

Father of the Stars

I

NORMAN MARCHAND sat in the wings of the ballroom's small stage, on a leather hassock someone had found for him. There were 1,500 people outside in the ballroom, waiting to do him honor.

Marchand remembered the ballroom very well. He had once owned it. Forty . . . no, it wasn't forty. Not even fifty. Sixty years ago it had been, sixty and more years ago that he and Joyce had danced in that ballroom. Then the hotel was the newest on Earth, and he was the newly married son of the man who had built it, and the party was the reception for his wedding to Joyce. Of course, none of these people would know about that. But Marchand remembered Oh, Joyce, my very dear! But she had been dead a long time now.

It was a noisy crowd. He peered out through the wings and could see the head table filling up. There was the Vice-President of the United States shaking hands with the Governor of Ontario as though, for the moment, they had forgotten they were of different parties. There was Linfox, from the Institute, obligingly helping a chimpanzee into the chair next to what, judging by the microphones ranked before it, would probably be Marchand's own. Linfox seemed a little ill at ease with the chimp. The chimpanzee had no doubt been smithed, but the imposition of human intelligence did not lengthen its ape's legs.

Then Dan Fleury appeared, up the steps from the floor of the ballroom where the rest of the 1,500 diners were taking their places.

Fleury didn't look well at all, Marchand thought—not without a small touch of satisfaction, since Fleury was fifteen years younger than himself. Still, Marchand wasn't jealous. Not even of the young bellhop who had brought him the hassock, twenty years old at the most and built like a fullback. One life was enough for a man to live. Especially when you had accomplished the dream you had set out to bring to fruition. Or almost.

Of course, it had cost him everything his father left. But what else was money for?

"It's time to go in, sir. May I help you!" It was the young fullback nearly bursting his bellhop's uniform with the huge, hard muscles of youth. He was very solicitous. One of the nice things about having this testimonial dinner in a Marchand hotel was that the staff was as deferential to him as though he still owned the place. Probably that was why the committee had picked it, Marchand ruminated, quaint and old-fashioned as the hotel must seem now. Though at one time— He recollected himself. "I'm sorry, young man. I was—woolgathering. Thank you."

He stood up, slowly but not very painfully, considering that it had been a long day. As the fullback walked him onto the stage, the applause was enough to drive down the automatic volume control on his hearing aid.

For that reason he missed the first words from Dan Fleury. No doubt they were complimentary. Very carefully he lowered himself into his chair, and as the clapping eased off, he was able to begin to hear the words.

Dan Fleury was still a tall man, built like a barrel, with bushy eyebrows and a huge mane of hair. He had helped Marchand's mad project for thrusting Man into space from its very beginnings. He said as much now. "Man's grandest dream!" he roared. "The conquering of the stars themselves! And here is the one man who taught us how to dream it, Norman Marchand!"

Marchand bowed to the storm of applause.

Again his hearing aid saved his ears and cost him the next few words: "—and now that we are on the threshold of success," Fleury was booming, "it is altogether fitting that we should gather here tonight . . . to join in fellowship and in the expression of that grand hope . . . to rededicate ourselves to its fulfillment . . . and to pay our respects and give of our

love to the man who first showed us what dream to have!"

While the AVC registered the power of Dan Fleury's oratory, Marchand smiled out on the foggy sea of faces. It was, he thought, almost cruel of Fleury to put it like that. The threshold of success indeed! How many years now had they waited on it patiently?—and the door still locked in their faces. Of course, he thought wryly, they must have calculated that the testimonial dinner would have to be held soon unless they wanted a cadaver for a guest. But still . . . He

turned painfully and looked at Fleury, half perplexed. There was something in his tone. Was there—Could there be— There could not, he told himself firmly. There was no news, no breakthrough, no report from one of the wandering ships, no dream come true at last. He would have been the first to know. Not for anything would they have kept a thing like that from him. And he did not know that thing.

"—and now," Fleury was saying, "I won't keep you from your dinners. There will be many a long, strong speech to help your digestions afterward, I promise you! But now let's eat!"

Laughter. Applause. A buzz and clash of forks.

The injunction to eat did not, of course, include Norman Marchand. He sat with his hands in his lap, watching them dig in, smiling and feeling just a touch deprived, with the wry regret of the very old. He didn't envy the young people anything really, he told himself. Not their health, their youth, or their life expectancy. But he envied them the bowls of ice.

