt instinctively that here was one person whom Cole Hendron and the committee would surely accept. The name of the man before him, he recalled, was Jack Taylor—his record for a man of twenty-five was startling. He grinned at the youth's speculation. "You're a physicist, Taylor. If you were in Cole Hendron's shoes, and were trying to take a

group of people to a place of safety, just where, under the circumstances we anticipate, would you take them?"

The other man was thoughtful for an instant. "That's just what worried me. I can't think of any place on earth that would offer a refuge essentially satisfactory."

"Exactly. No place *on earth."* Tony emphasized the last two words.

Jack Taylor frowned quickly, and suddenly the freckles on his face stood out because his color had departed.

"God Almighty! You don't mean to suggest—"

Tony lifted his hand and dropped it. "I'm offering you a letter than will give you an interview with Cole Hendron. Do you want to go and see him?"

For a minute Taylor did not answer. Then he said disjointedly: "Marvelous! My God—Hendron's just the man—the only man! To think that anybody would come around to give me a shot at such a thing!" Tears suddenly filled his eyes, and he stood up and walked in two mighty strides to the window.

Tony slapped his back. "See you in New York. Better get going right away. So long, old man."

Deeply moved, proud that any race, any civilization should produce human beings of the temper and fineness of young Taylor, Tony walked out onto the university campus and hurried to keep an appointment with an obscure but talented assistant professor of chemistry whose investigations of colloids had placed his name on the long list furnished to Tony by Hendron and his associates.

Tony, having applied himself for months to acquisition of the primitive proficiencies in growing things and in the manual arts, had found himself appointed by Cole Hendron as his personnel officer. Tony possessed, decidedly, a knack with people; and so Hendron was sending him about to recruit young men for the extraordinary duties of the crew of the Space Ship.

Her father had asked Eve to suggest, provisionally, the women who must go along; and Tony had met some whom Eve had selected.

Strange to think of them standing with you—and with a few other men out of all our world's creation—on the soil of an empty planet! What would they be to each other there?

Stranger still, to gaze at night into the sky, and see a spot of light beside a brighter orb and realize that you might—you *might* become a visitor to that spot in the sky!

Tony returned, three weeks later, to New York City, where Hendron

now spent most of his time. He had workshops and laboratories started in several places, but the advantage of conveniences in New York was so great that he had decided not to abandon his work there until later.

Upon his arrival in the city, late on a July afternoon, Tony went at once to see Hendron and Eve. He had business with Hendron—none with Eve; he merely longed to see her and be with her, more than he dared display. Not much change was observable in the city. The station was a sea of people, as it had been on the day of his departure. The streets were more than normally crowded, and his taxicab made slow progress.

There were three policemen in the front offices of the laboratories, and he was admitted only after a wait. Eve came into the reception-room first, and shook hands with him coolly. That is, outwardly it was coolly; but inwardly, Tony felt sure, she was trembling, even as was he.

"Oh, Tony," she said, her voice almost giving way, "I'm so glad to have you back! I've read all your reports."

"I've read all your acknowledgments of them," said Tony hoarsely. It was all that had passed between them. Reports and acknowledgments, in lieu of love-letters!

"Father will be right out. We've been working steadily ever since you left. You and Dad and I are going to have dinner together to-night."

"Any one else?" asked Tony jealously.

"No; who would there be?"

"Your South African, I thought probably."

"Not mine, Tony!"

"Your father's, then. He keeps him in the laboratory—for you."

Hendron, wearing his laboratory apron, walked briskly into the front office. "Hello, there, Drake! Delighted to see you back. Your candidates have been arriving daily, and we've put them all to work. Dodson and Smith and Greve are enthusiastic about them." He looked at his watch. "Five-fifty. I've got a little work to do here. Then we want you to come up to the house for dinner."

As Tony unlocked his apartment door, Kyto sprang to his feet.

"I take your presence," Kyto said, "with extravagant gratitude."

Tony laughed. "A bath, Kyto, a dinner jacket, something in the way of a highball—I haven't had a drink since I left. Good Lord! It's refreshing to see this digging again. You've missed me, eh?"

The little Jap ducked his head. "I have indulged my person in continual melancholy, which is now raised in the manner of a siege-gun."

"Swell," said Tony. "The drink, the bath, the clothes! Eat, drink and be

merry, for to-morrow we die. There's something in it, Kyto."

"I have become apprised of the Bronson circumstances in *toto,* and about your statement am agreement itself."

Tony's eyebrows raised. "Know all about it, hey?"

"I have a nice storehouse of information on same."

"Good. How's my mother?"

"Excellent as to health. Telephoning daily."

"Maybe you'd better ring her up first. On second thought, that's the thing to do. I telegraphed her occasionally, but heaven only knows when I'll see her. She is a darn' good sport."

"A person of profound esteemableness."

Tony looked with surprise at the back of the Jap as he started toward the telephone. The approach of the Bronson bodies had made his servant more loquacious than he had ever before been. Aside from that, no change in Kyto was discernible—nor did Tony anticipate any change. He began to remove his travel-worn clothes, and was in a bathrobe when Kyto succeeded in completing a telephone-connection with his mother's house in Connecticut.

Tony moved with a feeling of incredulity. The Hendron apartment was exactly as it had been. Leighton approached stiffly with a cocktail on a small silver tray. There was even jazz emerging softly from the radio. He smiled faintly. Funny that a girl of Eve's extraordinary education and taste should enjoy the monotonous rhythm of jazz coming over the radio, and yet she had always liked it.

Eve appeared—a new Eve who was a little different from the old Eve. She wore a green evening dress that he remembered from an hour spent long ago on the balcony.

"Hello, Tony." In her eyes was the same wonderment, the same surprise and unbelief that he felt. She took the cocktail which Leighton had brought, and held it up to the light. A pink hemisphere, a few drops of something that belonged to a life in a world already as good as dead. "Happy days!"

Hendron appeared immediately after his daughter. "Drake! Evening, old man. No cocktail, thanks, Leighton. Well, this is odd. Here we stand, just as we did in the old days, eh?"

"Don't say the old days, Father. We'll be doing it all the rest of our lives."

Hendron's extravagantly blue eyes twinkled. "If you expect me to

furnish you with cocktail glasses and smuggled Bacardi in the years that lie ahead on Bronson Beta, Eve, you vastly overrate my paternal generosity and thoughtfulness. Let's have dinner. I want to get back to the laboratory for a conference at midnight."

The dining-room doors were opened. White, silver and red glittered under the indirect lights. "I point with pride," Eve said, "to the roses. It's something of an achievement these days."

They sat down. Leighton served consommé, and Tony picked up his silver spoon with a dreamy feeling of unreality which psychologists have noted and only badly explained.

Hendron brought him to his senses. "Tell us the news, Tony. We've been living down there at the laboratory ever since you left. This is Eve's and my first night off. Eating there, sleeping there. We have dormitories now on the floor above. What's going on in the world? You know, we even bar newspapers now. They're too much of a distraction, and Dodson has instructions to keep track of the news but not to give us any, unless it will have an effect on our work."

Tony sipped the consommé. "You mean to say you haven't kept tabs on the effect of your own society's bitter pill?"

Hendron shook his head. "Not anything to speak of. A word here and there in reference to something else, that's all."

Eve said eagerly: "Go ahead, Tony! Tell us everything. What do you know about the world? What's it like in Boston? What do people think and say? What's the news from abroad? All we know is that the Government has at last done a little governing, and taken over the public utilities in order to keep them running."

Tony began to talk. He took what opportunity their questions gave, to eat.

"It hasn't made as much difference as you'd think. The Government at Washington is now less concerned with the fact that the populace should be moved away from the Coast, than it is with immediate problems. If you really have not read about them, I can give you some idea. There was a general strike in Chicago two weeks ago that tied up everything. No electric light and no water; nothing for a day. There was a terrific riot in Birmingham. The police forces in half a dozen cities walked out. The State governments weren't able to cope with the situation. In some cases it was just that the people decided not to work any more, and in others it was pure mob uproar. The Federal Government stepped in everywhere. They took over blanket control of the utilities, saw to it that trains were kept running, powerhouses kept going, and so on. Nominally workers are jailed for dereliction, but actually I think they have found it necessary to execute them. Trouble began when I was in Boston, but in three days all

the major functions of housing, food and transportation were working fairly well.

"I think the people looked first to the President, anyway; and the President had the good sense to kick politics in the face and take full authority upon himself to do anything and everything which he thought would keep the country in operation. There was some trouble in the Army and Navy, still more in the National Guard, especially with soldiers who were fathers and wanted to remain with their families. I suppose there are nearly half a million men doing police duty right now."

"It's strange," Eve said, "but I realized things were functioning, without even having the time to investigate precisely why they were going."

Her father looked keenly at Tony. "That's all according to the plan that the League worked out before the news broke. A man named Carey is largely responsible for it. He's an economist. I believe he's a guest at the White House right now, and has been for ten days."

"I've seen his name," Tony said, and continued: "As I was saying, it hasn't made as much difference as you would imagine. I saw one nasty riot in Baltimore between soldiers on one side and cops on the other, but in half an hour it was all over. I think that the work of keeping the public informed has been marvelous. The radio goes twenty-four hours a day, and the newspapers appear as often as they have anything fresh to print. People are kept encouraged and reassured and directed. Of course, part of the general calmness is due simply to mass inertia. For every person that will get hysterical or do something foolish, there are about ten who will not only fail to get hysterical, but who will not even recognize that their lives are presently going to be changed entirely. The whole city of Philadelphia, with the exception of the university, is almost unaltered. Anyway, that's the impression you get of it.

"And the unemployed have been corralled *en masse.* There is a project to turn the entire basin of the Mississippi north and west of Kansas City into an abode for the Coast populations, and the unemployed are building there, I understand, quarters of sorts for ten million people. Most of them are temporary. They are also planting vast areas of land in crops. I imagine that they are going to compel the migration when the interior of the country is prepared as well as possible to receive it, and when the danger of tidal waves draws near. As a matter of fact, every industrial center is working at top speed, and Chicago is headquarters for their produce. I don't just remember the figures, but an appalling quantity of canned goods, clothing, medical supplies and things like that are being prepared and distributed to bases in the Mississippi valley. Granted that the valley remains inhabitable, I really believe that a majority of our population will be successfully moved there and installed

for an indefinite time."

"It's wonderful, isn't it?" Eve said.

Tony nodded. "The machinery which organized millions of men during the war was still more or less available for this much bigger undertaking, from the standpoint of plans and human cogs. The hardest thing is to convince the people that it must be done; but the leaders have recognized the fact, and are going ahead. A sort of prosperity has returned. Of course, all prices and wages are rigidly fixed now, but there is more than enough work to go around, and keeping busy is the secret of holding the masses in emotional balance."

Hendron nodded. "Exactly, Drake.-I'm really astonished to hear that they've done so well. It's unthinkable, isn't it? Absolutely unthinkable! Just a few months ago we were a nation floundering in the depths of what we thought were great difficulties and tribulations, and to-day, facing an infinitely greater difficulty, the people are more intelligent, more united—and more successful."

"I think it's thrilling," Eve said.

Tony shook his head in affirmation. "I can't give you a really good picture of it. I really know very little of it. It all came, in dashes—things read in newspapers, things heard over the radio, things told me; but this country at least has grasped the basic idea that there is going to be trouble, and great trouble, in a short time."

"Quite so," Hendron said. "Now how about the rest of the world?"

Tony's hand jerked as he buttered his roll. He looked up. "The rest of the world?" he repeated. "I don't know much about the rest of the world. What I do know I'll tell you, but you mustn't take my word as final. The information is garbled, contradictory and unreliable. For one thing, many of the European nations are still foolishly trying to keep their plans secret in order to protect their borders, and so on. In fact, I wouldn't be at all surprised if they fell to fighting. There seems to be small thought of cooperation, and they stick fiercely to national lines.

"England's labor troubles festered the minute she tried to institute compulsory work for those who tended her utilities. I believe London was without power or light for five or six days. There was a vast amount of sabotage. The police fought battles through Piccadilly and Trafalgar Square with armed mobs. A curious thing happened in India. One would think that the Hindus would be the last people in the world to recognize what was about to happen. One would believe that their reaction would be fatalistic acceptance. However, according to one report at least, there is something in the Veda which anticipated the Bronson bodies, or some similar cosmic manifestation; and with the spread of the news that disaster threatened the world, the Hindus and Brahmins rose together.

Now no word comes from India at all. Every line of communication has been cut or silenced."

Tony paused, ate a little. "This is all very sententious. Most of what I'm saying is taken from the *clichés* of the newspapers. You'll have to forgive me, but you asked me to tell you."

"Don't stop, Drake, old man."

"Yes, go ahead, Tony."

"Australia and Canada, on the other hand, acted very much as the United States has acted. Their political leaders, or at least the ones who came immediately into prominence and power, accepted the fact that trouble was on the scene. They got down to brass tacks, and are doing what they can for and with their people. So is South Africa.

"The French are very gay about it, and very mad. They think it is very funny, and they think it is an insult to France at the same time. The whole country is filled with sputtering ineffective people. They're playing politics for all it's worth, and new cabinets come and go, sometimes at the rate of three a day, without ever getting anything accomplished at all. But at least they have kept functioning as a nation. Germany went fascist; a few communists were killed; and so were a few Jews.

"Communists are struggling to get control—not, with success. As for Russia, little is known. Of course it is a terrible blow to the Soviet. The heavy industries which they developed so painstakingly and at such awful cost are scattered over a wide area. I believe the Soviet Government is carrying on rather bitterly, but as best it can. China is still just China. So you can tell very little about it. In South America the news has served merely to augment the regular crop of revolutions."

Tony put down his fork. "That's all I know." He reached for a cigarette, and lighted it. "What to expect to-morrow or a week from to-morrow, no one can say. Since it's impossible to tell how high tides will be, how far inland they will rush, and what areas will be devastated, and since not even the best guess will be any indication whatsoever of where the land may rise, where it may fall, and what portions of it will witness eruptions and quakes, it may be that even the gigantic steps being taken by some governments will be futile. Am I not right?"

"My dear boy," Hendron replied after a pause, "you are eminently right. That is an amazingly clear picture you've given us. I'm surprised that any nation has had the intelligence to take steps, although I suppose, being patriotic in my heart, I rather hoped and expected that our own United States would leap from the backwash of villainous politics into a little good clear sailing before the crisis arrives. . . . Let's have our coffee in the other room."

After dinner Leighton, whose customary mournfulness had, by some

perversity, bloomed into the very flower of good nature, ushered Ransdell into the apartment.

Tony was furious at Ransdell's arrival. He had hoped to have Eve to himself.

How he had hoped to have her, and with what further satisfaction, he did not define; but at least he knew that he wanted Ransdell away; and the South African would not go away.

"He has flown five or six times to Washington for Father," Eve explained. "And he's wonderful in the laboratory. He has a genius for mechanics."

The South African listened to this account of himself with embarrassment; and Tony, observing him, realized that under any other circumstances he would have liked him.

In fact, originally Tony had liked David Ransdell immensely—until he had realized that he also was to go with him—and with Eve—on the Space Ship!

Chapter 10—Migration

BRIGHTER and brighter, and higher and higher, each night the strange stars stood in the southern skies.

Indeed, one ceased to resemble a star at all and appeared, instead, as a small full moon which grew balefully each night; and now the other also showed a disc even to the naked eye.

Each night, also, they altered position slightly relatively to each other. For the gravitational control of the larger— Bronson Alpha—swung the smaller, Bronson Beta, about it in an orbit like that of the moon about the earth.

Their plain approach paralyzed enterprise on the earth, while the physical effects of their rush toward the world was measurable only in the instruments of the laboratories.

Throughout the civilized world two professions above all others adhered most universally to their calling: day and night, in the face of famine, blood, fire, disaster and every conceivable form of human anguish, doctors and surgeons clung steadfast to their high calling; and day and night amid the weltering change of conditions and in the glut of fabulous alarms and reports, the men who gathered news and printed it, labored to fulfill their purposes.

Tony saw more of the world's activities than most of its citizens at this

time. He had scarcely returned from his first tour of the Eastern cities when he was sent out again, this time to the Middle and Far West. That journey was arduous because of the increasing difficulties of travel. The railroads were moving the Pacific and the Atlantic civilizations inland, and passenger trains ran on uneasy schedules. He saw the vast accumulation of freight in the Mid-western depots. He saw the horizon-filling settlements being prepared. He saw the breath-taking reaches of prairie which had been put under cultivation to feed the new horde in the high flat country north and west of Kansas.

Along the Pacific Coast he observed the preparations being made for the withdrawal from the western ocean. Seattle, Tacoma, Portland, San Francisco, Los Angeles, San Diego, the cities inevitably doomed, were digging up their roots. Millionaires drove eastward in great limousines with their most priceless treasures heaped around them; and small urchins cast an anxious eye at the Pacific and turned to look with uncomprehending hope toward the mountains that ranged beside it.

Every citizen in the United States had some part in the migration. Relief maps of the United States were supplied by the Government, so that any man by looking at one could tell whether he had put a thousand feet or five thousand of altitude between himself and the menacing waters.

Tony's work was varied. He continued to send back by ones and twos those scientists whose counsel Hendron desired, and the flower of the young men and women who might be useful in the event of a great cataclysm.

Hendron's own ideas were still uncrystallized: he felt with increasing intensity the need for gathering together the best brains, the healthiest bodies and the stanchest hearts that could be found. He had a variety of plans. He had founded two stations in the United States, and was in the process of equipping them for all emergencies. Under the best conditions, the personality of his group might divide into two parts and move to those stations, there to remain until the first crisis passed so that afterward they could emerge as leaders in the final effort against doom.

Under the pressure of the impending destruction, his scientists had pushed their experiments in obtaining power from atomic disintegration to a point where the power of the atom could be utilized, within limits, as a propulsive force.

Hendron had thereupon succeeded in bombarding the surface of the moon with a projectile that was, in its essentials, a small rocket. He had settled the problems of hull composition, insulation and aeration, which would arise in such a vessel if made in a size to be occupied by men. He had devised rockets which could be directed. He had constructed a rocket with vents at both ends so that a discharge in the opposite

direction would break its fall. Several such rockets he actually dispatched under remote control, hurtling many miles into the air, turning, descending part way under full force of their stern "engines," and checking their fall by forward discharges at the end of their flight, so that their actual landing had not destroyed even the delicate instruments they contained.

The chief problem that remained unsolved was a metal sufficiently resistant to the awful force Hendron employed. Even the experimental rockets often failed in their flight because the heat generated by the atomic combustion within them melted and blew away the walls intended to retain it. So, at the Hendron laboratories, the world's metallurgists concentrated their efforts upon finding an alloy capable of withstanding the temperatures and pressures involved in employing atomic energy as a driving force.

Tony visited both of Hendron's stations. One was in Michigan and one in New Mexico. He brought back reports on the progress being made there in the construction of laboratories, machine-shops and dormitories. He returned on the day on which the President made his impassioned and soul-searching speech on courage. More than forty million persons heard the President's voice as it came over the radio. Tony, standing in the crowded aisle of a train between Philadelphia and New York, caught some of the President's words:

"The world is facing an august manifestation of the handiwork of Almighty God. Whether this handiwork is provided as punishment for our failure to pursue His ways, or whether Nature in her inscrutable processes is testing the courage of her most tender product—man—we shall never know. But we stand on the brink of a situation from which we cannot hide, and which we cannot escape. We must meet this situation with fortitude, with generosity, with patience and endurance. We have provided punishments in our emergency decrees for the selfish. But so impoverished have our human resources become, that we can provide no reward for the noble, save that which they find in their own hearts.

"Many nations have already faltered and fallen in the outpouring of their own blood. Some nations, with obtuse stubbornness, have failed to accept the truth, and in stupid carelessness are endeavoring to ignore that which will presently devour them. America, recognizing the magnitude of the coming upheavals, has taken every step, bent every effort, and enlisted every man and woman and child to do his and her utmost, not only, as a great predecessor in my office has said, 'that the Nation shall not perish from the earth,' but that humanity itself shall not perish from the earth. To you, my fellow-countrymen, I can offer but one word of advice, one single lamp to penetrate the onrushing gloom"—and his voice sank to a whisper more penetrating than any shout—

"Courage."

As Tony listened, his heart swelled with pride, and he saw in the abstracted eyes of his fellow-passengers a new light appear.

Courage! Courage was needed.

When Tony reached New York, he found Hendron sleepless and icily calm in the midst of his multitudinous enterprises.

But Eve showed the strain more than her father, and during the first evening, which they spent together, she expressed her fear: "Father's greatest hope was that his ship would be successful. There is more information than has been given out about the Bronson bodies. We admit that they will come very close. Terribly close. We do not admit yet precisely how close."

They were standing together on the balcony overlooking the brightly lighted and still noisy city. Their arms were locked together in defiance of their oath to the league.

"He'll succeed," Tony said.

"He has succeeded, except that every rocket he builds is limited in the distance it can fly and the power it can use by the fact that its propulsive tubes melt. There isn't a metal nor an alloy in the world that will withstand that heat."

Tony did not answer. After a long silence she spoke again. "It's an awful thing, Tony. Look down there. Look down on the city. Think of the people. Look at the lights, and then imagine water, mountains of it. Water that would reach to here!"

Tony held her arm more tightly. "Don't torture yourself, Eve."

"I can't help it. Oh, Tony, just think of it!"

"Well, that's the way things have to be, Eve." He could not say any more.

When Tony went down, the street was still filled with people. All the people were talking. They walked, but it did not seem to matter to them what direction they took or what chance company they shared.

The strange small moon, growing larger each night, shone palely in the sky.

Tony hailed a cab. His eyes settled on his shoes when he sat down. He thought grayly and without rhythm. Into every thought darted the face of Eve as he had last seen it— a face growing hourly more haggard. He remembered the downcasting of her eyes.

When he arrived at his apartment, Kyto was waiting. There was an expression of distinct anxiety on his usually inscrutable face. The

emotion made him ludicrous—but Tony was more surprised than amused and Kyto commenced to talk immediately.

"All people frightful, now."

Tony tossed his hat aside. "Yes."

"Serious consequences close, you will inform me?"

"Of course. Do you want to leave now?"

"Contrarily. Safety surrounds you. Also charming good luck. I therefore prefer to stick."

"Right. And thanks."

Kyto padded softly away, and Tony stood thoughtfully in the center of his living-room for fully two minutes.

Next he called a number in Greenwich, Connecticut, waited an abnormally long time, then asked a maid for Mrs. Drake. His voice was warm and calm. "Hello, Mother. How are you?"

His mother's reply was controlled, but nerves stabbed through every word she said. "Tony, darling! I've tried and tried to reach you. Oh! I'm just an inch short of fainting. I thought something had happened to you."

"Sorry, Mother. I've been busy."

"I know. Come right out and tell me all about it."

"I can't."

There was a pause. "You can't put it in words?"

"No."

There was another long pause. Mrs. Drake's voice was lower, more tremulous—and yet it was not the voice of an hysterical or an unreasoning woman. "Tell me, Tony, how bad is it now to be?"

"The same as it was to be yesterday, Mother."

"Not hiding new developments, are you, Tony?"

"No, Mother; those we've announced that we expect, haven't really begun to happen yet."

"Yet you know more; I can feel you know more than you have ever told me."

"Mother, I swear you're being morbid—" How could he tell her that for her there was annihilation, but for himself some chance of escape? She would wish it for him, whatever happened to herself; but he could not accept it. A berth in the Space Ship, leaving her here! Leaving here millions of mothers—and children too!

Hendron did not permit himself such reflections; Hendron hardened

himself and forbade it. He had to. If he began to let himself even consider the saving of individuals, and allowed himself personal judgment as to who should go,—as individuals,—he'd go mad. Stark, raving, crazy! He simply had to confine himself to selection on the sole point of saving the species—the race.

But probably no one at all would be saved, Tony recollected almost with relief. Work on the Space Ship, in recent days, was not really advancing. They were held up from lack of a material to withstand the power that science now could loose from the atom. The idea of escape was probably only a fantasy, utterly vain. So thinking, Tony ended his talk, and put up the receiver.

Taxicabs had been sent for Tony and his party. They made their way immediately downtown to the big building which housed the Hendron laboratories. The cab had covered a few blocks when Tony realized that not only on the waterfront, but throughout its length and breadth, Manhattan had been depopulated. Here and there a lone figure was visible— usually a figure in the uniform of a policeman or a soldier. Once he thought he caught sight of a man skulking in the shadows of a doorway. But he was not sure. And there were no women, no children.

After the sun had set, it was easy to appreciate why the last recalcitrant thousands of New York's populace had departed. The Bronson bodies, on this night, rose in frightful majesty: a sphere of lustrous white larger than the moon, and a second sphere much smaller, but equally brilliant. Their awesome illumination flooded the city, rendered superfluous the street-lights which, however, remained stubbornly burning. News of this augmented size had undoubtedly reached New York during the day—and the last unbeliever must surely have been convinced if he remained to witness the phenomenon.

There were few lights in the skyscrapers. As the taxies bowled through the murk and dark, unchecked by traffic signals, Tony and Jack Taylor shuddered involuntarily to see the black buildings which man had deserted. Had they but known, a second shudder might have seized them—for already the tide was lapping the sea-wall at the Battery.

At the elevator they were met by Eve. She kissed Tony, in an ecstasy of defiance, and then hurried to assist his group in the removal of their baggage, and in directing its disposal. Every one left the street reluctantly. The Bronson bodies were hypnotic.

In the laboratories there was the utmost confusion. No longer was the inner door closed. Only a skeleton crew had remained in New York, under Hendron. The scientist himself was introduced by Tony to each of the new arrivals, and to each he said a few words of welcome. Several were already known to him.

Then Hendron made an announcement to all of them—a statement

which was repeated afterward in French and German. "Ladies and gentlemen—you will sleep in the dormitories above here to-night. To-morrow we will remove by airplane to my field station in Michigan. The others are already there. In bidding you good-night, I must also request no one to leave the building. A splendid view of the firmament may be had from the roof. But the streets are entirely unsafe. The last wave of emigration left New York at sundown this evening. The people who remain are either law officers or marauders. I regret that I will be unable to entertain you myself, but I leave you in the hands of my assistants."

Jack Taylor was beside Tony when they reached the roof.

"As God lives, that's a marvelous thing!" He stared at the two yellow discs in the sky. "Think of it! The heavens are falling upon us—and a few hundred men, here and there, are sitting on this stymied golf-ball figuring how to get away!"

Chapter 11—The Last Night In New York

"LOOK down, now," said a different voice, "at the street." It was a young man's voice, carefully controlled, but in spite of its constraint, ringing with an unusually vibrant and vital quality.

Tony looked about at the speaker before he gazed down, and he recognized a recruit whom he had not himself selected. It was Eliot James, an Englishman from Oxford, and a poet. By profession and by nature, he was the most impractical of all the company; and one of the most attractive, in spite of his affectation—if it was that—of a small beard. The beard became him. He was tall, broad-shouldered, aquiline in feature, brown.

The baleful moonlight of the Bronson Bodies glinted up from the street.

"Water," some one said.

"Yes; that's the tide. It's flowing in from the cross-streets from the Hudson, and from the East River too."

"There's some coming up from the Battery along the avenues—see the flow down there!"

"How high will it rise to-night? Oh, how high?"

"Not above the bridges to-night. They're not in danger— to-night. But of course the power-houses will go."

"And the tunnels will be filled?"

"Of course."

"There are people down there, wading in the street! . . . Why did they stay? They've been warned enough."

"Why did we stay? We gave the warning."

"We've business here."

"So had they—they supposed, and as important to them as we imagined ours to be to us. Besides, they're safe enough to-night. Just that few of them. They can climb three stories in almost any building and be safe. The tide ebbs, of course, in six hours."

"Then comes again higher!"

"Yes—much higher. For the Bronson Bodies are rushing at us now."

"Exactly how," asked Eliot James, "do they look through the telescope?"

"The big one—Bronson Alpha," replied Jack Taylor, as they all looked up from the street, "not very different from before. It seems to be gaseous, chiefly—it always was chiefly gaseous, unlike the earth and Mars, but like Jupiter and Saturn and Neptune. Its approach to the sun has increased the temperature of its envelope, but has brought out no details of its geography, if you could call it that. Bronson Alpha offers us no real surface, as such. It seems to be a great globe with a massive nucleus surrounded by an immense atmosphere. What we see is only the outer surface of the atmosphere."

"Could it ever have been inhabited?" the poet asked.

"In no such sense as we understand the word. For one thing, if we found ourselves on Bronson Alpha, we would never find any surface to live on. There is probably no sudden alteration of material such as exists on the earth when air stops and land and water begin."

"But the other world—Bronson Beta—is different."

"Very different from its companion up there, but not so different from our world, it seems. It has a surface we can see, with air and clouds in its atmosphere. The clouds shift or disappear and form again; but there are fixed details which do not change, and which prove a surface crust exists. The atmosphere was frozen solid in the long journey through space, but the sun has thawed out the air and has started, at least, on thawing out the seas."

"You're sure there are seas too?"

"There are great spaces that seem to be seas, that satisfy every visual and spectroscopic test of seas."

"Have you seen," asked the poet, "anything like—cities?"

"Cities?"

"The ruins of cities, I mean. That globe seems to be so much like the earth; and sometimes it has had its sun. It lived in the sunshine of a star that was an octillion, octillion miles away. I thought just now, looking at it, that perhaps on it were cities like this, where people once watched the coming of whatever pulled them loose from their sun, and dropped them into the black mouth of space."

Some of the company about him were looking up and listening; others paid no attention to him. He did not care; a few had shared his feeling; and among them was Eve, who stood near him.

"Would you rather we went that way?" she said to him.

"Slipping into space, falling away, all of us in the world together retreating farther and farther away from our sun, gradually freezing as we went into darkness?" Eliot James shook his handsome head. "No; if I had my choice, I think I'd elect our way. Yet I wonder how they faced it—what they did?"

"I wonder," said Eve, her eyes upon the yellow orb, "if we'll ever know."

"Look," proclaimed some one else who was gazing down, "the lights are beginning to go."

He meant the street-lamps of New York, which had been switched on as usual and maintained to this minute.

Thousands of them still prevailed, indeed; but a huge oblong, which had been lighted before, was darkened now.

"The flood has caught the conduits!" And with the word, the little gleaming rows which etched the streets throughout another district died; but the rest burned on in beautiful defiance.

The city officially was abandoned; but men remained. Some men, whatever the warning, whatever the danger, refused to surrender; they stuck to their duties and to their services to the last. Some men and some boys; and some women and girls too. And so, on this night, New York had lights; it kept communication—telephone and telegraph too.

But now another pattern of blocks disappeared; Brooklyn went black. Beacons burned—airplane-guides and lighthouses. Ships, having their own electric installations, could be seen seeking the sea.

That too, thought Tony, was only a splendid gesture; yet the sight of the ships, like the stubborn persistence of the lights, threw a tingle in his blood and made him more proud of his people. They couldn't give up—some of them! To leave the ships at the dock to take the tide that now was flooding in, was certain destruction. What use to steer them out to sea? For what would they be saved? Yet captains and crews could be found to steer and stoke them.

More blocks were black; the lights from the awful orbs of the Bronson Bodies slanted sharp across the streets, their shadows unbroken by the last lamps of the city's defiance.

Now the street gave up sounds—the rush of water as the loud edge of the flood advanced filling the last floor of the cañons between the buildings. All over the world at the seaboard it must be the same, except that some cities already were overswept and this tide was now retiring. To rise higher yet twelve hours later; and then still higher!

Eliot James moved closer to Eve.

"What does it do to you?" he said.

She answered: "Too much."

"Yes," he said. "And it's only begun?"

"It's not begun," whispered Eve. "This—this is really nothing. To-night, the waters will merely rise over the lower buildings of the city, and then subside. We will all leave in the ebb tide."

"Which, I suppose, will drain the rivers dry? There was clearly no practical purpose for staying this twelve hours longer; but I am glad we did. I would not have escaped this sensation. I wonder where the people have gone who also stayed for it—whom we saw in the streets awhile ago?"

Eve attempted no answer; nor did Tony.

"I imagine," persisted the poet, "they are also glad they remained. It is a new intoxication—annihilation. It multiplies every emotion."

Tony so fully agreed with him that he drew Eve away. He made the excuse that, her father having retired, she also should sleep; but having taken her away from the others, he kept her to himself,

"Eve, we've got to marry!"

"My dear, what would marriage mean now?"

"But you feel it—don't you?"

"Need for you—"

"As never before, Eve?"

"Yes, Tony. It's as he said—oh, my dear! The waters overwhelm you—the flood rising and rising, with scarcely a sound, and those two yellow discs doing it! And no one can stop them! They're coming on, Tony! They're coming on, to lift the waters higher and higher; they're coming on to crack open the shell of the earth! Tony—oh, hold me!"

"I have you, Eve. You have me! Here we are, two of us together. . . . They're in pairs wherever they are in New York to-night, Eve. Didn't you

see them? Wherever they waited, a woman waited with a man. There's only one answer to— annihilation. That's it."

"Tony!"

"My dear—"

"What's that. . . . Your name? Some one's searching for you. A message seems to have come."

"How could a message come?"

Yet in the yellow light on the roof, they could see a uniformed boy; and Tony stepped out to meet him.

He had arrived at the building an hour ago, the boy was saying; with the elevators stopped, he had climbed the roof by the stairs.

Tony took his telegram, tore it open and, in the light of the two baleful Bodies, he read:

MRS. MADELINE DRAKE MURDERED BY LOOTERS WHO RAIDED SEVERAL CONNECTICUT FARMS AND ESTATES LATE TO-DAY.

The paper dropped from Tony's fingers. He slumped to a bench and covered his face with his hands.

He felt Eve's hand and looked up, utter despair on his face.

"Read that." He saw that she held his telegram.

"I have read it. Tony—"

"I should have gone to her; or I should have taken her away —but I believed it best to leave her in her home as long as possible. I was going to her to-morrow. Now—*now*—"

She checked his flow of recrimination, sitting down on the bench beside him and reaching up to smooth his hair as if he were only a child. "You couldn't have done a thing, Tony. This might have happened wherever you had taken her. All over the country, bands of men have been running like wolves; and to-day they became more merciless."

Tony leaped to his feet. "I'll go to her, and find them, and kill them!"

"You'll never find them, Tony. They'll have moved on; and no one will have stayed to tell you who they were. ... Besides, Tony, they'll be punished without any one raising a hand. Perhaps already they are dead."

"But I must go to her!"

"Of course; and I'll go with you; but we must wait for the tide to fall."

"Tide?" He stalked to the edge of the roof and stared down; for, strangely, he had forgotten it. Now he saw the streets running full, not with the foul water of the harbor, but with a clean green flood. The Bronson Bodies lit it almost to dim daylight.

Tony gazed up at them, aghast. "My mind, my mind can understand it, Eve; but, good God, she was my mother! *Murdered!* Cornered somewhere in her house—my home where I was a little boy, and where I ran to her with my triumphs and my troubles, Eve. I wonder where she was, in what room they struck her down, the damned cowards—" He did not finish. He was racked by a succession of great sobs.

Eve caught his hand and brought him again to the bench. Still they were alone, and she sat close beside him, holding him in her arms.

"Well go to her, Tony, as soon as we can. . . . This is happening to everybody. It's horrible, fiendish, unbelievable —and inevitable. It was frightful that they killed her; and yet probably, Tony, they did it instantly, and surely without agony for her; so perhaps it is much better that she went now, than that she should live through the next months as we know they will be—months of starvation and savagery and horror; leading only to the final catastrophe."

Tony looked bleakly at the girl. "Yes, I know that! but I can feel only that they killed her."

For a long time they said nothing more; then they arose, returned to the parapet and gazed down at the water.

Strange sounds rose with the flow of the flood; the collapse of windows under the weight of water; the outrush of air, the inrush of the tide. Away on other streets not citadeled by the massive towers whose steel skeletons reached down to the living rock, the walls were beginning to fall. Smoke drifted like a mist between the buildings as the water, the final enemy of fire, began to cause conflagrations.

