

THE REVOLT OF THE MACHINE MEN

By Charles R. Tanner

*A robot will do what he's told—but sometimes he doesn't like what you tell him.
Then he takes matters in his own metal hands—and, brother, that's the time to start running!*

There was a discreet knock on the door and Jason Critchfield looked up from his copy of *Modern Psychogenics* long enough to call, "Come in!" The door opened to admit Meadows, the butler. Meadows was about six and a half feet tall, and two and a half feet in diameter. Its glossy black sides were of a cool blue, offset with darker blue around the two big eye-lenses and the voder speaker.

It moved on caterpillar treads, tired with soft rubber, and the only things about it that looked even remotely human were the two arms that hung at its sides. Even they were obviously mechanical—the only thing recalling humanity being the fact that they were jointed like human arms and had delicate five-fingered hands.

Below Meadows' eyes were gadgets - lots of gadgets. There was a motor shaft sticking out near the bottom, and a thin wire cable on a reel. There was a drawer, and above that a built-in microphone. There were several electric plugs, marked charge, discharge and emergency house current.

Meadows rolled swiftly and silently over the rug to Jason's desk and said, in well-modulated tones, "There is a gentleman to see you, sir."

Jason hardly looked up from his magazine. "Who is it?" he grunted.

Meadows spoke again. His voice was entirely different now. It was a sharp voice, a brash and confident voice, a voice that belong to a man who was young and successful and convinced that he was go-ing places.

The voice said, "You tell him McClintock is here to see him. Richard J. Mc-Clintock. He'll know who I mean. He's expecting me."

Jason was by no means amazed at the sudden Jekyll-Hyde shift in the cultured voice of the robot. He knew that the but-ler was merely repeating with phonographic exactness the words that it had heard at the door.

Jason merely said, "Oh, McClintock. Send him in, Meadows."

The robot swung about and retired through the door, and a moment later, the caller entered.

The caller, in his appearance, lived up to the promise inherent in his voice. He was sartorially perfect in a neatly pressed and high-collared coverall of electric blue twill, with navy blue shoes and a hat of similar color that had the tiniest line of gold cording about its edge. He carried a choice swagger stick of wine-colored plastic, and, all in all, he was a perfect picture of what the well dressed man will wear, autumn, 2087.

He extended a carefully manicured hand and smiled to show a set of perfect teeth. "Richard J. McClintock, sir," he announced. "I am addressing Jason Critchfield, I presume?"

"That's right," said Jason, shortly. "You're the psychogen man, aren't you?"

"In a way, yes," the stranger said, seating himself. "Psychogens have been my particular study for some time. Al-though I could hardly call myself an ex-pert in that line of biochemistry."

"I heard different," Jason grunted. "Don't grow modest on me, Mr. McClintock. I'm a busy man, and I have no time for trade-lasts. I called you here today, because I want to talk business with you."

McClintock was a little taken aback by the older man's brusqueness. He got around it by remaining silent. Jason found that he had to speak again.

"I sent for you because I heard from several reliable sources that you're the smartest and most promising young man in this line of research. It's a line that's getting more and more important in our business and I want to offer you a job."

McClintock's heart took a jump. He had been hoping for this, but he hadn't allowed himself to hope too much, for fear of a disappointment. A job with Jason Critchfield was just about what he needed at this moment to further his own fortunes.

For Jason Critchfield was the big man in the field of applied psychomechanics. He was the president of the great Solarwide Electric Corporation; and it was well known that Solarwide had been experimenting with that branch of science for more than seven years, in the hope of producing a safe and marketable robot.

Incidentally, in all its experimenting, Solarwide had, so far, been unsuccessful. It was for this reason that Jason had sent for the all but perfect Mr. McClintock.

"Yes, I want to offer you a job," Critchfield said, after McClintock had stammered out his thanks. "I've had Paulding and Kramer and Seabright working on robot behavior patterns for years now, and I still haven't got anything I can put on the market. That Meadows is the best thing they've been able to show me."

"It seemed pretty efficient to me," said McClintock dubiously. "I was really surprised when it answered the door. I couldn't notice anything wrong with it. I'd say it was a splendid piece of machinery."

Jason grunted again. "Cost me, all told, nearly a million dollars. Just that one model ran me a hundred and twenty thousand. He ought to be good. That bunch of ignoramuses I keep had to do something to earn their pay. But I couldn't sell a contraption like Meadows. I should say not."

"May I ask why?"

"Sure. It's no secret. The damn thing isn't safe!"

Jason took out a cigarette, lit it, and, as an afterthought, offered one to the other man. He puffed it a minute, settled back in his chair, and began to pour out his troubles.