He tried to pretend he enjoyed his wine and the huge pink shrimp in crackers and milk. According to Asa Czerny, who ought to know since he had kept Marchand alive this long, he had a clear choice. He could eat whatever he chose, or he could stay alive. For a while. And ever since Czerny had been good enough, or despairing enough, to give him a maximum date for his life expectancy, Marchand had in idle moments tried to calculate just how much of those remaining months he was willing to give up for one really good meal. He rather believed that when Czerny looked up at him after the weekly medical checkup and said that only days were left, that he would take those last days and trade them in for a sauerbraten with potato pancakes and sweet-sour red cabbage on the side. But that time was not yet. With any kind of luck he still had a month. Perhaps as much as two.

"I beg your—pardon," he said, half-turning to the chimpanzee. Even smithed, the animal spoke so poorly that Marchand had not at first known that he was being addressed.

He should not have turned.

His wrist had lost its suppleness; the spoon in his hand tilted; the soggy crackers fell. He made the mistake of trying to move his knee out of the way—it was bad enough to be old; he did not want to be sloppy—and he moved too quickly.

The chair was at the very edge of the little platform. He felt himself going over.

Ninety-six is too old to be falling on your head, he thought; if I was going to do this sort of thing, I might just as well have eaten some of those shrimp. . . . But he did not kill himself.

He only knocked himself unconscious. And not for very long at that, because he began to wake up while they were still carrying him back to his dressing room behind the stage.

Once upon a time, Norman Marchand had given his life to a hope.

Rich, intelligent, married to a girl of beauty and tenderness, he had taken everything he owned and given it to the Institute for Colonizing Extra-Solar Planets. He had, to begin with, given away several million dollars.

That was the whole of the personal fortune his father had left him, and it was nowhere near enough to do the job. It was only a catalyst. He had used it to hire publicity men, fund raisers, investment counselors, foundation

managers. He had spent it on documentary ifims and on TV commercials. With it he had financed cocktail parties for United States Senators, and prize contests for the nation's sixth grades, and he had done what he set out to do.

He had raised money. A very great deal of money.

He had taken all the money he had begged and teased out of the pockets of the world and used it to finance the building of twenty-six great ships, each the size of a dozen ocean liners, and he had cast them into space like a farmer sowing wheat upon the wind.

I tried, he whispered to himself, returning from the darkest place he had ever seen. I wanted to see Man reach out and touch a new home. . . and I wanted to be the one to guide him there. . .

And someone was saying: "-he knew about it, did he? But we were trying to keep it quiet-" Someone else told the first person to shut his mouth. Marchand opened his eyes.

Czerny was there, unsmiling. He saw that Marchand was conscious. "You're all right," he said, and Marchand knew that it was true, since Czerny was scowling angrily at him. If the news had been bad, he would have smiled- "No, you don't!" cried Czerny, catching him by the shoulder. "You stay right there. You're going home to bed."

"But you said I was all right."

"I meant you were still breathing. Don't push it, Norm."

Marchand protested, "But the dinner-I ought to be there--"

Asa Czerny had cared for Marchand for thirty years. They had gone fishing together, and once or twice they had gotten drunk. Czerny would not have refused for nothing. He only shook his head.

Marchand slumped back. Behind Czerny the chimpanzee was squatting silently on the edge of a chair, watching. He's worried, Marchand thought. Worried because he feels it's his fault, what happened to me. The thought gave him enough strength to say: "Stupid of me to fall like that, Mr.- I'm sorry."

Czerny supplied the introduction. "This is Duane Ferguson, Norman. He was supernumerary on the Copernicus. Smithed. He's attending the dinner in costume, as it were." The chimpanzee nodded but did not speak. He was watching that silver-tongued orator, Dan Fleury, who seemed upset. "Where is that ambulance?" demanded Czerny, with a doctor's impatience with interns, and the fullback in bellhop's uniform hurried silently away to find out.

The chimpanzee made a barking sound, clearing his throat. "Ghwadd"-he said-more or less: the German ich sound followed by the word "what." "Ghwadd did jou mee-an about evdial, Midda Vleury?"

Dan Fleury turned and looked at the chimp blankly. But not, Marchand thought suddenly, as though he didn't know what the chimp was talking about. Only as if he didn't intend to answer.

Marchand rasped, "What's this 'evdial,' Dan?"

"Search me. Look, Mr. Ferguson, perhaps we'd better go outside."

"Ghwadd?" The harsh barking voice struggled against the simian body it occupied, and came closer to the sounds it meant to emit. "What did you bean-did you mean?"

