



Gallegher Plus

GALLEGHER PEERED DIMLY through the window at the place where his back yard should have been and felt his stomach dropping queasily into that ridiculous, unlikely hole gaping there in the earth. It was big, that hole. And deep. Almost deep enough to hold Gallegher's slightly colossal hangover.

But not quite. Gallegher wondered if he should look at the calendar, and then decided against it. He had a feeling that several thousand years had passed since the beginning of the bulge. Even for a man with his thirst and capacity, it had been one hell of a toot.

"Toot," Gallegher mourned, crawling toward the couch and collapsing on it. "Binge is far more expressive. Toot makes me think of fire engines and boat whistles, and I've got those in my head, anyway—all sounding off at once." He reached up weakly for the siphon of the liquor organ, hesitated, and communed briefly with his stomach.

GALLEGHER: Just a short one, maybe? STOMACH: Careful, there! GALLEGHER: A hair of the dog—STOMACH: O-O-O-OH!

GALLEGHER: Don't do that! I need a drink. My back yard's disappeared.

STOMACH: I wish I could.

At this point the door opened and a robot entered, wheels, cogs, and gadgets moving rapidly under its transparent skin plate. Gallegher took one look and closed his eyes, sweating.

"Get out of here," he snarled. "I curse the day I ever made you. I hate your revolving guts."

"You have no appreciation of beauty," said the robot in a hurt voice. "Here. I've brought you some beer."

"Hm-m-m!" Gallegher took the plastibulb from the robot's hand and drank thirstily. The cool catnip taste tingled refreshingly against the back of his throat. "A-ah," he said, sitting up. "That's a little better. Not much, but—"

"How about a thiamin shot?"

"I've become allergic to the stuff," Gallegher told his robot morosely. "I'm cursed with thirst. Hm-m-m!" He looked at the liquor organ. "Maybe—"

"There's a policeman to see you."

"A what?"

"A policeman. He's been hanging around for quite a while."





"Oh," Gallegher said. He stared into a corner by an open window. "What's that?"

It looked like a machine of some curious sort. Gallegher eyed it with puzzled interest and a touch of amazement. No doubt he had built the damned thing. That was the only way the erratic scientist ever worked. He'd had no technical training, but, for some weird reason, his subconcious mind was gifted with a touch of genius. Conscious, Gallegher was normal enough, though erratic and often drunk. But when his demon subconscious took over, anything was liable to happen. It was in one of these sprees that he had built this robot, spending weeks thereafter trying to figure out the creature's basic purpose. As it turned out, the purpose wasn't an especially useful one, but Gallegher kept the robot around, despite its maddening habit of hunting up mirrors and posturing vainly before them, admiring its metallic innards.

"I've done it again," Gallegher thought. Aloud he said, "More beer, stupid. Quick."

As the robot went out, Gallegher uncoiled his lanky body and wandered across to the machine, examining it curiously. It was not in operation. Through the open window extended some pale, limber cables as thick as his thumb; they dangled a foot or so over the edge of the pit where the back yard should have been. They ended in

—Hm-m-m! Gallegher pulled one up and peered at it. They ended' in metal-rimmed holes, and were hollow. Odd.

The machine's over-all length was approximately two yards, and it looked like an animated junk heap. Gallegher had a habit of using makeshifts. If he couldn't find the right sort of connection, he'd snatch the nearest suitable object—a buttonhook, perhaps, or a coat hanger

—and use that. Which meant that a qualitative analysis of an already-assembled machine was none too easy. What, . for example, was that fibroid duck doing wrapped around

with wires and nestling contentedly on an antique waffle iron?

"This time I've gone crazy," Gallegher pondered. "However, I'm not in trouble as usual. Where's that beer?"

The robot was before a mirror, staring fascinated at his middle. "Beer? Oh, right here. I paused to steal an admiring little glance at nfe."

Gallegher favored the robot with a foul oath, but took the plastibulb. He blinked at the gadget by the window, his long, bony face twisted in a puzzled scowl. The end product —

The ropy hollow tubes emerged from a big feed box. that had once been a wastebasket. It was sealed shut now, though a gooseneck led from it into a tiny convertible dynamo, or its equivalent. "No," Gallegher thought. "Dynamos are big, aren't they? Oh, I wish I'd had a technical training. How can I figure this out, anyway?"





There was more, much more, including a square gray metal locker — Gallegher, momentarily off the beam, tried to estimate its contents in cubic feet. He made it four hundred eighty-six, which was obviously wrong, since the box was only eighteen inches by eighteen inches.

The door of the locker was closed; Gallegher let it pass temporarily and continued his futile investigation. There were more puzzling gadgets. At the very end was a wheel, its rim grooved, diameter four inches.

"End product — what? Hey, Narcissus."

"My name is not Narcissus," the robot said reprov-

-

"It's enough to have to look at you, without trying to remember your name," Gallegher snarled. "Machines shouldn't have names, anyhow. Come over here."

"Well?"

"What is this?"

"A machine," the robot said, "but by no means as lovely as I."

"I hope it's more useful. What does it do?"

"It eats dirt."

"Oh. That explains the hole in the back yard."

"There is no back yard," the robot pointed out accurately.

"There is."

"A back yard," said the robot, quoting in a confused

manner from Thomas Wolfe, "is not only back yard but the negation of back yard. It is the meeting in Space of back yard and no back yard. A back yard is finite and un-extended dirt, a fact determined by its own denial."

"Do you know what you're talking about?" Gallegher demanded, honestly anxious to find out.

"Yes."

"I see. Well, try and keep the dirt out of your conversation. I want to know why I built this machine."





"Why ask me? I've been turned off for days—weeks, in fact."

"Oh, yeah. I remember. You were posing before the mirror and wouldn't let me shave that morning."

"It was a matter of artistic integrity. The planes of my functional face are far more coherent and dramatic than yours."

"Listen, Narcissus," Gallegher said, keeping a grip on himself. "I'm trying to find out something. Can the planes of your blasted functional brain follow that?"

"Certainly," Narcissus said coldly. "I can't help you. You turned me on again this morning and fell into a drunken slumber. Trie machine was already finished. It wasn't in operation. I cleaned house and kindly brought you beer when you woke up with your usual hangover."

"Then kindly bring me some more and shut up."

"What about the policeman?"

"Oh, I forgot him. Uh ... I'd better see the guy, I suppose."

Narcissus retreated on softly padding feet. Gallegher shivered, went to the window, and looked out at that incredible hole. Why? How? He ransacked his brain. No use, of course. His subconscious had the answer, but it was locked up there firmly. At any rate, he wouldn't have built the machine without some good reason. Or would he? His subconscious possessed a peculiar, distorted sort of logic. Narcissus had originally been intended as a super beer-can opener.

A muscular young man in a dapper uniform came in after the robot. "Mr. Gallegher?" he asked.

"Yeah."

"Mr. Galloway Gallegher?"

"The answer's still 'yeah.' What can I do for you?"

"You can accept this summons," said the cop. He gave Gallegher a folded paper.

The maze of intricate legal phraseology made little sense to Gallegher. "Who's Dell Hopper?" he asked. "I never heard of him."

"It's not my pie," the officer grunted. "I've served the summons; that's as far as I go."

He went out. Gallegher peered at the paper. It told him





little.

Finally, for lack of something better to do, he televised an attorney, got in touch with the bureau of legal records, and found the name of Hopper's lawyer, a man named Trench. A corporation lawyer at that. Trench had a battery of secretaries to take calls, but by dint of threats, curses and pleas Gallegher got through to the great man

himself.

On the telescreen Trench showed as a gray, thin, dry man with a clipped mustache. His voice was file-sharp.

"Mr. Gallegher? Yes?"

"Look," Gallegher said, "I just had a summons served on me."

"Ah, you have it, then. Good."

"What do you mean, good? I haven't the least idea what this is all about."