Somewhere it "shorted" an electric current, perhaps; somewhere else it had sent a family fleeing before a fire which ought first to have been extinguished; or the water itself entered into chemical combinations which caused heat. Doubtless many a hand deliberately set the flames. But there was no wind to-night; so the flood isolated each fire; here and there a building burned; but the huge terraced towers of Manhattan stood dark and silent, intact.

"You must try to sleep, Tony."

"And you!"

"Till the tide goes out; yes, Tony. I'll try, if you will." She kissed him, and they went in together, to separate at the door of the room where she was to sleep. Tony went on to the bed allotted him, and he lay down

without undressing. In the next room Cole Hendron was actually asleep.

Tony, trying not to think, occupied himself with separating the sounds which reached him through the opened window —a woman's shriek, a bass voice booming a strange song, a flute.

Some one, seated above the flood, was piping in the unnatural light of the Bronson Bodies as the sea swept over the city; but for the most part the people who had remained were silent—paired off, here and there, sharing in each other's arms the terrible excitement of dawning doomsday.

Tony twisted on his bed and remembered his mother. When this tide turned—and enormous as it was, it must flow six hours, ebb for six before it flowed again, just like the moon tides—he must set off home for his last service to her.

"Lord, let me know mine end, and the number of my days, that I may be certified how long I have to live." The lines for the burial of the dead began echoing in his brain. *"Behold, thou hast made my days as it were a span long; and mine age is even as nothing in respect of thee; and verily every man living is altogether vanity."*

Tony had shut his eyes, and now he opened them to the light of the Bronson Bodies slanting into the room. . . . *"For when thou art angry, all our days are gone; we bring our years to an end, as it were a tale that is told."*

The woman had ceased to shriek; but the Negro's bass boomed on. Tony was sure it was a black man singing the weird chant which rode on the waters. The piper, too, played on. ...

Tony was aware that some one was shaking him.

"Morning?" he complained.

"Not morning," Kyto's voice admitted. "But the tide now—"

"Oh, yes," said Tony, sitting up as he remembered. "Thank you, Kyto."

"Coffee," said Kyto modestly, "will be much as usual, I venture to hope."

Tony arose and stalked to the window to look down at water, now rushing seaward. The roll of the world, while he had slept, had turned the city and the coast away from the Bronson Bodies so that now they sucked the sea outward; and the wash made whirlpools at the cross-streets.

It was the gray light of dawn which showed him the whirlpools. In the west, the awful Bronson Bodies had set; but Tony knew that, though now for twelve hours they would be invisible, the force of their baleful

violence, even upon the side of the world which had spun away from them, was in no sense diminished. The tide which had risen under them would flow out for six hours, to be sure; but then—though they were on the opposite side of the world—they would raise the frightful flow again just six hours later. . . .

"Coffee," reminded Kyto patiently, "you will need."

"Yes," admitted Tony, turning, "I'll need coffee."

"Miss Eve insists to pour it."

"Oh, she's up?"

"Very ready to see you."

An airplane hummed overhead; at some small distance, several others. Ransdell undoubtedly was in one of them. Inspection from the air of effects upon the earth was one of his duties—a sort of reconnaissance of the lines of destruction. Tony thought of Ransdell looking down and wondering about Eve. The flyer's admiration of her amounted to openly desirous adoration. There was the poet Eliot James, too.

They were bound with him—and with Eve—in the close company of the League of the Last Days whose function lay no longer in the vague future. The peculiar rules and regulations of the League already were operative in part; others would clamp their control upon him immediately.

Tony to-day resented it. He made no attempt to shake off his overpossessive jealousy of Ransdell or Eliot James over Eve. She would go home with him to-day—to his home, where his mother had been murdered. Eve and he would leave his home together—for what next destination? To return her to her father, who forbade Tony attempting to exercise any exclusive claim upon her? No; Tony would not return her to her father.

Hendron had arisen; and as if through the wall he had read Tony's defiance, he opened the door and entered.

He offered his hand. "I have heard, Tony, the news which reached you after I retired. I am sorry."

"You're not," returned Tony. It was no morning for perfunctory politeness.

"You're right," acceded Hendron. "I'm not. I know it is altogether better that your mother died now. I am sorry only for the shock to you which you cannot argue away. Eve tells me that she goes home with you. I am glad of that. . . . Last night, Tony, the Bronson Bodies were studied in every observatory on the side of the world turned to them. Of course they were closer than ever before, and conditions were highly favorable for

observation. I would have liked to be at a telescope; but that is the prerogative of others. My duty was here. However, a few reports have reached me. Tony, cities have been seen."

"Cities?" said Tony.

"On Bronson Beta. Bronson Alpha continues to turn like a great gaseous globe; but Bronson Beta, which already had displayed air and land and water, last night exhibited— cities. . . We can see the geography of Bronson Beta quite plainly. It rotates probably at the same rate it turned, making day and night, when it was spinning about its sun. It makes a rotation in slightly over thirty hours, you may remember; and it happens to rotate at such an angle relative to us that we have studied its entire surface. Something more than two-thirds of the surface is sea; the land lies chiefly in four continents with two well-marked archipelagoes. We have seen not merely the seas and the lines of the shores, but the mountain ranges and the river valleys.

"At points upon the seacoasts and at points in the river valleys where intelligent beings—if they once lived on the globe—would have built cities, there are areas plainly marked which have distinct characteristics of their own. There is no doubt in the minds of the men who have studied them; there is no important disagreement. The telescopes of the world were trained last night, Tony, upon the sites of cities on that world. Tony, for millions of years there was life on Bronson Beta as there has been We here. For more than a thousand million years, we believe, the slow, cautious but cruel process of evolution had been going on there as it has here.

"Recall the calendar of geological time, Tony. Azoic time —perhaps a billion years while the earth was spinning around our sun with no life upon it at all—azoic time, showing no vestige of organic life. Then archeozoic time—the earliest, most minute forms of life—five hundred million years. Then proterozoic time—five hundred million more—the age of primitive marine life; then paleozoic time, three hundred million years more while life developed in the sea; then mesozoic time—more than a hundred million years when reptiles ruled the earth.

"A hundred million years merely for the Age of Reptiles, Tony, when in the seas, on the lands and in the very air itself, the world was dominated by a diverse and monstrous horde of reptiles!

"They passed; and we came to the age of mammals—and of man.

"Something of the sort must have transpired on Bronson Beta while it was spinning about its sun. That is the significance of the cities that we have seen. For cities, of course, cannot 'occur.' They must have thousands and tens of thousands of years of human strife and development behind them; and behind that, the millions of years of the mammals, the reptiles, the life in the seas.

"It is a developed world—a fully developed world which approaches us, Tony, with its cities that we now can see."

"Not inhabited cities," objected Tony.

"Of course not inhabited now; but once. There can be no possible doubt that every one on that world is dead. The point is, they lived; so very likely we also can live on their world —if we merely reach it."

"Merely," repeated Tony mockingly.

"Yes," said Hendron, ignoring his tone. "It is most likely that where they lived, we can. And think of stepping upon that soil up there, finding a road leading to one of their cities—and entering it!"

He recollected himself suddenly and extended his hand. "You have an errand, Tony, to complete between the tides. I gladly lend you Eve to accompany you. She will tell you later what we all have to do."

He led Tony to Eve's door but did not linger, thereafter. Tony went in alone.

She was at a tiny table where a blue flame burned below a coffee percolator, and where an oil lamp, following the failure of electricity, augmented the faint gray of approaching dawn.

Was it the light, he wondered, or was Eve this morning really so pale?

He came to her, and whatever the rules for this day, he claimed her with his arms and kissed her.

"Now," he said with some satisfaction, "you're not so pale."

She did not disengage herself at once; and before she did, she clung tightly to him for a moment. Then she said:

"You've got to have your coffee now, Tony."

"I suppose so. ... But there's no stimulant in the world like you, Eve."

"I'll be with you all day."

"Then let's not think of anything beyond."

She turned the tiny tap of the silver coffeepot, filled a cup for him, one for herself. A few minutes later they went down together.

The rushing ebb of the tremendous tide was swirling less than a foot deep over the pavement, and was falling so rapidly that the curb emerged even while they were watching. From upper floors, where many automobiles had been stored against the tide, cars were reaching the street. One drove in the splash before Tony and Eve and stopped. The driver turned it over to them; and Tony took the wheel with Eve beside him.

They went with all possible speed, no longer encountering the tide

itself, but lurching through vast puddles left by the retreating water. Debris from offices, shops and tenements swept by the tides bestrewed the street.

A few people appeared; a couple of motorcycle police, not in the least concerned with cars, were making some last inspection of the city.

Bodies lay in the street; and now on the right a haze of smoke drifted from an area that had burned down during the night.

The morning, though the sun had not yet risen, felt sticky. The passage of water over Manhattan had laden the air with moisture so that driving between the forsaken skyscrapers was like journeying in a strange, gaunt jungle.

Tony noticed many things mechanically, with Eve at his side, traversing the reëchoing streets; the rows of smashed windows along Fifth Avenue—tipped-over dummies, wrecked displays; piles of useless goods on the sidewalks, the result of looting; the Empire State Building standing proudly against the blue sky, ignorant of its destiny, still lord of man's creation.

The East River, when they reached it, was a torrent low in its channel being sucked dry toward the sea. Wreckage strewed the strangely exposed bottom. The bridge; a few miles more of flood debris in steaming streets. Then towns and villages which also had been overswept.

Now the country with its higher hills whereon Tony and Eve marked in the first sunlight, the line left by the water at its height. They dipped through empty villages and rose to hamlets whose inhabitants still lingered, staring in a dulled wonderment at the speeding car. The effect of the vast desolation beat into the soul; derelict, helpless people, occasional burning houses, a loose horse or a wandering sheep—emptiness, silence.

They dipped into a hollow which was a pool not drained but which could be traversed; they climbed a slope with a sharp turn which was blocked; and there two men sprang at them.

Tony jerked out his pistol; but to-day—and though he was on his way to his mother who was murdered—he could not pull the trigger on these men. He beat down one with the butt, instead, and with the barrel cowed the other.

He got the car clear and with Eve drove on, realizing they would have killed him and taken Eve with them. Why had he left them alive?

Ah—here was the road home! Home! His home, where he had been born and where he was a little boy. Home, the home that had been his father's and his grandfather's and before that for four generations. Down this road from his home, some man named Drake had gone to fight in

the Great War, the War of the Rebellion, in 1812, and to join the army of Washington.

Tony recalled how his earliest remembrances were of strangers coming to peer about the house which they called “historic," and how they raved about the things they called "old." The house was high on a hillside, and as he drove along the winding road, he rode over the mark where the water had risen the night before, and thought what a mere moment in geologic time the things "old" and "historic" here represented.

He tried not to think about his mother yet.

Eve, beside him, placed her hand over his which held the steering-wheel.

"You'll let me stay close beside you, Tony," she appealed.

"Yes. We're almost there."

Familiar landmarks bobbed up on both sides, everywhere: a log cabin he had built as a boy; here was the way to the old well—the "revolutionary well."

A thousand million years, at least, life had been developing upon this earth; a thousand million years like them had been required for the process which must have preceded the first molding of the bricks which built the cities on Bronson Beta —which, some countless æons ago, had come to an end. For a thousand million years, since their inhabitants died, they might have been drifting in the dark until to-day, at last, they found our sun, and the telescopes of the world were turned upon them.

It was useful to think of something like this when driving to your home where your mother lay. ...

There was the tree where he had fashioned his tree dwelling; the platform still stood in the boughs. It was hidden from the house, but within hailing distance. Playing there, he could hear his mother's voice calling; sometimes he'd pretended that he did not hear.

How long ago was that? How old was he? Oh, that was fifteen years ago. Fifteen, in a thousand million years.

Time was beginning to tick on a different scale in Tony's brain. Not the worldly clock but the awful chronometer of the cosmos was beginning to space, for him, in enormous seconds. And Tony realized that Hendron, speaking to him as he had done, had not been heartless; he had attempted to extend to him a merciful morphia from his own, mind. What happened here this morning could not matter, in the stupendous perspective of time. ...

"Here we are."

The house was before them, white, calm, confident. A stout, secure

dwelling with its own traditions. Tony's heart leaped. How he loved it—and her who had been its spirit! How often she had stood in that doorway awaiting him!

Some one was standing there now—an old woman, slight, white-haired. Tony recognized her—Mrs. Haskins, the minister's wife. She advanced toward Tony, and old Hezekiah Haskins took her place in the doorway.

"What happened?"

Not what happened to the world last night; not what happened to millions and hundreds of millions overswept or sent fleeing by the sea. But what happened here?

Old Haskins told Tony, as kindly as he could:

"She was alone; she did not feel afraid, though all the village and even her servants had fled. The band of men came by. She did not try to keep them out. Knowing her— and judging by what I found—she asked them in and offered them food. Some of them had been drinking; or they were mad with the intoxication of destruction. Some one shot her cleanly—once, Tony. It might have been one more thoughtful than the rest, more merciful. It is certain, Tony, she did not suffer."

Tony could not speak. Eve clung to his hand. "Thank God for that, Tony!" she whispered.

Briefly Tony unclasped his hand from Eve's and met the old minister's quivering grasp. He bent and kissed Mrs. Haskin's gray cheek.

"Thank you. Thank you both," he whispered. "You shouldn't have stayed here; you shouldn't have waited for me. But you did."

"Orson also remained," Hezekiah Haskins said. Old Orson was the sexton. "He's inside. He's—made what arrangements he could."

"I'll go in now," Tony said to Eve. "I'll go in alone for a few minutes. Will you come in, then, to—us?"

"Lord, thou hast been our refuge in all generations. Before the mountains were brought forth, or ever the earth and the world were made: thou are God from everlasting, and world without end."

Old Hezekiah Haskins and his wife, and Orson the sexton, and Tony Drake and Eve Hendron stood on the hilltop where the men of the Drake blood and the women who reproduced them in all generations of memory lay buried. A closed box lay waiting its lowering into the ground.

"Hear my prayer, O Lord; and with thine ears consider my calling. . . . For I am a stranger with thee, and a sojourner as all my fathers were.

"Oh, spare me a little, that I may recover my strength before I go hence, and be no more seen."

Old Hezekiah Haskins held the book before him, but he did not read. A thousand times in his fifty years of the ministry he had repeated the words of that poignant, pathetic appeal voiced for all the dying by the great poet of the psalms: *"For I am a stranger with thee, and a sojourner as all my fathers were."*

Tony's eyes turned to the graves of his fathers; their headstones stood in a line, with their birth-dates and their ages.

"The days of our age are three score years and ten."

What were three score and ten in a thousand million years? To-day, in a few hours, the tide would wash this hilltop.

Connecticut had become an archipelago; the highest hills were islands. Their slopes were shoals over which the tide swirled white. The sun stood in the sky blazing down upon this strange sea.

"Thou turnest man to destruction; again thou sayest, Come again, ye children of men."

Men and children of men on Bronson Beta too. Men millions and thousands of millions of years in the making. Azoic time—proterozoic time—hundreds of millions of years, while life slowly developed in the seas. Hundreds of millions more, while it emerged from the seas; a hundred million more, while reptiles ruled the land, the sky and water. Then they were swept away; mammals came; and man—a thousand millions years of birth and death and birth again before even the first brick could be laid in the oldest city on Bronson Beta, which men on earth had seen last night with their telescopes.

"For a thousand years in thy sight are but as yesterday; seeing that is past as a watch in the night.

"For when thou art angry, all our days are gone; we bring our years to an end as it were a tale that is told."

The sexton and old Hezekiah alone could not lift the box to lower it. Tony had to help them with it. He did; and his mother lay beside her husband.

To-night, when the huge Bronson Alpha and Bronson Beta with its visible cities of its own dead were on this side of the world again, the tide might rise over this hill. What matter? His mother lay where she would have chosen. A short time now, and all this world would end.

"I'll take you away," Tony was saying to the old minister and his wife and the older sexton. "We're flying west to-night to the central plateau. We'll manage somehow to take you with us."

"Not me," said the old sexton. "Do not take me from the will of the Lord!"

Nor would the minister and his wife be moved. They would journey to-day, when the water receded, into the higher hills; but that was all they would do.

Chapter 12—Hendron's Encampment

THE airplane settled to earth on the high ground between Lake Michigan and Lake Superior, just as the Bronson Bodies, appallingly large, rose over the eastern horizon. Nearly a thousand people came from the great cantonment to greet Tony and Hendron's daughter. The scientist had given up his New Mexico venture entirely, and brought his congregation of human beings all to his Michigan retreat.

Greetings, however, were not fully made until the Bronson Bodies had been observed. Beta now exceeded the moon, and it shone with a pearly luster and a brilliance which the moon had never possessed. Around it was an aureole of soft radiance where its atmosphere, thawed by the warmth of the sun it so rapidly approached, had completely resumed its gaseous state.

But Bronson Beta did not compare with the spectacle of Alpha. Alpha was gigantic—bigger than the sun, and seemingly almost as bright, for the clouds which streamed up from every part of its surface threw back the sun's light, dazzling, white and hard. There was no night. Neither Eve nor Tony had seen the camp in its completion; and when wonderment over the ascending bodies gave way to uneasy familiarity, Eliot James took them on a tour of inspection.

Hendron had prepared admirably for the days which he had known would lie ahead of his hand-picked community. There were two prodigious dining-halls, two buildings not unlike apartment houses in which the men and women were domiciled. In addition there was a building resembling a hangar set on end, which towered above the surrounding forests more than a hundred feet. At its side was the landing-field, space for the sheltering of the planes, and opposite the landing-field, a long row of shops which terminated in an iron works.

It was to the machine-shops and foundry that Eliot James last took his companions.

"The crew here," he said to Eve, "has already finished part of the construction of the Ark which your father is planning. If we wanted to, we could build a battleship here; in the laboratories anything that has been done could be repeated; and a great many things have been accomplished that have never been done before. By to-morrow night I presume that the entire New York equipment will have been reinstalled here."

Tony whistled. "It's amazing. Genius, sheer genius! How about food?"

Eliot James smiled. "There is enough food for the entire congregation as long as we will need it."

"Now show us the 'Ark.'"

Eve's father came out from the hangar to act as their guide.

From the hysterical white glare of the Bronson Bodies they were taken into a mighty chamber which rose seemingly to the sky itself, where the brilliance was even greater. A hundred things inside that chamber might have attracted their attention—its flood-lighting system, or the tremendous bracing of its metal walls; but their eyes were only for the object in its center. The Ark on that late July evening—the focal-point, the dream and hope of all those whom Hendron had gathered together—stood upright on a gigantic concrete block in a cradle of steel beams. Its length was one hundred and thirty-five feet. It was sixty-two feet in diameter, and its shape was cylindrical. Stream-lining was unnecessary for travel in the outer reaches of space, where there was no air to set up resistance. The metal which composed it was a special alloy eighteen inches in thickness, electro-plated on the outside with an alloy which shone like chromium.

After Tony had looked at it for a long time, he said: "It is by far the most spectacular object which mankind has ever achieved."

Hendron glanced at him and continued his exposition. "A second shell, much smaller, goes inside; and between the inner shell and its outer guard are several layers of insulation material. Inside the shell will be engines which generate the current, which in turn releases the blast of atomic energy, store-chambers for everything to be carried, the mechanisms of control, the aeration plant, the heating units and the quarters for passengers."

Tony tore his eyes from the sight. "How many will she carry?" he asked quietly.

Hendron hesitated; then he said: "For a trip of the duration I contemplate, she would be able to take about one hundred people."

Tony's voice was still quieter. "Then you have nine hundred idealists in your camp here."

The older man smiled. "Unless I am greatly mistaken, I have a thousand."

"They all know about the ship?"

"Something about it. Nearly half of them have been working on it, or on apparatus connected with it."

"You pay no wages?"

"I've offered wages. In most cases they've been refused. I have more than three million dollars in gold available here for expenses encountered in dealing with people who still wish money for their time or materials."

"I see. How long a trip do you contemplate?"

Hendron took the young man's breath. "Ninety hours. That is, provided,"—and his voice began to shake,—"provided we can find proper materials with which to line our blast-tubes. Otherwise we wouldn't be able to propel this thing for more than a few minutes. I—"

Eve looked at her father. "Dad, you've got to go to bed. You'd better take some veronal or something, and don't worry so. We'll find the alloy all right. We've done everything else, and the things we've done were even more difficult."

Hendron nodded; and Tony, looking at him, realized for the first time how much the scientist had aged recently. They went through the door of the hangar in single file, and high up among the beams and buttresses that supported it, a shower of sparks fell from an acetylene welding-torch.

Outside, the wind was blowing. It sighed hotly in the near-by trees—wind that presaged a storm. The lights in the foundry and laboratories, the power-house and the dormitories made a ring around them, a ring of yellow fireflies faint beneath the glare of the Bronson Bodies. Tony looked up at them, and it seemed to him that he could almost feel and hear them in their awful rush through space: Beta, a dazzling white world, and Alpha, an insensible luminous disc of destruction. Both bodies seemed to stand away from the vault of the heavens.

Hendron left them. Soon afterward James withdrew with the apology that he wished to write to bring up to date his diary. Tony escorted Eve to the women's dormitory. A phonograph was playing in the general room on the ground floor. One of the girls was singing, and another was sitting at a table writing what was apparently a letter. They could all be seen through the open windows, and Tony wondered what postman that girl expected would carry her missive. Eve bade him good night, then went inside.

Tony, left alone, walked over the gleaming ground to the top of a neighboring hill. Hendron's village looked on the northern side like a university campus, and on the southern side like the heart of a manufacturing district. All around it stretched the Michigan wilderness. The ground had been chosen partly because of the age and grimness of its geological base, and partly because of its isolation.

He sat down on a large stone. The hot night wind blew with increasing violence, and the double shadows, one sharp and one faint, which were cast by all things in the light of the Bronson Bodies, were abruptly

obliterated by the passage of a dark cloud.

Tony's mind ran unevenly and irresolutely. "Probably," he thought, "this little community is the most self-sufficient of any place on earth. All these people, these brilliant temperamental men and women, have subsided and made themselves like soldiers in Hendron's service—amazing man. . . . Only a hundred people. ... I wonder how many of those I brought to New York they'll take."

Fears assailed him: "Suppose they don't complete the Ark successfully, and she never leaves the ground? Then all these people would have given their lives for nothing. . . . Suppose it leaves the earth and fails—falls back for hundreds of miles, gaining speed all the way, so that when it hit the atmosphere it would turn red-hot and burn itself up just like a meteor? What hideous chances have to be taken! If only I were a scientist and could help them! If only I could sit up day and night with the others, trying to find the metal that would make the ship fly. . . ."

A larger cloud obscured the Bronson Bodies. The wind came in violent gusts. The great globes in the sky which disturbed sea and land, also enormously distorted the atmospheric envelope.

The steady sound of machinery reached Tony's ears, and the ring of iron against iron. The wind wailed upon the æolian harp of the trees. Tony thought of the tides that would rise that night and on following nights; and faintly, like the palpitation of a steamer's deck, the earth shook beneath his feet as if in answer to his meditation. And Tony realized that the heart of the earth was straining toward its celestial companions.

Chapter 13—The Approach Of The Planets

ON the night of the twenty-fifth, tides unprecedented in the world's history swept every seacoast. There were earthquakes of varying magnitude all over the world. In the day that followed, volcanoes opened up, and islands sank beneath the sea; and on the night of the twenty-sixth the greater of the Bronson Bodies came within its minimum distance from the earth on this their first approach.

No complete record was ever made of the devastation.

Eliot James, who made some tabulation of it in the succeeding months, could never believe all that he saw and heard, but it must have been true.

The eastern coast of the United States sustained a tidal wave seven hundred and fifty feet in height, which came in from the sea in relentless terraces and inundated the land to the very foot of the Appalachians. Its

westward rush destroyed every building, every hovel, every skyscraper, every city, from Bangor in Maine to Key West in Florida. The tide looped into the Gulf of Mexico, rolled up the Mississippi Valley, becoming in some places so congested with material along its foaming face that the terrified human beings upon whom it descended saw a wall of trees and houses, of stones and machinery, of all the conglomerate handiwork of men and Nature—rather than the remorseless or uplifted water behind it. When the tide gushed back to the ocean's bed, it strewed the gullied landscape with the things it had uprooted.

It roared around South America, turning the Amazon Basin into a vast inland sea which stretched from what had been the east coast to the Andes Mountains on the west coast. The speed of this tide was beyond calculation.

Every river became a channel for it. It spilled over Asia. It inundated the great plain of China. It descended from the arctic regions and removed much of France, England and Germany, all of Holland and the great Soviet Empire, from the list of nations. Arctic water hundreds of feet deep flowed into the Caspian Sea and hurled the last of its august inertia upon the Caucasus.

Western Asia and Arabia, southern India, Africa and much of Australia remained dry land. Those who saw that tide from mountain-tops were never afterward able to depict it for their fellows. The mind of man is not adjusted for a close observation of phenomena that belong to the cosmos. To see that dark obsidian sky-clutching torrent of water moving inward upon the land at a velocity of many hundreds of miles an hour was to behold something foreign to the realm of Nature, as Nature even at its most furious has hitherto appeared to man.

More than half the population of the world died in the tides that rose and subsided during the proximity of the Bronson Bodies. But those who by design or through accident found themselves on land that remained dry were not necessarily spared.

The earthquake which Tony felt in Michigan was the first of a series of shocks which increased steadily in violence for the next forty-eight hours, and which never afterward wholly ceased. Hendron had chosen his spot well, for it was one of the relatively few portions of the undeluged world which was not reduced to an untenable wasteland of smoking rock and creeping lava.

Nothing in the category of earthquakes or eruption occurring within the memory of the race could even furnish criteria for the manifestations everywhere on the earth's crust on that July twenty-sixth. Man had witnessed the explosion of whole mountains. He had seen the disappearance and the formation of islands. Yards of sea-coast had subsided before his very eyes. Fissures wide enough to contain an army

had opened at his feet; but such occurrences were not even minutiae in the hours of the closest approach of the Bronson Bodies.

As hour by hour the earth presented new surfaces to the awful gravitational pull of those spheres, a series of stupendous cataclysms took place. Underneath the brittle slag which man considers both solid and enduring lie thousands of miles of dense compressed molten material. The earth's crust does not hold back that material. It is kept in place only by a delicate adjustment of gravity; and the interference of the Bronson Bodies distorted that balance. The earth burst open like a ripe grape! From a geological standpoint the tides which swept over were a phenomenon of but trifling magnitude.

The center of the continent of Africa split in two as if a mighty cleaver had come down on it, and out of the grisly incision poured an unquenchable tumult of the hell that dwells within the earth. Chasms yawned in the ocean floor, swallowing levels of the sea and returning it instantaneously in continents of steam. The great plateau of inner Thibet dropped like an express elevator nine hundred feet. South America was riven into two islands one extending north and south in the shape of a sickle, and the other, roughly circular, composed of all that remained of the high lands of Brazil. North America reeled and shuddered, split, snapped, boomed and leaped. The Rocky Mountains lost their immobility and danced like waves of water. From the place that had been Yellowstone Park a mantle of lava was spread over thousands of square miles. The coastal plain along the Pacific disappeared, and the water moved up to dash itself in fury against a range of active volcanoes that extended from Nome to Panama.

Gases, steam and ashes welled from ten thousand vents into the earth's atmosphere. The sun went out, the stars were made visible. Blistering heat blew to the ends of the earth. The polar ice melted and a new raw land emerged, fiery and shattered, mobile and catastrophic.

Those human beings who survived the world's white-hot throes were survivors for the most part through good fortune. Few escaped through design—on the entire planet only a dozen places which had been picked by the geologists as refuges remained habitable.

Upon millions poured oceans of seething magma carrying death more terrible than the death which rolled on the tongue of the great tides. The air which was breathed by other millions was suddenly choked with sulphurous fumes and they fell like gassed soldiers, strangling in the streets of their destroyed cities. Live steam, blown with the violence of a hurricane, scalded populous centers and barren steppes impartially. From a sky that had hitherto deluged mankind only with rain, snow and hail, fell now burning torrents and red-hot sleet. The very earth itself slowed in its rotation, sped up again, sucked and dragged through space

at the caprice of the bodies in the sky above. It became girdled in smoke and steam, and blasts of hot gas; and upon it as Bronson Alpha and Beta drew away, there fell torrential rains which hewed down rich land to the bare rock, which cooled the issue from the earth to vast metallic oceans, and which were accompanied by lightnings that furnished the infernal scenery with incessant illumination, and by thunder which blended undetectably with the terrestrial din.

At Hendron's camp forty-eight hours in the Pit were experienced; and yet Hendron's camp was on one of the safest and least disturbed corners of the world.

The first black clouds which Tony had observed marked the beginning of an electrical storm. The tremor he felt presaged a steady crescendo of earth-shakings. He left his hill-top soon and found that the population of the colony which, an hour before, had retired for the night, was again awake. He met Hendron and several scientists making a last tour of inspection; and he joined them.

"The dormitories," Hendron said, "are presumably quake-proof. I don't think any force could knock over the buttresses we have put around the projectile."

Even as he spoke, the wind increased, lightning stabbed the sky, the radiance of the Bronson Bodies was permanently extinguished, and the gusty wind was transformed to a steady tempest. Lights were on in every building; and as shock followed shock, people began to pour into the outdoors.

Tony tried to locate Eve, but was unable to do so in the gathering throng. The darkness outside the range of lights was absolute. The temperature of the wind dropped many degrees, so that it seemed cold in comparison to the heat of early evening. It was difficult to walk on the wide cleared area between the various buildings, for the ground underfoot frequently forced itself up like the floor of a rapidly decelerated elevator. The lightning came nearer. The thunder was continual. It was hard to hear the voice of one's nearest neighbor. Word passed from person to person in staccato shouts that all buildings were to be evacuated. Tony himself, with half a dozen others, rushed into the brightly illuminated women's dormitory and hurriedly brought from it into the tumult and rain those who had remained there.

By ten o'clock the violence of the quakes was great enough so that it was difficult to stand. The people huddled like sheep in a storm in the lee of the buildings. Lightning hammered incessantly on the tall steel tower which surrounded the space-flyer. Tony moved through the assembled people shouting words of encouragement he did not feel.

Shortly after eleven an extraordinarily violent shock lifted one end of the men's building so that bricks and cement cascaded from its wall.

Immediately Tony located Hendron, who was sitting wrapped in a tarpaulin on a stone in the center of the crowd, and made a suggestion which was forthwith carried out. The flood-lights were thrown on the landing-field, and every one migrated thither. They congregated again in the center of smooth open space, a weird collection in their hastily assumed wraps, with their white faces looking upward picked out through the rain by the flood-lights and the blue flashes from the heavens.

Before midnight some caprice of the seismic disturbance snapped off the power. At one o'clock in the morning a truck from the kitchens of the dining-halls floundered through the mud with sandwiches and coffee. At two o'clock the temperature of the wind dropped again, and the wet multitude shivered and chattered with cold. Hail fell in place of rain.

Half an hour later the wind stopped abruptly, and in that sudden silence, between bursts of thunder, human voices rose in a loud clamor of a hundred individual conversations. The wind puffed, veered, and came back from the southwest. It blew fifty miles an hour, a hundred, and then rose from that velocity to an immeasurable degree. Leaves and whole branches shot through the air. Every man and woman was compelled to lie face down on the muddy earth, the undulations of which increased.

They lay for an hour or more, shivering, gasping for breath, hiding their faces. Then a particularly violent shock suddenly separated the landing-field into two parts, one of which rose eight or nine feet above the other, leaving a sharp diminutive precipice across the middle of the field. A dozen people had been actually straddling the point of fracture; and some fell on the lower side, while others, crawling away from the new and terrifying menace, were lifted up. Fortunately no crevice opened, although the split edges of the underlying rocks ground against each other with a noise that transcended the tumult. Toward morning the temperature of the wind began to rise.

There was no dawn, no daylight, only a diffused inadequate grayness through which the tumbling streaming clouds could be dimly apprehended. The people lay on the ground, each man wrapped in the terrors of his own soul, with fingers clutching the grass or buried in the earth. And so the day began. The air grew perpetually more warm. An augmented fury of the gale brought a faint odor of sulphur.

Midday held no respite. It was impossible to bring up food against the gale, impossible even to stand. The sulphurous odors and the heat increased. The driven rain seemed hot. Toward what would have been afternoon, and in the absolute darkness, there was a sudden abatement; and the wind, while it still blew strong, allowed the shaken populace to rise and to stare through the impenetrable murk. Fifty or more of the

men made a rush for the dining-halls. They found them, and were surprised that they had not collapsed. The low hills around had furnished them with protection. There was no time to prepare food. Snatching what they could, and loading themselves with containers of drinking-water, they fought their way back to the field. There, like animals, the people drank and ate, finishing in time only to throw themselves once again on the bare ground under the renewed fury of the storm.

Night came again. The sulphur in the air, the fumes and gases, the heat and smoke and dust, the hot rain, almost extinguished their frantically defended lives. They lay now in the lee of the fault, but even there the down-swirl of the tempest and lash of the elements were almost unendurable.

The dust and rain combined with the wind to make a diagonal downfall of fœtid mud which blistered them and covered the earth. Through that second night no one was able to talk, to think, to move, to do more than lie prone amid the chaos, gasping for breath.

Chapter 14—The First Passing

THE respite brought by morning was comparative rather than real. The wind abated; the torrential rain became intermittent; and the visibility returned, though no one could have told whether it was early morning or twilight.

Tony rose to his feet the instant the wind slacked. Through all the long and terrible hours he had been absent from Eve. It would have been utterly unthinkable to attempt to locate her in the midst of that sound and fury. He found, however, that there was no use in looking for her immediately. So heavy had been the downpour of rain and ashes from the sky, that it not only reduced the field to a quagmire, but it covered the human beings who had lain there with a thick chocolate-colored coating, so that as one by one the people arose to sitting and standing postures, he found it difficult even to distinguish man from woman.

He was compelled to put Eve from his mind. It was necessary to think of all and not one. Succor was needed sorely. Many of those who had been in the field were unable to rise. Several had been injured. Of the older men a number were suffering perhaps fatally from exposure.

Tony found that his limbs would scarcely support him when he did regain them; but after he had staggered for some distance through the murk, his numbed circulation was restored, and his muscles responded. He held brief conversations with those who were standing:

"Are you all right?" If the answer was in the negative, he replied: "Sit down. We'll take care of you. But when it was in the affirmative, he said: "Come with me. We'll start things going again. I think the worst is over."

Out of the subsiding maelstrom he collected some thirty or forty persons, most of them men. They walked off the field together; and as they walked, slowly and painfully, their feet sucking in the quagmire and stumbling on debris, Tony proceeded with his organization.

"Any of you men working on the power plant?" he shouted. … "Right. You two come over here. Now who else here was in the machine-shop? … Good. You fellows get to work on starting up the lights. They'll be the first thing. Now I want half of you to get beds in shape in the women's hall." He counted the number he required, slapping them on the shoulders and dispatching them toward the halls, which loomed in the distance. "If they don't look safe," he shouted after the disappearing men, "find a place that is safe, and put the beds there. We'll have to have a hospital."

With the remnant of his men he went to the dining-halls. One of these buildings was a complete wreck, but the other still stood. They entered the kitchen. Its floor was knee-deep in mud. He recognized among those still with him Taylor, the student of light, whom he had sent to Hendron from Cornell. "Take charge in here, will you, Taylor? I'll leave you half these men. The rest of us are going out to round up the doctors and get medical supplies ready. They'll want coffee out there, and any kind of food that they can eat immediately." He saw Taylor's mouth smile in assent, and heard Taylor begin to issue instructions for the lighting of a fire in one of the big stoves.