"It amounts to this here," Critchfield said. "I ship all the way to Mars to get Martian vegetation because Martian vegetation is the only thing in the system besides the human brain that grows those virus-like molecules called psychogens. I bring refined psychogens here, by the rocket-load, turn 'em over to Paulding and Kramer and Seabright to build me robot brains with, and what's the result? They work four years, and at the end of that time, they can't turn me out a robot that won't rebel!"

"Rebel!" McClintock looked at Critchfield as if he thought the older man had taken leave of his senses. "How in thunder—pardon me, sir—how in the world can a robot rebel?"

Jason wiped a modicum of perspiration from his brow. For a moment, he seemed in the grip of some powerful emotion. He looked at McClintock curiously for several seconds and then said, obviously trying to hold himself in, "Young man, I'm hiring you to tell me how to keep 'em from rebelling!"

"But—surely your experts can build whatever behavior patterns they desire into a robot. How could rebellion patterns creep in, without the desire of the designers?"

"That's what I'm hiring you to find out. I got mad at those three fellows last week and fired the lot of them. What I want you to do is to take over the big research lab I've built for them, and see if you can't give me a robot that'll do whatever he's told, without going berserk about every once in so often."

While he was speaking, a low buzzing had come from the hall outside the door, and Critchfield had had to raise his voice slightly, in order to be heard above it. Now, he looked out and noticed that Meadows, the robot, was gliding slowly back and forth over the thick-piled rug of the hallway. From beneath its glistening blue cylinder, the bottom of a vacuum cleaner was protruding. Meadows was cleaning the hall rug.

Jason called out, testily, "Shut that door, Meadows!" Meadows half turned, drew up its vacuum cleaner, glided softly to the door and took the knob in its hand. It wrenched the knob off and threw it down the hallway, slammed the door shut as hard as it could, and then walked through the closed door into the study. It was moving in a straight line, and Jason was directly in front of it.

The magnate gave a startled peep of dismay, which sounded strange coming from one of his bulk, and endeavored to get out of the machine's way. He almost succeeded—but an edge of Meadows caught his

chair in passing and overturned it. Jason and the chair went down with a crash. Meadows struck a heavy mahogany table that was a little too big for even one of its make-up—and the robot, too, went down, with another crash. It buzzed for a moment, said something that sounded like, “Tut-tut,” and then was still.

Jason arose amid sounds of fury. From out of a welter of words came the one clear repeated sentence, “See what I mean, McClintock? See what I mean?”

And McClintock saw. Without a doubt, with his own eyes, he had seen a finely built robot, one that he, himself, had pronounced pretty efficient, rebel and attack its master. All he could do was nod—he had nothing to say.

But Jason was capable of speaking for the two of them, just then.

“It’s always like that, McClintock,” he complained. “We’ve partially traced the reason for the rebellious streak. It’s always because of conflicting orders. In this case, for instance, the housekeeper had evidently ordered him to sweep the floor; and before I thought, I told him to close the door, while he was still engaged on the first job. The conflicting orders were too much for that simple brain of his. He tried to obey both orders at once and—well, you see the result.”

McClintock saw the result. It lay supine-ly before him, a hundred and twenty thousand dollars worth of valuable machinery and almost priceless chemicals. He tut-tutted softly himself.

But to Jason, this was only an illustration, a costly one and unintentional, but withal timely.

“You see, now, what Solarwide is up against? Mechanically, Meadows is just about perfect. Mentally, he was as perfect as those—those blacksmiths I fired could make him. But imagine turning out gadgets like that and offering ‘em for sale to the public! It’d be worth what my life is to do it. So I’m hiring you, because I’ve heard you’re the most promising young man in the field of psycho mechanical re-search today.”

By this time, Richard was himself again. His tremendous self confidence took possession of him and he smiled wisely at Jason’s final sentence.

“Mr. Critchfield,” he said. “I hope, and I believe, that you have come to the right man. I’ll take over the lab, and if I can’t give you results before the year’s out— I’ll quit of my own accord.”

“You’d better,” said Jason with a grim smile, and rose to show that the interview was over.

He led McClintock out into the hallway. They had almost reached the outside door when it opened, and there stepped into Mr. Richard McClintock’s life a new influence and a new aim.

Mr. McClintock had been quite unaware of the fact that old Jason Critchfield had a young and lovely daughter. But his keen, analytical mind put two and two together, and in not more than five seconds after the door opened, he had arrived at the following remarkable decision:

The person who entered was a girl, dressed in sport clothes, and she entered the house without knocking, bringing a young man with her. Therefore she was at home here, and her choice of clothes made it obvious that she was not a servant. Ergo, she was one of the family. She was beautiful, and the heiress of old Jason, more than likely; so she was a girl that any man could love. And as old Jason’s son-in-law, he could further his own ambitions tremendously.