"Indeed," Trench said skeptically. "Perhaps I can refresh your memory. My client, who is soft-hearted, is not prosecuting you for slander, threat of bodily harm, or assault and battery. He just wants his money back— or else value received."

Gallegher closed his eyes and shuddered. "H-he does? I... ah ... did I slander him?"

"You called him," said Trench, referring to a bulky file, "a duck-footed cockroach, a foul-smelling Neander-thaler, and either a dirty cow or a dirty cao. Both are terms of opprobium. You also kicked him."

"When was this?" Gallegher whispered.

"Three days ago."

"And—you mentioned money?"

"A thousand credits, which he paid you on account."

"On account of what?"

"A commission you were to undertake for him. I was not acquainted with the exact details. In any case, you not only failed to fulfill the commission, but you refused to return the money."

"Oh. Who is Hopper, anyway?"





"Hopper Enterprises, Inc.—Dell Hopper, entrepreneur and impresario. However, I think you know all this. I

will see you in court, Mr. Gallegher. And, if you'll forgive me, I'm rather busy. I have a case to prosecute today, and I rather think the defendant will get a long prison sentence."

fWhat did he do?" Gallegher asked weakly.

"Simple case of assault and battery," Trench said. "Good-by."

His face faded from the screen. Gallegher clapped a hand to his forehead and screamed for beer. He went to his desk, sucking at the plastibulb with its built-in refrigerant, and thoughtfully examined his mail. Nothing there. No clue.

A thousand credits— He had no recollection of getting them. But the cash book might show—

lit did. Under dates of several weeks back, it said:

Rec'd D. H.—com.—on acc't—cl,000 Rec'd J. W.—com.—on acc't—c 1,500 - Rec'd Fatty—com.—on acc't—c800.

Thirty-three hundred credits! And the bank book had no record of that sum. It showed merely a withdrawal of seven hundred credits, leaving about fifteen still on hand.

Gallegher moaned and searched his desk again. Under a blotter he found an envelope he had previously overlooked. It contained stock certificates—both common and preferred—for something called Devices Unlimited. A covering letter acknowledged receipt of four thousand credits, in return for which payment stock had been issued to Mr. Galloway Gallegher, as ordered—

"Murder," Gallegher said. He gulped beer, his mind swirling. Trouble was piling up in triplicate D. H.—Dell Hopper—had paid him a thousand credits to do something or other. Someone whose initials were J. W. had given him fifteen hundred credits for a similar purpose. And Fatty, the cheapskate, had paid only eight hundred credits on account.

Why?

Only Gallegher's mad subconscious knew. That brainy personality had deftly arranged the deals, collected the dough, depleted Gallegher's personal bank account—cleaning it out—and bought stock in Devices Unlimited. Ha!

Gallegher used the televisor again. Presently he beamed his broker.

"Arnie?"

"Hi, Gallegher," Arnie said, looking up at the tele-plate over his desk. "What's up?"





"I am. At the end of a rope. Listen, did I buy some stock lately?"

"Sure. In Devices—DU."

"Then I want to sell it. I need the dough, quick."

"Wait a minute." Arnie pressed buttons. Current quotations were flashing across his wall, Gallegher knew.

"Well?"

"No soap. The bottom's dropped out. Four asked,

nothing bid."

"What did I buy at?"

"Twenty."

Gallegher emitted the howl of a wounded wolf. "Twenty? And you let me do that?"

"I tried to argue you out of it," Arnie said wearily. "Told you the stock was skidding. There's a delay in a construction deal or something—not sure just what. But you said you had inside info. What could I do?"

"You could have beaten my brains out," Gallegher said. "Well, never mind. It's too late now. Have I got any other stock?"

"A hundred shares of Martian Bonanza."

"Quoted at?"

"You could realize twenty-five credits on the whole

lot."

"What are the bugles blowin' for?" Gallegher murmured.

"Huh?"

"I'm dreadin' what I've got to watch—"

"I know," Arnie said happily. "Danny Deever."

"Yeah," Gallegher agreed. "Danny Deever. Sing it at my funeral, chum." He broke the beam.





Why, in the name of everything holy and unholy, had he bought that DU stock?

What had he promised Dell Hopper of Hopper Enterprises?

Who were J. W. (fifteen hundred credits) and Fatty

(eight hundred credits)?

Why was there a hole in place of his back yard?

What and why was that confounded machine his subconscious had built?

He pressed the directory button on the televisor, spun the dial till he located Hopper Enterprises, and called that number.

"I want to see Mr. Hopper."

"Your name?"

"Gallegher,"

"Call our lawyer, Mr. Trench."

"I did," Gallegher said. "Listen—"

"Mr. Hopper is busy."

"Tell him," Gallegher said wildly, "that I've got what he wanted."

That did it. Hopper focused in, a buffalo of a man with a mane of gray hair, intolerant jet-black eyes, and a beak of a nose. He thrust his jutting jaw toward the screen and bellowed, "Gallegher? For two pins I'd—" He changed his tune abruptly. "You called Trench, eh? I thought that'd do the trick. You know I can send you to prison, don't you?"

"Well, maybe—"

"Maybe nothing! Do you think I come personally to see every crackpot inventor who does some work for me? If I hadn't been told dver and over that you were the best man in your field, I'd have slapped an injunction on you days ago!"

Inventor?

"The fact is," Gallegher began mildly, "I've been ill—"





"In a pig's eye," Hopper said coarsely. "You were drunk as a lord. I don't pay men for drinking. Did you forget those thousand credits were only part payment— with nine thousand more to come?"

"Why . . . why, n-no. Uh . . . nine thousand?"

"Plus a bonus for quick work. You still get the bonus, luckily. It's only been a couple of weeks. But it's lucky for you you got the thing finished. I've got options on a couple of factories already. And scouts looking out for good locations, all over the country. Is it practical for small sets, Gallegher? We'll make our steady money from them, not from the big audiences."

"Tchwuk," Gallegher said. "Uh—"

"Got it there? I'm coming right down to see it."

"Wait! Maybe you'd better let me add a few touches—"

"All I want is the idea," Hopper said. "If that's satisfactory, the rest is easy. I'll call Trench and have him quash that summons. See you soon."

He blanked out.

Gallegher screamed for beer. "And a razor," he added, as Narcissus padded out of the room. "I want to cut my throat."

"Why?" the robot asked.

"Just to amuse you, ..why else? Get that beer."

Narcissus brought a plastibulb. "I don't understand why you're so upset," he remarked. "Why don't you lose yourself in rapturous contemplation of my beauty?"

"Better the razor," Gallegher said glumly. "Far better. Three clients, two of whom I can't remember at all, commissioning me to do jobs I can't remember, either. Ha!"

Narcissus ruminated. "Try induction," he suggested. "That machine-"

"What about it?"

"Well, when you get a commission, you usually drink yourself into such a state that your subconscious takes over and does the job. Then you sober up. Apparently that's what happened this tune. You made the machine, didn't you?"

"Sure," Gallegher said, "but for which client? I don't even know what it does."

"You could try it and find out."





"Oh. So I could. I'm stupid this morning."

"You're always stupid," Narcissus said. "And very ugly, too. The more I contemplate my own perfect loveliness, the more pity I feel for humans."

"Oh, shut up," Gallegher snapped, feeling the useless-ness of trying to argue with a robot. He went over to the enigmatic machine and studied it once more. Nothing clicked in his mind.

There was a switch, and he flipped it. The machine started to sing "St. James Infirmary."

"—to see my sweetie there

She was lying on a marble sla-a-ab—"

"I see it all," Gallegher said in a fit of wild frustration. "Somebody asked me to invent a phonograph."

"Wait," Narcissus pointed out. "Look at the window."

"The window. Sure. What about it? Wh—" Gallegher hung over the sill, gasping. His knees felt unhinged and weak. Still, he might have expected something like this.