Once again he went outdoors. It was a little lighter. His anxious gaze traveled to the tower that housed the Ark, and from its silhouette he deduced that it was at least superficially intact. The shouting he had done had already rendered him hoarse, for the air was still sulphurous. It irritated the nose and throat, and produced in every one a dry frequent cough. Tony was apprehensive for fear the gases in the air might increase in volume and suffocate them, but he banished the thought from his mind: it was but one of innumerable apprehensions, many of them greater, which numbed his consciousness and the consciousness of all his fellows during that terrifying forty-eight hours. Besides the irritating vapors in the air, there was heat, not the heat expected any day in July, but such heat as surrounds a blast furnace—a sullen withering heat which blanched the skin, parched the lips and was unrelieved by the rivulets of perspiration that covered the body.

Tony went back alone to the flying-field. It was a little lighter. Mist motions were visible in the sky, and threads of vapor were flung over the Stygian landscape by the wind. People were returning from what had

been the flying-field to the partial wreck at the camp in twos and threes, many of them limping, some of them being carried. They made a stream of humanity like walking wounded—a procession of hunger, thirst, pain and exhaustion struggling across a landscape that would have credited Dante's Inferno itself, struggling through a nether gloom, slobbered with mire, breathing the hot metallic atmosphere. He found Eve at last, just as he reached the edge of the flying-field. She was helping two other girls, who were trying to carry a third. She recognized him and called to him.

"Are you all right, Eve?" His soul was in his rasping voice. He came close to her. He looked into her eyes. She nodded, first to him and then toward the unconscious girl. She put her lips close to his ear, for she could speak only in a whisper: "Give us a hand, Tony. This girl needs water. She fainted."

He picked up the girl, and they followed him through the slough to the main hall of the women's dormitory. Beds were being carried there, and many of the beds were already filled. Some one had found candles and stuck them in window-sills so that the room was lighted. Already two men who were doctors were examining the arrivals. Tony recognized one of the men as Dodson when he heard the boom of his voice: "Get hot water here, lots of it, boiling water. Don't anybody touch those bandages. Everything has to be sterilized. See if you can find anybody who knows anything about nursing. Get the rest of the doctors."

Somehow Dodson had already managed to wash, and his heavy-jowled face radiated power and confidence. In the candle-light Tony recognized other muddy faces on the beds. A German actress seemed to have a broken leg, and a dignified gray-haired Austrian pathologist was himself a victim of the barrage that had fallen from the heavens.

Tony went outdoors again. It seemed to him that the air had freshened somewhat, and that the temperature had dropped. A gong boomed in the kitchen, and he remembered his thirst and hunger. For almost forty-eight hours he had had little to eat and little to drink. He knew he could not deny the needs of his body any longer. He hastened in the direction of the gong. Around a caldron of coffee and a heap of sandwiches, which were replenished as fast as they disappeared, were grouped at least two hundred people. Tony stood in the line which passed the caldron, and was handed a cup of coffee and a sandwich. The coffee tasted muddy. The sandwich had a flavor not unlike the noxious odor in the air. Tony's craving was for water, but he realized that for the time being all liquids would have to be boiled to eliminate their pollution. With his first sip of coffee he realized that brandy had been added to it. He wet his burning throat and swallowed his sandwich in three mouthfuls, and joined the line again.

His senses reasserted themselves. He realized that the wind was

dying, the oppressiveness was departing and the temperature had lowered perceptibly. He was able for the first time to hear the conversation of people around him, and even in his shocked and shocking state, he was moved by mingled feelings of compassion and amusement. The heavy hand of the gods had scarcely been lifted. Its return might be expected imminently, and yet the marvelous resilience of humankind already was asserting itself.

". . . Ruined my dress, absolutely ruined!" he heard one woman say.

And some one else laughed. That sentence spread. "Her dress was ruined. Too bad!"

From the men there came a different sort of comment:

"When I say I never saw anything like it before in my life, I mean I've never seen anything like it before in my life. ..."

The excited voice of one of the scientists: "Amazing, the way things survived. Almost nothing has been damaged in the machine-shops and the power-houses. Those places were built like bank vaults. Great genius for organization, that man Hendron."

Another man spoke: "I inspected the seismograph first. The needle had shot clear off the roll the night before last and put it out of business. Then I looked at the barometric record. Air-pressure changed around here inches in minutes. The barometer went out of business too. You could almost feel what was happening to the earth. I had sensations of being lifted and lowered, and of pressure coming and going on my ears.

"I wonder how many people survived. The volcanic manifestations must have been awful. They must still be going on—although I can't tell whether it's earthquake now, or just my legs shaking. And smell the sulphur in the air."

Tony saw Peter Vanderbilt sitting pacifically on a log, a cup of coffee in one hand, a sandwich in the other, and his bedraggled handkerchief spread over his knees for a napkin. The elegant Vanderbilt's mustache was clogged with mud. His hair was a cake of mud. His shoes were gobs of mud. One of his pant-legs had been torn off at the knee. His shirt-tails had escaped his belt and festooned his midriff in stained tatters, and yet as Tony approached him, he still maintained his attitude of cosmic indifference, of urbanity so complete that nothing could succeed in ruffling it spiritually.

Vanderbilt rose. "Tony, my friend," he exclaimed. "What a masquerade! What a disguise! I recognized you only by the gauge in which heaven made your shoulders. Sit down. Join me in a spot of lunch."

Tony sat on the log, which apparently the wind had moved into

position especially for Mr. Vanderbilt. "I'll have a snack with you," he replied. "Then I must get back to work."

The quondam Beau Brummell of Fifth Avenue nodded understandingly. "Work, my dear fellow! I never saw so many people who were so avid for work, and yet there's something exalting about it. And the storm was certainly impressive. I admit that I was impressed. In fact, I proclaim that I was impressed. Yet its whole moral was futility."

"Futility?"

"Oh, don't think that for a minute I was being philosophical. I wasn't referring to the obvious futility of all man's efforts and achievements. They were quite apparent before this—this—ah—disturbance. I was thinking of myself entirely. I was thinking of the many years I had spent as a lad in learning geography, and how useless all that knowledge was to me now. I should imagine that the geography I learned at twelve was now completely out of date."

Tony nodded to the man on the log. "So I should imagine. You'll excuse me, but I'm needed."

Peter Vanderbilt smiled and put his cup beside Tony's on the ground. Then without a word he rose and followed the younger man. They found Hendron emerging from the great hangar. His condition was neither worse nor better than that of the others. He seized Tony's shoulder the minute his eyes lighted upon him. "Tony, son, have you seen Eve?"

"Yes."

"She's all right?"

"She's entirely all right. She's working over at the emergency hospital."

Behind Hendron stood a number of men. He turned to them. "You go ahead and inspect the machine-shop. I'll join you in a minute."

He then noticed that Tony had a companion. "Hello, Vanderbilt Glad to see you're safe." And again he spoke to Tony. "What was the extent of the injury to personnel?"

Tony shook his head. "I don't know yet."

Vanderbilt spoke. "I just came from the field hospital before I had my coffee. I was making a private check-up. So far as is known, no one here was killed. There are three cases of collapse that may develop into pneumonia, several minor cases of shock, two broken legs, one broken arm, a sprained ankle; one of the men who made coffee during the storm got burned, and there are forty or fifty people with more or less minor scratches and abrasions. In all less than seventy-five cases were reported so far."

Hendron's head bobbed again. He sighed with relief. "Good God, I'm

thankful! It was more terrifying out there, apparently, than it was dangerous."

"It was not unlike taking a Turkish bath on a roller coaster in the dark," Vanderbilt replied.

Hendron rubbed his hand across his face. "Did you men say something about coffee?"

"With brandy in it," Tony said.

Vanderbilt took Hendron's arm. "May I escort you? You're a bit rocky, I guess."

"Just a bit. Brandy, eh? Good." Before he walked away, he spoke to Tony. "Listen, son—" The use of that word rocked Tony's heart. "This was much more than I had anticipated, much worse. But by the mercy of Providence the major dangers have passed, and we seem to be bloody but unbowed. The ship is safe, although one side was dented against its cradle. That's about all. If I had foreseen anything like this, I could have been better prepared for it, although perhaps not. An open field was about the only habitable sort of place. I've got to get some rest now. I'm just a few minutes away from unconsciousness. I want you to take over things, if you think you can stand up for another twelve hours."

"I'm in the pink," Tony answered.

"Good. You're in charge, then. Have me waked in twelve hours."

Tony began the rounds again. In the hall of the women's dormitory, Dodson and Smith were hard at work. Their patients sat or lay in bed. There was a smell of anæsthetics and antiseptics in the air. Eve, together with a dozen other women, was acting as nurse. She had changed her clothes, and washed. She smiled at him across the room, and Dodson spoke to him. "Tell Hendron we're managing things beautifully in here now. I don't think there's anybody here that won't recover."

"He's asleep," Tony replied. "Ill tell him when he wakes."

He looked at Eve again before he went out, and saw her eyes flooded with tears. Immediately he realized his thoughtlessness in not telling her at once that her father was safe, but there was no reproof in her starry-eyed glance. She understood that the situation had passed the point at which rational and normal thoughtfulness could be expected.

Tony went next to the machine-shop. A shift of men was at work clearing away the infiltrated dust on the engines and the mud that had poured over the floors. Another group of men lay in deep sleep wherever there was room enough to recline. One of the workers explained: "Nobody around here can work for long without a little sleep, so we're going in one-hour shifts. Sleep an hour, clean an hour. Is that all right, Mr. Drake?"

"That's fine," Tony said.

At the power-house a voice hailed him.

"You're just in time, Mr. Drake."

"What for?"

"Come in." Tony entered the power-house. The man conducted him to a walled panel and pointed to a switch. "Pull her down."

Tony pulled. At once all over the cantonment obscurity was annihilated by the radiance of countless electric lights. The electrician who had summoned Tony grinned. "We're using a little emergency engine, and only about a quarter of the lights of the lines are operating. That's all we've had time to put in order. It's jerry-made, but it's better than this damn' gloom."

Tony's hand came down firmly on the man's shoulder. "It's marvelous. You boys work in shifts now. All of you need sleep."

The electrician nodded. "We will. Some of the big shots are inside. Shall I tell them to come out to see you?"

An idea suddenly struck Tony. "Look here. Why shouldn't I go see them if I want to? Why is it you expect them to come out and see me?"

"You're the boss, aren't you?"

"What makes you think I'm the boss?"

The man looked at him quizzically. "Why, it said so in the instruction-book we got when we were all sent out here. Everybody got a copy. It said you were second in command in any emergency to Mr. Hendron; and this is an emergency, isn't it?"

Tony was staggered by this new information. "It said that in a book?"

"Right. In the book of rules that everybody that lives here got the day they came. I had one in my pocket, but I lost pocket, book and all, out there on the landing-field."

Tony conquered his surprise. It flashed through his mind that Hendron was training him to be in command of those who stayed behind and launched the Space Ship. He was conscious of a naïve pride at this indication of the great scientist's confidence in him. "I won't bother the men here," he said. "Just so long as we get as many lights as possible in operation, as fast as possible."

He found a group of men standing speculatively in front of the men's hall. One of the side walls had been shattered, and bricks had cascaded from the front walls to the ground. Tony looked at the building critically, and then said: "I don't think anybody should occupy it."

"There are a good many men in there asleep right now. Probably they

entered in the dark without noticing the condition of the building."

Tony addressed the crowd. "If two or three of you care to volunteer to go in with me, we'll get them all out. The men will sleep for the time being on the floor in the south dining-hall."

He went into the insecure building, and practically all of the men who had been regarding it from the outside accompanied him. They roused the sleepers.

The floor of the dining-hall was dry: men in dozens, and then in scores, without speech, among themselves, pushed aside the tables and stretched out on the bare boards, falling instantly to sleep.

Next Tony went to the kitchen. Fires were going in two stoves; more coffee was ready, the supply of sandwiches had overtaken the demand, and kettles of soup augmented it. Taylor was still in charge, and he made his report as soon as he saw Tony.

"The big storehouses are half underground, as you probably know, and I don't think the food in them has been hurt much, although it has been shaken up. I didn't know anything about the feeding arrangements, but I've located a bunch of men who did. There's apparently a large herd of livestock and a lot of poultry about a quarter of a mile in the woods. I've sent men there to take charge. They already reported that the sheep and goats and steers didn't budge, although their pens and corrals were destroyed. They're putting up barbed-wire for the time being. Everything got shaken up pretty badly, and the water and mud spoiled whatever it got into, but most of the stuff was in big containers. The main that carried the water from the reservoir is all smashed to hell, and I guess the water in the reservoir isn't any good anyway. I'm boiling all that I use, but somebody has just got the bright idea of using the fire apparatus and hoses from some of these young lakes."

"You've done damned well, Taylor," Tony said. "Do you think you can carry on for a few hours more?"

"Sure. I'm good for a week of this."

Tony watched the innumerable chores which were being done by men under Taylor's instruction. He noticed for the first time that the work of reclaiming the human habitations was not being done altogether by the young men, the mechanics and the helpers whom Hendron had enlisted. Among Taylor's group were a dozen middle-aged scientists whose names had been august in the world three months before that day. Unable for the time to carry on their own tasks, they were laboring for the common weal with mops and brooms and pails and shovels.

When Tony went outdoors again, it was four o'clock, though he had no means of knowing the time. Once again he noticed that the air was cooler. He made his way down the almost impassable trail to the

stockyards, and found another group of men working feverishly with the frightened animals and the clamorous poultry. Then he walked back to the "village green." So far as he could determine, every effort was being bent toward reorganizing the important affairs of the community. He had at last the leisure in which to consider himself and the world around him.

Perspiration had carried away the dirt on his face and hands, but his clothes were still mucky. The dampness of the air had prevented that mud from drying. His hair was still caked. He walked in the direction of the flying-field, and presently found what he sought—a depression in the ground which had been filled with water to a depth of three or four feet, and in which water the mud had settled. He waded into the pool carefully so as not to disturb the silt on the bottom. The water was warm. He ducked his head below the surface and laved his face with his hands.

When he stepped out, he was relatively clean, though his feet became immediately encased in mud again.

Slowly he walked to the top of the small hill from which he had watched the Bronson Bodies on the evening before. He felt a diminution of the sulphur and other vapors in the air, His throat was raw, but each breath did not sting his lungs as it had during the last hours when they had been lying in the open field. He noticed again a quality of thinness in the air which persisted in spite of the heat and moisture. He wondered if the entire chemistry of the earth's atmosphere had been changed—if, for example a definite percentage of its normal oxygen had been consumed. That problem, however, was unsolvable, at least for the time.

By straining his eyes into the distance, and aiding their perceptions with imagination, he could deduce the general changes in the local landscape. The hurricane had uprooted, disheveled and destroyed the surrounding portions except where hill-crests protected small patches of standing trees. One-half of the flying-field had been lifted eight or ten feet above the other, so that its surface looked like two books of unequal thickness lying edge to edge. The open space inside the "U" of buildings which Hendron had constructed was littered with rubbish, most of it tree-branches. One dining-hall had collapsed. The men's dormitory was unsafe until it could be repaired. Everywhere was an even coat of soft brown mud which on the level must have attained a depth of ten inches—and the rain which still fell in occasional interludes continued to bring down detritus from the skies.

What had happened to the rest of the world, to what had been Michigan, to the United States, to the continents and the oceans would have to be determined at some future time.

For the moment, calm had come. The Bronson Bodies not only had passed and withdrawn toward the sun, but they shone no longer in the

night sky. If atmospheric conditions permitted, they would be visible dimly by day; but only by day. As a matter of fact, from the camp they were completely invisible; not even the sun could be clearly seen.

But the night came on clear—clear and almost calm. The mists had settled, and the clouds moved away. Dust and gases hung in the air; still the stars showed.

The moon, too, should be shining, Tony thought. Tonight there should be a full moon; but only stars were in the sky. Had he reckoned wrong?

He was standing alone, looking up and checking his mental calculations, when some one stopped beside him.

"What is it, Tony?" Hendron said.

"Where's the moon to-night?"

"Where—that's it: where? That's what we'd like to know —exactly what happened. We had to miss it, you see; probably nowhere in the world were conditions that permitted observation when the collision occurred; and what a thing to see!"

"The collision!" said Tony.

"When Bronson Alpha took out the moon! I thought you knew it was going to happen, Tony. I thought I told you."

"Bronson Alpha took out the moon! . . . You told me that it would take out the world when we meet it next on the other side of the sun; but you didn't mention the moon!"

"Didn't I? I meant to. It was minor, of course; but I'd have given much to have been able to see it. Bronson Alpha, if our calculations proved correct, collided with the moon in a glancing blow. That is, it was not a center collision; but it surely broke up the moon into fragments. Most of them may have merged with the far greater body; but others we may see later. There are conditions under which they would form a band of dust and fragments about the earth like the rings about Saturn. In any case, there is no use looking for the moon, Tony. The moon has met its end; it is forever gone. I wish we could have seen it."

Tony was silent. Strange to stare into a sky into which never again the moon would rise! Strange to think that now that the terrible tides raised by the Bronson Bodies had fallen, there would not be any tide at all. Even the moon tides were gone. The seas, so enormously upsucked and swept back and forth, were left to lap at their shores in this unnatural, moonless calm.

"However," said Hendron, "when the world encounters Bronson Alpha, we'll see that, I hope."

"See it—from the world?" said Tony.

"From space, I hope, if we succeed with our ship—from space on our way to Bronson Beta. What a show that will be, Tony, from space with no clouds to cut if off! And then landing on that other world, whose cities we have seen!"

"Yes," said Tony.

Chapter 15—Reconnaissance

SO through the darkness of that moon-lost night, Tony continued to work. He mustered new gangs for the dreary tasks of salvage, and of rehabilitating and reconstructing the shelters.

He organized, directed, exhorted and cheered men on, wondering at them as they responded and redoubled their efforts. He wondered no less at himself. What use, in the end, was all this labor? A few months, and they would meet the Bronson Bodies again; and this time, Bronson Alpha would not pass the world. As it had extinguished the moon, it would annihilate the earth too! This solid ground!

Tony stamped upon it.

No wonder, really, that these men responded and that he exhorted and urged them on. They, and he, could not realize that the world was doomed, any more than a man could realize that he himself must die. Death is what happens to others! So other worlds may perish; but not ours, on which we stand!

Tony clapped his hands together loudly. "All right, fellows! Come on! Come on!" Clouds gathered again, and rain was pouring down.

When light began again to filter through the darkly streaming heavens, Hendron re-awoke. He found Tony drunk with fatigue, carrying on by sheer effort of will, and refusing to rest.

Hendron called some of the men who had been taking Tony's commands, and had him carried bodily to bed....

Tony opened his eyes. One by one he collected all the disjointed memories of the past days. He perceived that he was lying on a couch in Hendron's offices in the west end of the machine-shop and laboratory building. He sat up and looked out the window. It was notably lighter, although the clouds were still dense; and as he looked, a stained mist commenced to descend. A slight noise in one corner of the room attracted his attention. A man sat there at a desk quietly scribbling. He raised his eyes when Tony looked at him. He was a tall, very thin man, with dark curly hair and long-lashed blue eyes. His age might have been thirty-five—or fifty. He had a remarkably high forehead and slim, tactile hands.

He smiled at Tony, and spoke with a trace of accent.

"Good morning, Mr. Drake. It is not necessary to ask if you slept well. Your sleep was patently of the most profound order."

Tony swung his feet onto the floor. "Yes, I think I did sleep well. We haven't met, have we?"

The other man shook his head. "No, we haven't; but I've heard about you, and I should imagine that you have heard my name once or twice in the last few weeks." A smile flickered on his face. "I am Sven Bronson."

"Good Lord!" Tony walked across the room and held out his hand. "I'm surely delighted to meet the man who—" He hesitated.

The Scandinavian's smile returned. "You were going to say, 'the man who was responsible for all this.'"

Tony chuckled, shook Bronson's hand, and then looked down at the bedraggled garments which only partially covered him. "I've got to find some clothes and get shaved."

"It's all been prepared," Bronson said. "In the private office, there's a bath of sorts ready for you, and some clean clothes and a razor."

"Somebody has taken terribly good care of me," Tony said. He yawned and stretched. "I feel fine." At the door he hesitated. "What's the news, by the way? How are things? How is everybody?"

Bronson tapped his desk with his pencil. "Everybody is doing nicely. There are only a dozen people left in the hospital now. Your friend Taylor has the commissary completely rehabilitated, and everybody here is saying pleasant things about him. I don't know all the news, but it is picturesque, to say the least. Appalling, too! For instance the spot on which we now reside was very considerably raised last week. It has apparently been lifted again, together with no one knows how much surrounding territory, so the elevator sensations we felt in the field were decidedly accurate. We presume that many thousands of square miles may have been raised simultaneously; otherwise there would have been more local fracture. The radio station has been functioning again."

"Good Lord!" Tony exclaimed. "I forgot all about the radio station last night—that is to say, to-day is to-morrow, isn't it? What day is this?"

"This is the twenty-ninth." Tony realized that he has been asleep for twenty-four hours. "The man in the wireless division went to work on the station immediately. Anyway, not much has come in, though we picked up a station in New Mexico, and a very feeble station somewhere in Ohio. The New Mexico station reports some sort of extraordinary phenomena, together with a violent eruption of a volcanic nature in their district; the one in Ohio merely appealed steadily for help."

At once Tony inferred the import of Bronson's words. "You mean to say that you've only heard two stations in all this country?"

"You deduce things quickly, Mr. Drake. Of course the static is so tremendous still that it would be impossible to hear anything from any foreign country; and doubtless other stations are working which we will pick up later, as well as many which will be reconditioned in the future; but so far, we have received only two calls."

Tony opened the door to the adjacent office. "That means, then, that nearly everybody has been—"

The Scandinavian's long white hands locked, and his eyes affirmed Tony's speculation. ...

"I'll get myself cleaned up," said Tony.

And he stepped into a big galvanized tub of water that had been kept warm by a small electric heater. He bathed, shaved and dressed in his own clothes, which had been brought from his quarters in the partly demolished men's dormitory. Afterward he went to the laboratories and found Hendron.

"By George, you look fit, Tony!" were Hendron's first words. "Eve is impatiently waiting for you. She's at the dining-hall."

Tony found Eve cheerful and bright-eyed. With a dozen or more women, she was rearranging and redecorating the dining-hall, which had been immaculately cleaned. She went out on the long veranda with him.

"Notice how much clearer the air is?" Eve asked. "Most of the fumes have disappeared. . . . It's hard to shake the superstition that natural disasters are directed at you, isn't it, Tony?"

"Are we sure it's a superstition, Eve?"

"After all, what has happened to us is only the sort of thing that has happened before, thousands of times, on this earth of ours, Tony, on a smaller scale—at Pompeii, at Mt. Pelée and Krakatao and at other places. What can be the differences in the scale of the God of the cosmos, whether He shakes down San Francisco and Tokio twenty years apart, buries Pompeii when Titus was ruling Rome, and blows up Krakatao eighteen hundred years later—or whether he decides to smash it all at once? It's all the same sort of thing."

"Yes," agreed Tony. "It's only the scale of the performance that's different. Anyway, we've survived so far. I heard you were safe, Eve; and then when I could hear no more, I supposed you were safe. You *had* to be safe."

"Why, Tony?"

"If anything was to keep any meaning for me." He stared at her,

himself amazed at what he said. "The moon's gone, I suppose you know!"

"Yes. It was known that it would go."

"And we—the world goes like the moon, with the return of Bronson Alpha!"

"That's still true, Tony," she said, standing before him, and quivering as he did.

He gestured about. "They all know that now."

"Yes," she said. "They've been told it."

"But they don't *know* it. They can't *know* a thing like that just from being told—or even from what they've just been through."

"Neither can we, Tony."

"No; we think we—you and I, at least—are going to be safe somehow. We are sure, down in our hearts—aren't we, Eve?—that you and I will pull through. There'll be some error in the calculations that will save *us;* or the Space Ship will take us away; or—something."

She nodded. "There's no error in the calculations, Tony. Too many good men have made them, independently of each other."

"Did they all count in the collision with the moon, Eve?"

"All the good ones did, dear. There's no chance of escape because of the encounter with the moon. It deflected the Bronson Bodies a little, of course; but not enough to save the world. I know that with my head, Tony; but—you're right—I don't know it with my heart. I don't know it with —*me."*

Tony seized and held her with a fierceness and with a tenderness in his ferocity, neither of which he had ever known before. He looked down at her in his arms, and it was difficult to believe that any one so exquisite, so splendidly fragile, could have survived the orgy of elemental passion through which they all had passed. Yet that—he knew— was nothing to what would be.

He kissed her, long and deeply; and when he drew his lips away, he continued to stare down at her whispering words which she, with her lips almost at his, yet could not hear.

"What is it, Tony?"

"Only—an incantation, dear."

"What?" she asked; so he repeated it audibly:

" 'A *thousand shall fall beside thee, and ten thousand at thy right hand; but it shall not come nigh thee!'* Remember it, Eve?"

"The psalmist!" whispered Eve.

"He must have seen some one he loved, threatened," said Tony. " *'For he shall give his angels charge over thee,'"* he continued, " *'to keep thee in all thy ways.*

" 'They shall bear thee in their hands; that thou hurt not thy foot against a stone.'

"It stayed in my head, hearing it at the church where Mother used to take me. I'd read it in the responses, too. I remember that, I suppose, because it's beautiful—if no more."

"If no more," said Eve; and very gently, she freed herself from him; for, far more faithfully than he, she heeded her father.

He sighed. She looked up at him. "They tell me, Tony, that you kept the whole camp going single-handed," she returned him to practical affairs.

"I just rallied around and looked at people who were doing something and said: 'Great! Go ahead.' That's all I did."

She laughed, proud of him. "You put heart in them all again. That's you, Tony. . . . Did you know Professor Bronson is here?"

"Yes; I saw him—spoke to him. Funny feeling I had, when I heard his name. Bronson—of the Bronson Bodies. It made him almost to blame for them. How did he happen to come?"

"He'd arrived in the country and was almost here when the storm struck. He's known about what was to happen, and he's been figuring it out for a longer time than any one else. He's had the highest respect for Father. Of course you know it was to Father that he sent his results. They had to get together, Father and he. They agreed it was better to work here than in South Africa; so he did the traveling. He'll be invaluable—if we do get away."

"You mean, if we get away from the world."

"Yes. You see, Father's chief work has been—and will be—on the Space Ship; how to get away from the world and reach Bronson Beta, when it returns."

"And before Bronson Alpha smashes us as it did the moon," said Tony grimly.

Eve nodded. "That's all Father can possibly arrange— if not more. He can't take any time to figuring how we'll live, if we reach that other world. But Professor Bronson has been doing that for months. For more than a year he practically lived—in his mind—on Bronson Beta. So he's here to make the right preparation for the party that goes on the ship: who they should be, what they should carry, and what they must do to live—if they land there."

In three days the static in the air vanished to such an extent that messages from various parts of the world became audible. Out of those messages a large map was constructed in the executive offices. It was a speculative map, and its accuracy was by no means guaranteed. It showed islands where Australia had been, two huge islands in the place of South America, and only the central and southern part of Europe and Asia. There was a blank in place of Africa, for no one knew what had happened to the Dark Continent. A few points of land were all that was left of the British Isles, and over the air came the terrible story of the last-minute flight from London across the Channel, in which the populace was overwhelmed on the Great Lowland Plain. Among the minor phenomena reported was the disappearance of the Great Lakes, which had been inclined from west to east and tipped like trays of water into the valley of the St. Lawrence. On the fifth day they learned that an airplane flight had been made over what was the site of New York. The Hudson River Valley was a deep estuary; the sea rolled up to Newburgh; and the entire coast along its new line was scoured with east-to-west-running valleys which were piled high with the wreckage of a mighty civilization. Everywhere were still fœtid plains of cooling lava; and in many areas, apparently, the flow from the earth had been not molten rock but metal, which lay in fantastic and solidified seas already red with rust.

It was impossible to make any estimate whatsoever of the number of people who had survived the catastrophe. Doubtless the figure ran into scores of millions; but except in a few fortunate and prearranged places, they were destitute, disorganized and doomed to perish of hunger and exposure.

On the tenth day the sun shone for the first time. It pierced the clouds for a few minutes only, and even at its strongest it was hazy, penetrating the belts of fog with scarcely enough strength to cast shadows. . . .

At the end of two weeks it would have been difficult to tell that the settlement in Michigan had undergone any great cataclysm, save that the miniature precipice remained on the flying-field, and that great mounds of chocolate-colored earth were piled within view of the inhabitants.

On the evening of the fifteenth day a considerable patch of blue sky appeared at twilight, and for three hours afforded a view of the stars. The astronomers took advantage of that extended opportunity to make observation of the Bronson Bodies, which had become morning stars, showing rims like the planet Venus as they moved between the earth and the sun.

Carefully, meticulously, both by direct observation and by photographic methods, they measured and plotted the course of the two terrible strangers from space; and with infinitesimal differences, the

results of all the observers were the same. Bronson Beta—the habitable world—on its return would pass by closer than before; but it would pass.

There would be no escape from Bronson Alpha.

In all the fifteen days the earth had not ceased trembling. Sometimes the shocks were violent enough to jar objects from shelves, but ordinarily they were so light as to be barely detectable.

In all those fifteen days, furthermore, there had been no visitor to the camp from the outside world, and the radio station had contented itself for the most part with the messages it received, for fear that by giving its position and broadcasting its comparative security, it might be overwhelmed by a rush of desperate and starving survivors.

At the end of three weeks one of the airplanes which had escaped the storm was put in condition, and Eliot James and Ransdell made a five-hundred-mile reconnaissance. At Hendron's request the young author addressed the entire gathering in the dining-hall after his return. He held spellbound the thousand men and women who were thirsty for any syllable of information about the world over the horizon.

"Mr. Ransdell and myself," James began, "took our ship off the ground this morning at eight o'clock. We flew due north for about seventy-five miles. Then we made a circle of which that distance was the radius, covering the territory that formerly constituted parts of Michigan and Wisconsin.

"I say 'formerly,' ladies and gentlemen, because the land which we observed has nothing to do with the United States as it once was, and our flight was like a journey of discovery. You have already been told that the Great Lakes have disappeared. They are, however, not entirely gone, and I should say that about one-third of Lake Superior, possibly now landlocked, remains in its bed.

"The country we covered, as you doubtless know, was formerly heavily wooded and hilly. It contained many lakes, and was a mining center. I will make no attempt to describe the astonishing aspect of the empty lake-bed, the chasms and flat beaches which were revealed when the water uncovered them, or the broad cracks and crevices which stretch across the bed. I am unable to convey to you the utter desolation of the scene. It is easier, somewhat, to give an idea of the land over which we flew. Most of the forests have been burned away. Seams have opened underneath them, which are in reality mighty cañons, abysses in the naked earth. Steam pours from them and hovers in them. All about the landscape are fumaroles, hot springs, geysers and boiling wells.

"In the course of our flight we observed the ruins of a moderate-sized town and of several villages. We also saw the charred remains of what we assumed were farms, and possibly lumber- and mining-camps. Not only

have great clefts been made, but hills have been created, and in innumerable places the earth shows raw and multicolored—the purplish red of iron veins, the glaring white of quartz, the dark monotony of basalt intermingled in a giant's conglomerate. I can only suggest the majesty and the unearthliness of the scene by saying it closely resembled my conception of what the lunar landscape must have been.

"We observed a few areas which, like our own, were relatively undisturbed. There were a number of oases in this destruction where forests still stood, apparently sheltered from the hurricanes and in no danger of conflagration. This district, as you know, is sparsely settled. I will complete my wholly inadequate report to you by satisfying what must be your major curiosity: we saw in the course of our flying a number of human beings. Some of them wandered over this nude, tumultuous country alone and obviously without resources for their sustenance. Others were gathered together in small communities in the glades and sheltered places. They had fires going, and they were apparently secure at least for the time being. All of them attempted to attract our attention to themselves, and it is with regret that I must say that not only is their rescue inadvisable from the sheer necessity of our own self-preservation, but that in most cases it would be difficult if not impossible, as we found no place in which we might have landed a plane, if the surface of the water that remains in Lake Superior be excepted, and a few other ponds and lakes. And it would be difficult indeed to go on foot to the succor of those unfortunates."

After the speech, people crowded around James. Peter Vanderbilt, moving through the crowd, glimpsed Ransdell as he was walking through the front doors of the hall. The New Yorker stepped out on the porch beside the pilot; the sophisticated Manhattan *dilettante* with his smooth, graying hair, his worldly-wise and -weary eyes, his svelte accent, beside the rugged, tan-faced, blue-eyed, powerful adventurer. One, the product of millions, of Eastern universities and of society at its most sumptuous, the other a man whose entire resources always had been held in his own hands, and who had lived in a world of frontiers.

"I wanted to ask you something," Vanderbilt said. Ransdell turned, and as usual he did not speak but simply waited.

"Has Hendron commissioned you to do any more flying?"

"No."

"Do you think it would be possible to hop around the country during the next few months?"

"With a good ship—an amphibian."

Vanderbilt tapped his cigarette-holder delicately against one of the posts on the porch. "You and I are both supernumeraries around here, in

a sense. I was wondering if it might not be a good idea to make an expedition around the country and see for ourselves just what has happened. If this old planet is really going to be smashed,—and from the evidence furnished two weeks ago I'll believe it,—yet there's something to see on its surface still. Let's look at it."

Ransdell thought inarticulately of Eve. He was drawn to her as never to any girl before; but, he reckoned, she must remain here. Not only that, but under the discipline which was clamped upon the settlement, no rival could claim her while he would be gone. And the adventure that Vanderbilt offered tremendously allured him.

"I'd like to try it," Ransdell replied simply.

"Then I'll see Hendron; we must have his consent, of course, to take a ship."

Ransdell was struck by a thought. "Shall we take James too? He'd join, I think."

"Excellent," Vanderbilt accepted. "He could write up the trip. It would be ignominious, if any of us got to Bronson Beta, with no record of the real history of this old earth's last days."

Together they broached the subject to Hendron. He considered them for several minutes without replying, and then said: "You realize, of course, that such an expedition will be extremely hazardous? You could carry fuel and provisions for a long flight, but nothing like what you'd need. You'd have to take pot-luck everywhere you went; gasoline would be almost impossible to find—what hasn't leaked away must have been burned, for the most part; and whenever you set the ship down, you would be a target for any and every person lurking in the vicinity. The conditions prevailing, physically, socially and morally, must be wholly without precedent."

"That," replied Vanderbilt calmly, "is precisely why we cannot be men and fear to study them."

"Exactly," jerked Hendron; and he gazed at Ransdell.

The gray-blue eyes fixed steadily on Hendron's, and the scientist abruptly decided: "Very well, I'll sanction it."

Ransdell and Vanderbilt knocked on the door of Eliot James' room, from which issued the sound of typewriting. The poet swung wide the door and greeted them with an expression of pleasure. "What's up?"

They told him.

"Go?" James repeated, his face alight with excitement. "Of course I'll go. What a record to write—whether or not any one lives to read it!"

Tony received the news with mingled feelings. He could not help an

impulse of jealousy at not being chosen for the adventure; but he understood that Ransdell hardly would have selected him. Also, he realized that his position as vice to Hendron in command of the cantonment did not leave him free for adventure.

Yet it was almost with shame that Tony assisted in the takeoff of the big plane two days later. Eve emerged from the crowd at the edge of the landing-field and walked to Ransdell; and Tony saw the light in her eyes which comes to a woman watching a man embark on high adventure. The very needlessness, the impracticalness of it, increased her feeling for him—a feeling not to be roused by a man performing a merely useful service, no matter how hazardous. Tony walked around to the other side of the plane and stayed there until Eve had said good-by to the pilot.

The motor was turning over slowly. The mechanics had made their last inspection. The maximum amount of fuel had been taken aboard, and all provisions, supplies, ammunition, instruments and paraphernalia which were deemed needful. Many of the more prominent members of the colony were grouped near the plane shaking hands with Vanderbilt and Eliot James. Bronson was there, Dodson, Smith and a dozen more, besides Hendron. Vanderbilt's farewells were debonair and light. "We'll send you postcards picturing latest developments." Eliot James was receiving last-minute advice from the scientists, who had burdened him with questions, the answers of which they wished him to discover by observation. Ransdell came around the fuselage of the plane, Eve behind him.