By the time the girl had shut the door, Richard McClintock had decided that this was love at first sight.

The girl smiled when she saw Jason, and for a second stood in that uncertain, waiting manner of a person expecting to be introduced. Jason saw the point after a little while and mumbled the introduction awkwardly.

It was his daughter, her name was Ardath, and the rather innocuous appearing young man with her was a Mr. Shevlin, or something like that, McClintock nodded a curt notice to Mr. Shevlin and took Ardath’s hand in his while he told her enthusiastically how very glad he was to meet her.

He might have emphasized this to a degree just short of absurdity, if Jason had not interrupted with:

"McClintock's going to work for me, Ardie. I fired Paulding and his bunch and I'm putting McClintock in charge of the laboratory."

Ardath's eyes opened wide. "Why, Daddy, I thought they were doing so well. They made Meadows, didn't they?"

Jason's face darkened to a color that approached the one he had worn while lying on the floor in his study.

"You're darn right they made Mea-dows," he snapped. "And it's a good thing that I'd fired them before what happened just now. They got away just in time! Meadows went berserk and wrecked himself."

Ardath frowned and shook her head, commiseratingly.

"That's too bad, Daddy," she said. "That means nearly four years' work shot, doesn't it?"

"Not exactly shot," grumbled Critchfield. "At least, McClintock will know what not to make, when he takes over."

"But, Daddy— isn't it just possible that that the whole thing's impractical? After all, a thinking, reasonable robot—it almost seems like a fantastic dream. And you've spent so much money already."

"And I'll spend more, by thunder," Jason roared suddenly. "When Solarwide starts something, it finishes it! I'll spend five million—I'll spend ten million—but I'll turn out a safe, practicable robot or know the reason why."

Ardath gave a brief chuckle. She was evidently used to her father's outbursts and thought nothing of them. But Jason's temper was a little uncertain today, due to the adventure with Meadows, and he went on with his roaring.

"I've brought psychogens from Mars; I've had chemists working on viruses by the dozen; and I've given those so-called psychomechanics carte blanche and blank checks. And what have I got? After four years' work, the best damn robot they've been able to build tries to assault me! I'd give—" his voices which had dropped a little, rose again—"I'd give a half million cash to any man who gives me a saleable robot, by thunder!"

McClintock's eyes glittered.

"Ah—do you mean that seriously, Mr. Critchfield?" he asked, with a little catch in his voice.

Jason stared at him, belligerently. He hadn't meant it seriously, but no young whippersnapper was going to make him back water.

"Sure I mean it," he stated. "Anybody who turns out a robot that won't rebel gets a half million. Anybody!" he repeated as an afterthought. "I don't care if it's you, or who it is."

The hitherto silent Mr. Shevlin spoke up. His voice was diffident.

"If I could make a suggestion," he said awkwardly. "I would suggest—I was just wondering—do you suppose that a general contest among the men of Solarwide would be of any help? Some one among them might have a valuable suggestion, perhaps the very suggestion that would lead to success. Such a contest is the usual thing among the larger corporations, I believe. It is a very popular system."

Jason stared at him as though noticing his presence for the first time. He started to bluster—but the soundness of the idea appealed to him and he allowed himself to simmer down a bit.

"Might be a good idea at that," he con-ceded reluctantly. He thought a moment. "It's a good idea," he announced. "Thanks, Mr. Shevlin. I'll put it up to the Board tomorrow. If I can't hire brains, I'll have to find 'em, somehow."

Ardath, for some reason or other, was chuckling to herself again. She spoke to Shevlin now.

"Come on, Dave," she ordered. "If we're going to get in a set of tennis before supper, we'll have to get started." She kissed her father lightly on the cheek, nodded what was only a friendly goodbye to McClintock, and strode off down the hail, followed by Shevlin. McClintock looked after her, with just the proper look of respectful interest in his eyes.

"A splendid girl, your daughter," he said. "A splendid girl! I hope I shall see much more of her in the future."

"All the young fellows hope that," Jason grunted, and McClintock bit his lip, realizing that he had been a little precipitous in making that statement. He decided to take his departure before he committed another faux pas.

If Mr. McClintock could have followed unseen on the trail of Ardath and the self-effacing Mr. Shevlin, he would have witnessed a scene that would have disturbed his complacency far more than the little financial slip of the tongue which he had made.