The group of tubes emerging from the machine were rather incredibly telescopic. They had stretched down to the bottom of the pit, a full thirty feet, and were sweep-

ing around in erratic circles like grazing vacuum cleaners. They moved so fast Gallegher couldn't see them except as blurs. It was like watching the head of a Medusa who had contracted St. Vitus' Dance and transmitted the ailment to her snakes.

"Look at them whiz," Narcissus said contemplatively, leaning heavily on Gallegher. "I guess that's what made the hole. They eat dirt."

"Yeah," the scientist agreed, drawing back. "I wonder why. Dirt— Hm-m-m. Raw material." He peered at the machine, which was wailing:

"—can search the wide world over

And never find another sweet man like me."

"Electrical connections," Gallegher mused, cocking an inquisitive eye. "The raw dirt goes in that one-time waste-basket. Then what? Electronic bombardment? Protons, neutrons, positrons—I wish I knew what those words meant," he ended plaintively. "If only I'd had a college education!"

"A positron is—^





"Don't tell me," Gallegher pleaded. 'Til only have semantic difficulties. I know what a positron is, all right, only I don't identify it with that name. All I know is the intensional meaning. Which can't be expressed in words, anyhow."

"The extensional meaning can, though," Narcissus pointed out.

"Not with me. As Humpty Dumpty said, the question is, which is to be master. And with me it's the word. The damn things scare me. I simply don't get their extensional meanings."

"That's silly," said the robot. "Positron has a perfectly clear denotation."

"To you. All it means to me is a gang of little boys with fishtails and green whiskers. That's why I never can figure out what my subconscious has been up to. I have to use symbolic logic, and the symbols ... ah, shut up," Gallegher growled. "Why should I argue about semantics with you, anyhow?"

"You started it," Narcissus said.

Gallegher glared at the robot and then went back to the cryptic machine. It was still eating dirt and playing "St. James Infirmary."

"Why should it sing that, I wonder?"

"You usually sing it when you're drunk, don't you? Preferably in a barroom."

"That solves nothing," Gallegher said shortly. He explored the machine. It was in smooth, rapid operation, emitting a certain amount of heat, and something was smoking. Gallegher found a lubricating valve, seized an oil can, and squirted. The' smoke vanished, as well as a faint smell of burning.

"Nothing comes out," Gallegher said, after a long pause of baffled consideration.

"There?" The robot pointed.

Gallegher examined the grooved wheel that was turning rapidly. Just above it was a small circular aperture in the smooth hide of a cylindrical tube. Nothing seemed to be coming out of that hole, however.

"Turn the switch off," Gallegher said. Narcissus obeyed. The valve snapped shut and the grooved wheel stopped turning. Other activity ceased instantly. The music died. The tentacles stretched out the window stopped whirling and shortened to their normal inactive length.

"Well, there's apparently no end product," Gallegher remarked. "It eats dirt and digests it completely. Ridiculous."





"Is it?"

"Sure. Dirt's got elements in it. Oxygen, nitrogen—there's granite under New York, so there's aluminum, sodium, silicon—lots of things. No sort of physical or chemical change could explain this."

"You mean something ought to come out of the machine?"

"Yes," Gallegher said. "In a word, exactly. I'd feel a lot better if something did. Even mud."

"Music comes out of it," Narcissus pointed out. "If you can truthfully call that squalling music."

"By no stretch of my imagination can I bring myself to consider that loathsome thought," the scientist denied firmly. "I'll admit my subconscious is slightly nuts. But it's got logic, in a mad sort of way. It wouldn't build a machine to convert dirt into music, even if such a thing's possible."

"But it doesn't do anything else, does it?"

"No. Ah. Hm-m-m. I wonder what Hopper asked me to make for him. He kept talking about factories and audiences."

"He'll be here soon," Narcissus said. "Ask him."

Gallegher didn't bother to reply. He thought of demanding more beer, rejected the idea, and instead used the liquor organ to mix himself a pick-me-up of several liqueurs. After that he went and sat on a generator which bore the conspicuous 'label of Monstro. Apparently dissatisfied, he changed his seat to a smaller generator named Bubbles.

Gallegher always thought better atop Bubbles.

The pick-me-up had oiled his brain, fuzzy with alcohol fumes. A machine without an end product—dirt vanishing into nothingness. Hm-m-m. Matter cannot disappear like a rabbit popping into a magician's hat. It's got to go somewhere. Energy?

Apparently not. The machine didn't manufacture energy. The cords and sockets showed that, on the contrary, it made use of electric power to operate.

And so-

What?

Try it from another angle. Gallegher's subconscious, Gallegher Plus, had built the device for some logical reason. The reason was supplied by his profit of thirty-three hundred





credits. He'd been paid that sum, by three different people, to make—maybe—three different things.

Which of them fitted the machine?

Look at it as an equation. Call clients a, b, and c. Call the purpose of the machine—not the machine itself, of course—x. Then a (or) b (or) c equals x.

Not quite. The term a wouldn't represent Dell Hopper; it would symbolize what he wanted. And what he wanted must necessarily and logically be the purpose of the machine.

Or the mysterious J. W., or the equally mysterious Fatty.

Well, Fatty was a shade less enigmatic. Gallegher had a clue, for what it was worth. If J. W. was represented by b, Fatty would be c plus adipose tissue. Call adipose tissue t, and what did you get?

Thirsty.

Gallegher had more beer, distracting Narcissus from his posturing before the mirror. He drummed his heels against Bubbles, scowling, a lock of dark hair falling lankly over his eyes.

Prison?

Uh! No, there must be some other answer, somewhere. The DU stock, for example. Why had Gallegher Plus bought four thousand credits' worth of the stuff when it was on the skids?

If he could find the answer to that, it might help. For Gallegher Plus did nothing without purpose. What was Devices Unlimited, anyway?

He tried the televisqr Who's Who in Manhattan. Luckily Devices was corporated within the State and had business offices here. A full-page ad flipped into view.

DEVICES UNLIMITED

WE DO EVERYTHING!

RED 5-1400-M

Well, Gallegher had the firm's 'visor number, which was something. As he began to call RED, a buzzer murmured, and Narcissus turned petulantly from the mirror and went off to answer the door. He returned in a moment with the bisonlike Mr. Hopper.

"Sorry to be so long," Hopper rumbled. "My chauffeur went through a light, and a cop stopped us. I had to bawl the very devil out of him."





"The chauffeur?"

"The cop. Now where's the stuff?"

Gallegher licked, his lips. Had Gallegher Plus actually kicked this mountainous guy in the pants? It was not a thought to dwell upon.

He pointed toward the window. "There." Was he right? Had Hopper ordered a machine that ate dirt?

The big man's eyes widened in surprise. He gave Gallegher a swift, wondering look, and then moved toward the device, inspecting it from all angles. He glanced out the window, but didn't seem much interested in what he saw there. Instead, he turned back to Gallegher with a puzzled scowl.

"You mean this? A totally new principle, is it? But then it must be."

No clue there. Gallegher tried a feeble smile. Hopper just looked at him.

"All right," he said. "What's the practical application?"

Gallegher groped wildly. "I'd better show you," he said at last, crossing the lab and flipping the switch. Instantly the machine started to sing "St. James Infirmary." The

tentacles lengthened and began to eat dirt. The hole in the cylinder opened. The grooved wheel began to revolve.

Hopper waited.

After a tune he said, "Well?"

"You—don't like it?"

"How should I know? I don't even know what it does. Isn't there any screen?"

"Sure," Gallegher said, completely at a loss. "It's inside that cylinder."

"In—what?" Hopper's shaggy brows drew down over his jet-black eyes. "Inside that cylinder?"

"Uh-huh."

"For—" Hopper seemed to be choking. "What good is it there? Without X-ray eyes, anyhow?"





"Should it have X-ray eyes?" Gallegher muttered, dizzy with bafflement. "You wanted a screen with X-ray eyes?"

"You're still drunk!" Hopper snarled. "Or else you're crazy!"