He was a rude young man, Marchand thought irritably. The fellow was tiring him.

Although there was something about that insistent question- Marchand winced and felt for a moment as though he were going to throw up. It passed, leaving him wobbly. It wasn't possible he had broken anything, he told himself. Czerny would not lie about that. But he felt as if he had.

He lost interest in the chimp-man, did not even turn his head as Fleury hurried him out of the room, whispering to him in an agitated and low-pitched chirrup like the scratching of a cricket's legs.

If a man wanted to abandon his God-given human body and put his mind, thoughts, and-yes-soul into the corpus of an anthropoid, there was nothing in that to entitle him to any special consideration from Norman Marchand.

Of course not! Marchand rehearsed the familiar argument as he waited for the ambulance. Men who volunteered for the interstellar flights he had done so much to bring about knew what they were getting into. Until some super-Batman invented the mythical FTL drive, it would always be so. At possible speeds—less than light's 186,000 m.p.s. crawl—it was a matter of decades to reach almost every worthwhile planet that was known.

The Smith process allowed these men to use their minds to control chimpanzee bodies—easily bred, utterly expendable—while their own bodies rested in the deep-freeze for all the long years between the stars.

It took brave men, naturally. They were entitled to courtesy and consideration.

But so was he, and it was not courteous to blather about "Evdial," whatever that was, while the man who had made their trip possible was seriously injured. .

Unless .

Marchand opened his eyes again.

"Evdial." Unless "Evdial" was the closest chimpanzee vocal chords and chimpanzee lips could come to—unless what they had been talking about, while he was unconscious, was that utterly impossible, hopeless, and fantastic dream that he, Marchand, had turned his back upon when he began organizing the colonization campaign.

Unless someone had really found the way to FTL travel.

II

As soon as he was able the next day, Marchand got himself into a wheelchair—all by himself; he didn't want any help in this—and rolled it out into the chart room of the home the Institute had given him, rent free, for all of his life. (He had, of course, given it in the first place to the Institute.)

The Institute had put \$300,000 into the chart room. Stayed and guy-wired stars flecked the volume of a forty-foot ballroom, representing in scale all the space within fifty-five light-years of Sol. Every star was mapped and tagged. They had even moved a few of them slightly, a year ago, to correct for proper motion. It was that carefully done.

The twenty-six great starships the Institute had financed were there, too, or such of them as were still in space. They were out of scale, of course, but Marchand understood what they represented. He rolled his chair down the marked path to the center of the room and sat there, looking around, just under yellow Sol.

There was blue-white Sirius dominating them all, Procyon hanging just above. The two of them together were incomparably the brightest objects in the room, though red Altair was brighter in its own right than Procyon. In the center of the chamber Sol and Alpha Centauri A made a brilliant pair.

He gazed with rheuming eyes at the greatest disappointment of his life, Alpha Centauri B. So close. So right. So sterile. It was an ironic blunder of creation that the nearest and best chance of another home had never formed planets. . . or had formed them and swept them into the Bode-area traps set by itself and its two companions.

But there were other hopes. .

Marchand sought and found Tau Ceti, yellow and pale. Only eleven light-years away, the colony should be definitely established by now. In another decade or less they should have an answer. . . if, of course, it had planets Man could live on.

That was the big question, to which they had already received so many noes. But Tau Ceti was still a good bet, Marchand told himself stoutly. It was a dimmer, cooler sun than Sol. But it was Type G, and according to spectropolarimetry, almost certainly planetiferous. And if it was another

disappointment— Marchand turned his eyes to 40 Eridani A, even dimmer, even farther away. The expedition to 40 Eridani A had been, he remembered, the fifth ship he had launched. It ought to be reaching its destination soon—this year or perhaps next. There was no sure way of estimating time when the top velocity was so close to light's own. .

But now, of course, the top velocity was more.

The sudden wash of failure almost made him physically ill. Faster than light travel—why, how dared they!

But he didn't have time to waste on that particular emotion, or indeed on any emotion at all. He felt time draining away from him and sat up straight again, looking around. At 96, you dare not do anything slowly, not even daydream.

He glanced at and dismissed Procyon. They had tried Procyon lately—the ship would not be even halfway. They had tried almost everything. Even Epsilon Eridani and Groombridge 1618; even, far down past the probable good bets among the spectroscopic classes, 61 Cygni A and Epsilon mdi, a late and despairing try at Proxima Centauri (though they were very nearly sure it was wasted; the Alpha Centauri expedition had detected nothing like viable planets).