No sooner was the door at the far end of the hail closed than Ardath flung herself into Shevlin's embrace and threw her arms about his neck.

"Dave," she cried. "You arranged that splendidly! He'll have to hold good to it. He'll have to stick to that half million proposition. It's your chance all right, isn't it?"

Dave Shevlin kissed her twice before he answered. Then he said, soberly, "It's my chance, all right, Ardath. And I've got to make good, too. After the way Paulding and the others treated me, I can't let this new man get the same opinion. I've been the office boy around the lab long enough. If I can just come forward with something in this contest, they'll have to recognize me."

"Well, don't you go and turn over your ideas to this Mr. McClintock, like you did the improvement on the Hammond-Stover batteries. You would have got credit for them, if Paulding hadn't claimed them for his own."

"Don't worry. I'll not let anything get away from me again," Shevlin assured her. "I have an aim in life now. I'd never sacrifice my chances of marrying you. Besides, a burnt child dreads fire, you know."

"That's all very well to say, but keep it in your mind."

Shevlin kissed her again for an answer, and they went on toward the tennis courts.

Richard J. McClintock was not the sort of man to let the grass grow under his feet on the path to his success. He had made this visit to Jason Critchfield's home on a Thursday; by the following Monday he had succeeded in establishing himself to his satisfaction in the office of the Superintendent of Research of the Psychogenic Division of the Solarwide Corporation.

The office and laboratory assigned to him had been refurnished to his satisfaction, and the various underlings had been informed of the proper amount of respect expected by the new boss.

He had managed to impress Jason with his earnestness and industry, at least; and, strange as it may seem, had also managed to wangle a supper invitation from the old fellow.

This, of course, was all very definitely a part of his plan for the future—for Mr. McClintock was by no way indulging in idle day dreaming when he decided that he was in love with Ardath. To further his romance, this supper engagement was obviously the next step.

Mr. McClintock was most attentive to Ardath during the evening meal, and it was with a feeling of puzzled envy that he heard the girl announce, after supper, that she had a date for the evening with Mr. Shevlin. McClintock hadn't planned it that way, and it came to him with a little shock that this Mr. Shevlin, instead of being a casual acquaintance of Ardath, might be a close friend; indeed, might even be his rival. In spite of Shevlin's colorless appearance, such a thing was not beyond the bounds of probability.

He decided that, somehow or other, he would have to remove Shevlin from this position as soon as possible. And to accomplish that, he must find out more about the fellow.

You can imagine his surprise and de-light, therefore, at the incident which oc-curred the next morning in his laboratory. He was busy, leaning over a big table tracing a performance trail on a chart of one section of the robot brain he was designing, when a voice said, respectfully, Here are the new function analyses you sent for, Mr. McClintock."

He ignored the speaker for some seconds—to impress him with the import-ance of Richard J. McClintock—and when he turned, there was Dave Shevlin, self-effacing as ever, with just the proper look of respect and deference on his face.

"Well! Shevlin!" McClintock ejaculated, with genuine delight in his voice. "Don't tell me that you work for Solar-wide, too!" He managed, even on such short notice, to get exactly the right in-flection in his tone. It meant, "This is a pleasure, to see you again," and it meant, "Isn't it nice that we two are working to-gether?" and underneath these polite amenities, there was a curious, "Say, how did a dud like you ever get a job with Solarwide?"

Shevlin muttered some pleasant inconsequentials in answer, and after a moment or two of light talk, he left. McClintock stared after him with a jumble of new ideas running through his brain.

Before evening, he had called up and asked Ardath for a date. She was already engaged for that night and the night fol-lowing, she said. He suspected that it was Shevlin who was claiming her attention, and smiled grimly. He settled for a date on the following Friday. Then, after hanging up he pushed the button which, investigation had proved, would bring Shevlin. That young man entered after a few moments and McClintock laid the first brick in the structure of his latest plan.

"Shevlin," he said, "it seems that you're about the only man this firm has that really knows how to connect up the brain to the nervous system."

Shevlin made a nervous denial of this, but McClintock interrupted him.

"Oh, I know we've got plenty of electricians, but I mean men of imagination. Men who can handle new stuff and see what it's all about. As near as I can make out, you're the best man we have for that."

Shevlin murmured a rather bashful thanks, and was about to stammer some further comment, but McClintock waved him to silence.

"I didn't just call you in here to compli-ment you," he said. "I've got work for you. New work. It'll pay you better, but it won't be easy."

He rose and led him to the drafting room, and pointed to a great blueprint that hung on the wall.