"Wait a minute. Maybe I've made a mistake—"

"A mistake!"

"Tell me one thing. Just what did you ask me to do?"

Hopper took three deep breaths. In a cold, precise voice he said, "I asked you if you could devise a method of projecting three-dimensional images that could be viewed from any angle, front, back or side, without distortion. You said yes. I paid you a thousand credits on account. I've taken options on a couple of factories so I could begin manufacturing without delay. I've had scouts out looking for likely theaters. I'm planning a campaign for selling the attachments to home televisors. And now, Mr. Gallegher, I'm going out and see my attorney and tell him to put the screws on."

He went out, snorting. The robot gently closed the 'door, came back, and, without being asked, hurried after beer. Gallegher waved it away.

"I'll use the organ," he moaned, mixing himself a stiff one. "Turn that blasted machine off, Narcissus. I haven't the strength."

"Well, you've found out one thing," the robot said encouragingly. "You didn't build the device for Hopper." "True. I made it for ... ah ... either J. W. or Fatty. How can I find out who they are?"

"You need a rest," the robot said. "Why not simply relax and listen to my lovely melodious voice? I'll read to

vou "

"It's not melodious," Gallegher said automatically and absently. "It squeaks like a rusty hinge."

"To your ears. My senses are different. To me, your voice is the croaking of an asthmatic frog. You can't see me as I do, any more than you can hear me as I hear myself. Which is just as well. You'd swoon with ecstasy."

"Narcissus," Gallegher said patiently, "I'm trying to think. Will you kindly shut your metallic trap?"

"My name isn't Narcissus," said the robot. "It's Joe."

"Then I'm changing it. Let's see. I was checking up on DU. What was that number?"





"Red five fourteen hundred M."

"Oh, yeah." Gallegher used the televisor. A secretary was willing but unable to give much useful information.

Devices Unlimited was the name of a holding company, of a sort. It had connections all over the world. When a client wanted a job done, DU, through its agents, got in touch with the right person and finagled the deal. The trick was that DU supplied the money, financing operations and working on a percentage basis. It sounded fantastically intricate, and Gallegher was left in the dark.

"Any record of my name in your files? Oh— Well, can you tell me who J. W. is?"

"J. W.? I'm sorry, sir. I'll need the full name—"

"I don't have it. And this is important." Gallegher argued. At last he got his way. The only DU man whose initials were J. W. was someone named Jackson Wardell, who was on Callisto at the moment.

"How long has he been there?"

"He was born there," said the secretary unhelpfully. "He's never been to Earth in his life. I'm sure Mr. War-dell can't be your man."

Gallegher agreed. There was no use asking for Fatty, he decided, and broke the beam with a faint sigh. Well, what now?

The visor shrilled. On the screen appeared the face of a plump-cheeked, bald, pudgy man who was frowning worriedly. He broke into a relieved chuckle at sight of the scientist.

"Oh, there you are, Mr. Gallegher," he said. "I've been trying to reach you for an hour. Something's wrong with the beam. My goodness, I thought I'd certainly hear from you before this!"

Gallegher's heart stumbled. Fatty—of course!

Thank God, the luck was beginning to turn! Fatty— eight hundred credits. On account. On account of what? The machine? Was it the solution to Fatty's problem, or to J. W.'s? Gallegher prayed with brief fervency that Fatty had requested a device that ate dirt and sang "St. James Infirmary."

The image blurred and flickered, with a faint crackling. Fatty said hurriedly, "Something's wrong with the line. But—did you do it, Mr. Gallegher? Did you find a method?

"Sure," Gallegher said. If he could lead the man on, gain some hint of what he had ordered—





"Oh, wonderful! DU's been calling me for days. I've been putting them off, but they won't wait forever. Cuff's bearing down hard, and I can't get around that old statute—"

The screen went dead.

Gallegher almost bit off his tongue in impotent fury. Hastily he closed the circuit and began striding around the lab, his nerves tense with expectation. In a second the visor would ring. Fatty would call back. Naturally. And this time the first question Gallegher would ask would be, "Who are you?" ^

Time passed.

Gallegher groaned and checked back, asking the operator to trace the call.

"I'm sorry, sir. It was made from a dial visor. We cannot trace cafls made from a dial visor."

Ten minutes later Gallegher stopped cursing, seized his hat from its perch atop an iron dog that had once decorated a lawn, and whirled to the door. "I'm going out," he snapped to Narcissus. "Keep an eye on that machine."

"All right. One eye." The robot agreed. "Ill need the other to watch my beautiful insides. Why don't you find out who Cuff is?"

"What?"

"Cuff. Fatty mentioned somebody by that name. He said he was bearing down hard—"

"Check! He did, at that. And—what was it?—he said he couldn't get around an old statue—"

"Statute. It means a law."

"I know what statute means," Gallegher growled. "I'm not exactly a driveling idiot. Not yet, anyhow. Cuff, eh? I'll try the visor again."

There were six Cuffs listed. Gallegher eliminated half of them by gender. He crossed off Cuff-Linx Mfg. Co., which

left two—Max and Fredk. He televised Frederick, getting a pop-eyed, scrawny youth who was obviously not yet old enough to vote. Gallegher gave the lad a murderous glare of frustration and nipped the switch, leaving Frederick to spend the next half-hour wondering who had called him, grimaced like a demon, and blanked out without a word.

But Max Cuff remained, and that, certainly, was the man. Gallaegher felt sure of it when Max Cuff's butler transferred the call to a downtown office, where a receptionist said that Mr. Cuff was spending the afternoon at the Uplift Social Club.





"That so? Say, who is Cuff, anyhow?"

"I beg your pardon?"

"What's his noise? His business, I mean?"

"Mr. Cuff has no business," the girl said frigidly. "He's an alderman."

That was interesting. Gallegher looked for his hat, found it on his head, and took leave of the robot, who did not trouble to answer. "If Fatty calls up again," the scientist commanded, "get his name. See? And keep your eye on that machine, just in case it starts having mutations or something."

That seemed to tie up all the loose ends. Gallegher let himself out of the house. A cool autumn wind was blowing, scattering crisp leaves from the overhead parkways. A few taxiplanes drifted past, but Gallegher hailed a street cab; he wanted to see where he was going. Somehow he felt that a telecall to Max Cuff would produce little of value. The man would require deft handling, especially since he was "bearing down hard."

"Where to, bud?"

"Uplift Social Club. Know where it is?"

"Nope," said the driver, "but I can find out." He used his teledirectory on the dashboard. "Downtown. 'Way down."

"O. K.," Gallegher told the man, and dropped back on the cushions, brooding darkly. Why was everybody so elusive? His clients weren't usually ghosts. But Fatty remained vague and nameless—a face, that was all, and one Gallegher hadn't recognized. Who J. W. was anyone might guess. Only Dell Hopper had put in an appearance, and Gallegher wished he hadn't. The summons rustled in his pocket.

"What I need," Gallegher soliloquized, "is a drink. That was the whole trouble. I didn't stay drunk. Not long enough, anyhow. Oh, damn."

Presently the taxi stopped at what had once been a glass-brick mansion, now grimy and forlorn-looking. Gallegher got out, paid the driver, and went up the ramp. A small placard said Uplift Social Club. Since there was no buzzer, he opened the door and went in.

Instantly his nostrils twitched like the muzzle of a war horse scenting cordite. There was drinking going on. With the instinct of a homing pigeon, Gallegher went directly to the bar, set up against one wall of a huge room filled with chairs, tables, and people. A sadlooking man with a derby was playing a pin-ball machine in a corner. He looked up as Gallegher approached, lurched into his path, and murmured, "Loolding for somebody?"

"Yeah," Gallegher said. "Max Cuff. They told me he was here."





"Not now," said the sad man. "What do you want with him?"

"It's about Fatty," Gallegher hazarded.

Cold eyes regardedPhim. "Who?"

"You wouldn't know him. But Max would."