There had been twenty-six of them in all. Three ships lost, three returned, one still Earthbound. Nineteen were still out there.

Marchand looked for comfort at the bright green arrow that marked where the Tycho Brahe rode its jets of ionized gas, the biggest of his ships, three thousand men and women. It seemed to him that someone had mentioned the Tycho Brahe recently. When? Why? He was not sure, but the name stuck in his mind.

The door opened and Dan Fleury walked in, glancing at the arrayed stars and ships and not seeing them. The chart room had never meant anything to Fleury. He scolded, "Damn it, Norman, you scared us witless! Why you're not in the hospital now—"

"I was in the hospital, Dan. I wouldn't stay. And finally I got it through Asa Czerny's head that I meant it, so he said I could come home if I would stay quiet and let him look in. Well, as you see, I'm quiet. And I don't care if he looks in. I only care about finding out the truth about FTL."

"Oh, cripes, Norm! Honestly, you shouldn't worry yourself—"

"Dan, for thirty years you've never used the word 'honestly' except when you were lying to me. Now give. I sent for you this morning because you know the answer. I want it.

"For God's sake, Dan!"

Fleury glanced around the room, as though he were seeing the glowing points of light for the first time . . . perhaps he was, Marchand thought.

He said at last, "Well, there is something."

Marchand waited. He had had a great deal of practice at waiting.

"There's a young fellow," said Fleury, starting over again. "He's named Eisele. A mathematician, would you believe it? He's got an idea."

Fleury pulled over a chair and sat down.

"It's far from perfect," he added.

"In fact," he said, "a lot of people think it won't work at all. Yoti know the theory, of course. Einstein, Lorentz-Fitzgerald, the whole roster—they're all against it. It's called—get this!—polynomiation."

He waited for a laugh, hopelessly. Then he said, "Although I must say he appears to have something, since the tests—"

Marchand said gently and with enormous restraint: "Dan, will you please spit it out? Let's see what you said so far. There's this fellow named Eisele, and he has something, and it's crazy, but it works."

"Well—yes."

Marchand slowly leaned back and closed his eyes. "So that means that we were all wrong. Especially me. And all our work—"

"Look, Norman! Don't ever think like that. Your work has made all the difference. If it weren't for you, people like Eisele never would have had the chance. Don't you know he was working under one of our grants?"

"No. I didn't know that." Marchand's eyes went out to the Tycho Brahe for a moment. "But it doesn't help much. I wonder if fifty-odd thousand men and women who have given most of their lives to the deep freeze because of my work will feel the way you do. But thanks. You've told me what I want to know."

When Czerny entered the chart room an hour later, Marchand said at once, "Am I in good enough shape to stand a smith?"

The doctor put down his bag and took a chair before he answered. "We don't have anyone available, Norman. There hasn't been a volunteer for years."

"No. I don't mean smithed into a human body. I don't want any would-be suicide volunteer donors—you said yourself the smithed bodies sometimes suicided, anyway. I'll settle for a chimp. Why should I be any better than that young fellow—what's his name?"

"You mean Duane Ferguson."

"Sure. Why should I be any better than he is?"

"Oh, cut it out, Norman. You're too old. Your phospholipids—"

"I'm not too old to die, am I? And that's the worst that could happen."

"It wouldn't be stable! Not at your age; you just don't understand the chemistry. I couldn't promise you more than a few weeks."

Marchand said joyously, "Really! I didn't expect that much. That's more than you can promise me now."

The doctor argued, but Marchand had held up his end of many a hard-fought battle in ninety-six years, and besides, he had an advantage over Czerny. The doctor knew even better than Marchand himself that getting into a passion would kill him. At the moment when Czerny gauged the risk of a smith translation less than the risk of going on arguing about it, he frowned, shook his head grudgingly, and left.

Slowly Marchand wheeled after him.

He did not have to hurry to what might be the last act of his life. There was plenty of time. In the Institute they kept a supply of breeding chimpanzees, but it would take several hours to prepare one.

One mind had to be sacrificed in the smith imposition. The man would ultimately be able to return to his own body, his risk less than one chance in 50 of failure. But the chimp would never be the same. Marchand submitted to the beginnings of the irradiation, the delicate titration of his body fluids, the endless strapping and patching and clamping. He had seen it done, and there were no surprises in the procedure. . . . He had not known, however, that it would hurt so much.