"You study that for a while, Shevlin," he ordered. "I've got an entirely new idea of performance trails there. So there are about twenty-five hundred new functions, and most of them will have to be hooked up to the nervous system in an entirely new manner. I want you to work them out for me and I want it done in time to sub-mit it in this contest the company is preparing. Do you think you can do that for me, old man?"

Shevlin seemed quite flattered at the idea of helping McClintock. "I'll certain-ly try to get it done for you, Mr. McClintock," he said. "I'll have to study those plans over a bit, but if it's humanly pos-sible, I'll work out those hook-ups for you in time."

McClintock thanked him, and after a few minutes withdrew and left Shevlin pouring over the great blue sheets. He allowed a smile to spread broadly over his face as soon as he was out of the lab.

Later that afternoon the smile became broader when he by chance overheard, on an extension phone, a conversation be-tween Shevlin and Ardath. Shevlin was breaking a date with Critchfield's daughter because, he said, he had a lot of extra work to do and wouldn't get finished until late that night.

Once again things seemed to be going according to Richard McClintock's plan.

Things continued to go according to his plan for the next couple of months. Once he was aware of Shevlin's place in the laboratory, he was able to plan an extensive campaign to keel) that young man from having too much time with Ardath. He was careful not to keep Shevlin so busy that he never saw the girl, for

he knew that absence makes the heart grow fonder. Besides, they had to have some time to quarrel about Shevlin's neglect of the girl.

But practically all of Shevlin's evenings were spent over the drafting hoards or in the construction rooms. The thing that McClintock chuckled about the most was the fact that the fellow was really helping him to design the very machine that would help McClintock win that half million dol-lars. That would make him rich enough to be able to go to Ardath Critchfield and ask her fearlessly to become his wife.

During the next few weeks, McClintock really did make some progress in his suit. Ardath liked him in a way, and with Shevlin almost out of her life, time would have hung heavy on her hands if she hadn't gone out with somebody. Richard's kindness and attentiveness impressed her, and she found herself liking him more and more. Once or twice she even accepted his kisses in an indifferent sort of way.

The contest and its stupendous prize were announced officially in due time, and to McClintock's surprise, there were several other psychogeneticists who announced their intention of trying for the prize. So complete was Mr. McClintock's conceit that he had really convinced himself that he would be the only contestant; and so complete was it that, even after he found out that there were several rivals, he didn't let it worry him. He was quite confident that none of these comparatively unknown investigators could produce anything as effective as he could.

The day of the contest came at last. It had pleased Jason Critchfield to allow the tests to be held in a big courtyard, a sort of super patio around which one of the big factories of Solarwide was built. The ground here was mostly bare, hard-packed earth, with a plot or two of badly trampled grass and a sickly looking tree or two, but its surrounding walls and its bareness were just the place to test dubiously performing robots.

Jason had no intention of being attacked by another robot, either, so he had had a sort of big wooden reviewing stand built. In this stand, he and the directors and their friends had taken seats. Jason had brought Ardath, for obviously she had quite an interest in the outcome of the contest.

To her and her suitors, seated in the stands, the yard must have looked a good deal like one of the old-time jousting fields, with the robots as the knights and old king Jason and his charming daughter waiting to award the prize to the winner.

These turned out to be only four contestants for the prize, including McClintock. Five had entered, but one of them was in the hospital. His robot hadn't waited until the contest to do its rebelling.

Of the four who were there, McClintock's robot looked by far the best. He had had all the limitless resources of Solar-wide to draw from and it was obvious that he had not needed to worry for funds or supplies. His robot glistened with plastics and shone with chromium and gold. When it was brought to its place below the platform, it moved with a dignified silence that contrasted strangely with the clinks and clatters that the other machines made. McClintock was chortling to himself and mentally patting himself on the back. He didn't see how he could lose.

He was a little puzzled by one thing, though. He had sort of expected that, somehow, Shevlin would have an entry. Whether he had unconsciously transferred the idea of rivalry in love to rivalry in business, or got the idea from something Shevlin had said, he couldn't remember—but that idea had been in his mind. Yet, now, apparently he was wrong, for none of the entries was Shevlin's. McClintock chuckled suddenly to himself. Maybe Shevlin had intended to make an entry, and had been kept too busy working on McClintock's model. If that were the case, it was a joke.

The first test was soon disposed of. The fellow was one of those "100% mechanical" cranks, who still believed a robot brain could be built from metal and plastic. His robot performed a few perfunctory acts in a mechanical, perfunctory manner and then bowed and answered a couple questions concerning its construction. It didn't rebel—it didn't do anything much. After its designer had put it through its paces, the two men whom Jason had appointed to test these machines had it stumped in half a minute. It really wasn't a robot at all; just a clever machine that could do some of the things a robot was required to do, and could do them on vocal command. It even failed to respond to its orders when they were spoken in too high a voice.