He cast one look at the sky, where the heavy and still numerous clouds moved on a regular wind, and one at the available half of the landing-field, on which the sun shone tentatively.

"Let's go," he said.

There were a few last handshakes; there was a shout as the chocks were removed from the wheels of the plane. It made a long bumpy run across the field, rose slowly, circled once over the heads of the waving throng, and gradually disappeared toward the south.

Eve signaled Tony. "Aren't they fine, those three men? Going off into nowhere like that."

Tony made his answer enthusiastic. "I never thought I'd meet three such people in my life—one, perhaps, but not three. And there are literally hundreds of people here who are capable of the same sort of thing."

Eve was-still watching the plane. "I like Dave Ransdell."

"No one could help liking him," Tony agreed.

"He's so interested in everything, and yet so aloof," went on Eve, still

watching. "In spite of all he's been through with us, he's still absolutely terrified of me."

"I can understand that," said Tony grimly.

"But you've never been that way around me."

"I didn't show it that way; no. But I know—and you know —what it means."

"Yes, I know," Eve replied simply.

The sun, which had been shielded by a cloud, suddenly shone on them, and both glanced toward it.

Off there to the side of the sun, hidden by its glare, moved the Bronson Bodies on their paths which would cause them to circle the sun and return—one to pass close to the earth and the other to shatter the world—in little more than seven months more.

"If they are away only thirty days, we're not to count them missing," Eve was saying—of the crew of the airplane, of course. "If they're not back in thirty—we're to forget them. Especially we're not to send any one to search for them."

"Who said so?"

"David. It's the last thing he asked."

Chapter 16—The Saga

THE thirty days raced by. Under the circumstances, time could not drag. Nine-tenths of the people at Hendron's encampment spent their waking and sleeping hours under a death-sentence. No one could be sure of a place on the Space Ship. No one, in fact, was positive that the colossal rocket would be able to leave the earth. Every man, every woman, knew that in six months the two Bronson Bodies would return from their rush into the space beyond the sun; even the most sanguine knew that a contact was inevitable.

Consequently every day, every hour, was precious to them. They were intelligent, courageous people. They collaborated in keeping up the general morale. The various department heads in the miniature city made every effort to occupy their colleagues and workers—and Hendron's own foresight had assisted in the procedure. ...

The First Passage was followed by relative calm. As soon as order had been restored, a routine was set up. Every one had his or her duty. Those duties were divided into five parts: First, the preparation of the rocket itself; second, the preparation of the rocket's equipment and load;

third, observation of the receding and returning Bodies to determine their nature and exact course; fourth, maintenance of the life of the colony; fifth, miscellaneous occupations.

Hendron, in charge of the first division, spent most of his time in the rocket's vast hangar, the laboratories and the machine-shop. Bronson headed the second division. The third duty was shared by several astronomers; and in this division Eve, with her phenomenal skill in making precise measurements, was an important worker. The maintenance division was under the direction of Dodson, and under Dodson, a subcommittee headed by Jack Taylor took charge of sports and amusements. Tony was assigned to the miscellaneous category, as were the three absent adventurers.

The days did not suffice for the work to be done, particularly in preparation of the Space Ship.

Hendron had the power. Under the pressure of impending doom, the group laboring under him had "liberated" the amazing energy in the atom—under laboratory conditions. They had possessed, therefore, a potential driving power enormously in excess of that ever made available before. They could "break up" the atom at will, and set its almost endless energies to work; but what material could harness that energy and direct it into a driving force for the Space Ship?

Hendron and his group experimented for hour after desperate hour through their days, with one metal, another alloy and another after another.

At night, in the reaction of relaxation, there were games, motion pictures which had been preserved, and a variety of private enterprises which included organization and rehearsal of a very fine orchestra. There were dances, too; and while the thin crescents of the Bronson Bodies hung in the sky like cosmic swords of Damocles, there were plays satirizing human hopes and fates in the shed next to that wherein the Space Ship, still lacking its engine, was being prepared.

The excellent temper of the colony was flawed rarely. However, there were occasional lapses. One night during a dance a girl from California suddenly became hysterical and was carried from the hall shouting: *"I won't die!"* On another occasion a Berlin astronomer was found dead in his bed—beside him an empty bottle of sleeping-powders holding down a note which read: *"Esteemed friends: The vitality of youth is required to meet the tension of these terrible days with calmness. I salute you."* The astronomer was buried with honors.

Tony perceived an evidence of the increasing tension in Eve when they walked, late one afternoon, through the nearby woods.

She saw on the pine-needle carpet of the forest a white flower. She

plucked it, looked at it, smelled it and carried it away. After they had proceeded silently for some distance, she said: "It's strange to think about matters like this flower. To think that there will never be any more flowers like this again in the universe—unless we take seeds with us!"

"That impresses you, perhaps," said Tony, "because we can come closer to realizing the verdict—no more flowers—than we can the verdict 'no more us.'"

"I suppose so, Tony. Did David ever tell you that, in his first conference at Capetown with Lord Rhondin and Professor Bronson, they were excited over realizing there would be no more lions?"

"No," said Tony, very quietly. "He never mentioned it to me."

"Tell me, Tony," she asked quickly, "you aren't jealous?"

"How, under the conditions laid down by your father," retorted Tony, "could anybody be 'jealous'? You're not going to be free to pick or choose your own husband—or mate—or whatever he'll be called, on Bronson Beta. And if we never get there, certainly I'll have nothing to be jealous about."

The strain was telling, too, on Tony.

"He may not even return to us here," Eve reminded. "And we would never know what happened to the three of them."

"It would have to be a good deal, to stop them. Each one's damn' resourceful in his own way; and Ransdell is sure a flyer," Tony granted ungrudgingly. "Yet if the plane cracked, they'd never get back. There's not a road ten miles long that isn't broken by some sort of landslip or a chasm. Land travel has simply ceased. It isn't possible that there's a railroad of any length anywhere in operation; and a car would have to be an amphibian as well as a tank to get anywhere.

"Sometimes, when day follows day and nobody arrives or passes, I think it must mean that every one else in the world is dead; then I remember the look of the land—especially of the roads, and I understand it. This certainly has become a mess of a world; and I suppose the best we can expect is some such state awaiting us," Tony smiled grimly, "if we get across to Bronson Beta.

"No; that's one of the funny things about our possible future situation. If we get across to Bronson Beta, we'll find far less damage there."

"Why?" Tony had not happened to be with the scientists when this had been discussed.

"Because Bronson Beta seems certain to be a world a lot like this; and it has never been as close as we have been to Bronson Alpha. It wasn't

the passing of Bronson Beta that tore us up so badly; it was the passing of the big one, Bronson Alpha. Now, Bronson Beta has never been nearly so close to Bronson Alpha, as we have been. Beta circles Alpha, but never gets within half a million miles of it. So if we ever step upon that world, we'll find it about as it has been."

"As it has been—for how many years?" Tony asked.

"The ages and epochs of travel through space. . . . You ought to talk more with Professor Bronson, Tony. He just *lives* there. He's so sure we'll get there! Exactly how, he doesn't bother about; he's passed that on to Father. His work assumes we can get across space in the Ship, and land. He starts with the landing; what may we reasonably expect to find there, beyond water and air—and soil? Which of us, who may make up the possible crew of the ship, will have most chances to survive under the probable conditions? What immediate supplies and implements—food and so on—must we have with us? What ultimate supplies—seeds and seedlings to furnish us with food later? What animals, what birds and insects and Crustacea, should we take along?

"You see, that world must be dead, Tony. It must have been dead, preserved in the frightful, complete cold of absolute zero for millions of years. . . . You'd be surprised at some of the assumptions Professor Bronson makes.

"He assumes, among other things, that we can find some edible food—some sort of grain, probably, which absolute zero would have preserved. He assumes that some vegetable life—the vegetation that springs from spores, which mere cold cannot destroy—will spring to life automatically.

"Tony, you must see his lists of the most essential things to take with us. His work is the most fascinating here. What animals, do you suppose, he's figured we must take with us to help us to survive?"

On the tenth of September, the inhabitants of the strangely isolated station which existed for the perfection of the Space Ship, began to look—although prematurely—for the return of the explorers into the world which had been theirs.

The three had agreed on the fourteenth as the first possible day for their return; but so great was the longing to learn the state of the outside world, that on the twelfth even those who felt no particular concern for the men who ventured in the airplane, began to watch the sky, casting upward glances as their duties took them out of doors.

It was difficult for anyone to work on the appointed day. The fourteenth was bright. The wind was gentle and visibility good—although the weather had never returned to what would have been considered normal for northern Michigan in the summer. There was always a moderate amount of haze. Sometimes the sky was obscured by new and

interminable clouds of volcanic dust. The thermometer ranged between eighty and ninety-five, seldom falling below the first figure. From the laboratory, the dining-halls, the shops, powerhouse, kitchens and the hangar, men and women constantly emerged into the outdoors to stand silently, inspecting the sky.

No one went to bed that night until long after the usual hour. Then, reluctantly, those overwearied, those who had arduous tasks and heavy responsibilities on the morrow, regretfully withdrew. Fears now had voices.

"They're so damn' resourceful, I can't believe they could miss out."

"But—after all—what do we know about outside conditions?"

"Think of the risks! God only knows what they might have faced. Anything, from the violence of a mob to a volcanic blast blowing them out of the sky."

Tony was in charge of the landing arrangements. At three A.M. he was sitting on the edge of the field with Eve. Hendron had left, after giving instructions that he was to be wakened if they arrived. They had little to say to each other. They sat with straining eyes and ears. Coffee and soup simmered on a camp-stove near the plane-shed against which they leaned their chairs. Dr. Dodson lay on a cot, ready in case the landing should result in accident.

At four, nothing had changed. It began to grow light. Since the passing of the Bronson Bodies, dawn had been minutes earlier than formerly.

Eve stood up stiffly and stretched. "Maybe I'd better leave. I have some work laid out for morning."

But she had not walked more than ten steps when she halted.

"I thought I heard motors," she said.

Tony nodded, unwilling to break the stillness. A dog barked in the camp. Far away toward the stockyards a rooster crowed. The first sun rays tipped the lowest clouds with gold.

Then the sound came unmistakably. For a full minute they heard the rise and fall of a churning motor—remote, soft, yet unmistakable.

"It's coming!" Eve said. She rushed to Tony and held his shoulder.

He lifted his hand. The sound vanished, came back again —a waspish drone somewhere in the sky. Their eyes swept the heavens. Then they saw it simultaneously—a speck in the dawning atmosphere. The speck enlarged. It took the shape of a cross.

"Tony!" Eve breathed.

The ship was not flying well. It lurched and staggered in its course.

Tony rushed to the cot where Dodson slept. "They're coming," he said, shaking the Doctor. "And they may need you."

The ship was nearer. Those who beheld it now appreciated not only the irregularity of its course, but the fact that it was flying slowly.

"They've only got two motors," somebody said. The words were not shouted.

Scarcely breathing, they stood at the edge of the field. The pilot did not wiggle his wings or circle. In a shambling slip he dropped toward the ground, changing his course a little in order not to strike the ten-foot precipice which had bisected the field. The plane was a thousand yards from the ground. Five hundred.

"She's going to crash!" some one yelled.

Tony, Dodson and Jack Taylor were already in a light truck. Fire-apparatus and stretchers were in the space behind them. The truck's engine raced.

The plane touched the ground heavily, bounced, touched again, ran forward and slewed. It nosed over. The propeller on the forward engine bent.

Tony threw in the clutch of the car and shot toward it. As he approached, he realized that fire had not started. He leaped from the truck, and with the Doctor and Jack at his heels, he flung open the cabin door and looked into the canted chamber.

Everything that the comfortable cabin had once contained was gone. Two men lay on the floor at the forward end— Vanderbilt and James. Ransdell was unconscious over the instrument panel. Vanderbilt looked up at Tony. His face was paper-white; his shirt was blood-soaked. And yet there showed momentarily in the fading light in his eyes a spark of unquenchable, deathless, reckless and almost diabolical glee. His voice was quite distinct. He said: "In the words of the immortal Lindbergh, *'Here we are.'"* Then he fainted.

James was unconscious.

The truck came back toward the throng very slowly and carefully. In its bed, Dodson looked up from his three charges. He announced briefly as way was made for them: "They've been through hell. They're shot, bruised, half-starved. But so far, I've found nothing surely fatal." Then to Tony, who was still driving: "You can put on a little speed, Tony. I want to get these boys where I can treat them."

Two or three hundred people waited outside the surgery door for an hour. Then a man appeared and said: "Announcements will be made

about the condition of the flyers in the dining-hall at breakfast time."

The waiting crowd moved away.

An hour later, with every member of the community who could leave his post assembled, Hendron stepped to the rostrum in the dining-hall.

"All three will live," he said simply.

Cheering made it impossible for him to continue. He waited for silence. "James has a broken arm and concussion. Vanderbilt has been shot through the shoulder. Ransdell brought in the ship with a compound fracture of the left arm, and five machine-gun bullets in his right thigh. They undoubtedly have traveled for some time in that state. Ransdell's feat is one of distinguished heroism."

Again cheering broke tumultuously through the hall. Again Hendron stood quietly until it subsided. "This evening we will meet again. At that time I shall read to you; from the diary which James kept during the past thirty days. I have skimmed some of its pages. It is a remarkable document. I must prepare you by saying, my friends, that those of our fellow human beings who have not perished, have reverted to savagery, almost without notable exception."

A hush followed those words. Then Hendron stepped from the platform, and a din of excited conversation filled the room. The scientist stopped to speak to three or four people, then came over to his daughter. He seemed excited.

"Eve," he said, "I want you and Drake to come to the office right away."

Bronson and Dodson were already there when they arrived.

A dozen other men joined them; and last to appear was Hendron himself. Every one was standing, and Hendron invited them to sit down. It was easy to perceive his excitement now. His surpassingly calm blue eyes were fiery. His cheeks concentrated their color in two red spots. He commenced to speak immediately.

"My friends, the word I have to add to my announcement in the hall is of stupendous importance!

"When we took off Ransdell's clothes, we found belted to his body, and heavily wrapped, a note, a map, and a chunk of metal. You will remember, doubtless, that Ransdell was once a miner and a prospector. His main interest had always been diamonds. And his knowledge of geology and metallurgy is self-taught and of the practical sort."

Bronson, unable to control himself, burst into speech. "Good God, Hendron! He found it!"

The scientist continued impassively: "The eruptions caused by the

passage of the Bodies were of so intense a nature that they brought to earth not only modern rock, but vast quantities of the internal substance of the earth—which, as you know, is presumably of metal, as the earth's total density is slightly greater than that of iron. Ransdell noticed on the edge of such a flow a quantity of solid unmelted material. Realizing that the heat surrounding it had been enormous, he secured specimens. He found the substance to be a metal or natural alloy, hard but machineable. Remembering our dilemma here in the matter of lining for the power tubes for the Space Ship, he carefully carried back a sample—protecting it, in fact, with his life.

"My friends,"—Hendron's voice began to tremble—"for the past seventy-five minutes this metal has withstood not only the heat of an atomic blast, but the immeasurably greater heat of Professor Kane's recently developed atomic furnace. We are at the end of the quest!"

Suddenly, to the astonishment of his hearer, Hendron bowed his head in his arms and cried like a woman.

No one moved. They waited in respect, or in a gratitude that was almost hysterical. In a few moments Hendron lifted his face.

"I apologize. These are days when nerves are worn thin. But all of you must realize the strain under which I have labored. Perhaps you will forgive me. I am moved to meditate on the almost supernatural element of this discovery. At a time when nature has doomed the world, she seems to have offered the means of escape to those who, let us hope and trust, are best fitted to save her most imaginative gesture of creation—mankind."

Hendron bowed his head once more, and Eve came wordlessly to his side.

Hendron stood before an audience of nearly a thousand persons. It was a feverish audience. It had a gayety mingled with solemnity such as, on a smaller scale, overwhelmed the thoughtful on a night in November in 1918 when the Armistice had been signed.

Hendron bowed to the applause.

"I speak to you to-night, my friends, in the first full flush of the knowledge that your sacrifices and sufferings have not been in vain. Ransdell has solved our last technical problem. We have assured ourselves by observation that life on the planet-to-be will be possible. My heart is surging with pride and wonderment when I find myself able to say: man shall live; we are the forefathers of his new history."

The wild applause proclaimed the hopes no one had dared declare before.

"But to-night I wish to talk not of the future. There is time enough for

that. I wish to talk—or rather to read—of the present." He picked up from a small table the topmost of a number of ordinary notebooks. "I have here James' record of the journey that brought us salvation. I cannot read you all of it. But I shall have it printed in the course of the next few days. I anticipate that printing merely because I understand your collective interest in the document.

"This is the first of the seven notebooks James filled. I shall read with the minimum of comment."

He opened the book. He read:

"'August 16th. To-night Ransdell, Vanderbilt and I descended at six o'clock precisely on a small body of water which is a residue in a bed of Lake Michigan. We are lying at anchor about a mile from Chicago.

" 'Our journey has been bizarre in the extreme. Following south along what was once the coast of Lake Michigan, we flew over scenes of desolation and destruction identical with those described after our first reconnaissance. In making this direct-line flight, it was forced upon our reluctant intelligence that the world has indeed been wrecked.

" 'The resultant feeling of eeriness reached its quintessence when we anchored here. Sharply outlined against the later afternoon sun stood the memorable skyline of the metropolis—relatively undamaged! With an emotion of indescribable joy, after the hours of depressive desolation, I recognized the Wrigley Building, the Tribune Tower, the 333 North Michigan Avenue Building, and others. My companions shouted, evidently sharing my emotions.

" 'We had landed on the water from the north. We anchored near shore and quickly made our way to land. We exercised certain precautions, however. All of us were armed. Lots were drawn to determine whether Ransdell or Vanderbilt would remain on guard beside the ship. I was useless in that capacity, as I would be unable to fly it in case of emergency. It was agreed that the lone guard was to take off instantly upon the approach of any persons whatever. Our ship was our only refuge, our salvation, our life-insurance.

" 'Vanderbilt was elected to remain. Ransdell and I started off at once toward the city. The pool on which we lay was approximately a mile in diameter and some two hundred feet below the level of the city. We started across the weird water-bottom. Mud, weeds, wrecks, debris, puddles, cracks, cliffs and steep ascents impeded our progress. But we reached the edge of what had been a lake, without mishap. The angle of our ascent had concealed the city during the latter part of our climb.

" 'Our first close view was had as we scrambled to the top of a sea-wall. The streets of the metropolis stretched before us—empty. The silence of the grave, of the tomb. Chicago was a dead city.

" "We stood on the top of the wall for a few minutes. We strained our ears and eyes. There was nothing. No light in the staring windows. No plume of steam on the lofty buildings. We started forward together. Unconsciously, we had both drawn our revolvers.

" 'Behind us and to the right was the Navy Pier, which I remember as the Municipal Pier. Directly ahead of us were the skyscrapers of the northern business district. We observed them from this closer point only after we had been reassured by the silence of the city, and had slipped our revolvers back into our pockets. Large sections of brick and stonework had been shaken from the sides of the buildings, leaving yawning holes which looked as if caused by shell-fire. The great windows had been shaken into the street, and wherever we went, we found the sidewalks literally buried in broken glass. A still more amazing phenomenon was noticeable from our position on the lake shore: the skyscrapers were visibly out of plumb. We made no measurements of this angulation, but I imagine some of the towers were off center by several feet, perhaps by as much as fifteen or twenty feet. No doubt the earthquakes in the vicinity had been relatively light, but the wavelike rise and fall of the land had been sufficient to tilt these great edifices, much as if they had been sticks standing perpendicularly in soft mud.

" 'Ransdell and I commented on the strangeness of the spectacle, and then together we moved forward into the business district. We had crossed the railroad tracks before we found any bodies; but on the other side they appeared here and there—most of them lying underneath the cascades of glass, horribly mangled and now in a state of decomposition.

" It was Ransdell who turned to me and in his monosyllabic, taciturn way said: "No rats. Noticed it?"

" 'I was stricken by a double feeling of horror, first in the realization that upon such a ghastly scene the armies of rats should be marching, and second by the meaning of Ransdell's words—that if there were no rats, there must be some dreadful mystery to explain their absence.

" 'We walked over the rubble and glass in the streets. Here and there it was necessary to circumvent an enormous pile of debris which had cascaded from the side of one of the buildings. It was immediately manifest that the people who had left Chicago had taken with them every object upon which they could lay their hands, every possession which they coveted, every article for which they thought they might find use. The stores were like open bazaars; their glass windows had been broken in by marauders or burst out by the quakes, and their contents had been ravaged.

" 'We continued to notice that the dead on the street did not represent even a tithe of the metropolitan population, and I expressed the opinion that the passing of the Bronson Bodies must have caused a mighty

exodus.

" 'Ransdell's reply was a shrug, and abruptly my mind was discharged upon a new course. "You think they're all upstairs?" I asked.

" 'He nodded. A block farther along, we came to an open fissure. It was not a large fissure in comparison with the gigantic openings in the earth which we had seen hitherto, but it appeared to go deep into the earth, and a thin veil of steam escaped from it. As we approached it, the wind blew toward us a wisp of this exuding gas, and instantly we were thrown into fits of coughing. Our lungs burned, our eyes stung and our senses were partially confounded, so that with one accord we snatched each other's arms and ran uncertainly from the place.

"Gas," Ransdell said, gasping.

" 'No other words were necessary to interpret the frightful fate of Chicago; nothing could better demonstrate how profound was the disturbance under the earth's crust. For in this region noted for its freedom from seismic shocks and remote from the recognized volcanic region, it was evident that deadly, suffocating gases such as previously had found the surface only through volcanoes, here had seeped up and blotted out the population. When the Bronson Bodies were nearest the earth and the stresses began to break the crust—when, doubtless, part of the population in that great interior metropolis were madly fleeing and another part was grimly holding on—there were discharged somewhere in the vicinity, deadly gases of the sort which suffocated the people about Mt. Pelée and La Soufrière. Only this emission of gas—whether through cracks in the crust or through some true new crater yet to be discovered—was incomparably greater. Like those gases, largely hydrochloric, it was heavier than air; and apparently it lay like a choking cloud on the ground. When those who escaped the first suffocating currents—and apparently they were in the majority—climbed to upper floors to escape, they were followed by the rising vapors. That frightful theory explained why there were so few dead on the street, why no one had returned to the silent city, and above all, why there were no rats.

" 'We would have liked to climb up the staircases of some of the buildings to test the accuracy of our concepts so far as it might concern the numbers who had remained in the city, to be smothered by gas, but darkness was approaching.

" 'We were sure of Vanderbilt's safety, for we had heard no shot. It was odd to think that we could expect to hear such a shot at a distance of more than a mile when we were standing in a place where recently the machine-gun fire of gangsters had been almost inaudible in the roaring daylight. Moreover, our single experience with the potency of the gas even in dilution warned us that a deeper penetration of the metropolitan area was more than dangerous.

" 'We found Vanderbilt sitting upon a stone on the shore beside the plane. We pushed out to it in the collapsible boat; and while we ate supper, we told him what we had seen.

" 'His comment perhaps is suitable for closing this record of the great city of Chicago: "Sitting alone, I realized what you were investigating; and for the first time, gentlemen, I understand what the end of the world would mean. I have never come so close to losing my nerve. It was awful."

Hendron looked up from the book. "I think, my friends, we will all find ourselves in agreement with Mr. James and Mr. Vanderbilt." He turned a few pages; and their whisper was audible in the silence of his audience. "I am now skipping a portion of Mr. James' record. It covers their investigation of the Great Lakes and describes with care the geological uplifting of that basin. From Chicago they flew to Detroit. In Detroit they found a different form of desolation. The waters of Lake Huron had poured through the city and the surrounding district, completely depopulating it and largely destroying it. They were able to land their plane on a large boulevard, a section of which was unbroken, and they refueled in the vicinity. They were disturbed by no one, and they saw no one. Cleveland had suffered a similar fate. Then they continued their flight to Pittsburgh. I read from Mr. James' record:

" 'Like God leading the children of Israel, Pittsburgh remains in my memory as a pillar of cloud by day and of fire by night! My astonishment may be imagined when I say that, as we approached the city after our visit to the ravaged metropolises of Ohio, we saw smoke arising against the sky. Presently the lichen-like area of buildings began to clarify in the morning haze. Vanderbilt dampered the motors and we dropped toward the Monongahela River, which was full to the brim of the levees and threatened to inundate the city. Earthquakes had half wrecked its structures. They lay broken and battered on "The Point" which lies between the two rivers. Smoke and steam emerged from a rent in Mt. Washington. The bridges were all down. I noticed that one of them had fallen directly upon a river steamer in which human beings had evidently sought to escape.

" 'Our ship came to rest, and we taxied cautiously toward one of the submerged bridges—every landing on water was dangerous, because of the likelihood of unsuspected snags, and we always exercised the maximum of care. From the top of the pontoon I threw a rope over one of the girders, and we made fast, the perceptible current keeping us clear. We went ashore by way of the taut rope.

" 'It was easy to perceive the cause of the smoke. A large area of Pittsburgh, or what remained of Pittsburgh, was in flames, and to our ears came clearly a not distant din. We had already guessed its identity in our descent. It was the din of battle. Rifles cracked incessantly;

machine-guns clattered; and occasionally we heard the cough of a hand-grenade.

" 'It was not wise to proceed farther. Nevertheless, bent upon discovering the nature of the combat, I insisted on going forward while my companions returned to guard our precious ship. I had not invaded the city deeply before I saw evidence of the fighting. Bullets buzzed overhead. I took cover. Not far away, in a street that was a shambles, I saw men moving. They carried rifles which they fired frequently; and they wore, I perceived, the tattered remnants of the uniform of the National Guard.

" 'A squad of these men retreated toward me, and as they did so, I perceived their enemy. Far down the street a mass of people surged over the barricade-like ruins of a building. They were terrible to see, even at that distance. Half naked, savage, screaming, armed with every tool that might be used as a weapon—a mob of the most desperate sort. The retreating squad stopped, took aim and several of the approaching savages fell. In their united voices I detected the tones of women.

"As the guardsmen reached my vicinity, one of them clapped his hand to his arm, dropped his rifle and staggered away from his fellows to shelter. The squad was at that instant reënforced by a number of soldiers who carried a machine-gun. The mob was temporarily checked by its clatter.

" 'I made my way to the wounded man, and he gratefully accepted the ministrations I could offer from the small kit I carried in my pocket. His right arm had been pierced. It was from him that I was able to learn the story of Pittsburgh. Some day I hope I may expand his tale into a complete document, but since my time at the moment is short, and since we are now flying southward and writing is difficult, I will compress it.

" "The man's name was George Schultz. He had been a bank-clerk, married, the father of two children, and had joined the National Guard because it offered an opportunity for recreation. He told me rather pitifully that he had doubted the menace of the Bronson Bodies, and that he had compelled his wife to keep the children in their flat, against her better judgment. His wife had wished to take them to their aunt's home in Kansas. On the night of the twenty-sixth, although frightened by the size of the Bronson Bodies, he had nonchalantly gone out to a drug-store for cigarettes, and the first tremor which struck Pittsburgh had shaken down his home on the heads of his family. He was not very clear about the next forty-eight hours.

" 'The mills at Pittsburgh had been working to the last moment. The Government deemed that the great steel city was in no danger from the tides, and had used it for manufacturing during the last days. Schultz described to me the horrible effect of the earthquakes in the steel-mills,

as blast furnaces were upset and as ladles tipped their molten contents onto the mill floors. Hundreds perished in the artificial hell that existed in the steel mills; but tens of thousands died in the city proper. In many parts of the city area the effect of the earthquakes was rendered doubly more frightful by the collapse of the honeycomb of mine galleries underlying the surface. Blocks of buildings literally dropped out of sight in some places.

" 'After the quake, what was left of the administrative powers immediately organized the remnant of the police and National Guard. Food, water and medical attention were their first objectives, and policing only a secondary consideration. However, food ran low; medical supplies gave out; the populace rebelled.

" 'Three days before our arrival, a mob had armed itself, stormed one of the warehouses in which a commissary functioned, and captured it. Encouraged by that success, the mob had attempted to take over the distribution of the remaining food and supplies.

'I had appeared on the scene apparently after the mob and the forces of law and order had been fighting for three days; and it was not necessary for Schultz to explain to me that in a very short time the National Guardmen and police would be routed: their numbers were vastly inferior; their ammunition was being exhausted, and organized warfare was out of the question in that madman's terrain.

" 'I abandoned Schultz to his comrades and made my way back to the river.

" 'We lost no time in taking off; and as we flew over Pittsburgh, we could see below us, moving antlike through the ruins, the savage mob, with scattered bands of guardsmen and police opposing it.' "

Again Hendron looked up from the notebook.

"That, my friends, ends the account of the fate of Pittsburgh.

"Mr. James' diary next describes a hazardous flight across the Appalachians and their arrival at Washington, or rather the site of Washington: 'It is not possible to describe our feelings when we actually flew over the site of Washington. We had passed the state in which emotions may be expressed by commonplace thought. We had reached a condition, in fact, where our senses rejected all feeling, and our brains made a record that might be useful in the future while it was insensible in the present. When I say that the ocean covered what had been the Capital of our nation, I mean it precisely. No spire, no pinnacle, no monument, no tower appeared above the blue water that rippled to the feet of the Appalachian chain. There was no trace of Chesapeake Bay, no sign of the Potomac River, no memory of the great works of architecture which had existed at the Capital. It was gone— gone into the grave of

Atlantis; and over it was the inscrutable salt sea, stretching to the utmost reaches of the eye. The Eastern seaboard has dropped. We turned back after assuring ourselves that this condition obtained along the entire East Coast.'

"Mr. James," Hendron said, "now describes their return across the mountains. He adds to our geographical knowledge by revealing that the whole Mississippi Basin, as well as the East Coast and Gulf States, has been submerged. Cincinnati is under water. The sea swells not only over Memphis but over St. Louis, where it becomes a wide estuary stretching in two great arms almost to Chicago and to Davenport.

"They next investigated the refuge area in the Middle West. Here they found indescribable chaos, and although order was being made out of it, although they were hospitably received by the President himself in Hutchinson, Kansas, which had become the temporary Capital of the United States, they found the migrated population in a sorry plight. Mr. James uses the President's own words to describe that predicament. Again I refer to the diary.

" 'Following the directions we had been given, we flew to Hutchinson. For a number of reasons, Hutchinson had been chosen as the temporary Capital of the States refuge area. It is normally fifteen hundred feet above sea level. It is in the center of a rich grain, farm, poultry, dairy, live-stock and lumber region. It has large packing plants, grain elevators, creameries, flour-mills. It is served by three railroads, and hence is an excellent site for the accumulation of produce. Thither, in the weeks preceding the passage of the Bronson Bodies, the multitudes of the United States flocked.

" 'The speed of that migration accelerated greatly after the Bronson Bodies had appeared above the southern horizon, and the most obtuse person could appreciate in their visible diameter the approach of something definite and fearful. It is estimated that more than eleven million people from the East Coast and three million from the West Coast actually reached the Mississippi Valley before the arrival of the Bodies. More than half of them were exterminated by the tide which rushed up the valley and which remained in the form of a gigantic bay in the new sunken area that now almost bisects the United States. We found Hutchinson a scene of prodigious military and civil activity—it resembled more than anything else an area behind the front lines in some titanic war.

"'After presentation of our credentials and a considerable wait, we left our plane, which was put under a heavy guard, and drove in an automobile to the new "White House"—a ramshackle rehabilitation of a huge metal garage. Here we found the President and his Cabinet; and here sitting around a table, we listened to his words. The President was -

worn and thin. His hand trembled visibly as he smoked. We learned later that he had been living on a diet of beans and bacon. He looked at us with considerable interest and said: "I sent for you, because I wished to hear about Cole Hendron's project. I know what he is planning to do, and I'm eager to learn if he thinks he will be successful."

" 'We explained the situation to the President, and he was delighted to know that we had survived the crises of the Passing. He then continued gravely: "I believe that Hendron will be successful. You alone, perhaps, may carry away the hope of humanity and the records of this life on earth; and I will return to the tasks confronting me here with the solace offered by the knowledge that the enterprise could be in no-—" '"

Here Hendron stopped, realizing that he was reading praise of himself to his colleagues. A subdued murmur of sympathetic amusement ran through the crowd of listeners, and the scientist read again from James' journal.

"The theory of migration to the Western Plains," the President told us, "was correct in so far as it concerned escape from the tides. It was mistaken only in that it underestimated the fury of the quakes, and particularly the force and velocity of the hurricane which accompanied them. I removed from Washington on the night of the twenty-fourth. At that time the migration was proceeding in an orderly fashion. Transcontinental highways, and particularly the Lincoln Highway, were choked with traffic, and railroads were overburdened; but the cantonments were ready, the food was here, the spring crops were thriving and I felt reasonably certain that with millions of my countrymen the onslaught might be survived. I doubted, and I still profoundly doubt, that the earth itself will be destroyed by a collision. Accurate as the predictions of the scientists may be, I still trust that God Himself will intervene if necessary with some unforeseen derangement and save the planet from total destruction."

" 'The President then described the passing of the Bronson Bodies and their effect on the prodigious Plains Settlement on the night of the twenty-fifth.

"We were as nearly ready as could be expected. People arrived in the area at the rate of three hundred thousand per hour that night. Tent colonies if nothing better, bulging granaries and a hastily made but strong supply organization were ready for them.

"Then the blow fell. Throughout the district the earth opened up. Lava poured from it. On the western boundary of our territory, which extended into Eastern Colorado, a veritable sea of lava and molten metal poured into the country drained by the Solomon, Saline, Smoky Hill and Arkansas rivers. A huge volcanic range was thrown up along the North Platte. Many if not most of our flimsily constructed buildings were

toppled to the ground in utter confusion. However, for the first few hours of this awful disaster most of our people escaped. It was the hurricane which went through our ranks like a scythe. In this flat country the wind blew unobstructed. Those who could, hastened into cyclone-cellars, of which there are many. These cellars, however, often collapsed from the force of the earthquakes, and many died in them. No one knows what velocity the wind attained, but an idea of it may be had by the fact that it swept the landscape almost bare, that it moved our stone buildings.

"This wind-driven scourge, which continued for thirty-six hours, abated on a scene of ruin. When I emerged from the cellar in which I had remained, I did not believe that a single one of my countrymen had survived it until I saw them reappear slowly, painfully, more often wounded than not, like soldiers coming out of shell-holes after an extensive bombardment. Our titanic effort had been for nothing. With the remnant of our ranks, we collected what we could find of our provisions and stores. In that hurricane my hopes of a united and re-formed United States were dashed to the ground. I now am struggling to preserve, not so much the nation, but that fraction of the race which has been left under my command; and I struggle against tremendous odds."

" 'Those were the words of the President of the United States. After the interview he wished us God-speed and good fortune in our projected journey; and we left him, a solitary figure whose individual greatness had been like a rock to his people.'"

Hendron put down the fifth of the notebooks from which he had been reading. "We now come," he said, "to the last stages of this remarkable flight. James' sixth diary describes the grant of fuel to them by the President, and their departure from the ruins of the great mushroom area that had grown up in Kansas and Nebraska, only to be destroyed. They made an attempt at flight over the Rockies, but found there conditions both terrestrial and atmospheric which turned them back. Hot lava still belched from the age-old hills; the sky was sulphurous and air-currents and temperature wholly uncertain. They had been flying for three weeks, sleeping little, living on bad food, and it was time for them to return if they were to keep their pledged date. They decided to go back by way of St. Paul and Milwaukee.