"Max want to see you?"

"Sure."

"Well," the man said doubtfully, "he's down at the Three-Star on a pub-crawl. When he starts that—"

"The Three-Star? Where is it?"

"Fourteenth near Broad."

"Thanks," Gallegher said. He went out, with a longing look at the bar. Not now—not yet. There was business to attend to first.

The Three-Star was a gin mill, with dirty pictures on the walls. They moved in a stereoscopic and mildly appalling manner. Gallegher, after a thoughtful examination, looked the customers over. There weren't many. A huge man at one end of the bar attracted his attention because of the gardenia in his lapel and the flashy diamond on his ring ringer.

Gallegher went toward him. "Mr. Cuff?"

"Right," said the big man, turning slowly on the bar-stool like Jupiter revolving on its axis. He eyed Gallegher, librating slightly. "Who're you?"

"I'm-"

"Never mind," said Cuff, winking. "Never give your right name after you've pulled a job. So you're on the lam, eh?"

"What?"

"I can spot 'em as far away as I can see 'em. You you . . . hey!" Cuff said, bending forward and sniffing. "You been drinking!"

"Drinking," Galleghef said bitterly. "It's an understatement."





"Then have a drink with me," the big man invited. "I'm up to E now. Egg flip. Tun!" he roared. " 'Nother egg flip for my pal here! Step it up! And get busy with

F."

Gallegher slid onto the stool beside Cuff and watched his companion speculatively. The alderman seemed a little tight.

"Yes," Cuff said, "alphabetical drinking's the only way to do it. You start with A—absinthe—and then work along, brandy, cointreau, daiquiri, egg flip—" "Then what?"

"F, of course," Cuff said, mildly surprised. "Flip. Here's yours. Good lubrication!"

They drank. "Listen," Gallegher said, "I want to see you about Fatty."

"Who's he?"

"Fatty," Gallegher explained, winking significantly. "You know. You've been bearing down lately. The statute. You know."

"Oh! Him!" Cuff suddenly roared with Gargantuan laughter. "Fatty, huh? That's good. That's very good. Fatty's a good name for him, all right."

"Not much like his own, is it?" Gallegher said cunningly.

"Not a bit. Fatty!"

"Does he spell his name with an e or an i?"

"Both," Cuff said. "Tim, where's the flip? Oh, you got it ready, huh? Well, good lubrication, pal."

Gallegher finished his egg flip and went to work on the flip, which was identical except for the name. What now?

"About Fatty," he hazarded.

"Yeah?"

"How's everything going?"

"I never answer questions," Cuff said, abruptly sobering. He looked sharply at Gallegher. "You one of the boys? I don't know you."

"Pittsburgh. They told me to come to the club when I got in town."





"That doesn't make sense," Cuff said. "Oh, well. It doesn't matter. I just cleaned up some loose ends, and I'm celebrating. Through with your flip? Tun! Gin!"

They had gin for G, a horse's neck for H, and an eye-opener for I. "Now a Jazzbo," Cuff said with satisfaction. "This is the only bar hi town that has a drink beginning with J. After that I have to start skipping. I dunno any K drinks."

"Kirchwasser," Gallegher said absently.

"K—huh? What's that?" Cuff bellowed at the bartender. "Tun! You g<n any kirchwasser?"

"Nope," said the man. "We don't carry it, Alderman."

"Then we'll find somebody who does. You're a smart guy, pal. Come along with me. I need you."

Gallegher went obediently. Since Cuff didn't want to talk about Fatty, it behooved him to win the alderman's confidence. And the best way to do that was to drink with him. Unfortunately \$n alphabetical pub-crawl, with its fantastic mixtures, proved none too easy. Gallegher already had a hangover. And Cuff's thirst was insatiable.

"L? What's L?"

"Lachrymae Christi. Or Liebfraumilch."

"Oh, boy!"

It was a relief to get back to a Martini. After the Orange Blossom Gallegher began to feel dizzy. For R lie suggested root beer, but Cuff would have none of that.

"Well, rice wine."

"Yeah. Rice—hey! We missed N! We gotta start over now from A!"

Gallegher dissuaded the alderman with some trouble, ^and succeeded only after fascinating Cuff with the exotic name ng ga po. They worked on, through sazeracs, tailspins, undergrounds, and vodka. W meant whiskey.

"X?"

They looked at each other through alcoholic fogs. Gallegher shrugged and stared around. How had they got into this swanky, well-furnished private clubroom, he wondered. It wasn't the Uplift, that was certain. Oh, well—

"X?" Cuff insisted. "Don't fail me now, pal."

"Extra whiskey," Gallegher said brilliantly;





"That's it. Only two left. Y and . . . and—what comes after Y?"

"Fatty. Remember?"

"Ol' Fatty Smith," Cuff said, beginning to laugh immoderately. At least,' it sounded like Smith. "Fatty just suits him."

"What's his first name?" Gallegher asked.

"Who?" ^ '

"Fatty."

"Never heard of him," Cuff said, and chuckled. A page boy came over and touched the alderman's arm.

"Someone to see you, sir. They're waiting outside."

"Right. Back hi a minute, pal. Everybody always knows where to find me—'specially here. Don't go 'way. There's still Y and . . . and the other one."

He vanished. Gallegher put down his untasted drink, stood up, swaying slightly, and headed for the lounge. A televisor booth there caught his eye, and, on impulse, he went in and vised his lab.

"Drunk again," said Narcissus, as the robot's face appeared on the screen.

"You said it," Gallegher agreed. "I'm . . . urp . . . high as a kite. But I got a clue, anyway."

"I'd advise you to get a police escort," the robot said. "Some thugs broke in looking for you, right after you left."

"S-s-some what? Say that again."

"Three thugs," Narcissus repeated patiently. "The leader was a thin, tall man hi a checkered suit with yellow hair and a gold front tooth. The others—"

"I don't want a description," Gallegher snarled. "Just tell me what happened?"

"Well, that's all. They wanted to kidnap you. Then they tried to steal the machine. I chased them out. For a robot, I'm pretty tough."

"Did they hurt the machine?"

"What about me?" Narcissus demanded plaintively. "I'm much more important than that gadget. Have you no curiosity about my wounds?"





"No," Gallegher said. "Have you some?"

"Of course not. But you could have demonstrated some slight curiosity—"

"Did they hurt that machine?"

"I didn't let them get near it," the robot said. "And the hell with you."

"I'll ring you back," Gallegher said. "Right now I need black coffee."

He beamed off, stood up, and wavered out of the booth. Max Cuff was coming toward him. There were three men following the alderman.

One of them stopped short, his jaw dropping. "Cripes!" he said. "That's the guy, boss. That's Gallegher. Is he the one you been drinking with?"

Gallegher tried to focus his eyes. The man swam into clarity. He was a tall, thin chap hi a checkered suit, and he had yellow hair and a gold front tooth.

"Conk him," Cuff said. "Quick, before he yells. And before anybody else comes in here. Gallegher, huh? Smart guy, huh?"

Gallegher saw something coming at his head, and tried to leap back into the visor booth like a snail retreating into its shell. He failed. Spinning flashes of glaring light dazzled him.

He was conked.

The trouble with this social culture, Gallegher thought dreamily, was that it was suffering both from overgrowth and calcification of the exoderm. A civilization may be likened to a flowerbed. Each individual plant stands for a component part of the culture. Growth is progress. Technology, that long-frustrated daffodil, had had B1 concentrate poured on its roots, the result of wars that forced its growth through sheer necessity. But no world is satisfactory unless the parts are equal to the whole.

The daffodil shaded another plant that developed parasitic tendencies. It stopped using its roots. It wound itself around the daffodil, climbing up on its stem and stalks and leaves, and that strangling liana was religion, politics, economics, culture—outmoded forms that changed too slowly, outstripped by the blazing comet of the sciences, riding high in the unlocked skies of this new era. Long ago writers had theorized that in the future—their future—the sociological pattern would be different. In the day of rocketships such illogical mores as watered stock, dirty politics, and gangsters would not exist. But those theorists had not seen clearly enough. They thought of rocketships as vehicles of the far distant future.