III

Trying not to walk on his knuckles (but it was hard; the ape body was meant to crouch, the arms were too long to hang comfortably along his sides), Marchand waddled out into the pad area and bent his rigid chimp's spine back in order to look up at the hated thing. Dan Fleury came toward him. "Norm?" he asked tentatively. Marchand attempted to nod; it was not a success, but Fleury understood. "Norman," he said, "this is Sigmund Eisele. He invented the FTL drive."

Marchand raised one long arm and extended a hand that resisted being opened: it was used to being clawed into a fist. "Congradulazhuns," he said, as clearly as he could. Virtuously he did not squeeze the hand of the young dark-eyed man who was being introduced to him. He had been warned that chimpanzee strength maimed human beings. He was not likely to forget, but it was tempting to allow himself to consider it for a moment.

He dropped the hand and winced as pain flooded through him.

Czerny had warned him to expect it. "Unstable, dangerous, won't last," had rumbled through his conversation, "and don't forget, Norman, the sensory equipment is set high for you; you're not used to so much input: it will hurt."

But Marchand had assured the doctor he would not mind that, and indeed

he didn't. He looked at the ship again. "Zo thads id," he grumbled, and again bent the backbone, the whole barrel chest of the brute he occupied, to stare at the ship on the pad. It was perhaps a hundred feet tall. "Nod mudge," he said scornfully. "De Zirian, dad was our firzd, zdood nine hoonderd feed dali and garried a dousand beople to Alpha Zendaauri."

"And it brought a hundred and fifty back alive," said Eisele. He didn't emphasize the words in any way, but he said it quite clearly. "I want to tell you I've always admired you, Dr. Marchand. I hope you won't mind my company. I understand you want to go along with me out to the Tycho Brahe."

"Why zhould I mind?" He did, of course. With the best will in the world, this young fellow had thrown seventy years of dedication, plus a handsome fortune—eight million dollars of his own, countless hundreds of millions that Marchand had begged from millionaires, from government handouts, from the pennies of schoolchildren—tossed them all into the chamber pot and flushed them into history. They would say: "A nonce figure of the early twenty-first century, Norman

Marchand, or Marquand, attempted stellar colonization with primitive rocket-propelled craft. He was, of course, unsuccessful, and the toll of life and wealth in his ill-conceived venture enormous. However, after Eisele's faster-than-light became practicable . . ." They would say that he was a failure. And he was.

When Tycho Brahe blasted off to the stars, massed bands of five hundred pieces played it to its countdown, and television audiences all over the world watched it through their orbiting satellites. A President, a Governor, and half the Senate were on hand.

When Eisele's little ship took off to catch it and tell its people their efforts had been all in vain, it was like the departure of the 7:17 ferry for Jersey City. To that extent, thought Marchand, had Eisele degraded the majesty of starflight. Yet he would not have missed it for anything. Not though it meant forcing himself as super-cargo on Eisele, who had destroyed his life, and on the other smithed chimpanzee, Duane Ferguson, who was for some reason deemed to have special privileges in regard to the Brahe.

They shipped an extra FTL unit—Marchand heard one of the men call it a polyflecter, but he would not do it the honor of asking anyone what that meant—for some reason. Because it was likely to break down, so spares were needed? Marchand dismissed the question, realizing that it had not been a fear but a hope. Whatever the reason, he didn't care; he didn't want even to be here; he only regarded it as his inescapable duty.

And he entered Eisele's ship.

The interior of Eisele's damned ship was built to human scale, nine-foot ceilings and broad acceleration couches, but they had brought hammocks scaled to a chimpanzee torso for himself and Duane Ferguson. Doubtless they had looted the hammocks from the new ship. The one that would never fly—or at least not on streams of ionized gas. And doubtless this was almost the last time that a man's mind would have to leave Earth in an ape's body.

What Eisele's damned ship rode to the stars on in place of ionized gas Marchand did not understand. The whatcha-flecter, whatever the damned thing was named, was so tiny. The whole ship was a pigmy.

There was no room for reaction mass, or at least only for enough to get it off-Earth. Then the little black box—it was not really little, since it was the size of a grand piano, and it was not black, but gray, but it was a box, all right—would work its magic. They called that magic "polynomiation." What polynomiation was Marchand did not try to understand, beyond listening, or seeming to listen, to Eisele's

brief, crude attempt to translate mathematics into English. He heard just enough to recognize a few words. Space was N-dimensional. All right, that answered the whole question, as far as he was concerned, and he did not hear Eisele's tortuous efforts to explain how one jacked oneself up, so to speak, into a polynomial dimension—or no, not that, but translated the existing

polynomial extensions of a standard four-space mass into higher orders—he didn't hear. He didn't hear any of it. What he was listening to was the deep liquid thump of the great ape's heart that now was sustaining his brain.