"On the way to St. Paul, they were forced down on a small lake and it was there that Ransdell noticed the un-melted metal in a flow of magma. The country was apparently deserted, and they investigated a tongue of molten metal after an arduous and perilous journey to reach it. When they were sure of its nature, they collected samples and brought them back to the plane. Repairs to the oil-feeding system were required, and they were made. They took off on the day before their return, and reached the vicinity of St. Paul safely. It was in St. Paul—which as you will realize, is less than two hundred miles from here—that they received

the injuries with which they returned. St. Paul was in much the same condition as Pittsburgh, except that it had undergone the further decay occasioned by two additional weeks of famine and pestilence. They landed on the Mississippi River near the shore, late that night. Almost immediately they were attacked, doubtless because it was believed they possessed food. The last words in James' diary are these, 'Boats have put out toward us. One of them has a machine gun mounted in the bow. Ransdell has succeeded in starting the motors, but the plane is listing. I believe that bullets have perforated one of the pontoons, and that it is filling. We may never leave the water. Vanderbilt is throwing out every object that can be removed, in order to lighten the ship. Our forward progress is slow. It may be that it will be necessary to repulse the first boat-load before we can take off. ... It is.' "

Hendron dropped the seventh notebook on the table. "You may reconstruct what followed, my friends. The hand-to-hand fight on the plane with a boatload of hunger-driven maniacs—a fight in which all three heroic members of the airplane company were hurt. We may imagine them at last beating back their assailants, and with their floundering ship taking off before a second boatload was upon them. We may imagine Ransdell guiding his ship through the night with gritted teeth while his occasional backward glances offered him little reassurance of the safety of his comrades. The rest we know. And this, my friends, completes their saga."

Chapter 17—The Attack

AUTUMN had set in, but it was like no autumn the world had ever known before. The weather remained unnaturally hot. The skies were still hazy. An enormous amount of fine volcanic dust, discharged mostly from the chain of great craters that rimmed the Pacific Ocean, remained suspended in the upper air-currents; and when some it settled, it was constantly renewed.

Vulcanists had enumerated, before the disturbance of the First Passage, some four hundred and thirty active volcanic vents. Counting the cones which, because of their slightly eroded condition, had been considered dormant, there had been several thousand. All of these, it now was calculated, had become active. Along the Andes, through Central America, through the Pacific States into Canada, then along the Aleutian chain of craters to Asia, and turning southward through Kamchatka, Japan and the Philippines into the East Indies stood the cones which continued to erupt into the atmosphere. The sun rose red and huge, and set in astounding haloes. Tropical rains, tawny with volcanic dust, fell in torrents. Steam and vapors, as well as lavas and

dust, were pouring from innumerable vents out from under the cracked and fissured crust of the world.

The neighboring vent, opened in the vicinity of St. Paul, supplied Hendron with more than the necessary amount of the new metal, which could be machined but which withstood even the heat of the atomic blast. Hendron had not waited for his explorers to recover. On the day after the reading of the diaries, he had flown with another pilot, found a source of the strange material from the center of the earth; and he had loaded the plane. Repeated trips had thereafter provided more than enough metal for the tubes of the atomic engines.

The engine-makers could not melt the metal by any heat they applied; they could not fuse it; but they could cut it, and by patient machining, shape it into lining of tubes which, at last, endured the frightful temperatures of the atom releasing its power.

The problem of the engine for the Space Ship was solved. There existed no doubt that it could, when required, lift the ship from the earth, successfully oppose the pull of gravity and propel it into interplanetary regions.

This transformed the psychology of the camp. It was not merely that hope appeared to be realized at last. The effect of Ransdell's discovery was far more profound than that.

The finding of the essential metal became, in the over-emotionalized mind of the camp, no mere accident, or bit of good luck, or result of intelligence. It became an event "ordained," and therefore endowed with more than physical meaning. It was a portent and omen of promise—indeed, of more than promise.

And now there ensued a period of frantic impatience for the return of the Bronson Bodies! For the camp, in its new hysteria, had become perfectly confident that the Space Ship must succeed in making its desperate journey. The camp was resolved—that part of it which should be chosen—to go.

"When a resolution is once taken," observed Polybius nearly two millennia before, "nothing tortures men like the wait before it can be executed."

Tony kept on at his work, tormented by a torture of his own. Together with Eliot James and Vanderbilt, who had been less hurt than he, Ransdell had now recovered from his wounds.

For his part in the great adventure which James had reported in detail, the pilot would have become popular, even if he had not also proved the discoverer of the metal that would not melt. That by itself would have lifted him above every other man in the camp.

Not above Hendron in authority; for the flyer never in the slightest attempted to assert authority. Ransdell became, indeed, even more retiring and reserved than before; and so the women of the camp, and especially the younger ones, worshiped him.

When Eve walked with Ransdell, as she often did, Tony became a potential killer. In reaction, he could laugh at himself; he knew it was the hysteria working in him—his fear and terrors at facing almost inevitable and terrible death, and at knowing that Eve also must be annihilated. It was these emotions that at moments almost broke out in a demonstration against Ransdell.

Almost but never did—quite.

When Tony was with Eve, she seemed to him less the civilized creature of cultured and sophisticated society, and more an impulsive and primitive woman.

Her very features seemed altered, bolder, her eyes darker and larger, her lips softer, her hair filled with a bright fire. She was stronger, also, and more taut.

"We're going to get over," she said to him one day. "To get over" meant to make the passage successfully to Bronson Beta, when it returned. The camp had phrases and euphemisms of its own for the hopes and fears it discussed.

"Yes," agreed Tony. No one, now, openly doubted it, whatever he hid in his heart. "How do you—" he began, and then made his challenge less directly personal by adding: "How do you girls now like the idea of ceasing to be individuals and becoming 'biological representatives of the human race'—after we get across?"

He saw Eve flush, and the warmth in her stirred him. "We talk about it, of course," she replied. "And—I suppose we'll do it."

"Breed the race, you mean," Tony continued mercilessly. "Reproduce the type—mating with whoever is best to insure the strongest and best children for the place, and to establish a new generation of the greatest possible variety from the few individuals which we can hope to land safely. That's the program."

"Yes," said Eve, "that's the purpose."

For a minute he did not speak, thinking how—though he temporarily might possess her—so Ransdell might, too. And others. His hands clenched; and Eve, looking at him, said:

"If you get across, Tony, there probably must be other wives—other mates—for you too."

"Would you care?"

"Care, Tony?" she began, her face flooded with color. She checked herself. "No one must care; we have sworn not to care—to conquer caring. And we must train ourselves to it now, you know. We can't suddenly stop caring about such things, when we find ourselves on Bronson Beta, unless we've at least made a start at downing selfishness here."

"You call it selfishness?"

'"I know it's not the word, Tony; but I've no word for it. *Morals* isn't the word, either. What are morals, fundamentally, Tony? Morals are nothing but the code of conduct required of an individual in the best interests of the group of which he's a member. So what's 'moral' here wouldn't be moral at all on Bronson Beta."

"Damn Bronson Beta! Have you no feeling for me?"

"Tony, is there any sense in making more difficult for ourselves what we may have to do?"

"Yes; damn it," Tony burst out again, "I want it difficult. I want it impossible for you!"

Wanderers from other places began to discover the camp. While they were few in number, it was possible to feed and clothe and even shelter them, at least temporarily. Then there was no choice but to give them a meal and send them away. But daily the dealings with the desperate, reckless groups became more and more ugly and hazardous.

Tony found that Hendron long ago had forseen the certainty of such emergencies, and had provided against it. Tony himself directed the extension of the protection of the camp by a barrier of barbed-wire half a mile beyond the buildings. There were four gates which he sentineled and where he turned back all vagrant visitors. If this was cruelty, he had no alternative but chaos. Let the barriers be broken, and the settlement would be overwhelmed.

But bigger and uglier bands continued to come. It became a commonplace to turn them back at the bayonet-point and under the threat of machine-guns. Tony had to forbid, except in special cases, the handing out of rations to the vagrants. The issuance of food not only permitted the gangs to lurk in the neighborhood, but it brought in others. It became unsafe for any one—man or woman—to leave the enclosure except by airplane.

Rifles cracked from concealments, and bullets sang by; some found their marks.

Ransdell scouted the surroundings from the air; and Tony and three others, unshaven and disheveled, crept forth at night and mingled with the men besieging the camp. They discovered that Hendron's group was

hopelessly outnumbered.

"What saves us for the time," Tony reported to Hendron on his return, "is that they're not yet united. They are gangs and groups which fight savagely enough among themselves, but in general tolerate each other. They join on only one thing. They want to get in here. They want to get us—and our women.

"There are women among them, but not like ours; and they are too few for so many men. Our women also would be too few—but they want them.

"They talk about smashing in here and getting our food, our shelters—and our women. They'd soon be killing each other in here, after they wiped us out. That desire—and hate of us—is their sole force of cohesion."

Hendron considered silently. "There was no way for us to avoid that hate. And there is no hate like that of men who have lost their morale, against those who have retained it."

Tony looked away. "If they get in, we'll see something new in savagery."

The attack began on the following night. It began with gunfire, raking the barriers. A siren on top of the powerhouse sounded a wholly unnecessary warning. "Women to cover! Men to arms!"

Low on the horizon that night, which was speckled here by gunfire, shone two new evening stars. They were the Bronson Bodies which now had turned about the sun and were rushing toward their next meeting-place with the earth: one of them to offer itself for refuge, the other to end the world forever.

Chapter 18—The Final Defense

TONY, directing the disposal of his men, longed for the moon—the shattered moon that survived to-night only in fragments too scattered and distant to lend any light. The stars had to suffice. The stars and the three searchlights fixed on the roofs of the laboratories nearest to. the three fronts of the encampment.

One blazed out—and instantly became a target for a machine-gun in the woods before it. For a full minute, the glaring white beam swung steadily, coolly back and forth, picking out of the night men's figures, that flattened themselves on the ground between the trees as the searchlight struck them.

Then the beam tipped up and ceased to move. The next moment, the

great glaring pencil was snuffed out. The machine-gun in the woods had got the light-crew first, and then the light itself.

Other machine-guns and rifles, firing at random but ceaselessly, raked the entire camp. Tony stumbled over friends that had fallen. Some told him their names; some would never speak again. He recognized them by flashing, for an instant, his pocket-light on their still faces. Scientists, great men, murdered in mass! For this was not war. This was mere murder; and it would be massacre, if the frail defenses of the camp failed, and the horde broke in.

A defending machine-gun showed its spatter of flashes off to the right; Tony ran to it, and dropped down beside the gun-crew.

"Give me the gun!" he begged. He had to have a shot at them himself; yet when he had his finger on the trigger, he withheld his fire. The enemy—that merciless, murderous enemy—was invisible. They showed not even the flash of gunfire; and outside the wire barriers, there was silence.

The only firing, the only spatters of red, the only rattle, was within the defenses. It was impossible that, so suddenly, the attack had ceased or had been beaten off. No; this pause must have been prearranged; it was part of the strategy of the assault.

It alarmed Tony far more than a continuance of the surrounding fire. There was more plan, more intelligence, in the attack than he had guessed.

"Lights!" he yelled, "Lights!"

They could not have heard him on the roofs where the two remaining searchlights stood; but they blazed out, one sweeping the woods before Tony. The glare caught a hundred men before they could drop; and Tony savagely held the trigger back, praying to catch them with his bullets. He blazed with fury such as he never had known; but he knew, as he fired, that his bullets were too few and too scattered. His targets were gone; but had he killed them? The searchlight swept by and back again, then was gone.

Machine-guns were spitting from the woods once more, and both lights were blinded.

A rocket rasped its yellow streak into the air and burst above in shower of stars. A Fourth of July rocket, unquestionably a signal!

Tony fired at random into the woods; all through the camp, rifles and machine-guns were going. But no attack came.

A second rocket rasped up and broke its spatter of stars. Now the camp held its fire and listened. It heard—Tony heard, only a whistle, like a traffic whistle, or the whistle that summoned squads to attacking

order.

A third rocket went up.

"Here they come!" some one said; and Tony wondered how he knew it. Soaked in perspiration, Tony glared into the blackness of the woods. He longed for the lights; he longed for military rockets. But there never had been any of these. Hendron, in making his preparation, had not foreseen this sort of attack. He had imagined vagrants in groups, or even mobs of desperate men, but nothing that the wire would not stop or a few machine-guns scatter. That is, he had imagined nothing worse until it was too late to prepare, adequately, for—this.

Now machine-guns in the woods were sweeping the camp enclosure. The fire radiated from a few points; and as it was certain the attackers were not in the path of their own fire, but were in the dark spaces between, Tony swept these with his bullets.

The gun bucked under his tense fingers. Yells rewarded him. He was wounding, killing the attackers—units of that horde that had sent that murderous fire to mow down the men, the splendid men, the great men who had whispered their names quietly to Tony as he had bent over them before they died.

Shouts drowned the yells of the wounded—savage, taunting shouts. There must be a thousand men on this bit of the front alone, more than all the men in the camp. Tony heard his voice bawling over the tumult: *"Get 'em! Get 'em! Don't let 'em by!"*

His machine-gun was overheating. A little light came from somewhere; Tony could not see what it was, except that it flickered. Something was burning. Tony could see figures at the wire, now. He could not reckon their numbers, did not try to. He tried only to shoot them down. Once through that wire,—that wire so weak that he could not see it,—and that thousand with the thousand behind them would be over him and the men beside him, they would be over the line of older men behind; then they would reach the women.

Tony's lips receded from his teeth. He aimed the gun with diabolic care, and watched it take effect as wind affects standing wheat. The attackers broke, and ran back to the woods.

In the central part of the cantonment the growth afforded better cover and gave the assault shorter range. Men went in pairs to the tops of the buildings, and through loopholes which had been provided for such a contingency began sniping at those who moved in the territory around the buildings.

Every one was overmastered by the same sort of rage which had possessed Tony. The reason for their existence had been to them a high and holy purpose. They defended it with the fanaticism of zealots. They

could not know that the flight of their planes to and from the Ransdell metal-supply had indicated to the frantic hordes that somewhere human beings lived in discipline and decency. They could not know how for weeks they had been spied upon by ravenous eyes. They could not know how the countryside around, and the distant cities, had been recruited to form an army to attack them. They could not know that nearly ten thousand men, hungry, desperate, most of them already murderers many times over, armed, supplied with crafty plans which had been formulated by disordered heads once devoted to important, intelligent pursuits—how these besieged them now, partly for spoils, but to a greater degree in a fury of lust and envy. They had traveled on broken roads, growing as they marched. It was a heathen horde, a barbaric and ruthless horde, which attacked the colony.

The siege relaxed to an intermittent exchange of volleys. At this machine-gun station, Tony, suffering acutely from thirst, with six of his comrades lying dead near by, fought intermittently.

Reënforcements came from the center of the camp—Jack Taylor and two more of the younger men.

"Hurt, Tony?" Taylor challenged him.

"No," replied Tony; and he did not mention his dead; for Taylor, creeping up, had encountered them. "Who's killed in the buildings?"

"Not Hendron," said Taylor, "or Eve—though she might have been. She was one of the girls that went out to attend to the wounded. Two of the girls were hit, but not Eve. . . . Hendron wants to see you, Tony."

"Now?"

"Right now."

"Where is he?"

"At the ship. I'll take over here for you. Good luck!"

Tony stumbled through the dark to the buildings, black except for faint cracks of light at the doors behind which the wounded were collected. He found Hendron inside the Space Ship, and there, since its metal made an armor for it, a light was burning. Hendron sat at a table; it was now his headquarters.

"Who's hurt?" said Tony.

"Too many." Hendron dismissed this. "What do they think *they* are doing?" he challenged Tony abruptly.

"Getting ready to come again," Tony returned.

"To-night, probably?"

Tony glanced at his wrist-watch; it was eleven o'clock. "Midnight,

would be my guess, sir," he said.

"Will they get in next time?" Hendron demanded.

"They can."

"What do you mean by that?"

"I mean, if they come on more resolutely. They can do more than they have done."

"Whereas we," Hendron took up for him, "can scarcely do more."

"Yes, sir," said Tony. "We used all the defenses we had; and they could have carried us an hour ago, if they'd come on."

"Exactly," nodded Hendron. "And now we are fewer. We will be fewer still, of course, after the next attack; and fewer yet, after they get in."

"Yes, sir."

"However," observed Hendron thoughtfully, "that will be, in one way, an advantage."

Tony was used, by now, to be astonished by Hendron; yet he said: "I don't follow you, sir."

"We will defend the enclosure as long as we can, Tony," Hendron said. "But when they are in,—if they get in,—no one is to throw himself away fighting them uselessly. They must be delayed as long as they can be; but when they *are* in, we gather—all of us that are left, Tony—here."

"Here?"

"Inside this ship. Hadn't that occurred to you, Tony? Don't you *see?* Don't you *see?*"

Tony stared at his chief, and straightened, the blood of hope racing again hot within.

"Of course I see!" he almost shouted. "Of course I see!"

"Very well. Then issue cloths—white cloths, Tony; distribute them."

"Cloths?" repeated Tony, but before Hendron answered, he realized the reason.

"For arm-bands, Tony; so, in the dark, we will know our own."

"Yes, sir."

"No time to lose, Tony."

"No, sir. But–Eve is safe?"

"She is not hurt, I hear. You might see her for an instant. The women are tearing up bandages."

Tony found her, but not alone; she was in a room with twenty others,

tearing white cloth into strips. At least, he saw for himself that she was not yet hurt; at least he had one word with her.

"Tony! Take care of yourself!"

"How about you, Eve?"

She disregarded this; said only:

"Get back to the ship, Tony, after the fight. Oh, get back to the ship!" He went out again. A bullet pinged on the wall beside him; bullets were flying again. Behind Tony, on the other edge of the camp, sporadic firing flashed along the road and in the woods. The bursts of machine-gun fire sounded uglier; there were groans again, and screams. Tony could sense rather than see the gathering of attackers on this edge; then firing broke out on the other side too.

He wondered how many of his runners with the arm-bands and with the orders would fall before they reached the first line of the defense. With his own burden of machine-gun cartridges, he returned to the post he had fought.

"That you, Tony?" Jack Taylor hailed. "Cartridges? Great! We'll scrap those bimboes. Hell! Just in time, I'd say. . . . Here they come!"

"Listen!" yelled Tony, giving his orders with realization that, if he did not speak now, he might never: "If they get in, delay them but don't mix with them; each man tie a white cloth on his sleeve—and retreat to the ship!" And he issued the strips he had brought with him.

From the buildings, reënforcements arrived—six men with guns slung over their shoulders, and bayonets that caught a glint from the firing. They were burdened with more cartridge-cases, and they carried another machine-gun. Tony placed them almost without comment.

One of the new men produced a Very pistol. His private property, he explained, which he had brought along "for emergencies."

"It's one now," Tony said simply, and took the pistol from him. He fired it; and the Very light, hanging in the air, revealed men at the wire everywhere. A thousand men—two thousand; no sense even in estimating them.

In the green glare which showed them, Jack Taylor looked at Tony. "My God, I forgot," he said, and shoved Tony his canteen.

Tony tasted the whisky and passed it on, then again he claimed the machine-gun. He made a flat fan of the flashes before him as he swung the gun back and forth. He was killing men by scores, he knew; but he knew, also, that if the hundreds had the nerve to stick, they were "in."

Chapter 19—Escape

THEY were in! And Tony did not need the green flare of the last light from the Very pistol to tell him so.

"Fall back! Fall back to the ship—fighting!" Tony yelled again and again.

He did not need to tell his men to fight. They were doing that. The trouble was, they still wanted to fight, holding on here.

What saved them was the fact that the machine-gun ammunition was gone. The machine-guns were useless; nothing to do but abandon them.

"Fall back!" Tony yelled. "Oh, fall back!"

A few obeyed him. The rest could not, he suddenly realized; and he had to leave them, dying. Jack Taylor was beside him, firing a rifle. They were five altogether who were falling back; firing, from the machine-gun post.

Figures from the black leaped at them, and it was hand to hand. Tony fought with a bayonet, then with a clubbed rifle, madly and wildly swinging. He was struck, and reeled. Some one caught him, and he clutched the other's throat to strangle him before his eyes got the patch of gray which was a white arm-band.

"Come on!" cried Jack Taylor's voice; and with Taylor, he ran in the dark. Clear of the attack for an instant, they rallied—the two of them—found a pistol on a body over which they stumbled, emptied it at the attackers, and fell back again.

They reached the buildings. Gunfire was flashing from the laboratories which otherwise were black. The dormitories sprang into light; windows shone, and spread illumination which showed that they were deserted and were being used, now. by the defenders of the camp to light the space already abandoned. The final concentration was in the center, dominated by the looming black bulk of the Space Ship standing in its stocks.

The lights from the dormitories were holding up the advance of the attackers. They could not shoot out hundreds of globes so simply as they had smashed the searchlights. And they could not advance into that illuminated area, under the machine-guns and rifles of the laboratories. They had first to take the deserted dormitories and darken them.

They were doing this; but it delayed them. It held them up a few minutes. Here and there a few, drunker or more reckless than the rest, charged in between the buildings, but they dropped to the ground dead or wounded—or waiting for the support that was soon to come.

Room by room, dormitory windows went black. The lights were not being turned out; they were being smashed and the window-panes were crashing. Yells celebrated the smashing, and shots.

The yells ceased; and the defenders knew that some sort of assault was being reorganized.

Tony moved in the dark, recognized by his voice, and knowing others in the same way.

"Keep down-—down—down," he was crying. "Below the window-line. Down!" For bullets from machine-guns, evidently aimed from the dormitory windows, were striking in.

Many did not obey him; he did not expect them to. They had to fight back, firing from the windows. Yells at the farther end of the main laboratory told that it was hand-to-hand there, in the dark. A charge—a rush had been pushed home.

Tony found Taylor beside him; they had stuck together in the dark; and a dozen others rose and ran with them into the melee.

Men of science, Tony was realizing even as he stumbled in the dark, the best brains of the modern world, fighting hand to hand with savages! Shoot and stab and club, wildly, desperately in the dark!

Your comrade went down; you stepped back over him, and shot and stabbed again; yelling, groaning, slipping, struggling up again. But many did not get up. More and more lay where they fell. Tony, stumbling and slipping on the stickily wet floor, realized that this rush was stopped. There was nobody left in the room to fight—nobody but two or three distinguished as friends by the spots of the arm bands.

"Jack?" gasped Tony; and Taylor's voice answered him. They were staggering and bleeding, both of them; but they had survived the fight together.

"Who was here!" Tony asked. Who of their comrades and friends were dead and dying at their feet, he meant. Tony found the flash-light which, all through the fight, he had in his pocket, and he bent to the floor and held it close to the faces.

He caught breath, bitterly. Bronson was there. Bronson, the discoverer of the two stranger planets whose passing had loosed this savagery; Dr. Sven Bronson, the first scientist of the Southern Hemisphere, lay there in his blood, a bayonet through his throat! Beside him Dodson was dying, his right arm hacked almost off. He recognized Tony, spoke two words which Tony could not hear, and lost consciousness.

A few of those less hurt were rising.

"To the ship! *Into the ship!"* Tony cried to them. "Everybody into the ship! Spread the word! Jack! . . . Everybody, everybody into the ship!" There was no alternative.

Three-fourths of the camp was in the hands of the horde; and the laboratories could not possibly beat off another rush. They could not have beaten back this, if it had been more organized.

Bullets flew through the dark.

"To the ship! *To the ship!"*

Creeping on hands and knees, from wounds or from caution, and dragging the wounded with them, the men started the retreat to the ship. Women were helping them.

Yells and whistles warned that another rush was gathering; and this would be from all sides; the laboratories and the ship were completely surrounded.

Tony caught up in his arms a young man who was barely breathing. He had a bullet through him; but he lived. Tony staggered with him into the ship.

Hendron was there at the portal of the great metal rocket. He was cooler than any one else. "Inside, inside," he was saying confidently.

"Where's Eve?" Tony gasped at him.

"I saw her—a moment ago."

"Safe?"

Her father nodded.

Tony bore in his burden, laid it down. Ransdell confronted him. From head to foot, the South African was dabbled and clotted with blood. He was three-quarters naked; a bullet had creased his forehead; a bayonet had slashed his shoulder. His lips were set back from his teeth. His eyes, the only portion of him not crimson, gazed from the pit of his face, and a voice that croaked out of his wheezing lungs said: "Seen Eve?"

"Her father has, Dave. She's all right," replied Tony.

Ransdell pitched head foremost toward the floor as Tony caught him.

The second rush was coming. No doubt of it, and it would be utterly overwhelming. There would be no survivors—but the women. None. For the horde would take no prisoners. They were killing the wounded already—their own badly wounded and the camp's wounded that they had captured.

Eliot James, a bullet through his thigh, but saved by the dark, crawled in with this information. Tony carried him into the ship.

They were all in the ship—all the survivors. The horde did not suspect it. The horde, as it charged in the dark, yelling and firing, closed in on the laboratories, clambered in the windows, smashing, shooting, screaming. Meeting no resistance, they shot and bayoneted the bodies of their own men and of the camp's which had been left there.

Then they came on toward the ship. They suddenly seemed to realize that the ship was the last refuge. They surrounded it, firing at it. Their bullets glanced from its metal. Somebody who had grenades bombed it.

A frightful flame shattered them. Probably they imagined, at first, that the grenade had exploded some sort of a powder magazine within the huge metal tube, and that it was exploding. Few of those near to the ship, and outside it, lived to see what was happening.

The great metal rocket rose from the earth, the awful blast from its power tubes lifting it. The frightful heat seared and incinerated, killing at its touch. A hundred of the horde were dead before the ship was above the buildings.

Hendron lifted it five hundred feet farther, and the blast spread in a funnel below it. A thousand died in that instant. Hendron ceased to elevate the ship. Indeed, he lowered it a little, and the power of the atomic blast which was keeping two thousand tons of metal and of human flesh suspended over the earth, played upon the ground—and upon the flesh on the ground—as no force ever released by man before.

Tony lay on his face on the floor of the ship, gazing down through the protective quartz-glass at the ground lighted by the garish glare of the awful heat.

In the midst of the blaring, blinding, screaming crisis, a man on horseback appeared. His coming seemed spectral. He rode in full uniform; he had a sword which he brandished to rally his doomed horde. Probably he was drunk; certainly he had no conception of what was occurring; but his courage was splendid. He spurred into the center of the lurid light, into the center of the circle of death and tumult, stiff-legged in stirrups of leather, like one of the horrible horsemen of the Apocalypse.

He was, for a flaming instant, the apotheosis of valor. He was the crazed commander of the horde.

But he was more. He was the futility of all the armies on earth. He was man, the soldier.

Probably he appeared to live after he had died, he and his horse together. For the horse stood there motionless like a statue, and he sat his horse, sword in hand. Then, like all about them, they also crumpled to the ground.

Half an hour later, Hendron brought the ship down.

Chapter 20—Day

A PALE delicate light carried away the depths of night. From the numbness and exhaustion which had seized it, the colony roused itself. It gazed with empty eyes upon that which surrounded it. The last battle of brains against brutality had been fought on the bosom of the earth. And the intelligence of man had conquered his primeval ruthlessness. But at what cost! Around a table in the office of the laboratories a few men and women stared at each other; Hendron pale and shaken, Tony in shoes and trousers, white bandages over his wounds, Eve staring from him to the short broad-shouldered silent form of Ransdell, whose hands, blackened, ugly, hung limply at his sides, whose gorilla-like strength seemed to have deserted him; the German actress, her dress disheveled, her hands covering her eyes; Smith the surgeon, stupefied in the face of this hopeless summons to his calling.

At last Hendron sucked a breath into his lungs. He spoke above the nerve-shattering clamor which penetrated the room continually. "My friends, what must be done is obvious. We must first bury the dead. There are no survivors of the enemy. If others are gathering, I believe we need fear no further attack. Doctor Smith, you will kindly take charge of all hospital and medical arrangements for our people. I will request that those who are able to do so appear immediately on the airplane field, which I believe is—unobstructed. I shall dispatch the majority of them to your assistance, and with those who remain, I shall take such steps as are necessary. Let's go."

Only three hundred and eighty persons were counted by Tony as they struggled shuddering to the landing-field. Almost half of them were women, for the women, except in the case of individuals who joined the fighting voluntarily, had been secluded.

As in the other emergency, Taylor was assigned to the kitchen. He walked to the kitchen with his men. Tony with ten other men, a pitiful number for the appalling task that confronted them, went down to the field and began to gather up in trucks the bodies there. Not far from the cantonment, on what had been a lumber road, an enormous fissure yawned in the earth. ...

All that day they tended their own wounded. Many of them perished.

In those nightmare days no one spoke unless it was necessary. Lifelong friendships and strong new friendships had been obliterated. Loves that in two months had flowered into vehement reality were ended.

And only the slowest progress was made against the increasing charnel horror surrounding the cantonment. For two weeks abysmal sadness and funereal silence held them. Only the necessary ardors of their toil prevented many of them from going mad. But at the end of two weeks Tony, returning from an errand to the fissure where the last bodies had been entombed by a blast of dynamite, stood on the hill where he had so often regarded the encampment, and saw that once again the grass grew greenly, once again the buildings were clean and trim. The odor of fresh paint was carried to his nostrils, and from far away the droning voices of the cattle in the stockyards reached his ears. He was weary, although for the last few nights he had been allowed adequate sleep, and his heart ached.

While he stood there, his attention was attracted by a strange sound—the sound of an airplane motor; and the plane itself became visible. It was not one of their own planes, and he looked at it with hostile curiosity. It landed presently on their field, and Tony was one of several men who approached it. The cabin door opened, and out stepped a man. There was something familiar about him to Tony, but he could not decide what it was. The man had a high crackling voice. His hair was snow-white. His features were drawn, and his skin was yellow. His pilot remained at the controls of the plane, and the old man hobbled toward Tony, saying as he approached:

"Please take me to Mr. Hendron."

Tony stepped forward. "I'm Mr. Hendron's assistant. We don't allow visitors here. Perhaps you will tell me your errand."

"I'll see Hendron," the other snapped.

Tony realized that the man constituted no menace. "Perhaps," he said coldly, "if you will tell me your reason for wanting to see Hendron, I can arrange for the interview."

The old man almost shrieked. *"You* can arrange an interview; I tell you, young fellow, I said I would see Hendron, and that's all there is to it." He came abruptly closer, snatched Tony's lapel, cocked his head and peered into his face. "You're Drake, aren't you, young Tony Drake?"

Suddenly Tony recognized the man. He was staggered. Before him stood Nathaniel Borgan, fourth richest man in America, friend of all tycoons of the land, friend indeed of Hendron himself. Tony had last seen Borgan in Hendron's house in New York, when Borgan had been immaculate, powerful, self-assured and barely approaching middle age. He now looked senile, degenerate and slovenly.

"Aren't you Drake?" the crackling voice repeated. Tony nodded mechanically. "Yes," he said, "come with me."

Hendron did not recognize Borgan until Tony had pronounced his

name. Then upon his face there appeared briefly a look of consternation, and Borgan in his shrill grating voice began to talk excitedly. "Of course I knew what you were doing, Hendron, knew all about it. Meant to offer you financial assistance, but got tangled up taking care of my affairs in the last few weeks. I haven't been able to come here before, for a variety of reasons. But now I'm here. You'll take me with you when you go, of course." He banged his fist on the table in a bizarre burlesque of his former gestures. "You'll take me, all right, all right, and I'll tell you why you'll take me—for my money. When all else fails, I'll have my money. I ask only that you spare my life, that you'll take me from this awful place, and in turn go out to my plane, go out to the plane that is waiting there for you. Look inside." Suddenly his voice sank to a whisper, and his head was shot forward. "It's full of bills, full of bills, Hendron, hundred-dollar bills, thousand-dollar bills, ten-thousand-dollar bills—stacked with them, bales of them, bundles of them—millions, Hendron, millions! That's the price I'm offering you for my life."

Hendron and Tony looked at this man in whose hands the destiny of colossal American industries had once been so firmly held; and they knew that he was mad.

Oddly enough, the arrival of Nathaniel Borgan and his effort to purchase passage on the Space Ship with millions in bills as worthless as Civil War shin-plasters, acted as a sort of catalyst on the survivors of the attack. The deep melancholy which had settled upon them, and which in many cases had been so powerful an emotion that all interest in the future was swept away, evaporated as the story of Borgan ran through the colony. To people living in a normal world, the millionaire's behavior might have seemed shocking. But Hendron's colonists were beyond the point where they could be shocked. Instead they were reawakened to an intense consciousness of their unique position and their vast responsibilities.

They sent Borgan away with his pilot and his plane full of money; and the last words of the financier were pronounced in a voice intended to be threatening as he leaned out of the cabin door: I'll get an injunction against you from the President himself. I'll have the Supreme Court behind me within twenty-four hours."

Somebody laughed, and then somebody else. It was not gay laughter, but Homeric laughter, the sort of laughter that contains too many emotions to be otherwise expressed.

After the plane disappeared in the sky, people found themselves talking to each other about their lives once more. On the following morning a small quota of bathers appeared and plunged into the pool. Their voices were still restrained; but Hendron, watching from the roof of the laboratory, sighed with infinite relief. He had almost reached the

point when he would have given way to utter despair over the morale of his people. That evening the strains of phonograph music floated over the place that had been a battlefield. They played old favorites for a while; but when some one put on a dance record, there was no objection.

The energy of interest returned to their work, replacing the energy of dogged and bleak determination. . . .

At that time, nearly three weeks after the attack, a census was retaken. There were two hundred and nine uninjured women, one hundred and eighty-two uninjured men. There were about eighty men and women who were expected wholly to recover. There were more than a hundred who would suffer some disability. Four hundred and ninety-three people had been killed or had died after the conflict.

Work of course was redistributed. More than five months lay ahead of them. The Space Ship could be completed, even with this reduced group, in three weeks. The greatest loss was in the death of men, specialists in various fields of human knowledge. That their branches of learning might not be unrepresented, schools were immediately opened, and more than two hundred men and women began an intensive training in a vast variety of the branches of science. . . .

On one of the unseasonably warm afternoons in December Tony received what he considered afterward the greatest compliment ever paid to him in his life. He was making one of his regular tours of the stockyards when Ransdell, walking alone on the road, overtook him. In all their recent encounters, Ransdell had not spoken a hundred words to Tony; but now finding him alone, he stopped him and said almost gruffly: "I'd like to speak to you."

Tony turned and smiled with his usual geniality.

The South African hesitated, and almost blushed. "I'm not talkative," he said bluntly, "but I've been trying to find you alone for weeks." Again he hesitated.

“Yes?”

"That fight you put up—" Ransdell took a huge pocket-knife from his flannel shirt and commenced to open and shut its blade nervously. "That was a damn' fine piece of work, fellow."

"What was yours?" Tony replied, heartily. Ransdell held out his hand. They gripped, and in that grip the hands of lesser men would have been broken.

From that time on, those rivals in love were as blood brothers. They were seen together more often than Ransdell was seen with his two companions of the long flight; they made an odd pair, the tall garrulous good-humored Tony striding here and there on his numerous duties,

accompanied by the short, equally broad and herculean British-American.

Another general meeting was held in the dining-hall. It began a little quietly, for those who gathered there were reminded intensely of the diminution of their numbers by the number of empty seats. Hendron again took charge, and his words from the beginning to end were a complete surprise to the community.

In his office and at his business a relatively silent man, Hendron none the less enjoyed making speeches. He stood on the platform that night, his hair a little grayer than formerly, the lines around his eyes a little deeper, the square set of his shoulders slightly bowed, and his mouth fixed in a more implacable line than before. The five-hundred-odd people who listened to him appreciated from the first moment that Hendron had something of importance to impart, and something which he knew would please them.

"I have called you together," he began, "for two distinct purposes: I shall dispatch the first of these with what I know will be your approval; and the second I am sure will meet with equal approval.

"I want each one of you to-night to forget for the moment the tragedies that have overtaken us. I want each of you to-night to think of yourself as a member of the human race who, buffeted by fortune, overwhelmed by Nature, threatened by your fellow-men, is nevertheless steadfastly continuing upon the greatest enterprise mankind has ever undertaken.