Ley landed on the moon before automobiles stopped using carburetors.





The great warfare of the early twentieth century gave a violent impetus to technology, and that growth continued. Unfortunately most of the business of living was based on such matters as man hours and monetary fixed standards. The only parallel was the day of the great bubbles—the Mississippi Bubble and its brothers. It was, finally, a time of chaos, - reorganization, shifting precariously from old standards to new, and a seesaw bouncing vigorously from one extreme to the other. The legal profession had become so complicated that batteries of experts needed Pedersen Calculators and the brain machines of Mechanistra to marshal their farfetched arguments, which went wildly into uncharted realms of symbolic logic and—eventually—pure nonsense. A murderer could get off scotfree provided he didn't sign a confession. And even if he did, there were ways of discrediting soild, legal proof. Precedents were shibboleths. In that maze of madness, administrators turned to historical so-lidities—legal precedents—and these were often twisted against them.

Thus it went, all down the line. Later sociology would catch up with technology. It hadn't, just yet. Economic gambling had reached a pitch never before attained in the history of the world. Geniuses were needed to straighten out the mess. Mutations eventually provided such geniuses, by natural compensation; but a long time was to pass until that satisfactory conclusion had been reached. The man with the best chance for survival, Gallegher had realized by now, was one with a good deal of adaptability and a first-class all-around stock of practical and impractical knowledge, versed in practically everything. In short, in matters vegetable, animal or mineral—

Gallegher opened his eyes. There was little to see, chiefly because, as he immediately discovered, he was slumped face down at a table. With an effort Gallegher sat up. He was unbound, and in a dimly lighted attic that seemed to be a storeroom; it was littered with broken-down junk. A fluorescent burned faintly on the ceiling. There was a door, but the man with the gold tooth was standing before it. Across the table sat Max Cuff, carefully pouring whiskey into a glass.

"I want some," Gallegher said feebly.

Cuff looked at him. "Awake, huh? Sorry Blazer socked you so hard."

"Oh, well. I might have passed out anyway. Those alphabetical pub-crawls are really something."

"Heigh-ho," Cuff said, pushing the glass toward Gallegher and rilling another for himself. "That's the way it goes. It was smart of you to stick with me—the one place the boys wouldn't think of looking."

"I'm naturally clever," Gallegher said modestly. The whiskey revived him. But his mind still felt foggy. "Your ... uh ... associates, 'by which I mean lousy thugs, tried to kidnap me earlier, didn't they?"

"Uh-huh. You weren't in. That robot of yours-"





"He's a beaut."

"Yeah. Look, Blazer told me about the machine you had set up. I'd hate to have Smith get his hands on it."

Smith—Fatty. Hm-m-m. The jigsaw was dislocated again. Gallegher sighed.

If he played the cards close to his chest—

"Smith hasn't seen it yet."

"I know that," Cuff said. "We've been tapping his visor beam. One of our spies found out he'd told DU he had a man working ^n the job—you know? Only he didn't mention the man's name. All we could do was shadow Smith and tap his visor till he got in touch with you. After that—well, we caught the conversation. You told Smith you'd got the gadget."

"Well?"

"We cut in on the beam, fast, and Blazer and the boys went down to see you. I told you I didn't want Smith to keep that contract."

"You never mentioned a contract," Gallegher said.

"Don't play dumb. Smith told 'em, up at DU, that he'd laid the whole case before you."

Maybe Smith had. Only Gallegher had been drunk at the tune, and it was Gallegher Plus who had listened, storing the information securely in the subconscious. "So?"

Cuff burped. He pushed his glass away suddenly. "I'll see you later. I'm tight, damn it. Can't think straight. But—I don't want Smith to get that machine. Your robot won't let us get near it. You'll get in touch with him by visor and send him off somewhere, so the boys can pick up your gadget. Say yes or no. If it's no, I'll be back." "No," Gallegher said. "On account of you'd kill me anyway, to stop me from building another machine for Smith."

Cuffs lids drew down slowly over his eyes. He sat motionless, seemingly asleep, for a time. Then he looked at Gallegher blankly and stood up.

"I'll see you later, then." He rubbed a hand across his forehead; his voice was a little thick. "Blazer, keep the lug here."

The man with the .gold tooth came forward. "You O. K.?" *

"Yeah. I can't think—" Cuff grimaced. "Turkish bath. That's what I need." He went toward the door, pulling Blazer with him. Gallegher saw the alderman's lips move. He read a few words.

"—drunk enough . . . vise that robot ... try it—"





Then Cuff went out. Blazer came back, sat opposite Gallegher, and shoved the bottle toward him. "Might as well take it easy," he suggested. "Have another; you need it."

Gallegher thought: Smart guys. They figure if I get stinko, I'll do what they want. Well-

There was another angle. When Gallegher was thoroughly under the influence of alcohol, his subconscious took over/ And Gallegher Plus was a scientific genius— mad, but good. "

Gallegher Plus might be able to figure a way out of this.

"That's it," Blazer said, watching the liquor vanish. "Have another. Max is a good egg. He wouldn't put the bee on you. He just can't stand people helixing up his plans."

"What plans?"

"Like with Smith," Blazer explained.

"I see." Gallegher's limbs were tingling. Pretty soon he should be sufficiently saturated with alcohol to unleash his subconscious. He kept drinking.

Perhaps he tried too hard. Usually Gallegher mixed his liquor judiciously. This time, the factors of the equation added up to a depressing zero. He saw the surface of the table moving slowly toward his nose, felt a mild, rather pleasant bump, and began to snore. Blazer got up and shook him.

"One half so precious as the stuff they sell," Gallegher said thickly. "High-piping Pehlevi, with wine, wine, wine, wine. Red wine."

"Wine he wants," Blazer said. "The guy's a human

blotter." He shook Gallegher again, but there was no response. Blazer grunted, and his footsteps sounded, growing fainter.

Gallegher heard the door close. He tried to sit up, slid off the chair, and banged his head agonizingly against a table leg.

It was more effective than cold water. Wavering, Gallegher crawled to his feet. The attic room was empty except for himself and other jetsam. He walked with abnormal carefulness to the door and tried it. Locked. Reinforced with steel, at that.

"Fine stuff," Gallegher murmured. "The one time I need my subconscious, it stays buried. How the devil can I get out of here?"

There was no way. Tlie room had no windows, and the door was firm. Gallegher floated toward the piles of junk. An old sofa. A box of scraps. Pillows. A rolled carpet. Junk.





Gallegher found a length of wire, a bit of mica, a twisted spiral of plastic, once part of a mobile statuette, and some other trivia. He put them together. The result was a thing vaguely resembling a gun, though it had some resemblance to an egg beater. It looked as weird as a Martian's doodling.

After that, Gallegher returned to the chair and sat down, trying, by sheer will power, to sober up. He didn't succeed too well. When he heard footsteps returning, his mind was still fuzzy.

The door opened. Blazer came in, with a swift, wary glance at Gallegher, who had hidden the gadget under the table.

"Back, are you? I thought it might be Max."

"He'll be along, too," Blazer said. "How d'you feel?"

"Woozy. I could use another drink. I've finished this bottle." Gallegher had finished it. He had poured it down a rat hole.

Blazer locked the door and came forward as Gallegher stood up. The scientist missed his balance, lurched forward, and Blazer hesitated. Gallegher brought out the crazy egg-beater gun and snapped it up to eye level, squinting along its barrel at Blazer's face.

The 3iug went for something, either his gun or his sap. But the eerie contrivance Gallegher had leveled at him worried Blazer. His motion was arrested abruptly. He was wondering what menace confronted him. In an-

other second he would act, one way or another—perhaps continuing that arrested smooth motion toward his belt.