Jason ordered them to remove the thing from the testing ground, and they took it off with its owner still protesting and demanding another chance.

"You didn't see it add and subtract," he kept shouting. "Give him a chance to add and subtract!"

Jason snorted his indignation at being forced to waste his time on such nonsense, and even the other contestants had to hide their smiles as the fellow was hurried away.

The next designer displayed a robot that was far and away ahead of the mechanical, in design. This one's brain, like that of all the more successful robots that had been attempted in the last ten years, was composed of artificial nerve cells carefully built up from those giant molecules called psychogens. And McClintock had to admit, before this second test was over, that the designer knew his stuff.

The testers took it over and gave it a real workout. They had a long list of orders for it, and it went through them without a hitch. They had a long list of questions and it answered them, calmly and correctly. Then came the big test, and McClintock began to feel a little uneasy. This thing had been so efficient that he was beginning to wonder if it really did have something on the ball.

They gave it an order, and before it could complete the task, they assigned it another. It stopped, spun about plaintively for a moment. A sputter of gibberish burst from its mouth and it tore across the field, to butt against the wall of the building opposite the reviewing stand.

Twice it butted against the wall; then it reached into its drawer, took out an axe and began to chop at the wall. It seemed quite determined to keep on going in that particular direction, come hell or high water.

The designer had sprung into the re-viewing stand as soon as the thing had burst into gibberish.

Now he stood there, wringing his hands sadly and crying, "Watch out for it! Watch out!"

One of the testers walked toward it a little uncertainly, but it ignored him, even when he had come quite close. The thing had but a one-track mind by now; it was quite determined to keep going in the direction it had started even though it had to hack at those glass bricks for the next century or so.

The tester was able to get up quite close to it. He made a sudden dart forward, flung open the door in the back of the robot and jerked half a dozen wires loose from the battery within.

The robot instantly dropped the axe and became motionless, reduced to an inert mass of metal, plastic and semi-living paste.

McClintock breathed freely again. There was one more opponent eliminated. It began to look as if he had the machine that would take the half-million dollar prize, all right.

He was still surer, after the next test. This fellow was apparently another crank, although not to the extent that the first fellow was. This designer had concentrated so much on the inability of the average robot to take two orders at once that he had practically forgotten the original functions of the machine. His robot wouldn't rebel when given two conflicting orders. As a matter of fact, his robot wouldn't obey unless it was given two orders. And then it made its own choice as to which order it would obey.

So, in no time at all, it was Richard McClintock's turn.

He had been sitting in the stand with Critchfield and Ardath and the other executives. Now he vaulted over the railing gracefully, and landed lightly in the arena. He called, "Come, Adam!" and his robot glided smoothly out to him as he strode to the center of the open space.

"Now, Adam," he said. "This is the test I told you about. This is the big chance. Keep your head and don't let yourself get rattled. They're out to try to stump you, so hold yourself in, old kid. Remember, it's for the glory of Adam, the robot, and dear old Solarwide."

McClintock bowed, and Adam broke into cheers and applause. That wasn't difficult for it to do—Adam's speaker could reproduce anything that a radio speaker or a phonograph could.

When the smiles at this little touch of humor were over, McClintock began to put Adam through its paces. From the common little orders usually given to robots, McClintock went on to more unusual ones. He gave orders such as had never before been given and Adam obeyed them all, unhesitatingly.

Then he began to qualify his commands and even to countermand them. Adam continued in its unwavering obedience. Even Jason found it necessary to nod his approval.

"Now, Adam," McClintock said at last. "Let's see what we can do with duplicate orders. Don't forget what you've been told."

He was about to continue when one of the testers stepped forward.

"I believe, Mr. McClintock, that this part of the test lies more in our province," he said stiffly. McClintock nodded as stiffly, and stepped to one side, for the first time seeming a little anxious. The testers took their places and began their orders.

They ordered the robot to dig a hole. Then, before it had dug more than a shovelful or two, they ordered it to fill it up again. The robot calmly obeyed both orders.

Then they ordered it to open a small box with a rather complicated fastener, and as soon as it had started on that job, they commanded it to stretch a line between the reviewing stand and one of the trees. Adam halted as soon as he heard the second order given, and looked at its testers.

"I have been given two orders," it said. "Which one shall I obey, please?"

The group in the stands broke into a loud round of applause. Jason's eyes were glistening. He leaned over the rail and cried to McClintock delightedly, "You've done it, boy, you've done it! No robot was ever built before that could do that!"