"And while you are thinking that, I will draw your attention to the fact that certain of our number have made, at the risk of their own lives and with the exhibition of incredible heroism, contributions to our lives here, the value of which cannot be expressed.

"I am thinking of Peter Vanderbilt, Eliot James and David Ransdell, who brought to us a record of the fate of our nation, and especially of Ransdell, who not only carried home his companions when he was severely wounded, but who discovered and brought back the substance which will make our escape from here possible."

Applause and cheering checked Hendron for a while. Then he continued:

"I am thinking also of Jack Taylor and Anthony Drake, whose courageous defense is largely responsible for our presence here to-day." The cheers were redoubled.

"'Because we are all human, and because we wish to recognize by some token services so extraordinary and distinguished as these, I have had struck off five gold medals." Hendron held up his hand to check the tumult. "These medals bear on one side the motto of the United States of America, which I think we might still adopt as our own. Out of the many

nationalities represented before, we intend to create a single race. Therefore the medals bear the inscription, *'E pluribus unum,'* the names of their recipients, and beneath the names the words *'For valor.'* On the opposite face of these medals is the head of Sven Bronson, who first discovered the Bronson Bodies, who gave warning to the world, and who was one of those who surrendered his life, that the rest of us might not perish."

There was now silence in the room. One by one Hendron called the names of the five men to whom he wished to do honor. As each rose and stepped forward, he spoke a few words descriptive of the reasons for awarding the medal, and the occasion which had won the award. Vanderbilt and James were gracefully embarrassed. Jack Taylor was dumb-stricken and crimson. Tony shuffled to and from the platform with a bent head, and Ransdell accepted his medal with a white face and a military precision which showed clearly the emotional price he was paying for every step and gesture he made.

When the applause had at last died, Hendron began again in a different tone: "The second matter which I have to discuss with you is one which will come, I am sure, as a distinct surprise. It is the result of my earnest thought and of careful calculations. I arrived at it no sooner, because I anticipated neither the temper nor the quality of the people who would be gathered before me at this time, and because I was uncertain of the mechanical facilities that would be available to us. From the standpoint of realism,—and I have learned that all of you are courageous enough to face truths, —I am forced to add that my decision has been made possible by the diminution of our numbers.

"All of you know that I founded this village of ours for the purpose of transferring to the planet that will take the place of Earth a company of about one hundred people, with the hope that they might perpetuate our doomed race. The number I considered was in a measure arbitrary, but it seemed to me that a ship large enough to accommodate such a number might be fabricated and launched by the one thousand persons who were originally assembled here. It is obvious, of course, that the more intelligent and healthy the units of humanity we are able to transfer to the planet, the better the chance for founding a new race will be."

He paused and his eyes roved over the throng. Not a breath was drawn, and not a word was spoken. Many guessed in a blinding flash of ecstasy what Hendron was going to say.

"My friends, we are five hundred in number. There is not one man or woman left among us who bears such disability as will prevent him from surviving, if any one may, the trip through space; there is not one but who, if we effect our landing upon Bronson Beta and find it habitable, will be fit to propagate .there the human race.

"On the night of the attack, we all of us—and some who since have died—crammed into the Space Ship. We all realize that no such crowding will be possible on the voyage through space; we all realize that much cargo, other than humanity, must be stowed on the ship if there is to be any point and purpose in our safe landing upon another planet. One hundred persons remains my estimate of the probable crew and passenger-list of the ship which saved us all on that night.

"But I have come to the conclusion that, by dint of tremendous effort and cooperation, and largely because of the success of the experiments which we have made with Ransdell's metal, it will be possible within the remaining months of time to construct a second and larger vessel which will be capable of removing the entire residual personnel of this camp."

Hendron sat down. No cheer was lifted. As if they had seen the Gorgon's Head, the audience was turned to stone. The sentence imposed by the death-lottery had been lifted. Every man and woman who sat there was free. Every one of them had a chance to live, to fight and to make a new career elsewhere in the starlit firmament.

They sat silently, many with bowed heads, as if they were engaged in prayer. Then sound came: A man's racking sob, the low hysterical laughter of a woman; after that, like the rising of a great wind, the cheers.

Chapter 21—Diary

IN Eliot James' diaries the days appeared to be crammed with events. A glance at its pages would have made the observer believe that life was filled with excitement for the dwellers in Hendron's colony, although to the dwellers themselves, the weeks passed in what seemed like a steady routine, and James had been so busy that he was unable to write voluminously:

"Dec. 4th: To-day what we call the keel of the second Space Ship was laid. The first has been popularly named *'Noah's Ark'* and we have offered a prize of five thousand dollars in absolutely worthless bank-notes for anybody who will contrive a name for the second. It was a spectacular affair—all of us dressed in what we call our best clothes, Hendron making another of his usual speeches, full of stirring words and periodic sentences, and the molten metal pouring into its forms.

"Dec. 7th: To-day was a gala day for Tony Drake. Kyto, the Japanese servant whom he had had for some years in New York, and of whom he was inordinately fond, walked peacefully into camp, after he had been supposedly lost on the trip here from New York. The inscrutable little Jap walked up to Tony, whose back was turned. Kyto's face was like a

smiling Buddha's; and fully appreciating the drama of the situation, he said in his odd voice: 'With exceedingly humbleness request possibilities of return to former employment.' Peter Vanderbilt and I had brought him up to Tony, and when Tony spun around, I thought he was going to faint. Immediately afterward he began thumping Kyto's back so hard that I personally feared for the Jap's life. But he seems to be wiry; in fact, he must have the constitution of a steel spring, for he has traveled overland more than eight hundred miles in the past two months, and his story, which I am getting out of him piecemeal, is one of fabulous adventure. Eve seemed almost as much pleased to see Kyto as was Tony himself. She took his hand and held it and cried over him, while he stood there blinking and saying that he was humbly and honorably this and that.

"Dec. 8th: Four deer wandered into the camp to-day, and were corralled for our menagerie after a very exciting chase.

"Dec. 19th: Hendron is a curiously ingenious devil. I discovered only to-day that he has used for insulation, between the double walls of the now completed Ark, two thick layers of asbestos, and between them, books. The books make reasonably good insulating material, and when we arrive at our future home, if we do not arrive with too hard a blow, we will be provided with an enormous and complete library. I even saw a first edition of Shelley which was designated for the lining of the second ship. Amazing fellow, Hendron.

"Dec. 31st: We had our Christmas dinner last Thursday, and except for the absence of turkey, it was complete, even to plum pudding. The weather continues to be warm, and the gardens which we replanted have flourished under this new sub-tropical climate, so that already we are reaping huge harvests which are being stored in the Space Ships.

"Jan. 18th: A flight was made to the 'mines' from which Ransdell's metals have been taken, and in the course of it the plane passed over St. Paul and Minneapolis. Apparently the mobs in those two cities have for the most part either perished or migrated, as there was very little sign of life— smoke columns rising here and there amid the ruins betokening small cooking-fires, and an occasional figure on the streets, nothing more. However, we have not drawn in the outposts stationed around the cantonment after the last attack, and if we should be again attacked in force, we shall be warned in time and shall not temporize but use the final weapon at once. However, no one expects another attack. Even in this dying world, the word of our weapon has spread.

"Jan. 20th: There was dancing in the hall of the women's dormitory and Ransdell so far overcame his almost animal shyness that he danced twice with Eve. The rivalry between Ransdell and Tony is the most popular subject of discussion among the girls and women. I myself have been much interested in the triangle, and for a while I was disturbed

about it, but such a bond has grown between the two men that I know whoever is defeated in the contest, if there is victory or defeat, will take his medicine honorably and generously. I am wondering, however, about that business of victory and defeat. The women here slightly outnumber the men. It will be necessary for them to bear children on the new planet. Variation of our new race will be desirable. To care for the same, fifty girls and twenty-five men are already deeply immersed in the study of obstetrics; nursing, pediatry, child psychology, etc. Perhaps we will resort in the main to polyandry and abolish, because of biological necessity, all marriage. There are a good many very real love-affairs existent already. That is to be expected, when the very flower of young womanhood and the best men of all ages are segregated in the wilderness. I myself doubtless reflect the mental attitude of most of the men here. There are a hundred women, I shall say two hundred, any one of whom I would be proud to have as my wife. But so great have been the trials of our life, so enormous is the need for our concentrated efforts, that little energy or time has been left to them to think about love or marriage.

Jan. 31st: It is too bad that the change in the earth's orbit and the inclination of its axis did not occur long ago. Generations of people who have been snowbound at this time in Michigan would rub their eyes in wonderment if they could see the trees still in leaf, the flowers still in bloom, the fields still green, sunshine alternating with occasional warm rains, and the thermometer standing between 65 and 85 every day.

"Feb. 17th: In a little more than a month it will be time for our departure. As that solemn hour approaches, all of us tend to think back into our lives, rather than forward toward our new lives. Hendron has not hesitated to make it clear that our relatively short jump through space will be dangerous indeed. The ships may not have been contrived properly to withstand what are at best merely theoretical conditions. The cold of outer space may overwhelm us. The sun may beat through the sides of the ship and consume us. The rays which travel through the empty reaches when we thrust ourselves among them clad in the thin cylinders of our Ark may assert a different potency from that experienced under the layer of Earth's atmosphere. Either or both of our two projectiles may collide with a wandering asteroid, in which case the consequences will be similar to those anticipated for the collision of Earth with Bronson Alpha. Hendron assures us only that the ships will fly, and that if they reach the atmosphere of Bronson Beta, it will be possible to land them.

"Feb. 22nd: The Bronson Bodies have reappeared in the sky with visible discs. Alpha once more looks like a coin, and Beta not unlike the head of a large pin. Observations through our modest telescope show clearly that Bronson Beta, warmed by the sun, has a surface now

completely thawed. Its once solid atmosphere is drifting about it filled with clouds, and through those clouds we are able to glimpse patches of dark and patches of brilliance, which indicate continents and oceans. At the first approach, an excellent spectroscopic analysis was made of the planet's composition. The analysis denoted its fitness to support human life, but we stand in such awe of it that we say to ourselves only: 'Perhaps we shall be, able to live if we ever disembark there'; but we cannot know. There may be things upon its mysterious surface, elemental conditions undreamed of by man. However, there is some mysterious comfort, a sort of superstitious courage, afforded to many of our numbers by the fact that as our doom approaches, a future home is also waxing brightly in the dark sky. We spend many evenings staring toward the heavens.

"Feb. 28th: Tremendous effort is being expended upon the second Ark. The task of accumulating metal for its construction was tremendous, inasmuch as the vast stores accumulated by Hendron for the building of the first ship in the cantonment itself were insufficient. There was no time to smelt iron from the deposits in this district, and it had to be collected from every possible source. The hangar which had protected the first ship was confiscated. Two steel bridges across what used to be a river near by have furnished us with much of the extra material required, but we are now engaged in smelting every object for which we shall have no future use. Copper is at a premium, and our lighting system is now being conducted over iron wires, to the great detriment of its efficacy. Women are doing tasks that women have never done before, and we are all working on a sixteen-hour-a-day schedule. Hendronville looks like a little Pittsburgh—its furnaces going all night, its roads rutted by heavy trucking, and its foundries shaking with a continual roar of machinery. The construction of the second Ark in such a record time would have been impossible had it not been for the adaptability of Hendron's solution of atomic disintegration. Power and heat we have in unlimited quantities, but we are making progress, and we shall finish in time.

"March 6th: The day and hour of departure have been announced. In order to intercept the Bronson Body at its most advantageous point, we shall leave the Earth on the 27th of this month at 1:45 A.M. precisely. It is estimated that the journey will require about ninety hours, although it could be made much more quickly.

"March 18th: In running over my notes, I find I have not mentioned one source of constant interest and speculation here at the camp. From time to time, when our own receiving apparatus has been functioning, we have overheard radio broadcasts from the world outside. The static is still tremendous, and these broadcasts, whether on spark sets or over regular stations, have been most unsatisfactory. Once in November and again in January we heard the President of the United States. He recited

in a very strained and weary voice a few fragmentary details of life in his small kingdom. Not in any hope of aid, but as if he wished to inform any one else who might be listening, what the situation was. He did not address his own constituents, so we may assume they have no receiving sets and are still struggling against appalling handicaps which Ransdell and myself observed. On three or four occasions through the rattle in the earphones we have caught snatches of broadcasts from foreign stations. But, except for a lull immediately after the storms, we have never been able to overhear enough so that we know anything definite about the situation in Europe or elsewhere, except that on the night of, I think, December 8th, we heard a short segment of a Frenchman's oration which evidently was intended to move his hearers toward peace. We assumed that in spite of the appalling conditions that must prevail abroad as they do here, Europe, still sticking stubbornly to her nationalism, is again engaged in some form of warfare.

"March 20th: A week from to-night we shall leave the Earth. The approach of this zero hour has cast a spell on the colonists. They move as if in a dream. When they talk, they use only trivialities and commonplaces as a medium for their expression. Nervous tension is enormous. I saw two of the girls sitting on the steps of their dormitory discussing dressmaking for half an hour with the utmost seriousness; and yet neither replied to anything the other had said, and neither said anything that might be remotely considered sensible.

"Everything is in readiness; a few perishables will be moved into the ships in the last hours; the stock and poultry have already been domiciled in their quarters, although they have not been lashed fast. I have been given by Hendron, to include with my papers, a complete list of the contents of both ships. In spite of their enormous size,—the second ship looks like three gas-storage tanks piled on top of each other, and also has the same shining exterior as the first,—it is impossible to believe that they could contain all the items in these lists.

"It is the most incredible assortment of the gear that belongs to mankind ever assembled in any one place. What our ships contain might well be samples of our civilization collected wholesale by some curious visitors from another world and taken home in order that their weird fellows might look upon the wisdom, the genius, the entertainment and the interests of men. We are ready."

Chapter 22—Ave Atque Vale

"WHEN I think," Tony said to Eve as they sat side by side on a small hilltop watching the descent of twilight into the busy valley, "of the

foresight and ingenuity of your father, I am appalled. He was ahead of most of the people in the world in his idea for leaving the earth, and he was ahead of all of us when he saw the possibility and the practicability of taking everybody who was left after the struggle, to the new planet. It's odd. I used to imagine scenes that would exist when the Ark was ready to leave, and of the thousand of us here only a hundred would be chosen. It would have been a terrible period for every one. Then I used to think what would have happened if the world knew about the Ark. Hundreds of men like Borgan would have offered their millions in return for a ticket. Husbands would have deserted their wives and their children. People would have fought until they were killed, trying to get aboard. Prospective stowaways would have offered fabulous prices. No wonder he insisted on isolation and secrecy. And now we can all go—"

Eve hugged herself with her arms and looked at him side-wise. "I knew all about Dad's plans for the departure, and I knew something else. You were not to go, were you?"

"Me? Of course not. What good would I have been?"

Eve smiled. On this evening, an evening so close to the great adventure, she seemed radiant and unusually tender. "You're modest, Tony. That's one of your greatest charms. Let me tell you: Once I saw the list Dad had made up. He had given Bronson first place. I came second. Dodson was third. Ransdell was fourth. And you were fifth, Tony. When he could pick almost as he wished from the whole world, he made you fifth. That's pretty high up."

"Your father must be sentimental to consider me at all. But I am glad he gave Ransdell that fourth position. I can't imagine any situation in the world which Dave couldn't handle."

Eve ignored the compliment. "Father took the list away from me, and he was very angry that I had seen it. Peter Vanderbilt was on it. There are a good many high-minding and high-binding communists—that is, there used to be a good many—who would be mighty sore to think that into the blood of the future race would go that of the American aristocracy which they so passionately hate. Funny! I got into the habit of thinking, just as Dodson and the other men were thinking, about whom to preserve, and when you consider it, Vanderbilt has as much to offer as almost any one. The delicacy that comes from overbreeding, a wiry nervous constitution, an artist's temperament, taste, a learned mind, a gorgeous sense of humor and courage. Probably he's wasteful, spendthrift, decadent and jaded—or at least he used to be; but how greatly his positive virtues outweigh his vices!"

"He's a good egg," Tony replied. "I knew him for years. His sister went to school with my mother."

"Another thing: Dad's name wasn't on that list. I think when Dad

thought he could save only a hundred people, he figured that he was too old, and that his work had been done; and I'll bet if the first ship had been ready to leave and there had been none other, Dad would have been missing at the crucial time, so that they would have been compelled to go without him."

"Yes," Tony said thoughtfully. 'That's exactly what your father would have done. And how calmly we are able to consider that! It's strange the way people change. I remember once when I was in college, seeing a man in Boston struck by an automobile. I don't suppose he was really badly injured, and yet for days afterward I was actually sick. And I used to brood about the awfulness of people being locked up in prisons, about electrocution and operations.

"I couldn't stand the thought of people being hurt. I used to lie in my bed at night in a cold sweat thinking about the, to me, impossible courage of men who volunteered during the wars to go on missions that meant sure death. And now"—he shrugged his shoulders—"death has lost all its meaning. Suffering has become something we accept as the logical accompaniment of life. I am not even shocked when I think that your father would deliberately commit suicide on this planet if he decided his biological usefulness was at an end— although, of course, such a decision would have been mistaken."

Eve nodded in agreement. "He intended to do it, I think, as a lesson—a sort of instruction—to the others."

A silence fell between them. In the cantonment a mechanical siren tooted, and the night-shift exchanged places with the day-shift to the noisy undertone of moving trucks and banging doors. Lights sparkled in all the windows of the dining-hall, and as the doors opened and closed, a streak of vivid purplish light darted across the open campus. Tony began to talk again. "I have changed my ideas about everything, Eve—not only about life and death! I think that even my ideas about you are changing. When Ransdell came to New York under such dramatic circumstances, and when I saw your interest in him, I was jealous. I pretended I wasn't, even to myself; but I was. And in some small way—some small-minded way—I felt superior to him. I was better educated, better bred, better trained socially. Since I've come to know that man, I've learned that from the standpoint of everything that counts, he's a man, and I'm still in short pants.

"It would have been hard to talk to you about such things at one time; in fact it would have been impossible, because I would have considered it bad form. Now it's all different. The day after to-morrow we are going to sail. I may not have a chance to see you alone again between now and then. I don't want to burden you with a feeling of unnecessary responsibility. There isn't any responsibility on your part. But I must tell

you that I love you. I've told you that before, long ago, and what I said then has nothing to do with what I feel now. In saying it I am asking you for nothing. I mean that you shall know only that whatever happens, whatever you decide, whatever either of us does in the future, cannot alter the fact that I now do and always shall hold for you intact the most fundamental part of all that any man can feel toward any woman."

He had finished his words with his face turned toward her, and his eyes looking into her eyes.

Eve spread her palms on the ground behind her and leaned back. "I love you too, Tony. I shall always love you."

A long second passed, and then he said in a startled and absent-minded tone: "What?"

"I said I shall always love you. What did you expect me to say?"

"I don't know," Tony replied.

"Can a girl say anything more?"

"I guess not."

"Well, what's the matter with you then?"

Tony thrust his hand against his forehead. "I don't know. I can't believe it. I don't think either of us can guess what we will 'always' do—if we reach Bronson Beta."

Eve was still leaning on her straightened arms. "Whether we'll have marriage on the other planet or not, I can't tell. Maybe I'll be expected to share you with some of the other girls. I think the old system of living will never quite return. You're thinking of Ransdell: I admire him; I'm fascinated by him. Sometimes I have brief periods in which I get a tremendous yen for him. So much manhood in one person is irresistible. Probably I'm the first girl in the world who thrust into one of these intimate *tête-à-têtes* a statement of the truth. I am assuring you I love you. I'm telling you something that every human being knows and that every human being tries to pretend is not true—that love on a night like this can always be pledged as enduring; but that love through the years invariably proves to be something that is capricious, something that waxes and wanes. I'm not saying that I love you with reservations, Tony. I'm saying only that I'm human."

Tony took her in his arms then and kissed her. "I'll try to understand what you've told me," he said a long time afterward. "I don't deserve this."

Eve laughed softly. Her copper hair was disheveled, and her black eyes were luminous in the dark. Tony, looking down into them, was frightened even when he heard her laughter, and the words that followed it. "I'll be the person who decides in the future about your merits and

demerits. Perhaps in giving up the power to choose the men she loves, the fathers for her children, by accepting our false single standards, woman has thrown away the key to freedom for both sexes. Anyway, let's not worry about that right this minute."

"You whistle so persistently and so cheerfully," Jack Taylor said to Tony on the following morning, "that it makes me irritable."

"Good!" Tony replied, and kept on whistling.

"I came here to bring you news, various kinds of news. The first item is interesting and historical: Ransdell is just in from a flight, and says he found how all those people got up here from the cities to attack us. There's a road reasonably undamaged that leads nearly three-quarters of the way from St. Paul here. The places wrecked by the earthquakes have been hastily repaired, and the whole road is littered with broken-down automobiles. Most of that mob must have driven a good part of the way. They must have spent weeks getting ready to strike."

Tony looked up from the suitcase which he was strapping in his room. He had stopped whistling. "That a fact? Well, that's one mystery cleared up, anyway."

"The second item is that the list of who goes in which ship has just been posted."

"Huh."

"I thought that word would get a rise out of you. Don't worry, don't worry. You're in the first ship, with Eve, all right. Hendron's in command. You're a lieutenant. James is with you. But guess who's in command of the second ship."

"Jessup?”

"Guess again."

"Kane?"

"Nope; you're all wet. Those two noble scientists are second in command. The big ship is going out under the instructions of your good friend David Ransdell."

"That's grand," Tony said; "but will he have sufficient technical knowledge to run the thing?"

"Oh, Jessup and Kane will do that all right. Ransdell's only going to be a figurehead until they get to Bronson Beta. But isn't that sweet?"

"That's swell."

"I mean for you and Eve. Think of it. Alone together in the reaches of utter space for ninety whole hours, cooped up with only about a hundred other people."

Tony groaned, kicked the lock on his suitcase shut, and said: "Jack, how'd you like to be lying on this floor unconscious?"

"Sure you could make the grade?"

"What do you think?"

Jack scratched his head in mock calculation.

"Well, remember back in Cornell when you were sounding me out to see if I'd be a likely candidate for this jaunt? Remember your asking me if I hadn't rowed on a crew, and my telling you that I had, but it wasn't much of a crew, and we were champions that year because the others were still worse?"

Tony nodded with mock menace. "I remember. What about it?"

"Well, on thinking it over, I've decided that that was a pretty good crew, after all. Now on this matter of whether I'm going to be lying on the floor unconscious, or you, I have another item to point out beside my quondam skill at the oars. I was a little bit rattled the day you came into my room, and I forgot to mention that I was also captain of the boxing team."

Tony stepped back. "Professionalism rearing its ugly head, eh? All right. We'll find something else to decide our positions. How about baseball-bats?"

"My idea exactly. Celluloid baseball-bats."

"Fine. I'll meet you and your seconds out behind the power-house in half an hour. In the meantime I've got to get packed up here. You know we're going places to-morrow."

Jack sat down on the bed. "That reminds me: I'm going on the second ship too."

Tony's face fell. They were serious again.

Jack said: "When you are all set, they want you down at the Ark. Everybody's going through it, and getting assigned to their quarters."

Tony walked up a long flight of steps to the airlock. As he went, he cast an upward glance at the elaborate structure of beams which supported the Ark, and which workmen were now removing. The interior of the Ark was brilliantly lighted by electricity. Through its center ran a spiral staircase, and a long taut cable inside the stairs. At eight-foot intervals steel floors cut the cylinder into sections. The two forward sections were crammed with machinery and instruments, and across them ran the great thrust-beams against which the atomic tubes would exert their force. A ring of smaller tubes pointing outward around the upper and lower sections like spokes were provided to give free dimensional control of the ship, and to make the adjustments necessary

for grounding. It had been planned to travel head-on for the greater part of the distance. When the reaction forces were started, the whole, ship would be upside down for some time, and eventually the landing would be made after turning it end for end; and although the probabilities of depositing the ship precisely upon her stern, and of keeping her in that position, were small, it was felt that after she had landed she might tip over, —a motion that would be broken by the use of the horizontal jets,— or that she might even roll, which could also be stopped by the jets, as had been done on the short and simple hop from the ground on the night of the attack.

Tony walked up the spiral staircase from the stern's engine-room. Above it were stockrooms with their arrangements for lashing fast the livestock which the Ark carried. Above the stockrooms were storerooms reaching to the center of the ship, and tightly packed. In the center of the ship were the human quarters, their walls carefully padded, and lashings, similar to but more comfortable than those provided for the animals, arranged along the floor.

These accommodations were not alluring. They suggested that the journey would be cramped and unpleasant, but inasmuch as it would take only ninety hours if it was successful, everything had been sacrificed to utility. On the side walls were water-taps, and in steel closets food for a considerably longer time than four days had been stored; but in their journey through space the travelers would enjoy no comfortable beds, eat no hot meals and divert themselves with no entertainments. The exact conditions of flight through space were unknown; and underneath the springs and paddings which lined the passengers' quarters was apparatus both for refrigeration and for heating. Tony passed through the double layer of passenger quarters, through the layers of storerooms and the engine-room at the front end of the great cylinder, climbing all the way on the spiral stairs. There he found Hendron, who was testing some of the apparatus.

"You sent for me?" Tony asked.

"No. Oh, I see what it was. They were giving out the numbers of your slings down below. I've asked every one to get in slings before we start and when we land, as I'm not sure, from the single test, exactly what the general effect will be. I think King was in charge of the list, but if you see him any time within the next few hours, he will tell you your number and position."

As Tony was about to go, Hendron recalled him. "I never showed you my engines, did I?"

"No," Tony said.

Hendron waved his arm around the chamber. It looked very much like the interior of a submarine. "This is the forward power-cabin," he began.

"The breeches of the main tubes are concealed behind a wall which is reënforced by the thrust-beams. Those are the ones which are to break the force of our fall; but you can see here the breeches of the smaller surrounding tubes. They are not unlike cannon, and they work on the same principle. Acting at right angles to our line of flight, they can turn the ship and revolve it end for end, in fact, like a thrown fire-cracker, if we should turn on jets on opposite sides and opposite ends. The breech of each of these little tubes,"—at that point Hendron turned a wheel with a handle on it, and the rear of one of the tubes slowly opened,—"is provided with the tubes which generate the rays that split atoms of beryllium into their protons and nuclei. The forces engendered in the process, which is like a molecular explosion, but vastly greater, together with the disrupted matter, is then discharged through the gun, the barrel of which is lined with Ransdell's metal. The consumption of fuel, so to speak, both in quantity and rate, is regulated by a mechanism on the breech itself. The rate and volume of the discharge will be, of course, immensely greater for leaving the earth, than it was on the mere hop from the ground on the night of the assault. The ship proved itself then to be a gun, or rather a number of guns, which we will fire steadily on the trip through space. By Newton's Law, which Einstein, has modified only in microscopic effects, for every action there is an equal and positive reaction, so that through space the speed and energy of the discharge from the tubes—which we also call the engines and motors, rather inaccurately—are what will determine the speed and motion of the ship."

Tony looked at the breech of the tube and nodded.

"Journeying through space we will be a rocket that can be fired from both ends and from all around the sides of both ends?"

"Exactly, although the side firing is of lesser intensity. We have twenty stern vents and twenty forward, you see, and twelve around the circumference at each end." Hendron smiled. "It is very beautiful, our ship; and according to the laws of physics, by the release of more power, it will navigate space as surely as it hopped from the ground, when we required it to. We'll leave this world, Tony; and, I believe, we'll land upon Bronson Beta."

Tony stared at him; "And we'll live?"

"Why not, Tony? I can control the landing as I can control the leaving."

"I meant," said Tony, "granting that—granting we travel through space and reach that other planet and land upon it safely, will we live afterward?"

"Why not?" Hendron returned again. "We can count upon vegetation on Bronson Beta almost surely. No, surely, I should say. Higher forms of life must have been annihilated by the cold; but the spores of vegetation

could survive.

"Arrhenius, the great Swedish physicist, demonstrated years ago that the germinating of spores may be preserved rather than killed by intense cold. He cited, indeed, microorganisms that had been kept in liquid air, at a temperature of some two hundred degrees below zero, Centigrade, for many months without being deprived of their germinating power.

"We know too little about the lower temperatures; but what we have discovered indicates that the germinating power of microorganisms and spores should be preserved at lower temperatures for much longer periods than at our ordinary temperatures.

"Arrhenius made calculations on a cold of only minus 220 Centigrade, which is much warmer than the almost 'absolute cold' in which all organisms on Bronson Beta have been preserved."

Hendron referred to a notebook: " 'The loss of germinating power,' Arrhenius observed, 'is no doubt due to some chemical process, and all chemical processes proceed at slower rates at lower temperatures than they do at higher. The vital functions are intensified in the ratio of 1:2.5 when the temperature is raised by ten degrees Centigrade.'

"So in the case of spores at a distance from the sun of the orbit of Neptune, after their temperature had been lowered to minus 220, their vital energy would, according to this ratio, react with one thousand millions less intensity than at ten plus. Arrhenius figured that the germinating power of spores would not deteriorate in three million years at minus 220 more than it would in *one day* at an ordinary earthly temperature. It is not unreasonable, therefore, to believe that at the much lower temperatures which must have prevailed on Bronson Beta, spores and microorganisms could have been preserved indefinitely.

"These, now, have been thawed, and are being revived by the sun; so I feel we can count at least upon vegetation upon Bronson Beta."

"At least!" Tony caught up his words. "You will not deny, then, that there may be a possibility of higher life surviving or capable of being revived—too?"

Hendron shook his head. "I have seen too many incredible things occur, Tony," he replied, "to deny any possibility— particularly under conditions of which no one on this world has had any experience. But I do not expect it. I do expect vegetation, especially vegetation that grows from spores.

"In the early days on this world, the great majority of plants did not reproduce by seeds, but by the far more resistant spores, which have survived as the method of reproduction of many varieties. So we will count upon a native flora which, undoubtedly, will appear very strange to us. Of course, as you know, we are taking across with us our own seeds

and our own spores."

"I know," said Tony, "and even our own insects too."

"An amazing list—isn't it, Tony?—our necessities for existence. We take so much for granted, don't we? You do not realize what has been supplied you by nature on this world of ours—until you come to count up what you must take along with you, if you hope to survive."

"Yes," said Tony, "ants and angleworms—and mayflies."

"Exactly. You've been talking with Keppler, I see. I put that problem entirely up to Keppler.

"Our first and most necessary unit for self-preservation proved to be the common honey bee, to secure pollination of flowering plants, trees and so on. Keppler says that of some twenty thousand nectar insects, this one species pollinates more than all the rest put together. The honey bee would take care of practically of this work, as his range is tremendous. There are a few plants—Keppler tells me—such as red clover, which he cannot work on; but his cousin the bumblebee, with his longer proboscis, could attend to them. So, first and foremost among living things, we bring bees.

"We also take ants, especially the common little brown variety, to ventilate, drain and work the soil; and, as you have observed, angleworms also.

"Since we are going to take with us fish eggs to hatch into fish over there, we have to take mayflies. Their larvas, in addition to providing food for the fish, are necessary to keep the inland waters from becoming choked with algæ and the lower water plants.

"In the whole of the Lepidoptera there is not, Keppler says, one necessary or even useful species; but for sheer beauty's sake—and because they take small space—we will take six butterflies and at least the Luna moth.

"And we must take one of the reputed scourges of the earth."

"What?" said Tony.

"The grasshopper—the locust. Such an insect will be vitally necessary to keep the greenery from choking our new earth; and the one best suited for this job is, paradoxically enough, one of mankind's oldest scourges, the grasshopper. He is an omnivorous feeder and would keep the greenery in check— after he got his start. Our first problem may be that he will not multiply fast enough; and then that he multiply too fast. So to keep him in check, and also the butterfly and the moth, we will take parasitic flies. We will have to have these—two or three of the dozen common Tachinidæ have been chosen.

"These will be the essential insects. Here on earth, with a balanced and bewilderingly intricate economy already established, a tremendously longer list would be vital to provide the proper checks and balances; but starting anew, on Bronson Beta, we can begin, at least, with the few insects we have chosen. Unquestionably, differentiation and evolution will swiftly set in, and they will find new forms.

"We are bringing along vials of mushroom and other fungi spores. Otherwise vegetation would fall down, never disintegrate, and pile up till everything was choked. A vial the size of your thumb holds several billion spores of assorted fungi— in case the spores of the fungi of Bronson Beta have not survived. They are absolutely essential.

"Also, besides our own water supply for the voyage, we are taking bottles of stagnant pond-water and another of sea-water containing our microorganisms such as diatoms, plankton, unicellular plants and animals which form the basis for our biotic economy and would supplement, or replace, such life on the other globe.

"About animals—" He halted.

"Yes, about animals," Tony urged.

"There is, naturally, still discussion. Our space is so limited, and there is most tremendous competition. Birds offer a somewhat simpler problem; but possibly you have heard some of the arguments over them."

"I have," said Tony, "and joined in them. I confess I argued for warblers—yellow warblers. I like them; I have always liked them; and meadow larks."

"The matter of dogs and cats is the most difficult," Hendron said, closing the subject. Air pumps murmured somewhere within the ship, which seemed half-alive. Electric generators hummed, and from somewhere came the high note of one of the electronic engines. Tony left Hendron and went from the ship.

That night, the emigrants from the Earth gathered again in the dining-hall. Hendron addressed them, outlining the general final preparations which were augmented by specific, printed instructions to meet such contingencies as could be foreseen.

The large ship, an exact duplicate of the original Ark with the exception of its greater proportions, stood on a concrete platform three hundred yards from its smaller companion.

After the meeting, the crowd moved outdoors and stood awhile, looking at the Bronson Bodies. As in their former approach their size had increased in diametric proportion during the last few days and nights, and they now dominated the heavens, Alpha eclipsed by Beta, which rushed toward the earth ahead of it, in the same position as that held by

a planet in transit across the face of the sun. The spectacle was one of weird beauty, and one calculated to strike terror in the bravest. Bronson Alpha looked like the rising moon, except that it was much larger than any moon had ever seemed to be; and its edges, instead of being sharp, were furred with a luminous aura which indicated its atmosphere. Riding as if on the bosom of Bronson Alpha was its smaller comrade, and it was sometimes difficult for the eye to delineate it exactly, for both planets gave off a brilliant white light. On Beta dark irregular "continental" splashes could be seen, and similar areas of maximum brightness doubtless indicated great oceans.

It seemed as they rose over the horizon on that last night that they increased visibly in size as the onlookers regarded them.

And such might have been the case, for now the earth was no longer rushing away from the stranger bodies, but toward them.

Already the desolate and wounded surface of man's world was stirring to their approach. Slight earthquake shocks were felt from time to time, and the very winds seemed to be moving in a consciousness of the awful cataclysm that was drawing near. All over the world, the tides—unnaturally absent since the shattering of the moon—rose again and licked up the sides of the fresh, raw shores; the people who huddled on mountains and prairie plateaus that night knew instinctively that this was indeed the end.

Chapter 23—The Last Night On Earth

TONY sought out Eve.

"Come walk with me," he said.

"I'd like to. It's so strange to wait, with everything done that matters. For it's all done, Tony; everything that we're to take with us has been prepared and put in place. Except the animals and ourselves."

"Dull lot of animals, mostly," complained Tony. He was excited and on edge, with nerves which he tried to quiet and could not.

He did not want to talk to Eve to-night about animals; but he might as well, for people were all about, alone or in pairs, likewise restless and excited.

"It would be madness to try to bring the interesting animals along, wouldn't it?" Eve said agreeably. "Like lions and tigers and leopards."

"I know," admitted Tony. "Meat-eaters. We can't cart along meat for them, of course; and we can't expect meat on Bronson Beta. All we can hope for is grass and moss; so we load up with a cow, and a young bull,

of course; a pair of sheep of proved breeding ability, a couple of reindeer, and a colt and a young mare. Half humanity lived on horsemeat once and milked the mares. We'll be allowed goats, too. And deer, if our big ship gets over. Do you suppose there'll be other ships starting from this side of the world tomorrow night and from the other side, the evening after?"