Gallegher did not wait. Blazer's stare was on the gadget. With utter disregard for the Queensbury Rules, Gallegher kicked his opponent below the belt. As Blazer folded up, Gallegher followed his advantage by hurling himself headlong on the .thug and bearing him down in a wild, octopuslike thrashing of lanky limbs. Blazer kept trying to reach his weapon, but that first foul blow had handicapped him.

Gallegher was still too drunk to co-ordinate properly. He compromised by crawling atop his enemy and beating the man repeatedly on the solar plexus. Such tactics proved effective. After a time, Gallegher was able to wrench the sap from Blazer's grasp and lay it firmly along the thug's temple.

That was that

With a glance at the gadget, Gallegher arose, wondering what Blazer had thought it was. A death-ray projector, perhaps. Gallegher grinned faintly. He found the door key in his unconscious victim's pocket, let himself out of the attic, and warily descended a stairway. So far, so good.





A reputation for scientific achievements has its advantages. It had, at least, served the purpose of distracting Blazer's attention from the obvious.

What now?

The house was a three-story, empty structure near the Battery. Gallegher escaped through a window. He did not pause till he was in an airtaxi, speeding uptown. There, breathing deeply, he flipped the wind filter and let the cool night breeze cool his perspiring cheeks. A full moon rode high in the black autumn sky. Below, through the earth-view transparent panel, he could see the brilliant ribbons of streets, with slashing bright diagonals marking the upper level speedways.

Smith. Fatty Smith. Connected with DU, somehow—

With an access of caution, he paid off the pilot and stepped out on a rooftop landing in the White Way district. There were televisor booths here, and Gallegher called his lab. The robot answered.

"Narcissus-"

"Joe," the robot corrected. "And you've been drinking some more. Why don't you sober up?

"Shut up and listen. What's been happening?"

"Not much."

"Those thugs. Did they come back?"

"No," Narcissus said, "but some officers came to arrest you. Remember that summons they served you with today? You should have appeared in court at 5 P.M."

Summons. Oh, yeah. Dell Hopper—one thousand credits.

"Are they there now?"

"No. I said you'd taken a powder."

'Why?" asked Gallegher.

"So they wouldn't hang around. Now you can come home whenever you like—if you take reasonable precautions."

"Such as what?"

"That's your problem," Narcissus said. "Get a false beard. I've done my share."





Gallegher said, "All right, make a lot of black coffee. Any other calls?"

"One from Washington. A commander in the space police unit. He didn' give his name."

"Space police! Are they after me, too? What did he want?"

"You," the robot said. "Good-by. You interrupted a lovely song I was singing to myself."

"Make that coffee," Gallegher ordered as the image faded. He stepped out of the booth and stood for a moment, considering, while he stared blankly at the towers of Manhattan rising around him, with their irregular patterns of lighted windows, square, oval, circular, crescent, or star-shaped.

A call from Washington.

Hopper cracking down.

Max Cuff and his thugs.

Fatty Smith.

Smith was the best bet. He tried the visor again, calling DU.

"Sorry, we have closed for the day."

"This is important," Gallegher insisted. "I need some information. I've got to get in touch with a man—"

"I'm sorry."

"S-m-i-t-h," Gallegher spelled. "Just look him up in the file or something, won't you? Or do you want me to cut my throat while you watch?" He fumbled in his pocket.

"If you will call tomorrow—"

"That'll be too late. Can't you just look it up for me? Please. Double please."

"Sorry."

"I'm a stockholder in DU," Gallegher snarled. "I warn you, my girl!"

"A ... oh. Well, it's, irregular, but—S-m-i-t-h? One moment. The first name: is what?"

"I don't know. Give me all the Smiths."





The girl disappeared and came back with a file box labeled SMI. "Oh, dear," she said, riffling through the cards. "There must be several hundred Smiths."

Gallegher groaned. "I want a fat one," he said wildly. "There's no way of checking on that, I suppose."

The secretary's lips tightened. "Oh, a rib. I see. Good night!" She broke the connection.

Gallegher sat staring at the screen. Several hundred Smiths. Not so good. In fact, definitely bad.

Wait a minute. He had bought DU stock when it was on the skids. Why? He must have expected a rising market. But the stock had continued to fall, according to Arnie.

There might be a lead there.

He reached Arnie at the broker's home and was insistent. "Break the date. This won't take you long. Just find out for me why DU's on the skids. Call me back at my lab. Or I'll break your neck. And make it fast! Get that dope, understand?"

Arnie said he would. Gallegher drank black coffee at a counter stand, went home warily by taxi, and let himself into his house. He double-locked the door behind him. Narcissus was dancing before the big mirror in the lab.

"Any calls?" Gallegher said.

"No. Nothing's happened. Look at this graceful pas."

/'Later. If anybody tries to get in, call me. I'll hide till you can get rid of 'em." Gallegher squeezed his eyes shut. "Is the coffee ready?"

"Black and strong. In the kitchen."

The scientist went into the bathroom instead, stripped, cold-showered, and took a brief irradiation. Feeling less woozy, he returned to the lab with a gigantic cup full of steaming coffee. He perched on Bubbles and gulped the liquid.

"You look like Rodin's Thinker," Narcissus remarked.

"I'll get you a robe. Your ungainly body offends my aesthetic feelings."

Gallegher didn't hear. He donned the robe, since his sweating skin felt unpleasantly cool, but continued to drink the coffee and stare into space.

"Narcissus. More of this."





Equation: a (or) b (or) c equals x. He had been trying to find the value of a, b, or c. Maybe that was the wrong way. He hadn't located J. W. at all. Smith remained a phantom. And Dell Hopper (one thousand credits) had been of no assistance.

It might be better to find the value of x. That blasted machine must have some purpose. Granted, it ate dirt. But matter cannot be destroyed; it can be changed into other forms.

Dirt went into the machine; nothing came out.

Nothing visible.

Free energy?

That was invisible, but could be detected with instruments.

Voltmeter, ammeter—gold leaf—

Gallegher turned the machine on again briefly. Its singing was dangerously loud, but no one rang the door buzzer, and after a minute or two Gallegher snapped the switch back to OFF. He had learned nothing.

Arnie called. The broker had secured the information Gallegher wanted.

"Twasn't easy. I had to pull some wires. But I found out why DU stock's been dropping."

"Thank Heaven for that! Spill it."

"DU's a sort of exchange, you know. They farm out jobs. This one—it's a big office building to be constructed in downtown Manhattan. Only the contractor hasn't been able to start yet. There's a lot of dough tied up in the deal, and there's a whispering campaign that's hurt the DU stock."

"Keep talking."

Arnie went on. "I got all the info I could, in case. There were two firms bidding on the job."

"Who?"

"Ajax, and somebody named—"

"Not Smith?"

"That's it," Arnie said. "Thaddeus Smith. S-m-e-i-t-h, he spells it."

There was a long pause. "S-m-e-i-t-h," Gallegher repeated at last. "So that's why the girl at DU couldn't . . . eh? Oh, nothing. I ought to have guessed it." Sure. When he'd asked Cuff whether Fatty spelled his name with an e or an i, the alderman had said both. Smeith. Ha!





"Smeith got the contract," Arnie continued. "He underbid Ajax. However, Ajax has political pull. They got some alderman to clamp down and apply an old statute that put the kibosh on Smeith. He can't do a thing."

"Why not?"

"Because," Arnie said, "the law won't permit him to block Manhattan traffic. It's a question of air rights. Smeith's client—or DU's client, rather—bought the property lately, but air rights over it had been leased for a ninety-nine-year period to Transworld Strato. The strato-liners have their hangar just beyond that property, and you know they're not gyros. They need a straightaway course for a bit before they can angle up. Well, their right of way runs right over the property. Their lease is good. For ninety-nine years they've got the right to use the air over that land, above and over fifty feet above ground level."

Gallegher squinted thoughtfully. "How could Smeith expect to put up a building there, then?"