Duane Ferguson appeared, in the ape's body that he would never leave now. That was one more count of Marchand's self-indictment; he had heard them say that the odds had worked against Ferguson, and his body had died in the imposition.

As soon as he had heard what Eisele was up to, Marchand had seized on it as a chance for expiation. The project was very simple. A good test for Eisele's drive, and a mission of mercy, too. They intended to fleet after the plodding, long-gone Tycho Brahe and catch it in mid-space . . . for even now, thirty years after it had left Port Kennedy, it was still decelerating to begin its search orbit around Groombridge 1618. As Marchand strapped himself in, Eisele was explaining it all over again. He was making tests on his black box and talking at the same time. "You see, sir, we'll try to match course and velocity, but, frankly, that's the hard part. Catching them's nothing: we've got the speed. Then we'll transfer the extra polyflector to the Tycho Brahe—"

"Yez, thanggs," said Marchand politely, but he still did not listen to the talk about the machine. As long as it existed, he would use it—his conscience would not let him off that—but he didn't want details.

Because the thing was, there were all those wasted lives.

Every year in the Tycho Brahe's deep freeze means a month off the life of the body that lay there. Respiration was slowed, but it was not stopped. The heart did not beat, but blood was perfused through a pump; tubes dripped sugar and minerals into the torpid blood; catheters carried wastes away. And Groombridge 1618 was a flight of ninety years.

The best a forty-year-old man could hope for on arriving was to be restored into a body whose biological age was nearly fifty—while behind him on the Earth was nothing but a family long dead, friends turned into dust.

It had been worth it. Or so the colonists had thought. Driven by the worm that wriggled in the spine of the explorer, the itch that drove him on; because of the wealth and the power and the freedom that a new world could give them, and because of the place they would have in the history books—not Washington's place, or even Christ's. They would have the place of an Adam and an Eve.

It had been worth it, all those thousands had thought when they volunteered and set out. But what would they think when they landed!

If they landed without knowing the truth, if some ship like Eisele's did not reach and tell them in mid-space, they would find the greatest disappointment any man had ever borne. The Groombridge 1618 expedition aboard the Tycho Brahe still had forty years to go on its original trip plan. With Eisele's invention driving faster-than-light commerce, there would be a planet populated by hundreds of thousands of people, factories at work, roads built, the best land taken, the history books already into their fifth chapter. . . and what would the three thousand aging adventurers think then?

Marchand moaned and shook, not entirely because the ship was taking off and the acceleration squeezed his rib cage down against his spine.

When they were in the polyflector's grip, he floated across the pilot room to join the others. "I vas never in zpaze bevore," he said.

Eisele said with great deference, "Your work was on the Earth."

"Vas, yez." But Marchand left it at that. A man whose whole life was a failure owed something to humanity, and one of the things he owed was the privilege of allowing them to overlook it.

He watched carefully while Eisele and Ferguson read their instruments and made micrometric settings on the polyflector. He did not understand anything about the faster-than-light drive, but he understood that a chart was a chart. Here there was a doubly profiled representation of the course line of the Groombridge 1618 expedition. The Tycho Brahe was a point of light, some nine-tenths of the way from Sol to the Groombridge star in distance, which

meant something under three-quarters of the way in time.

"Mass detectors, Dr. Marchand," said Eisele cheerfully pointing to the charts. "Good thing they're not much closer, or they wouldn't have mass enough to show." Marchand understood: the same detectors that would show a sun or a planet would also show a mere million-ton ship if its speed was great enough to add sufficient mass. "And a good thing," added Eisele, looking worried, "that they're not much farther away. We're going to have trouble matching their velocity now, even though they've been decelerating for nine years.

Let's get strapped in."

From the hammock Marchand braced himself for another surge of acceleration. But it was not that; it was something different and far worse.

It was a sausage-grinder, chewing his heart and sinews and spitting them out in strange crippled shapes.

It was a wine-press, squeezing his throat, collapsing his heart.

It was the giddy nausea of a roller coaster, or a small craft in a typhoon. Wherever it took them, the stars on the profile charts slipped and slid and flowed into new positions.