"Father doesn't know. When the radios were working well, months ago, he broadcast the knowledge of David's metal. It must have become obtainable from volcanic eruptions in other places. But we've no real news of any one else ready to start. One thing is certain. No party can count upon the arrival of any other. Each crew has to assume that it may be the only one that gets across to Bronson Beta."

"And damn' lucky if it lands, too," agreed Tony. "However, I hope the Australians are making a try, and will start with a kangaroo. And if the South Africans have a ship, they ought to show some originality in animals, even if they too feel confined to grass- and moss-eaters. Who has a chance of sending up a ship, anyway?"

"The English, Father thinks, surely have preserved enough organization to build and equip one ship, and the French, the Germans and Italians ought to do the same. Then there are the Russians and the Japanese at least with the potential ability to do it. There's a chance in Australia and another in South Africa—Lord Rhondin would head any party there, Father thinks."

"Any one else?"

"A possibility in Argentina and also in China."

"That makes twelve, counting our two."

"Possibilities, that's all. Of course, we know nothing about them. Father guesses that if twelve are trying, perhaps five may get ships out into space."

"What five?" demanded Tony.

"He did not name them."

"Five into space beyond the attraction of the world."

"The world won't be left then, Tony," Eve reminded him.

"Right. Funny how one keeps forgetting that, isn't it? So there'll be no place for them to drop back to, if they miss Bronson Beta. They just stay—out there in space—in their rocket, with their air-purifiers and oxygen-machines and their compressed food and their seeds and insects and birds or birds' eggs, and carefully chosen grass-eating animals. ... I imagine they'll eat the animals, at last, out there in space; and then—"

Eve stopped him.

"Why deny the possibilities?" he objected.

'"Why dwell on those particular ones, Tony, when they may be the ones we ourselves will meet? We—or our friends in our other ship. . . . It's funny how you men complain about missing the wild animals. Do you know, Tony, that Dave told me that Dr. Bronson thought about the impossibility of taking over lions when he first began planning with Father the idea of the space ships? That night Lord Rhondin and Professor Bronson walked about the room and spoke about how there would be no more lions."

"Funny to think of meeting Rhondin for the first time on Bronson Beta," said Tony, "if we and the South African ship get over. Good egg, Lord Rhondin, from all I hear from Dave."

They were off by themselves now, and Tony drew her nearer to him. She neither encouraged nor resisted him. He tightened his arm about her, and felt her softness and warmth against him. For a moment she remained motionless, neutral; then suddenly her hands were on his arms, clasping him, clinging to him. Her body became tense, thrilling, and as he bent, her lips burned on his.

She drew back a little, and at last he let her. In silence he kissed her again; then her lips, close to his, said: "Farewell to earth, Tony!"

"Yes," he said, quivering. "Yes; I suppose this is our last sure night."

"No; we leave to-night, Tony."

"To-night? I thought it was to-morrow."

"No; Father feared the last night—if any one knew it in advance. So he said to-morrow; but all his calculations make it to-night."

"How soon, Eve?"

"In an hour, dear. You'll hear the bugles. He deceived even you."

"And Dave?" asked Tony jealously. Dave Ransdell now was his great friend. Dave was to be in command, except as to scientific matters, of the party in the second ship; Tony was himself second only to Hendron on the first ship; and Tony had no jealousy of Dave for that. Moreover, Eve was to travel in the ship with her father and Tony; if he was saved, so would be she! And Dave might, without them, be lost. Tony had told himself that he had conquered his jealousy of Dave; but here it still held him.

"No," said Eve. "Father told Dave to-morrow, too. But we leave the earth to-night."

"So to-morrow," said Tony, "to-morrow we may be 'ourselves, with yesterday's seven thousand years.' I had plans— or dreams at least, Eve—of the last night on earth. It changes them to find it barely an

hour."

"I should not have told you, Tony."

"Why? Would you have me go ahead with what I dreamed?"

"Why not?" she said. "An hour before the bugles; an hour before we leave the world, to fall back upon it from some frightful height, dear, and be shattered on this globe's shell; or to gain space and float on endlessly, starving and freezing in our little ship; or to fall on Bronson Beta and die there. Or perhaps, Tony–perhaps, to live!"

"Perhaps," repeated Tony; but he had not, this time, gone from the world with her in his mind. He held her again and thought of his hour—the last hour of which he could be sure.

"Come away," he said. "Come farther away from—"

"From what, Tony?"

"From everybody else." And he drew her on. He led her, indeed, toward the edge of the encampment where the wires that protected it knitted a barrier. And there, holding her, he heard and she heard a child crying.

There were no children in the encampment. There never had been. No one with little children had been chosen. But here was a child.

Eve called to it, and the child ceased crying; so Eve had to call again for a response that would guide her to it in the dark. . . .

There were two children, together and alone. They were three and four years old, it appeared. They knew their names-—Dan and Dorothy. They called for "Papa." Papa, it appeared, had brought them there in the dark and gone away. Papa had told them to stay there, and somebody would come.

Eve had her arms between the wires, and the children clung to her hands while they talked. Now Tony lifted them over the wires; and Eve took them in her arms.

In the awful "moonlight" of Bronson Beta, the children clung to her; and the little girl asked if she was "Mamma." Mamma, it appeared, had gone away a long time ago.

"Months ago only," Eve interpreted for Tony, "or they wouldn't remember her."

"Yes. Probably in the destruction of the First Passage," Tony said; and they both understood that the mother must be dead.

"He brought them here to us," Eve said; and Tony understood that too. It was plain enough: Some father, who had heard of the camp and the Space Ships, had brought his children here and left them—going

away, asking nothing for himself. . . .

Clear and loud in the night, a bugle blew; and Tony and Eve both started.

"Gabriel's horn," muttered Tony. "The last trump!"

"Father advanced the time," returned Eve. "He decided to give a few minutes more of warning; or else he fooled me, too."

"You are carrying that child?" asked Tony. Eve had the little girl.

"Yes," said Eve. "You are carrying the boy?"

"Yes," said Tony. "Rules or no rules; necessities or no necessities, if we can take sheep and goats, I guess we can take these two."

"I guess so," said Eve; and she strode strongly beside him into the edge of illumination as the great floodlights blazed out.

The buildings were all alight; and everybody was bustling. The loading of the two Arks long ago had been completed, as Eve had said—except for the animals and the passengers and crew. The animals now were being driven aboard; and the passengers ran back and forth, calling, crying, shaking hands, embracing one another.

They were all to go; every one in sight was billeted on the Space Ships; but some would be in one ship, some on the other. Would they meet again—on Bronson Beta? Would either ship get there? Would they rise only to drop from a great height back upon this earth? What would happen?

Tony, hurrying to his station, appreciated how wisely Hendron had acted in deceiving them all—even himself—as to the night.

Here he was, second in command of the first Space Ship, carrying a strange child in contravention of all orders. The chief commander's daughter also carried a child.

No one stopped them. Not Hendron himself. It was the last hour on earth, and men's minds were rocking.

The bugles blew again; and Tony, depositing the boy with Eve, set about his business of checking the personnel of his ship.

Three hundred yards away, Dave Ransdell checked the personnel of his larger party. Jessup and Kane, there, were in the navigating-room as Hendron was in the chief control-room here.

Ransdell, for a moment, ran over. He asked for Hendron, but he sought, also, Eve.

Tony did not interfere; he allowed them their last minutes together.

A third time the bugles blew. This meant: "All persons at ship

stations!" All those who were to leave the earth forever, aboard ship!

Chapter 24—Starward Ho!

TONY completed his check of crew and passengers. Thrice he blew his whistle.

From off to the right, where the second ship lay, Dave Ransdell's shrill signal answered.

"Close valves and locks!"

There was no one on the ground. No one! They were all aboard. All checked and tallied, thrice over. Yet as Tony left the last lock open to gaze out again and listen, he heard a faint cry. The father of the children?

Could he take him too? One man more? Of course they could make it. If it was only one man more, they must have him. Tony withheld the final signal.

With a quick command, he warned those who were closing the lock. It swung open again. The voice was faint and far away, and in its thin notes could be detected the vibrations of tense anxiety. Tony looked over the landscape and detected its direction. It came from the southwest, where the airplane-field lay. Presently he made out syllables, but not their meaning.

"Hello," he yelled mightily. "Who is it?"

Back came the thinly shouted reply: *"C'est moi, Duquesne! Attendez!"*

Tony's mind translated: *"It's I, Duquesne! Wait."*

On the opposite side of the flying-field a lone human figure struggled into the rays of the flood-lights. It was the figure of a short fat man running clumsily, waving his arms and pausing at intervals to shout. Duquesne! The name had a familiar sound. Then Tony remembered. Duquesne was the French scientist in charge of building the French space ship that had been reported to him by James long ago. Instinctively he was sure that this Duquesne who ran ludicrously across the flying-field was the same man.

He turned to the attendants at the airlock.

"Get Hendron," he said; "he'll be in the stern control-room now. Tell him Duquesne is here alone." He operated the winch which moved the stairway back to the hull of the ship.

The short fat man trotted across the field, stopping frequently to

gesticulate and shout: *"Attendez! C'est moi, Duquesne!"*

At last he scrambled up the steps of the concrete foundations to the ship. He rushed across the platform and arrived at the airlock. He was completely out of breath, and could not speak. Tony, had an opportunity to look at him. He wore the remnants of a khaki uniform which did not fit him. Protruding from the breast pocket of the tunic was the butt of a revolver. He was black-haired, black-eyed and big-nosed. He regarded Tony with an intensity which was almost comical, and when he began to speak brokenly, he first swore in French and then said in English: "I am Duquesne! The great Duquesne! The celebrated Duquesne! The famous Duquesne. The French physicist, me, Duquesne. This I take for the ship of Cole 'Endron—yes? Then, so I am here. Tell him I have come from France in three months, running a steamboat by myself, flying across this foul country with my plane, which is broken down near what was Milwaukee, and to here I have walked by myself alone these many days. You are going now, yes? I see you are going. Tell him to go. Tell him Duquesne is here. Tell him to come and see me. Tell him to come at once. Tell him I leave those pigs, those dogs, those cows, those onions, who would build such a foolish ship as they will break their necks in. I said it would not fly, I, Duquesne. I knew this 'Endron ship would fly, so I have come to it. Bah! They are stupid, my French colleagues. More suitable for the motormen of trams than for flyers in outer space!"

At that instant Hendron arrived at the top of the spiral staircase.

He rushed forward with his eyes alight. "Duquesne! By God, Duquesne! I'm delighted. You're in the nick of time. In forty minutes we would have been away from here."

Duquesne gripped Hendron's hand, and skipped around him as if he were playing a child's game. With his free fist he smote upon his breast. Whether he was ecstatic with joy or rage could not have been told, for he shouted so that the entire chamber reverberated: "Am I a fool that you should have to tell me what hour was set for your departure? Have I no brains? Do I know nothing about astronomy? Have I never studied physics? Have I run barefoot across this whole United States of America for no other reason than because I knew when you would have to leave? Do I not carry the day on the watch in my pocket? Idiots, charming friends, glorious Americans, fools! Have I no brain? Can I not anticipate? Here I am."

Suddenly after this broadside of violent speech he became calm. He let go of Hendron's hand and stopped dancing. He bowed very gravely, first to Hendron, then to Tony, then to the crew. "Gentlemen," he said, "let's be going. Let's be on our way."

Hendron turned to Tony, who in reaction burst into a paroxysm of laughter. For an instant the French scientist looked deeply wounded and

as if he might burst into expletives of anger; then suddenly he began to laugh. "I am ridiculous, am I not?" he shouted. He roared with laughter. He rocked with it. He wrapped his arms around his ample frame, and the tears rolled down his cheeks. "It is magnificent," he said. "Yes. It is to laugh."

"What about the ships that were being built in other countries in Europe?" Hendron asked him.

"The English?" returned Duquesne. "They will get away. What then, who knows? Can you 'muddle through' space, Cole 'Endron? I ask it. But the English are sound; they have a good ship. But as to them, I have made my answer. I am here."

"The Germans?" demanded Hendron.

The Frenchman gestured. "Too advanced!"

"Too advanced?"

"They have tried to take every contingency into account— too many contingency! They will make the most beautiful voyage of all—or by far the worst. Again I reply, I am here. As to all the other, again I observe, I have preferred to be here."

And in that fashion Pierre Duquesne, France's greatest physicist, was at the eleventh hour and the fifty-ninth minute added to the company of the Ark. He went off with Hendron to the control-room, talking volubly. Tony superintended the closing of the lock. He went up the spiral staircase to the first passenger deck. Fifty people lay there on the padded surface with the broad belts strapped around their legs and torsos. Most of them had not yet attached the straps intended to hold their heads in place. Their eyes were directed toward the glass screen, where alternately views of the heavens overhead and of the radiant landscape outside the Space Ship were being shown.

Tony looked at his number and found his place. Eve was near by him, with the two children beside her. She had sat up to welcome him. "I've been terribly nervous. Of course I knew you'd come, but it has been hard waiting here."

"We're all set," Tony said. "And the funniest thing in the world has just happened." He began to tell about the arrival of Duquesne, and everybody in the circular room listened to his story. As he talked, he adjusted himself on the floor harness.

Below, in the control-room, the men took their posts. Hendron strapped himself under the glass screen. He fixed his eyes to an optical instrument, across which were two hair lines. Very close to the point of their intersection was a small star. The instrument had been set so that when the star reached the center of the cross, the discharge was to be

started. About him was a battery of switches which were controlled by a master switch, and a lever that worked not unlike a rheostat over a series of resistances. His control-room crew were fastened in their places with their arms free to manipulate various levers. Duquesne had taken the place reserved for one of the crew, and the man who had been displaced had been sent up to the passenger-cabins.

The French scientist glanced at his watch and put it back into his pocket without speaking. Voluble though he was, he knew when it was time to be silent. His black, sparkling eyes darted appreciatively from one instrument to another in the chamber, and on his face was a rapt expression as his mind identified and explained what he saw. Hendron looked away from the optical instrument. "You religious, Duquesne?"

The Frenchman shook his head and then said: "Nevertheless, I am praying."

Hendron turned to the crossed hairs and began to count. Every man in the room stiffened to attention.

"One, two, three, four, five—" His hand went to the switch. The room was filled with a vibrating hum. "—Six, seven, eight, nine, ten—" The sound of the hum rose now to a feline shriek. "—Eleven, twelve, thirteen, fourteen, fifteen—ready! Sixteen, seventeen, eighteen, nineteen, twenty—" His hand moved to the instrument that was like a rheostat. His other hand was clenched, white-knuckled, on his straps. "Twenty-one, twenty-two, twenty-three, twenty-four, twenty-five." Simultaneously the crew shoved levers, and the rheostat moved up an inch. As he counted, signals flashed to the other ship. They must leave at the same moment.

A roar redoubling that which had resounded below the ship on the night of the attack, deafened all other sound.

Tony thought: "We're leaving the earth!" But strangely, thought itself at such a moment supplied no sensation. The physical shocks were too overpowering.

A quivering of the ship that jarred the soul. An upthrust on the feet. Hendron's lips moving in counting that could no longer be heard. The eyes of the men of the crew watching those lips so that when they reached fifty, a second switch was touched, and the room was plunged into darkness relieved only by the dim rays of tiny bulbs over the instruments themselves. A slight change in the feeling of air-pressure against the eardrums. Another forward motion of the steady hand on the rheostat. An increase of the thrust against the feet, so that the whole body felt leaden. Augmentation of the hideous din outside.

An exchange of glances between Hendron and Duquesne— both men's eyes flashing with triumph.

In the passenger-cabin, Tony's recitation of the arrival of Duquesne

was suddenly interrupted by the fiendish uproar. "We've started!" fifty voices shouted, and the words were soundless. The deck on which they lay pressed up against them. The glass screen overhead went dark. Tony reached toward Eve, and felt her hand stretching to meet his.

Chapter 25—The Journey Through Space

ON the doomed earth, observers must have seen the Space Ship lying brass-bright in the light of the Bronson Bodies and the cantonment flood-lamps, as immobile as if part of the earth. They must have seen it surrounded abruptly in golden fire, fire that drove toward the earth and lifted in immense clouds which bellowed and eddied toward the other larger ship simultaneously rising above a similar cloud. They must have heard the hideous torrent of sound, and then they must have seen the ship rise rapidly into the air on its column of flame. They must have watched it gain altitude vertically. They would have realized that it gathered momentum as it rose, and they would have seen that long trail of fire beneath each ship stretch and stretch as the shimmering cylinder shot into the night until it detached itself from the earth. But— there were no known observers left immediately below. If any one from outside the camp had happened to approach too closely, he must certainly have been annihilated by the blast.

Tony, clinging to his straps, thought of the father who had brought the children; and Tony hoped, irrationally, that he had fled far away. But what difference whether he was annihilated alone now—or in the wreck of all the world a little later?

He could see the fiery trail of the second Ark rising skyward on its apex of scintillating vapor. Already it was miles away.

Below, on the earth, fires broke out—a blaze that denoted a forest burning. In the place where the ship had been, the two gigantic blocks of concrete must have crumbled and collapsed. The power-house, left untended, continued to hum, supplying lights for no living thing. Far away to the south and west, the President of the United States, surrounded by his Cabinet, looked up from the new toil engendered by the recommencing earthquakes, and saw, separated by an immeasurable distance, two comets moving away from the earth. The President looked reverently at the phenomenon; then he said: "My friends, the greatest living American has but now left his home-land."

In the passenger-chamber the unendurable noise rose in a steady crescendo until all those who lay there felt that their vital organs would be rent asunder by the fury of that sound. They were pressed with increasing force upon the deck. Nauseated, terrified, overwhelmed, their

senses foundered, and many of them lapsed into unconsciousness.

Tony, who was still able to think, despite the awful acceleration of the ship, realized presently that the din was diminishing. From his rather scanty knowledge of physics he tried to deduce what was happening. Either the Ark had reached air so thin that it did not carry sound-waves, or else the Ark was traveling so fast that its sound could not catch up with it. The speed of that diminution seemed to increase. The chamber became quieter and quieter. Tony reflected, in spite of the fearful torment he was undergoing, that eventually the only sound which would afflict it would come from the breeches of the tubes in the control-rooms, and the rooms themselves would insulate that. Presently he realized that the ringing in his ears was louder than the noise made by the passage of the ship. Eve had relaxed the grip on his hand, but at that moment he felt a pressure.

It was impossible to turn his head. He said, "Hello," in an ordinary voice, and found he had been so deafened that it was inaudible. He tried to lift his hand, but the acceleration of the ship was so great that it required more effort than he was able yet to exert. Then he heard Eve's voice and he realized that she was talking very loudly: "Are you all right, Tony? Speak to me."

He shouted back: "I'm all right. How are the children?" He could see them lying stupefied, with eyes wide open.

"It's horrible, isn't it?" Eve cried.

"Yes, but the worst is over. We'll be accelerating for some time, though."

Energy returned to him. He struggled with the bonds that held his head, and presently spoke again to Eve. She was deathly pale. He looked at the other passengers. Many of them were still unconscious, most of them only partly aware of what was happening. He tried to lift his head from the floor, but the upward pressure still overpowered him. He lay supine. Then the lights in the cabin went out and the screen was illuminated. Across one side was a glimpse of the trail which they were leaving, a bright hurtling yellow stream, but it was not that which held his attention. In the center of the screen was part of a curved disk. Tony realized that he was staring up at half of the northern hemisphere of the Earth. The disk did not yet have the luminous quality that the moon used to possess. It was in a sort of hazy darkness which grew light on its eastern edge.

Tony thought he could make out the outline of Alaska on the west coast of the United States, and he saw pinpoints of light which at first he thought of as signs of human habitation, but which he presently realized must have represented vast brilliant areas. He identified them with the renewal of volcanic activity. The screen flashed. Another view appeared.

Constellations of stars, such stars as he had never seen, blazing furiously in the velvet blackness of the outer sky. He realized that he was looking at the view to be had from the side of the ship. The light went out again, and a third of the four periscopes recorded its field. Again stars, but in their center and hanging away from them, as if in miraculous suspension, was a small round bright-red body which Tony recognized as Mars.

Once again Eve pressed his hand, and Tony returned the pressure.

In the control-room, Hendron still sat in the sling with his hand on the rheostat.

His eyes traveled to a meter which showed their distance from the Earth. Then they moved on to a chronometer; then for an instant, as if in concession to his human curiosity, they darted to Duquesne. Duquesne had loosened himself from his sling and was lying on the floor, unable to rise. His expression, in the dim light was extremely ludicrous. He struggled feebly, like a beetle that has been turned on its back, and Hendron smiled at him and pointed to the chronometer, but Duquesne did not seem to understand his meaning.

The control-room was filled with the throb that was contained in the breeches, but Hendron could do nothing to alleviate it. He had already determined the time necessary for acceleration—one hundred and twelve minutes—and he could not shorten it. In the end, Duquesne managed to pull himself to a sitting position underneath the glass screen where he was perfectly content to sit and contemplate the heavens as they appeared in reflection from outer space.

Tony felt that he had been lying on the floor for an eternity. His strength had come back, and he realized that it would be possible to sit up, even to move about, but they had been instructed to remain on the floor until the speed of their ascent was stabilized. Minutes dragged. It was becoming possible to converse in the chamber, but few people cared to say anything. Many of them were still violently ill. Others were glad to lie motionless, and watch the screen as Duquesne was doing several decks below.

At three minutes of five, Hendron slowly moved back the handle of the rheostat, and almost abruptly conditions in the ship changed. The volume of sound radiating from the engine-room decreased. Hendron unbuckled his bonds and stepped from them. Duquesne stood up. He walked unsteadily across the floor to take the hand of Hendron.

"Magnificent! Stunning! Beautiful! Perfect! How fast do we now travel?" He was compelled to shout to make himself heard.

Hendron pointed at a meter; its indicator hovered between the figures 3,000 and 3,500.

"Miles?" the Frenchman asked.

Hendron nodded.

"Per hour?"

Hendron nodded again.

The Frenchman made his mouth into the shape required for a whistle, although no note could be heard.

Hendron operated the switch controlling the choice of periscopes. In the midst of the glass screen, the Earth now appeared as a round globe, its diameter in both directions clearly apparent. More than half of it lay in shadow, but the illuminated half was like a great relief map. The whole of the United States, part of Europe and the north polar regions, were revealed to their gaze. In wonder they regarded the world that had been their home. They could see clearly the colossal changes which had been wrought upon it. The great inland sea that occupied the Mississippi Valley sparkled in the morning sun. The myriad volcanoes which had sprung into being along the Western cordillera were for the most part hidden under a pall of smoke and clouds.

Duquesne pointed solemnly to that part of Europe that was visible. Hendron, looking at the screen for the first time, was shocked to see the disappearance of the Lowland Plain.

The Frenchman moved closer to him and shouted in his ear. "We abandoned the ship outside of Paris when we realized it was not on high enough ground. We started a new one in the Alps. I told those pigs: 'Gentlemen, it will melt. It is but wax, I know it.' They replied: 'If it melts, we shall perish.' I responded: 'If you perish, it shall be without me.'" Suddenly the Frenchman popped out his watch. *"Sapristi!* The world has turned so that these fools are to leave now." He moved his lips while he made a rapid calculation. "We shall observe, is it not so? In an hour my idiot friends will burn themselves to death. I shall laugh. I shall roar. I shall shout. It will be one grand joke. Yes, you will give me a focus upon France in this remarkable instrument of yours an hour from now, will you not?"

Hendron nodded. He signaled a command to his crew, who had been standing unbuckled from their slings, at attention. They now seated themselves.

Hendron shouted at the Frenchman: "Come on up with me. I'll introduce you to the passengers. I'm anxious to know about them."

When Hendron reached the first deck of passengers' quarters, he found them standing together comparing notes on the sensations of space-flying. Many of them were rubbing stiff arms and legs. Two or three, including Eliot James, were still lying on the padded deck in

obvious discomfort. They had turned on the lights, apparently more interested in their own condition than in the astounding vista of the Earth below. Tony had just opened the doors of the larder and was on the point of distributing sandwiches.

Hendron brought the shabby Duquesne into their midst.

"I'd like to present my friend Professor Pierre Duquesne of the French Academy, a last-minute arrival. I assure you that except for its monotony, the trip will offer you no further great discomfort until we reach Bronson Beta, when we shall be under the necessity of repeating approximately the same maneuver. I want to call your attention to the following phenomena: In something less than an hour we are going to turn the periscope on France in an effort to observe the departure of the French equivalent of our ships. We are at the moment engaged in trying to locate our second Ark, which took its course at a distance from us to avoid any chance of collision, and being between us and the sun, is now temporarily lost in the glare of the sun.

"I will have the sun thrown on the screen at intervals, as some of the phenomena are extremely spectacular. At about mid-point of our voyage we will concentrate our attention on the collision between the Earth and Bronson Alpha. I think at this point I may express my satisfaction in the behavior of the Ark. As you all are aware, we have escaped from the earth. We are still well within the field of its gravitational control, in the sense that if our propellent forces ceased, we undoubtedly would fall back upon the earth; but the pull of gravity is constantly weakening. It diminishes, as most of you know, not directly in relation to the distance, but in relation to the square of the distance. It is the great lessening of the pull of gravity which has ended our extreme distress.

"Except for the small chance of striking an astrolite, we are quite safe and will continue so for some time. When we approach Bronson Beta, our situation will, of course, become more difficult. You will please excuse me now, as I wish to convey the same information to the passengers on the deck above."

Hendron departed, and his feet disappeared through the opening in the ceiling which contained the spiral staircase.

Duquesne immediately made himself the center of attention, praising alternately Hendron's ship and his own prowess in completing the journey from France. The reaction from the initial strain of the voyage took, in him, the form of saluting, shouting, joking with the men and flirting with the women.

Tony saw to the distribution of food and water. The ship rushed through the void so steadily that cups of milk, which Eve held to the lips of the children, scarcely spilled over. The passengers, having eaten a little, found that they could move from floor to floor without great

trouble, and several became garrulous. The ship was spinning very slowly, exposing one side after the other to the sun, and this served to equalize the temperature, which was fiery hot on the sun-side, deadly cold on the other.

Fans distributed the air inside the ship. Outside, there was vacuum against which the airlocks were sealed. The air of the ship, breathed and "restored," was not actually fresh, although chemically it was perfectly breathable. The soft roar of the rocket propulsion-tubes fuddled the senses. There was no sensation of external time, no appreciation of traveling from morn to night. The sun glared in a black sky studded with brilliant stars. . . . The sun showed its corona, its mighty, fiery prominences, its huge leaping tongues of flame.

To the right of the sun, the great glowing crescents of Bronson Alpha and Bronson Beta loomed larger and larger.

Eve sat with Tony as a periscope turned on them and displayed them on the screen. They could plainly see that Bronson Alpha was below and approaching the earth; Bronson Beta, slowly turning, was higher and much nearer the ship.

"Do you see their relation?" she asked.

"Between the Bronson Bodies?" said Tony. "Aren't they nearer together than they have ever been before?"

"Much nearer; and as Father—and Professor Bronson— calculated. Bronson Beta, being much the smaller and lighter, was revolving about Bronson Alpha. The orbit was not a circle; it was a very long ellipse. Sometimes, therefore, this brought Bronson Beta much closer to Alpha than at other times. When they went around the sun, the enormous force of the sun's attraction further distorted the orbit, and Bronson Beta probably is nearer Alpha now than it ever was before. Also, notice it is at the point in its orbit which is most favorable for us."

"You mean for our landing on it?" asked Tony.

“For that; and especially is it favorable to us, after we land —if we do," amended Eve; and she gathered the children to her. She sat between them, an arm about each, gazing at the screen.

"You see, the sun had not surely 'captured' Bronson Beta and Bronson Alpha. They had arrived from some incalculable distance and they have rounded the sun, but, without further interference than the sun's attraction, they would retreat again and perhaps never reappear; they would not join the family of familiar planets circling the sun.

"But on the course toward the sun, Alpha destroyed the moon, as we know, and this had an effect upon both Alpha and Bronson Beta, controlled by Alpha. And now something even more profound is going to

happen. Alpha will have contact with the world. That will destroy the earth and will send Bronson Alpha off in another path—perhaps will prove to be a very long ellipse, but more probably it will be a hyperbola. No one can quite calculate that; but one almost certain effect of the catastrophe is that it will break Bronson Beta away from the dominating control of Bronson Alpha and leave Beta subject to the sun. That will provide a much more satisfactory orbit for us about our sun."

"Us?" echoed Tony.

"Us—if we get there," said Eve; and she bent and kissed the children. "What purpose could there be in all that"—she nodded to the screen when she straightened—"if some of us aren't to get there? We see God not only sending us that world, Tony,"—she spoke a little impatiently—"but arranging for us an orbit for it about the sun which will let us live."

"Do you know the Wonder Clock?" Danny, the little boy, looked up and demanded. "Do you know Peterkin and the li'l Gray Hare?"

"Certainly," said Eve. "Once there was a giant—"

At the end of the hour all the lights in the passenger quarters were turned out, and the Earth was again flashed on the screen. Its diminution in size was already startling; and the remains of Europe, stranded in a new ocean, looked like a child's model flour-and-water map.

Duquesne lay on his back on deck and stared up at the scenery. He gave an informal lecture as he looked. "As we are flinging ourselves away from the Earth below, we are putting distance between ourselves and a number of prize fools. These fellows are my best friends. You will pick out faintly the map of Europe. Directly south of those shadows which were once the British Isles, you see the configuration of the Alps. In the center of the western range are the fools of whom I spoke. At any moment now, providing we are able to see anything at all, we shall witness their effort at departure. They built a ship not dissimilar to this, but unfortunately relying upon another construction than that valuable little metal discovered by Mr.—whatever his name is. I have told them they shall melt. I hope that we shall be able to see the joke of that fusion."

Duquesne glanced again at his watch, and looked up at the screen on which, like a stereopticon picture, hung the Earth. Suddenly he sat bolt upright. "Did I not tell you?"

A point of light showed suddenly in the' spot he had designated. It was very bright, and as a second passed, it appeared to extend so that it stood away from the Earth like a white-hot needle. Tony and Eve and many others glanced at Duquesne.

But Duquesne was not laughing as he had promised. Instead he sat with his head bent back, his hands doubled into fists which pounded his

knees, while in an outpouring of French he cajoled and pleaded frantically with that distant streak of fire.

The seconds passed slowly. Every one under the glass screen realized that here, perhaps, would be companions for them after they had reached Bronson Beta. Since they had just undergone the experience which they knew the Frenchmen were suffering in their catapulted departure from the Alps, they watched gravely and breathlessly. Only the rocket trail of the ship could be seen, as the ship itself was too small and too far away to be visible.

Duquesne was standing. He suddenly seemed conscious of those around him. "They go, they go, they go, they go! Maybe they have solved this problem. Maybe they will be with us."

Suddenly a groan escaped him. The upshooting light curved, became horizontal and shot parallel with Earth, moving apparently with such speed that it seemed to have traversed a measurable fraction of the Alps while they watched.

Abruptly, then, the trail zigzagged; it curved back toward the Earth, and the French ship commenced to descend, impelled by its own motors. In another second there was a faint glow and then—only a luminous trail, which disappeared rapidly, like the pathway of fire left by a meteor.

Duquesne did not laugh. He wept.

They tried to console him but he shrugged them away angrily. After a long time he began to talk, and they listened with sympathy. "Jean Delavoi was there, handsome Jean. And Captain Vivandi. Marcel Jamar, my own nephew, the greatest biologist of the new generation. And yet I told them, but it was their only hope, so they were stubborn." He looked at the people in the chamber. "Did you see? It melted. First the right tubes, throwing it on a horizontal course, then all of it. It was quickly over—*grâce à Dieu."*

But other flashes rose and traveled on. The English, the Germans, perhaps the Italians had got away.

The implications of these sights transcended talk. Conversation soon ceased. Exhaustion, spiritual and physical, assailed the travelers. Eve's children fell into a sleep-like stupor. The motion of the ship seemed no more than a slight sway, and those who remained awake found it possible to talk in more ordinary tones.

Gravity diminished steadily, so that gestures were easier to make than they had been on Earth. Time lost all sequence. Twelve hours in the past seemed like an eternity spent in a prison; and only the waning Earth, which was frequently flashed on the screen by men in the control-room, marked progress to the passengers. They were spent by their months of effort and by the emotional strains through which they had passed.

Stupefied like the children by the unusualness of this voyage, they were no longer worldly beings, but because all their vision of outer space came vicariously, their sensations were rather of being confined in a small place than of being lost and alone in the unfathomable void.

Their habit of relying upon the attractive force of the Earth resulted in an increasing number of mishaps, some of them amusing and some of them painful. After what seemed like eons of time some one asked Tony for more food. Tony himself could not remember whether he was going to serve the fifth meal or the sixth, but he sprang to his feet with earnest willingness—promptly shot clear to the ceiling, against which he bumped his head. He fell back to the floor with a jar and rose laughing. The ceiling was also padded, so that he had not hurt himself.

The sandwiches were wrapped in wax paper, and when some one on the edge of the crowd asked that his sandwich be tossed, Tony flipped it toward him, only to see it pass high over the man's head and entirely out of reach, and strike against the opposite wall. The man himself stretched to catch the wrapped sandwich, and sat down again rubbing his arm, saying that he had almost thrown his shoulder out of joint.

People walked in an absurd manner, stepping high into the air as if they were dancers. Gestures were uncontrollable, and it was unsafe to talk excitedly for fear one would hit one's self in the face.

Before this condition reached its crisis, however, Hendron himself appeared in the passenger-cabin for one of his frequent visits. He arrived, not by way of the staircase, but by way of the cable which was strung tautly inside the spiral, hauling himself up hand over hand with greater ease and rapidity than was ever exhibited by any sailor. He was greeted with pleasure—any slight incident had an exaggerated effect upon the passengers; but his demeanor was serious.

"I want you all to be witnesses of the reason for this journey," he said soberly.

He switched off the lights. The screen glowed, and on it they saw the Earth. At the hour of their departure the Earth had occupied much more than the area in the screen now reflected overhead, darkened on one side as if it were a moon in its third quarter, or not quite full. At the very edge of the screen was a bright curve which marked the perimeter of Bronson Alpha. Bronson Beta could not be seen.

Chapter 26—The Crash Of Two Worlds

NOW for an hour the passengers watched silently as Bronson Alpha swept upon the scene, a gigantic body, weird, luminous and

unguessable, many times larger than Earth. It moved toward the Earth with the relentless perceptibility of the hands of a large clock, and those who looked upon its awe-inspiring approach held their breaths.

Once again Hendron spoke. "What will take place now cannot be definitely ascertained. In view of the retardation of Bronson Alpha's speed caused by its collision with the moon, I have reason to believe that its course will be completely disrupted."

Inch by inch, as it seemed, the two bodies came closer together. Looking at the screen was like watching the motion picture of a catastrophe and not like seeing it. Tony had to repeat to himself over and over that it was really so, in order to make himself believe it. Down there on the little earth were millions of scattered, demoralized human beings. They were watching this awful phenomenon in the skies. Around them the ground was rocking, the tides were rising, lava was bursting forth, winds were blowing, oceans were boiling, fires were catching, and human courage was facing complete frustration. Above them the sky was filled with this awful onrushing mass.

To those who through the smoke and steam and hurricane could still pierce the void, it would appear as something no longer stellar but as something real, something they could almost reach out and touch. A vast horizon of earth stretched toward them across the skies. They would be able, if their reeling senses still maintained powers of observation, to see the equally tumultuous surface of Bronson Alpha, to describe the geography of its downfalling side. They would perhaps, in the last staggering seconds, feel themselves withdrawn from the feeble gravity of their own Earth, to fall headlong toward Bronson Alpha. And in the magnitude of that inconceivable manifestation, they would at last, numb and senseless, be ground to the utmost atoms of their composition.