He would have probably given the award to McClintock then and there, had not that young man been so full of confidence and faith in his own abilities.

"Just wait a while, Mr. Critchfield," he said. "I want you to see the other things it can do."

So Jason sat back, and the testers continued their work.

They gave Adam another order. Then they opposed it with an order that was the exact opposite. Adam took it in its stride. As it had the first time, it asked for a repetition of the correct order.

Again they ordered it, and again they reversed the order. This time, when Adam asked which order to obey, it clucked twice and rang a bell. McClintock looked a little uneasy. But he looked relieved when Adam unhesitatingly obeyed the order that was repeated the second time.

"You've really got something there," one of the testers told McClintock, admiringly, after the third test. "I think we'll try it once more and then mark it okay."

He turned to Adam.

"Just run over to the wall and fetch me that axe, Adam," he commanded.

His companion turned as Adam started off and—"Adam," he said, "would you please read me this market report from the morning paper?"

Adam halted in its tracks.

"I have been given two orders," it said coldly, mechanically. "I have been given two orders, too damned often! I'm fed up. If you punks can't make up your minds, I'll have to make 'cm up for you."

It started off, walked a few paces, spun around, made a noise like a train whistle and started in the direction of Richard J. McClintock. That young man stepped nimbly aside to get out of its way, but the cold glassy eyes of Adam swung after him, and the beautiful plastic form of Adam followed in the direction of its gaze.

McClintock walked faster, broke into a run, tore frantically across the yard, and, mechanically, Adam followed after. There was a tree in one corner of the yard—not a big tree, just an ailanthus about twenty feet high—but this tree seemed to Mr. McClintock to be his only salvation. He reached it and hunched up the

trunk like one of those people in a fast motion picture film. By the time Adam got there, he was already beyond the robot's reach.

Adam stretched its arms after him, saw that it was impossible to reach him, and made funny gunking noises. Out of these noises came a command.

"Come down," said Adam.

Mr. McClintock looked down and made his decision.

"No," said Mr. McClintock.

Adam didn't argue. To his robot mind, that settled it. The idea of arguing or threatening never entered its head. It turned, picked up the axe that was still lying where it had fallen, and began to chop down the tree.

The testers, like toreadors in a bull fight, had leaped lightly over the railing and into the stands at the first sign of rebellion. Now they were seated along with the other executives, commenting in-terestedly on the scene before them.

"Isn't it a splendid model?" the first was saying. "Far more complex than any of the earlier models. Quite an advance, I must say. Notice how complicated his re-bellion patterns are?"

"They are, indeed," the other admitted. "Think it'll get him?"

Before the first could reply to that, Dave Shevlin decided that it was time for him to take a hand in the proceedings. He vaulted over the railing of the stand and landed in the yard. Though he hardly exhibited the grace which Mr. McClintock had when he performed the same feat, yet Mr. McClintock himself considered him a paragon of grace and beauty as he saw him galloping across the yard to his rescue.

Dave approached the robot cautiously, for he was not exactly certain how clever the thing was. He had put a good many more wires and relays into its nervous system than any robot ever had before; but the actual construction of the brain had, of course, been left entirely to McClintock. It was there that the uncertainty lay. Shevlin knew well enough what it could do—what it would do was a mystery that, apparently, even McClintock wasn't any too sure of, how.

Shevlin managed to get within fifteen feet of the robot, when it turned and said calmly, "Don't come any nearer."

It wasn't a threat. It wasn't even a command or a warning. It seemed to be merely a sort of statement that Adam didn't want Shevlin to come any nearer. It continued to watch him, standing motionless now, and McClintock took advantage of the fact that its eyes were no longer on him, to edge down the tree a bit.

Shevlin decided to take a chance.

"Eakbray its atterybay eadslay," he called to McClintock, and hoped that the latter would remember his pig Latin. Then he took a step closer to the robot. Adam raised its axe with a threatening gesture and moved a foot toward Shevlin. The fact that it didn't rush him right then, gave Shevlin confidence. He moved a little closer.

"Don't do it," warned the robot. It was definitely a warning this time. Somewhere or other, in its brain, McClintock had evidently planted a definite reluctance toward attacking a human.

But it didn't seem too reluctant at this present moment.

McClintock had been lowering himself from the tree. Shevlin was weaving and feinting to keep the robot's eyes on him and so McClintock was able to get within a foot or so of the thing without being noticed. He suddenly reached up, jerked open the rear door and had the battery leads in his hands before Adam could turn. He gave a jerk, and Adam, axe still up-raised, was reduced to an impotent and inert complexity, no more dangerous than a turned-off radio.