Marchand, absorbed in the most crushing migraine of all but a century, hardly knew what was happening, but he knew that in the hours they found the Tycho Brahe, after giving it a thirty-year start.

IV

The captain of the Tycho Brahe was a graying, yellow-fanged chimp named Lafcadio, his brown animal eyes hooded with shock, his long, stringy arms still quivering with the reaction of seeing a ship—a ship—and human beings.

He could not take his eyes off Eisele, Marchand noted. It had been thirty years in an ape's body for the captain. The ape was old now. Lafcadio would be thinking himself more than half chimp already, the human frame only a memory that blurred against the everyday reminders of furry-backed hands and splayed prehensile feet. Marchand himself could feel the ape's mind stealing back, though he knew it was only imagination.

Or was it imagination? Asa Czerny had said the imposition would not be stable—something to do with the phospholipids—he could not remember. He could not, in fact, remember anything with the clarity and certainty he could wish, and it was not merely because his mind was ninety-six years old.

Without emotion, Marchand realized that his measured months or weeks had dwindled to a few days.

It could, of course, be the throbbing pain between his temples that was robbing him of reason. But Marchand only entertained that thought to dismiss it; if he had courage enough to realize that his life's work was wasted, he could face the fact that pain was only a second-order derivative of the killer that stalked his ape's body. But it made it hard for him to concentrate. It was through a haze that he heard the talk of the captain and his crew—the twenty-two smithed chimpanzees who superintended the running of the Tycho Brahe and watched over the three thousand frozen bodies in its hold. It was over a deep, confusing roar that he heard Eisele instruct them in the transfer of the FTL unit from his tiny ship to the great, lumbering ark that his box could make fleet enough to span the stars in a day's journey.

He was aware that they looked on him, from time to time, with pity.

He did not mind their pity. He only asked that they allow him to live with them until he died, knowing as he knew that that would be no long time; and he passed, while they were still talking, into a painful, dizzying reverie that lasted until—he did not know the measure of the time—until he found himself strapped in a hammock in the control room of the ship and felt the added crushing agony that told him they were once again slipping through the space of other dimensions.

"Are you all right?" said a familiar thick, slurred voice.

It was the other, last victim of his blundering, the one called Ferguson. Marchand managed to say that he was.

"We're almost there," said Ferguson. "I thought you'd like to know. There's a planet. Inhabitable, they think."

From Earth the star called Groombridge 1618 was not even visible to the naked eye. Binoculars might make it a tiny flicker of light, lost among countless thousands of farther but brighter stars. From Groombridge 1618 Sol was not much more.

Marchand remembered struggling out of his hammock, overruling the worry on Ferguson's simian face, to look back at the view that showed Sol. Ferguson had picked it out for him, and Marchand looked at light that had been 15 years journeying from his home. The photons that impinged on his eyes now had paused to drench the Earth in the colors of sunset when he was in his seventies and his wife only a few years mourned. He did not remember getting back to his hammock.

He did not remember, either, at what moment of time someone told him about the planet they hoped to own. It hung low around the little orange disk of Groombridge 1618—by solar standards, at least. The captain's first approximation made its orbit quite irregular, but at its nearest approach it would be less than ten million miles from the glowing fire-coal of its primary. Near enough. Warm enough. Telescopes showed it a planet with oceans and forests, removing the lingering doubts of the captain, for its orbit could not freeze it even at greatest remove from its star, or char it at closest—or else the forest could not have grown. Spectroscopes, thermocouples, filarometers

showed more, the instruments racing ahead of the ship, now in orbit and compelled to creep at rocket speeds the last little inch of its journey. The atmosphere could be breathed, for the ferny woods had flushed out the poisons and filled it with oxygen. The gravity was more than Earth's—a drag on the first generation, to be sure, and an expense in foot troubles and lumbar aches for many more—but nothing that could not be borne. The world was fair.

Marchand remembered nothing of how he learned this or of the landing or of the hurried, joyful opening of the freezing crypts, the awakening of the colonists, the beginning of life on the planet. . . he only knew that there was a time when he found himself curled on a soft, warm hummock, and he looked up and saw sky.

V

The protuberant hairy lip and sloping brows of a chimpanzee were hovering over him. Marchand recognized that young fellow Ferguson. "Hello," he said. "How long have I been unconscious?"

The chimp said, with embarrassment, "Well—you haven't been unconscious at all, exactly. You've been—" His voice trailed off.