Tony shuddered as he watched. A distance, short on the screen—even as solar measurements are contemplated—separated the two planets. In the chamber of the hurtling Space Ship no one moved. Earth and Bronson Alpha were but a few moments apart. It seemed that even at their august distance they could perceive motion on the planet, as if the continents below them were swimming across the seas, as if the seas were hurling themselves upon the land; and presently they saw great cracks, in the abysses of which were fire, spread along the remote dry land. Into the air were lifted mighty whirls of steam. The nebulous atmosphere of Bronson Alpha touched the air of Earth, and then the very Earth bulged. Its shape altered before their eyes. It became plastic. It was drawn out egg-shaped. The cracks girdled the globe. A great section of the Earth itself lifted up and peeled away, leaping toward Bronson Alpha with an inconceivable force.

The two planets struck.

Decillions of tons of mass colliding in cosmic catastrophe.

"It's not direct," Duquesne shouted. "Oh, God! Perhaps—"

Every one knew what he was thinking. Perhaps they were not witnessing complete annihilation. Perhaps some miracle would preserve a portion of the world.

They panted and stared.

Steam, fire, smoke. Tongues of flame from the center of the earth. The planets ground together and then moved across each other. It was like watching an eclipse. The magnitude of the disaster was veiled by hot gases and stupendous flames, and was diminished in awfulness by the intervening distances and by the seeming slowness with which it took place.

Bronson Alpha rode between them and the Earth. Then— on its opposite side—fragments of the shattered world reappeared. Distance showed between them—widening, scattering distance. Bronson Alpha moved away on its terrible course, fiery, flaming, spread enormously in ghastly light.

The views on the visagraph changed quickly. The sun showed its furious flames. The telescopic periscopes concentrated on the fragment of the earth. "They're calculating," Hendron said.

During a lull of humble voices Kyto could be heard praying to strange gods in Japanese. Eliot James drummed on the padded floor with monotonous fingertips. Tony clenched Eve's hand. Time passed—it seemed hours. A man hurried down the spiral staircase.

He went directly to Hendron. "First estimates ready," he said.

Hendron's voice was tense: "Tell us."

"I thought perhaps—"

"Go ahead, Von Beitz. These people aren't children; besides, they have given up all expectations of the earth."

"They have seen the first result," Von Beitz replied. "The earth is shattered. Unquestionably much of its material merged with Bronson Alpha; but most is scattered in fragments of various masses which will assume orbits of their own about the sun."

"And Bronson Alpha?"

"We have made only a preliminary estimate of its deceleration and its deviation from its original course; but it seems to have been deflected so that it will follow a hyperbola into space."

"Hyperbola, eh?"

"Probably."

"That means," Hendron explained loudly, "we will have seen the last of Bronson Alpha. It will not return to the sun. It will leave our solar system forever. —And Bronson Beta?" Hendron turned to the German.

"As we have hoped, the influence of Bronson Alpha over Bronson Beta is terminated. The collision occurred at a moment which found Bronson Beta at a favorable point in its orbit around Bronson Alpha. Favorable, I mean, for us. Bronson Beta will not follow Alpha into space. Its orbit becomes independent; Bronson Beta, almost surely, will circle the sun."

Some of the women burst out crying in a hysteria of relief. The world was gone; they had seen it shattered; but another would take its place. For the first time they succeeded in feeling this.

A short time later, a man arose to bring the women water; he remained suspended in the air!

Tony reached up and turned on the lights. The man who floated was sinking slowly toward the floor, his face blank with amazement.

"We have come," announced Tony loudly, "very close to the point between Bronson Beta and Bronson Alpha where the gravity of one neutralizes the gravity of the other. Bronson Alpha and the fragments of our world, pulling one way, strike an equilibrium here with the pull of Bronson Beta, which we are approaching."

He saw Eve lifting the children and leaving them suspended in the air. For an instant they enjoyed it; then it frightened them. A strange panic ensued. Tony's heart raced. It was difficult to breathe. When he swallowed, it choked him; and as he swam through the air with every step, he felt himself growing faint, dizzy and nauseated.

He saw Eve, as if through a mist, make a motion to reach for the children, and rise slowly into the air, where she stretched at full length groping wildly for the children. Tony swam over to her and pushed them into her arms. His brain roared; but he thought: "Is this psychological or physical? Was it a physical result of lack of all weight or was it the oppressiveness of sensation?" He shouted the question to Eve, who did not reply.

The air was becoming filled with people. Almost no one was on the deck. The slightest motion was sufficient to cause one to depart from whatever anchorage one had. Hands and feet were outthrust. On every face was a sick and pallid expression. Tony saw Hendron going hand over hand on the cable through the stair, ascending head foremost, his feet trailing out behind him.

That was all he remembered. He fell into coma.

When his senses returned, he found himself lying on the deck under half a dozen other people, but their weight was not oppressive. The pile

above him would have crushed any one on Earth, but here it made no difference. His limbs felt cold and weak; his heart still beat furiously. He struggled to free himself, and succeeded with remarkable ease. A wave of nausea brought him to his knees, and he fainted again, striking the floor lightly and bouncing into the air several times before he came to rest. . . .

Again consciousness returned.

This time he rolled over carefully and did not attempt to rise. He was lying on something hard and cold. He explored it with his fingers, and realized dully that it was the glass screen which projected the periscope views. It was the ceiling, then, on which the passengers were lying in a tangled heap, and not the deck. Their positions had been reversed. He thought that he was stone deaf, and then perceived that the noise of the motors had stopped entirely. They were falling toward Bronson Beta, using gravity and their own inertia to sustain that downward flight. He understood why he had seen Hendron pulling himself along the staircase. Hendron had been transferring to the control-room at the opposite end of the ship.

Tony's eyes moved in a tired and sickly fashion to the tangle of people. He knew that since he was the first to regain consciousness, it was his duty to disentangle them and make them as comfortable as possible. He crawled toward them. Whole people could be moved as if they were toy balloons. With one arm he would grasp a fixed belt on the deck, and with the other he would send a body rolling across the floor to the edge of the room. The passengers were breathing, gasping, hiccoughing; their hearts were pounding; their faces were stark white; but they seemed to be alive. The children were dazed but unhurt. Tony was unable to do more than to give them separate places in which to lie. After that, his own addled and confused body succumbed, and he lay down again, panting. He knew that they would be all right as soon as the gravity from Bronson Beta became stronger. He knew that the voyage was more than half finished; but he was so sick, so weak, that he did not care. He fell into a state between sleep and coma.

Some one woke him. "We're eating. How about a sandwich?"

He sat up. The gravity was still very slight, but strong enough to restore his sensations to something approaching normal. He stared around the circular room which had become so familiar in the past hours. An attempt at a grin overspread his features. He reached inaccurately for the sandwich, and murmured his thanks.

An hour later conditions were improved for moving about the chamber, by the starting of the motors which were to decelerate the ship. The floor was firm again. On the screen now at their feet they could see Bronson Beta. It was white like an immense moon, but veiled in clouds. Here and there bits of its superficial geography were visible. They

gathered around the screen, kneeling over it, the lurid light which the planet cast glowing up on their faces. In four hours the deceleration had been greatly increased. In six, Bronson Beta was visibly spreading on the screen. Deceleration held them tightly on the floor, but they would crawl across each other laboriously, and in turn stare at the floating, cloudy sphere upon which they expected to arrive.

The screen changed views now. It halted to catch the flight of Bronson Alpha from the sun, but most of the time those who operated it were now busy searching for the other American ship, of which they had seen no trace.

The hours dragged more, even, than they had on the outward journey. The surface of the planet ahead of them was disappointingly shrouded, as inspected for the last time. A word of warning went through the ship. The passengers took another drink of water, ate another mouthful of food, and once again strapped themselves to the floor. Hendron tripped the handle of a companion to the rheostat-like instrument in the far end of the ship. He fixed a separate telescope so that he could see into it. He looked critically at his gauges. He turned on more power.

A half-hour passed, and he did not budge. His face was taut. The dangers of space had been met. Now came the last great test. At his side again was Duquesne. Above him, in layers, were the terrified animals and the half-insensible passengers. So great was the pressure of retardation that it was almost impossible for him to move, and yet it was necessary to do so with great delicacy. A fractional miscalculation would mean that all his work had gone for nothing.

In the optical instrument to which he screwed his eyes, the edges of Bronson Alpha had long since passed out of view. He stared at a bright foaming mass of what looked like clouds. A vast abyss separated him from those clouds, and yet its distance shortened rapidly. He looked at the gauge that measured their altitude from the surface of the planet, and at the gauge which reckoned their speed.

Duquesne followed his movements with eyes eloquent of his emotions.

Suddenly the clouds seemed to rush up toward him.

Hendron pressed a stud. The retardation was perceptibly increased. Sound began to pour in awful volumes to their ears.

Duquesne's eyes jerked up to the altimeter, which showed eighty-six miles. It was falling rapidly. The clouds on the screen were thicker. They fell through atmosphere. The roar increased and became as insufferable as it had been when they left the Earth. Perspiration leaked down Hendron's face and showed darkly through the heavy shirt he wore. The altimeter ran with diminishing speed from fifty miles to twenty-five. From twenty-five it crawled to ten. From ten to five. It seemed scarcely to be

moving now.

Suddenly Hendron's lips jerked spasmodically, and a quiver ran through the hand on the rheostat. He pointed toward the screen with his free hand, and Duquesne had his first view of the new world. The same view flashed through the remnants of cloud to all the passengers. Below them was a turbulent rolling ocean. Where the force of their blasts struck it, it flung back terrific clouds of steam. They descended to within a mile of its surface, and then Hendron, operating another lever, sent out horizontal jets, so that the ship began to move rapidly over the surface of this unknown sea.

To every one who looked, this desolate expanse of ocean was like a beneficent blessing from God Himself. Here was something familiar, something interesting, something terrestrial. Here was no longer the incomprehensible majesty of the void.

The Space Ship had reached the surface of Bronson Beta and was traveling now at a slow, lateral velocity above one of the oceans. Hendron worked frantically with the delicate controls to keep the ship poised and in regular motion; yet it rose and fell like an airplane bounding in rough winds, and it swayed on its horizontal axis so that its pilot ceaselessly played his fingertips on the releases of the quick blasts which maintained equilibrium.

The sullen, sunless ocean seemed endless. Was there no land?

Where were the continents, where the islands and plains and the sites of the "cities" which the great telescopes of earth—the telescopes of that shattered world which survived now only in fragments spinning around the sun—once had shown? Had the cities, had the mountains and plains, been mere optical illusions?

That was impossible; yet impatience never had maddened men as now. Still the views obtainable from the side periscope flashed upon the screen and showed nothing but empty sea and lowering cloud.

Then, on the far horizon, land appeared dimly.

A cry, a shout that drowned in the tumult of the motors, broke from trembling lips. Speedily they approached the land. It spread out under them. It towered into hills. Its extent was lost in the mists. They reached its coast, a bleak inhospitable stretch of brown earth and rock, of sandy beach and cliff upon which nothing grew or moved or was. Inland the country rose precipitously; and Hendron, as if he shared the impatience of his passengers and could bear no more, turned the ship back toward a plateau that rose high above the level of the sea.

Along the plateau he skimmed at a speed that might have been thirty terrestrial miles an hour. The Ark drew down toward the new Earth until it was but a few feet above the ground. The speed diminished, the motors

were turned off and on again quickly, a maneuver which jolted those who lay strapped in their places. There was a very short, very rapid drop; bodies were thrown violently against the padded floor; the springs beneath them recoiled—and there was silence.

Regardless of the fate of the others, the fate of Earth itself, Hendron with his hundred colonists had reached a new world alive.

The ship settled at a slight angle in the earth and rock beneath it.

The Ark was filled with a new sound—the sound of human voices raised in hysterical bedlam.

Chapter 27—The Cosmic Conquerors

COLE HENDRON turned to Duquesne. The bedlam from the passenger-cabin came to their ears faintly. On the visa-screen above them was depicted the view from one of the sides of the ship—a broad stretch of rolling country, bare and brown, vanishing toward ascending hills and gray mist. Hendron had relaxed for the first time in the past eight months, and he stood with his hands at his sides, his shoulders stooped and his knees bent. He looked as Atlas might have looked when Hercules lifted the world from his shoulders. It was an expression more descriptive than any words might have been.

Duquesne's emotions found speech. "Miraculous! Marvelous! Superb! Ah, my friend, my good friend, my old friend, my esteemed friend! I congratulate you. I, Duquesne, I throw myself at your feet. I embrace your knees; I salute you. You have conquered Destiny itself. You have brought this astounding ship of yours to the Beta Bronson. To you, Christopher Columbus is a nincompoop. Magellan is a child drooling over his toys. Listen to them upstairs there, screaming. Their hearts are flooded. Their eyes are filled. Their souls expand. Through you, to-day, humanity opens a new epoch!"

The Frenchman could not confine his celebration to the control-cabin. He seized Hendron and hauled him to the spiral staircase which functioned as well inverted as it had right-side up. He thrust Hendron before him into the first chamber, where the passengers from both decks were crowding. Duquesne himself was ignored; and he did not mind it.

"Hendron!" rose the shout; and men and women, almost equally hysterical, rushed to him. They had to clap hands on him, touch him, cry out to him.

Tony found himself shouting an excited harangue to which no one was paying attention. He discovered Eve at his side, struggling toward her father, and weeping. Some one recognized her and thrust her

through the throng.

Men and women were throwing their arms about each other, kissing, and screaming in each other's faces. Duquesne, ignored and indifferent to it, made his way through the throng thumping the backs of the men and embracing the women, and beating on his own chest. Eliot James, who had been deathly ill during the entire transit, abruptly forgot his sickness, was caught in the tumult of the first triumph, and then withdrew to the wall and watched his fellows rejoice.

At last some one opened the larder and brought out food. People who had eaten practically nothing for the four days began to devour everything they could get their hands upon.

Tony, meanwhile, had somewhat recovered himself. He made a quick census and shouted: "We all are here. Every one who started on this ship survived!"

It set off pandemonium again, but also it reminded them of doubt of the safety of the second ship. "Where is it? Can it be sighted? . . . How about the Germans? . . . The English? . . . The Japanese?"

Their own shouts quieted them, so that Hendron at last could speak.

"We have had, for three days, no sight of our friends or of any of the other parties from earth," he announced. "That does not mean that they all have failed; our path through space was not the only one. Some may have been ahead of us and arrived when the other side of this world was turned; others may still arrive; but you all understand that we can count upon no one but ourselves.

"We have arrived; that we know. And none of you will question my sincerity when I repeat to you that it is my conviction that fate—Destiny—far more than our own efforts has brought us through.

"I repeat here, in my first words upon this strange, new, marvelous world what I said upon that planet which for millions and hundreds of millions of years supported and nourished the long life of evolution which created us—I repeat, what I said upon that planet which now flies in shattered fragments about our sun; we have arrived, not as triumphant individuals spared for ourselves, but as humble representatives of the result of a billion years of evolution transported to a sphere where we may reproduce and recreate the life given us. ...

"I will pass at once to practical considerations.

"At this spot, it is now late in the afternoon of Bronson Beta's new day, which lasts thirty hours instead of the twenty-four to which we are accustomed. For the present, we must all remain upon the ship. The ground immediately under is still baked hot by the heat of our blast at landing. Moreover we must test the atmosphere carefully before we

breathe it.

"Of course, if it is utterly unbreathable, we will all perish soon; but if it proves merely to contain some unfavorable element against which we must be masked at first until we develop immunity to it, we must discover what it is.

"While waiting, we will discharge one of the forward rocket tubes at half-hour intervals in the hope that our sister ship will see this signal and reply. We will also immediately put into operation an external radio system and listen for her. I wish to thank those of you who acted as my crew during this flight, and who in spite of shuddering senses and stricken bodies stuck steadfast to your posts. But there is no praise adequate in human language for the innumerable feats of courage, of ingenuity and perseverance which have been performed by every one of you. I trust that by morning we shall be able to make a survey of our world on foot, and I presume that by then we shall have heard from our sister ship."

Eve and Tony walked back and forth through the throng of passengers, arm in arm. Greetings and discussions continued incessantly. Every one was talking. Presently some one began to sing, and all the passengers joined in.

Up in the control-room Hendron and his assistants began their analysis of a sample of atmosphere that had been obtained through a small airlock. They rigged up the ship's wireless, and sent into the clouds the first beacon from the Ark's sky-pointing tubes. Lights were on all over the ship. Above the passenger quarters, several men were releasing and tending stock. The sheep and a few of the birds had perished, but the rest of the animals revived rapidly.

One of Hendron's assistants put a slip of paper before his chief. He read it:

Nitrogen	43%
Oxygen	24%
Neon	13%
Krypton	6%
Argon	5%
Helium	4%
Other gases	5%

Hendron looked at the list thoughtfully and took a notebook from a rack over the table. He glanced at the assistant and smiled. "There's only about a three-per-cent error in our telescopic analysis. It will be fair enough to breathe."

The assistant, Borden, smiled. He had been, in what the colonists

came to describe as "his former life," a professor of chemistry in Stanford University. His smile was naive and pleasing. "It's very good to breathe. In fact, I drew in a large sample and breathed what was left over for about five minutes. It felt like air; it looked like air; and I think we might consider it a very superior form of air—remarkably fresh, too."

Hendron chuckled. "All right, Borden. What about the temperature?"

"Eighty-six degrees Fahrenheit, top side of the ship—but the ground all around has been pretty highly heated, and the blast from the beacon also helped warm up the air. I should conjecture that the temperature is really about seventy-eight degrees. I didn't pick up much of that heat, because our thermometer is on the windward side."

Hendron nodded slowly. "Of course I don't know our latitude and longitude yet, but that seems fair enough. Pressure?"

"Thirty point one hundred thirty-five ten thousandths."

"Wind-velocity?"

"Eighteen miles an hour."

"Humidity?"

"Seventy-four per cent. But if I'm any judge of weather, it's clearing up."

"That's fine. We'll go out in the morning."

Another man approached the desk. "The radio set is working, Mr. Hendron. There's terrific static in bursts, but in the intervals listening has been pretty good. Everything's silent. I don't think anybody else made it."

"Right. You take the receivers until midnight on the new time, put Tarleton on for four hours and let Grange have it until dawn, and then Von Beitz. No one will leave the ship to-night. I believe that the situation here is favorable; but we will need every advantage for our first experience upon this planet. So we will wait for the sun."

The night came on clear. The visa-screen, which had been growing darker, showed now a dim, steady light. It was the light of the earth-destroyer Bronson Alpha, shining again upon the survivors of men as it set off on its measureless journey into infinite space. Other specks of light reënforced it; and the stars—glints from the debris of the world settling themselves in their strange circles about the sun.

Exhaustion allied itself to obedience to Hendron's orders. The emigrants from Earth slumped down and slept. Hendron strode quietly through the dimly lighted chambers, looking at the sleeping people with an expression almost paternal on his face. Within him leaped an exultation so great that he could scarcely contain it. ...

Tony lay down but did not sleep. Around him the members of the expedition lay in attitudes of rest. A thought had been stirring in his brain for a long time. Some one would have to take the risk of being the first to breathe the air of Bronson Beta. A small sample was not decisive. Tony did not know how accurately its composition might have been measured. He thought that it might have an evil smell. It might be sickening. It might be chemically possible to breathe, but practically, hopeless. It might contain a trace of some rare poison that, repeatedly breathed, would kill instantly or in time.

He should test it himself. They should send him out first. If he did not go into spasms of nausea and pain, the rest could follow. It was a small contribution, in Tony's mind; but it would help justify his presence on the Ark. He had considered offering himself for this service for so long that he had created in his subconscious mind a true and very real fear of the possibilities in the atmosphere of Bronson Beta.

"They might send some one useful," he thought. "Hendron might sacrifice himself in the test."

The more he thought, the more he worried. His mind began to plan. If he wished, he could open the airlock and drop down to the ground. Of course, he could not get back without making a fuss—stoning the periscope outlet—and he might not remain conscious long enough. But in that case —his body would be a warning when they looked out in the morning. ...

At last he rose. He went down the spiral staircase quietly. He shut doors behind him. In the bottom chamber he stood for a long time beside the airlock. He was trembling.

It did not enter his mind that the honor of being the first to step on the soil of Bronson Beta rightfully belonged to Hendron. It was self-sacrifice and not ambition which prompted him.

He lifted the levers that closed the inner door, balancing them so that they would fall automatically. He stepped between it and the outer door. The lock slammed; the levers fell. He was in pitch darkness.

He opened the outside door. He leaned out—his heart in his mouth. He drew in a breath.

A hot, rasping, sulphurous vapor smote his nostrils. He shuddered. Was this the atmosphere of the new planet? He remembered that the blast of the Ark had cooked the ground around it.

Gasping, with running eyes, he lay down on the floor and felt with his feet for the iron rungs of the workmen's ladder that ran from the now inverted bow of the Ark to the upper door and matched that on the opposite end. He began to descend. He coughed and shuddered. With every step the heat increased.

His foot touched the ground. It gave off heat like the earth around a geyser. He ran away from the looming bulk of the ship. His first fifty steps were taken in the stinging vapors.

Then—cooler air blew on his face. Sweet, fresh, cool air!

He inhaled lungfuls of it. It had no odor. It was like earth air washed by an April rain. It did not make him dizzy or sick. He did not feel weakness or numbness or pain. He felt exhilarated.

He flung out his arms in ecstasy. It was a dancer's gesture, a glorious, abandoned gesture. He could make it only because he was alone—alone on the new earth. Bronson Beta's atmosphere was magnificent.

He flung his arms again.

Beside him a voice said quietly: "It's splendid, isn't it, Tony?"

He could have been no more startled if stones had spoken or a mummy had sat up in its sarcophagus. He stiffened, not daring to look. Then into his icy veins blood flowed. He had recognized the voice. He turned in the lush, starlit dark.

"Mr. Hendron, I—I—I—"

"Never mind." The older man approached. "I think I know why you came. You wanted to be sure of the air before any of the rest of us left the ship."

Tony did not reply. Hendron took his arm. "So did I. I couldn't sleep. I had to inspect our future home. I came out on the ladder half an hour ago." Hendron chuckled. "Duquesne was on my heels. I hid. He's gone for a walk. I heard him fall down and swear. What do you think of it? Did you see the aurora?"

"No." Tony looked at the stars. He had a feeling that the sky overhead was not the sky to which he had been accustomed. The stars looked slightly mixed. As he stared upward, a crimson flame shot into the zenith from the horizon. It was followed by torches and sheets in all colors and shades. "Lord!" he whispered.

"Beautiful, isn't it?" Hendron said softly. "Nothing like it on earth. It was in rippling sheets when I came out. Then in shafts—a colored cathedral. It made faint shadows of the landscape. I venture to say it's a permanent fixture. The gases here are different from those on earth. Different ionization of solar electrical energy. That red may be the neon. The blue— I don't know. Anyway—it's gorgeous."

"You mean—this thing will play overhead all night every night?"

"I think so. Coming and going. It seemed to me that it touched the ground over there—once." He pointed. "I thought I could hear it—crackling faintly, swishing. It's going to make radio broadcasting bad;

and it'll affect astronomic observation. But it is magnificent."

"Like the rainbow that came on Ararat," Tony said slowly.

"Lord! So it is! God's promise, eh? Tony—you're an odd fellow for a football-player. Football! What a thing to hover in the mind here! Come—let's see if we can find Duquesne. The wily devil wanted to be first on Bronson Beta. He came out of the Ark like a shot. No. Wait—look."

Tony glanced toward the Ark. The lock was opening again. The aurora shone luminously on the polished sides, revealing the black rectangle of the open door in sharp contrast.

"Who is it?" Hendron whispered.

"Don't know." Tony was smiling.

They watched the fourth man to touch the new soil make his painful descent and run across the still hot earth. They saw him stop, a few yards away, and breathe. They heard his voice ecstatically. Then—they heard him weep.

Hendron called: "Hello—James!"

Tony saw Eliot James undergo the unearthliness of hearing that voice come through the empty air. Then James approached them.

"How beautiful!" he whispered. "I'm sorry. I thought some one should try the air. And—I admit—I was keen to get out. Wanted to be first, I suppose. I'm humiliated—"

Again Hendron laughed. "It's all right, my boy. I understand. I understand all of us. It was an act of bravery. When I came out, I half expected you others would be along. It's in your blood. The reason you came here one by one, alone and courageously, is the reason I picked you to come here with me. You all think, feel, act independently. You also all act for the common welfare. It makes me rather happy. Come on; Duquesne went this way."

"Duquesne?" James repeated. Tony explained.

They hunted for a long time. Overhead the stars showed brightly; and underneath them in varying intensity, with ten thousand spangles, the aurora played symphonies of light. Behind them was the tall cylinder of the ship, and behind it the range of hills. Ahead of them as they walked they could hear the increasing murmur of the sea.

They found Duquesne sitting on a bluff-head overlooking the illimitable sea. He heard them coming and rose, holding out his hands.

"My friends! *Salut!"*

"I saw you pop out of the ship," Hendron said, "and I was sorry you fell down."

The Frenchman was crestfallen. "You were out here?"

"Oh, yes."

"Ahead of me?"

"By a few minutes," Hendron answered.

Duquesne stamped his foot several times, and then laughed. "Well—you should be! But I thought to fool you. Duquesne, I told myself—the great Duquesne—shall be first to set foot on the new earth. But it was not to be. It was a sin. I even brought a small flag of France—my beautiful France—and planted it upon the soil."

"I saw it," Hendron said. "I took it down. We aren't going to have nations here. Just—people."

Duquesne nodded in the gloom. "That too is right. I am foolish. I am like six years old. But to-night we will forget all this, *n'est-ce pas?* We will be friends. Four friends. The mighty Cole 'Endron. The brilliant Monsieur James. The brave Tony Drake. And myself—Duquesne the great. Sit."

On the outcrop of stone ledge they seated themselves. They looked and breathed and waited.

Occasionally one of them spoke. Usually it was Hendron —casting up from his thoughts between periods of silence memories of the past and plans for the future.

"We are here alone. I cannot help feeling that our other ship has in some way failed to follow us. If, in the ensuing days, we hear nothing, we may be sure it is lost. Your French confrères, Duquesne—failed. We must admit that it seems probable that others failed. Bronson Beta belongs to us. It is sad—tragic. Ransdell is gone. Peter Vanderbilt is gone. Smith. That Taylor youngster you brought from Cornell. All the others. Yet—with all the world gone, who are we to complain that we have lost a few more of our friends?"

"Precisely!" exclaimed Duquesne emphatically. "And what are we, after all? What was that mankind, of our earth, which we alone perhaps survive to represent and reproduce?"

He had recoiled from his moment of inborn, instinctive patriotism, and become the scientist again.

"Is the creation of man the final climax toward which the whole Creation has moved? We said so, in the infancy of our thought, when we imagined the world made by God in six days, before we had any comprehension even of the nature of our neighboring stars, when we could not even have dreamed of the millions and millions of the distant stars shown us by our telescopes, when our wildest fancy would have failed before the facts of to-day—endless space spotted to the edges of

time with spiral nebulæ, each a separate 'universe' with its billions of suns like our own.

"Behind us lay, on our own earth, five hundred millions of years of evolution; and billions of years before that, while matter cooled and congealed, the world was being made—for us?

"Can we say so? Or is it that our existence is a mere accidental and possibly quite unimportant by-product of natural processes, which—as Jeans, the Englishman, once suggested—really had some other and more stupendous end in view?"

"You mean," said Hendron, "perhaps it concerns only ourselves in our vanity, and not the universe at all, that any of us escaped from the cataclysm of earth's end and came here?"

"Exactly," pronounced Duquesne. "It is nothing—if we merely continue the earth—here. When I recollect the filth of our cities, the greed of individuals and of nations, the savagery of wars, the horrors of pauperism permitted to exist side by side with luxury and wealth, our selfishness, hates, diseases, filth—all the hideousness we called civilization—I cannot regret that the world which was afflicted by us is flying in fragments, utterly incapable of rehabilitation, about the sun. On the other hand, now we are here; and how are we to justify the chance to begin again?"

Tony moved away from them. He was stirred with a great restlessness. He wandered toward the ship; and he saw, in that glowing, opalescent night, a woman's form; and he knew before he spoke to her, that it was Eve.

"I was sure you'd be out," he said.

"Tony!"

"Yes?"

"Here are you and I. Here!" She stooped to the ground and touched it; the dry fiber of a lichenlike grass was between her fingers. She pulled it, and stood with it in her hand. They had seen it, they both remembered; it was what had made the ground brown in the light of the dying day.

"This was green and fresh, Tony, perhaps ten million years ago; perhaps a hundred million. Then the dark and cold came; the very air froze and preserved it. Do you suppose our cattle could eat it?"

"Why not?" said Tony.

"What else may be here, Tony? How can we wait for the day?"

"We aren't waiting!"

"No; we're not." For they were walking, hand in hand like children, over the bare, rough ground. The amazing aurora of this strange world

lighted them, and the soil smoothed, suddenly, under their feet. The change was so abrupt that it made them stare down, and they saw what they had stumbled upon; and they cried out together: "A road!"

The ribbon of it ran to right and left—not clear and straight, for it had been washed over and blown over, but it was, beyond any doubt, a road! Made by what hands, and for what feet? Whence and whither did it run?

A hundred million years ago!

The clock of eternity ticked with the click of their heels on this hard ribbon of road, as they turned, hand in hand, and followed it toward the aurora.

"Where were they, said Tony, almost as if the souls of those a hundred million years dead might hear, "when they were whirled away from their sun? What stage had they reached? Is this one of their Roman roads on which one of their Varros was marching his men to meet a Hannibal at Bronson Beta's Cannas? What was at one end—and what still awaits us there? A Nineveh of Sargon saved for us by the dark and cold? Or was this a motor road to a city like our Paris of a year ago? Or was it a track for some vehicle we would have invented in a thousand more years? And is the city which we'll find, a city we'd never dreamed of? Whatever it was, their fate left it for us; whereas our fate—the fate of our world—" He stopped.

"I was thinking about it," said Eve. "Out there is space— in scattered stones circling in orbits of their own about the sun; the Pyramids and the Empire State Building, the Washington Monument and the Tomb of Napoleon, the Arch of Triumph! The seas and the mountains! Here the other thing happened—the other fate that could have been ours if the world had escaped the cataclysm. What sort were they who faced it here, Tony? Human, with bodies like our own? Or with souls like our own, but other shapes?"

"On this road," said Tony, "this road, perhaps, well see."

"And learn how they faced it, too, Tony; the coming dark and the cold. I think, if I had the choice, I'd prefer the cataclysm."

"Then you believe our world was better off?"

"Perhaps I wouldn't have—if we had stayed," amended Eve. "What happened here, at least left their world behind them."

"For us," said Tony.

"Yes; for us. What will we make of our chance here, Tony? Truly something very different?"

"How different do you feel, Eve?"

"Very different—completely strange even to myself, at some moments,

Tony; and then at other times—not different at all."

"Come here."

"Why?"

"Come here," he repeated, and drawing her close, he clasped her, and himself quivering, he could feel her trembling terribly. He kissed her, and her lips were hot on his. A little aghast, they dropped away.

"We seem to have brought the world with us. I can never give you up, Eve; or share you with any one else."

"We're too fresh from the world, Tony, to know. We've a faith to keep with—"

“With whom? Your father?"

"With fate—and the future. Let's go on, Tony. See, the road turns."

"Yes."

"What's that?"

"Where?"

She moved off the road to the right, where stood something too square and straight-edged to be natural. Scarcely breathing, they touched it, and found metal with a cold, smooth surface indented under their finger-tips.

"A monument!" said Tony, and he burned a match. The little yellow flame lighted characters engraved into the metal —characters like none either of them had ever seen before, but which proclaimed themselves symbols of meaning.

Swiftly Tony searched the two faces of the metal; but nothing that could possibly be a portrait adorned it. There were decorations of strange beauty and symmetry. Amazing that no one, in all the generations and in all the nations of the world, had drawn a decoration like this! It was not like the Chinese or Mayan or Egyptian, Greek or Roman, or French or German; but different from each and all.

Tony caught his breath sharply as he traced it with his fingers.

"They had an artist, Eve," he said.

"With five hundred million years of evolution behind him."

"Yes. How beautifully this writing is engraved! Will we ever read it? ... Come on. Come on!"

But the monument, if it was that, stood alone; and consideration of others, if not prudence, dictated that they return.

But they did not reenter the ship. Duquesne was determined to spend

the first night on the ground; and Hendron and James agreed with him. James had dragged out blankets from the Ark, and the five lay down on the ground of the new planet. And some of them slept.

Tony opened his eyes. The sun was rising into a sky not blue but jade green. A deep, bewildering color—the color of Bronson Beta's celestial canopy.

There would be no more human beings who wrote poetry about the blue sky. They would shape their romantic stanzas —as the stanzas in those strange, beautifully engraved characters must be shaped, if they mentioned the sky—to the verdancy of the heavens.

Tony lifted himself on his elbow. Below him, the sea also was green. It had been gray on the steamy yesterday. But an emerald ocean was more familiar than an emerald sky. He watched the white water roll on the summits of swells until it was dispersed by the brown cliff. He looked back at the Ark. It stood mysteriously on the landscape—a perpendicular cylinder, shining and marvelous, enormously foreign to the bare, brilliant landscape. Behind it the chocolate colored mountains stretched into opalescent nowhere—the mountain into which the road ran, the road beside which stood the stele adorned by a decoration like nothing else that had been seen in the world.

Tony regarded his companions. Hendron slept on a curled arm. His flashing eyes were closed. His hair, now almost white, was disheveled on his white forehead. Beside him Duquesne slept, half-sitting, his arms folded on his ample abdomen, and an expression of deep study on his swarthy face. Eliot James sprawled on a ledge which the sun now was warming, his countenance relaxed, his lips parted, his straggling red beard metal-bright in the morning rays.

Eve slept, or she had slept, near to Tony; and now she roused. She was lovely in the yellow light, and looked far fresher than the men.

Their clothes were stained and worn; and none of them had shaved, so that they looked more like philosophical vagrants than like three of the greatest men produced in the Twentieth Century on the Earth.

Tony watched Eve as she gazed at them, anxiously maternal. To be a mother in actuality, to become a mother of men, was to be her role on this reawakened world.

As she arose quietly, so as to disturb none of the others, Tony caught her hand with a new tenderness. They set off toward their road together.

Suddenly Tony saw something that took the breath from his lungs. It was a tiny thing—on the ground. A mere splotch of color. He hurried toward it, not believing his eyes. He lay down and stared at it. In a slight damp depression was a patch of moss the size of his hand.

He lay prone to examine it as Eve stooped beside him in excitement like his own. He did not know mosses—the vegetation resembled any other moss, on Earth. He recollected the hope that spores, which could exist in temperatures close to absolute zero for long periods, had preserved on Bronson Beta the power to germinate.

Mosses came—on Earth—from spores; and here, reawakened by the sun, was a remnant of life that had existed eons ago, light-years away.

Tony jumped up and ran about on the terrain; a few feet away, Eve stooped again. Other plants were burgeoning. Mosses, ferns, fungi—vegetation of species he could not classify, but some surely represented growths larger than mere mosses.

He heaped Eve's hands and his own, and together they ran back to the three who were staring, as they earlier had gazed, at the green sky.

Then Duquesne saw what Eve and Tony held. *"Sacré nom de Dieu!"* He leaped to his feet. Hendron and James were beside him.

With one accord, they rushed toward the Space Ship. "Get Higgins!" Hendron shouted. "Hell go mad! Think of it! A whole new world to classify! . . . And it means that we will live!"

Before they reached the sides of the ship, the lock opened. The gangplank dropped to earth. Von Beitz appeared in the aperture, and Hendron shouted to him the news.

People poured from the Ark; they stepped upon the new soil. They waved their arms. They stared at the hills, the sky, the sea. They breathed deep of the air. They handled the mosses, and ran about finding more of their own. They shouted, sang. They laughed and danced. The first day on the new earth had begun.

THE END

"ALL WHO ARE TO LEAVE THE EARTH FOREVER, BOARD THE SPACE SHIP!"

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