McClintock was a picture of despair. He was still shaking from the scare he'd had, and if he had not been, he would have been shaking with anger at the machine that had done so much to ruin his chances. The only

consolation he had was that, at least, no one else had done any better.

His eyes had been cast down to the ground; he raised them now, as a voice came to him across the yard. Over by the stand, Dave Shevlin was standing, looking like a gladiator reciting his Morituri before Caesar.

"Mr. Critchfield," he was saying. "Be-fore we account this entire contest a failure, I wonder if you would consider a little apparatus I have designed for the improvement of these robots?"

Jason leaned forward, a little belligerently. He was irritated at the turn the recent events had taken; he had counted on McClintock doing a little better than he had.

"Of course I'll consider it," he bawled. "What do you think I'm here for? Haven't I wasted a whole half day now, considering a bunch of animated tin cans?" He sat back, grumbling. Then as an afterthought, he sat up again. "But it better be good, by thunder. It better be good."

Shevlin looked around uncertainly.

"If I might have one of the robots to work on?" he said. "One of the psychogenic ones, of course."

"Take your choice," Jason said with a wave of his hand. "Take Adam there. Solarwide money paid for him, so I guess I can do what I want with him. And if you can do anything with that subtle monster, you ought to be good."

Shevlin thanked him and walked over to the silent machine. He stepped around to the back and hooked up the power lines that connected the sensory organs, checked them, and then said, "All previous orders are countermanded, Adam. Do you understand me? All previous orders are counter-manded."

He fumbled around again for a moment or two. He was hooking up his mysterious apparatus, and as near as McClintock could see from where he was, he was hooking it up in the power lines that led to the motor nervous system.

"I'm all ready now," he called over to those in the stand. "I believe you can come down and test it again."

Shevlin might have had all the confidence in the world in his invention, but it was evident at once that the testers did not share that confidence. It took quite a little persuasion to get them across the railing, and they were none too sure of themselves when at last they did venture into the yard.

Shevlin suggested that they ask the same questions they had asked before, and as they repeated one after another without incident, they began to gain a little more confidence.

Shevlin retired to the edge of the re-viewing stand, taking up his position in just the place where McClintock had stood before. It was evident that he was trying to make this test resemble, as close-ly as possible, the preceding one.

At last they had made all the tests and given all the orders but the last one. The first tester ordered Adam to fetch the axe, and as it started off, the second called it to come back and read the paper. Then they both dashed for the railing, not turning about until they were once more up in the stand. Then they stopped and looked down.

Adam was saying, "I have been given two orders. I have been given two or-ders—guk!"

That last was a startled interjection, and as soon as it was uttered, Adam fell silent. He toiled not, neither did he spin. Adam was as dead as he had been when McClintock had disconnected his batteries.

"What happened?" asked Jason, dumb-ly. "What's the matter with him now?"

"It tried to rebel again," answered Shevlin, calmly. "With my little appli-ance there, that'll happen every time it tries it."

Jason looked at him for a moment, a new light coming into his eyes. "Did it damage him much?" he asked.

"It isn't damaged at all," answered Shevlin. "Anybody can fix him in five minutes."

"By inserting another one of your little appliances, eh?"

"Well—yes, sir."

"In the power line to the motor nervous system, eh?"

"Yes."

"Well—I'll be damned !" snorted Jason. Then he burst into laughter. "Damned if I don't give you the half million anyhow. I said I'd give a half million to anybody who could turn out a robot that couldn't rebel and I'll keep my word !"

Shevlin smiled.

"Better be careful, Mr. Critchfield," he said. "Give me a fortune and I'm liable to elope with your daughter some dark night."

Jason chuckled.

"Go ahead and do it, if you can," he challenged. "I could use a son-in-law that can see a foot or two beyond his nose."

He broke into laughter, in which everybody joined but McClintock. That brilliant young psychomechanic was still wondering what it was all about.

"But what did he do?" he cried plain-tively. "What was that apparatus he put in my robot? And why won't it work now?"

Jason was still laughing, but he paused long enough to reply.

"He put a fuse in it! Put a fuse in the power line that leads to the nervous sys-tem. As long as Adam's orders were okay, things went along fine. But when he started to rebel—well, it took too much electricity to receive an order, mentally countermand it and order his body to do something else. The power drag was too great and Adam blew his fuse."

Jason wiped the tears from his eyes.

"Of course, a fuse isn't patentable. I could use the idea without paying Shevlin a cent—but it was too good. After all the work we've done, to have our problem solved by a young man just out of college, with a half-cent thread of lead! He deserves all he gets. You must come to the wedding, McClintock."

The End