"I see," said Marchand, and struggled up. He was grateful for the strength of the slope-shouldered, short-legged body he had borrowed, for this world he had come to had an uncomfortably powerful grip. The effort made him dizzy. A pale sky and thin clouds spiraled around him; he felt queer flashes of pain and pleasure, remembered tastes he had never experienced, felt joys he had never known. . . . With an effort he repressed the vestigial ape and said, "You mean I've been

—what would you call it? Unstable? The smithing didn't quite take." But he didn't need confirmation from Ferguson. He knew—and knew that the next time he slipped away would be the last. Czerny had warned him. The phospholipids, wasn't that it? It was almost time to go home. .

Off to one side, he saw men and women, human men and women, on various errands, and it made him ask: "You're still an ape?"

"I will be for a while, Dr. Marchand. My body's gone, you know."

Marchand puzzled over that for a while. His attention wandering, he caught himself licking his forearm and grooming his round belly. "No!" he shouted, and tried to stand up.

Ferguson helped him, and Marchand was grateful for the ape's strong arm. He remembered what had been bothering him. "Why?" he asked.

"Why what, Dr. Marchand?"

"Why did you come?"

Ferguson said anxiously, "I wish you'd sit down till the doctor gets here. I came because there's someone on the Tycho Brahe I wanted to see."

A girl?—thought Marchand wonderingly. "And did you see her?"

"Not her—them. Yes, I saw them. My parents. You see, I was two years old when the Tycho Brahe left. My parents were good breeding stock—volunteers were hard to get then, they tell me—oh, of course, you'd know better than I. Anyway they—I was adopted by an aunt. They left me a letter to read when I was old enough. . . . Dr. Marchand! What's the matter?"

Marchand reeled and fell; he could not help it; he knew he was a spectacle, could feel the incongruous tears rheuming out of his beast eyes, but this last and unexpected blow was too harsh. He had faced the fact of fifty thousand damaged lives and accepted guilt for them, but one abandoned baby, left to an aunt and the apology of a letter, broke his heart.

"I wonder why you don't kill me," he said.

"Dr. Marchand! I don't know what you're talking about."

"If only—" said Marchand carefully. "I don't expect any favors, but if only there were some way I could pay. But I can't. I have nothing left, not even enough life to matter. But I'm sorry, Mr. Ferguson, and that will have to do."

Ferguson said, "Dr. Marchand, if I'm not mistaken, you're saying that you apologize for the Institute." Marchand nodded. "But—oh, I'm not the one to say this, but there's no one else. Look. Let me try to make it clear. The first thing the colonists did yesterday was choose a name for the planet. The vote was unanimous. Do you know what they called it?"

Marchand only looked at him dully.

"Please listen, Dr. Marchand. They named it after the man who inspired all their lives. Their greatest hero. They named it Marchand."

Marchand stared at him, and stared longer, and then without changing expression closed his eyes. "Dr. Marchand!" said Ferguson tentatively, and then, seriously worried at last, turned and scuttled ape-like, legs and knuckles bearing him rapidly across the ground, to get the ship's doctor, who had left him with strict orders to call him as soon as the patient showed any signs of life.

When they got back, the chimp was gone. They looked at the fronded forest and at each other.

"Wandered off, I expect," said the doctor. "It may be just as well."

"But the nights are cold! He'll get pneumonia. He'll die."

"Not any more," said the doctor, as kindly as he could. "He's already dead in every way that matters."

He bent and rubbed his aching thighs, worn already from the struggle against this new Eden's gravity, then strthghtened and looked at the stars in the darkening western sky. A bright green one was another planet of Groombridge 1618's, farther out, all ice and copper salts. One of the very faintest ones, perhaps, was Sol. "He gave us these planets," said the doctor, and turned back toward the city. "Do you know what being a good man means, Ferguson? It means being better than you really are—so that even your failures carry someone a little farther to success—and that's what he did for us. I hope he heard what you were trying to tell him. I hope he remembers it when he dies," the doctor said.

"If he doesn't," said Ferguson very clearly, "the rest of us always will."

The next day they found the curled-up body.

It was the first funeral ever held on the planet, and the one that the history books describe. That is why, on the planet called Marchand, the statue at the spaceport has a small bas-relief carved over the legend:

THE FATHER OF THE STARS

The bas-relief is in the shape of a chimpanzee, curled on itself and looking out with blind, frightened eyes upon the world, for it was the chimpanzee's body that they found, and the chimpanzee's body that they buried under the monument. The bas-relief and the body, they are ape. But the statue that rises above them is a god's.