"The new owner possesses the property from fifty feet above soil down to the center of the earth. Savvy? A big eighty-story building—most of it underground. It's been done before, but not against political pull. If Smeith fails to fulfill his contract, the job goes to Ajax—and Ajax is hand-in-glove with that alderman."

"Yeah. Max Cuff," Gallegher said. "I've met the lug. Still—what's this statute you mentioned?"

"An old one, pretty much obsolete, but still on the books. It's legal. I checked. You can't interfere with downtown traffic, or upset the stagger system of transport."

"Well?"

"If you dig a hole for an eighty-story building," Arnie said, "you get a lot of dirt and rock. How can you haul it away without upsetting traffic? I didn't try to figure out how many tons have to be removed."

"I see," Gallegher said softly.

"So there it is, on a platinum platter. Smeith took the contract. Now he's stymied. He can't get rid of the dirt he'll be excavating, and pretty soon Ajax will take over and wangle a permit to truck out the material."

"How-a Smeith can't?"

"Remember the alderman? Well, a few weeks ago some of the streets downtown were blocked off, for repairs. Traffic was rerouted—right by that building site. It's been siphoned off there, and it's so crowded that dirt trucks would tangle up the whole business. Of





course it's temporary"—Arnie laughed shortly—"temporary until Smeith is forced out. Then the traffic will be rerouted again, and Ajax can wangle their permit."

"Oh," Gallegher looked over his shoulder at the machine. "There may be a way—"

The door buzzer rang. Narcissus made a gesture of inquiry.

Gallegher said, "Do me another favor, Arnie. I want to get Smeith down here to my lab, quick."

"All right, vise him."

"His visor's tapped. I don't dare. Can you hop over and bring him here, right away?"

Arnie sighed. "I certainly earn my commissions the hard way. But O. K."

He faded. Gallegher listened to the door buzzer, frowned, and nodded to the robot. "See who it is. I doubt if Cuff would try anything now, but—well, find out. I'll be hi this closet."

He stood in the dark, waiting, straining his ears, and wondering. Smeith—he had solved Smeith's problem. The machine ate dirt. The only effective way to get rid of earth without running the risk of a nitrogen explosion.

Eight hundred credits, on account, for a device or a method that would eliminate enough earth—safely—to provide space for an underground office building, a structure that had to be mostly subterranean because of prior-leased air rights.

Fair enough.

Only—where did that dirt go?

Narcissus returned and opened the closet door. "It's a Commander John Wall. He vised from Washington earlier tonight. I told you, remember?"

"John Wall?"

J. W., fifteen hundred credits! The third client!

"J^et him in," Gallegher ordered breathlessly. "Quick! Is he alone?"

"Yes."

"Then step it up!"

Narcissus padded off, to return with a gray-haired, stocky figure in the uniform of the space police. Wall grinned briefly at Gallegher, and then his keen eyes shot toward the machine by the window.





"That it?"

Gallegher said, "Hello, commander. I ... I'm pretty sure that's it. But I want to discuss some details with you first."

Wall frowned. "Money? You can't hold up the government. Or am I misjudging you? Fifty thousand credits should hold you for a while." His face cleared. "You have fifteen hundred already; I'm prepared to write you a check as soon as you've completed a satisfactory demonstration."

"Fifty thou—" Gallegher took a deep breath. "No, it isn't that, of course. I merely want to make certain that I've filled the terms of our agreement. I want to be sure I've met every specification." If he could only learn what Wall had requested! If he, too, had wanted a machine that ate dirt—

It was a farfetched hope, an impossible coincidence, but Gallegher had to find out. He waved the commander to a chair.

"But we discussed the problem' in full detail—"

"A double-check," Gallegher said smoothly. "Narcissus, get the commander a drink."

"Thanks, no."

"Coffee?"

"I'd be obliged. Well, then—as I told you some weeks ago, we needed a spaceship control—a manual that would meet the requirements of elasticity and tensile strength."

"Oh-oh," Gallegher thought.

Wall leaned forward, his eyes brightening. "A spaceship is necessarily big and complicated. Some manual controls are required. But they cannot move in a straight line; construction necessitates that such controls must turn sharp corners, follow an erratic and eccentric path from here to here"

"Well-"

"Thus," Wall said, "you want to turn on a water faucet in a house two blocks away. And you want to do it while you're here, in your laboratory. How?"

"String. Wire. Rope."

"Which could wind around corners as \dots say \dots a rigid rod could not. However, Mr. Gallegher, let me





repeat my statement of two weeks ago. That faucet is hard to turn. And it must be turned often, hundreds of times a day when a ship is in free space. Our toughest wire cables have proved unsatisfactory. The stress and strain snap them. When a cable is bent, and when it is also straight—you see?"

Gallegher nodded. "Sure. You can break wire by bending it back and forth often enough."

"That is the problem we asked you to solve. You said it could be done. Now—have you done it? And how?"

A manual control that could turn corners and withstand repeated stresses. Gallegher eyed the machine. Nitrogen—a thought was moving in the back of his mind, but he could not quite capture it.

The buzzer rang. "Smeith," Gallegher thought, and nodded to Narcissus. The robot vanished.

He returned with four men at his heels. Two of them were uniformed officers. The others were, respectively, Smeith and Dell Hopper.

Hopper was snsJing savagely. "Hello, Gallegher," he said. "We've been waiting. We weren't fast enough when this man"—he nodded toward Commander Wall—"came hi, but we waited for a second chance."

Smeith, his plump face puzzled, said, "Mr. Gallegher, what is this? I rang your buzzer, and then these men surrounded me—"

"It's O. K.," Gallegher said. "You're on top, at least. Look out that window."

Smeith obeyed. He popped back in again, beaming.

"That hole—"

"Right. I didn't cart the dirt away, either. I'll give you a demonstration presently."

"You will in jail," Hopper said acidly. "I warned you, Gallegher, that I'm not a man to play around with. I gave you a thousand credits to do a job for me, and you neither did the job nor returned the money."

Commander Wall was staring, his coffee cup, forgotten, balanced in one hand. An officer moved forward and took Gallegher's arm.

"Wait a minute," Wall began, but Smeith was quicker.

"I think I owe Mr. Gallegher some credits," he said, snatching out a wallet. "I've not much more than a thousand on me, but you can take a check for the





balance, I suppose. If this—gentleman—wants cash, there should be a thousand here."

Gallegher gulped.

Smeith nodded at hirn encouragingly. "You did my job for me, you know. I can begin construction—and excavation—tomorrow. Without bothering to get a trucking permit, either."

Hopper's teeth showed. "The devil with the money! I'm going to teach this man a lesson! My time is worth plenty, and he's completely upset my schedule. Options, scouts— I've gone ahead on the assumption that he could do what I paid him for, and now he blandly thinks he can wiggle out. Well, Mr. Gallegher, you can't. You failed to observe that summons you were handed today, which makes you legally liable to certain penalties—and you're going to suffer them, Dammit!"

Smeith looked around. "But-I'll stand good for Mr. Gallegher. I'll reimburse-"

"No!" Hopper snapped.

"The man says no," Gallegher murmured. "It's just my heart's blood he wants. Malevolent little devil, isn't he?"

"You drunken idiot!" Hopper snarled. "Take him to the jail, officers. Now!"

"Don't worry, Mr. Gallegher," Smeith encouraged. "I'll have you out in no time. I can pull a few wires myself."

Gallegher's jaw dropped. He breathed hoarsely, in an asthmatic fashion, as he stared at Smeith, who drew back.

"Wires," Gallegher whispered. "And a ... a stereoscopic screen that can be viewed from any angle. You said —wires!"

"Take him away," Hopper ordered brusquely.

Gallegher tried to wrench away from the officers holding him. "Wait a minute! One minute! I've got the answer now. It must be the answer. Hopper, I've done what you wanted—and you, too, commander. Let me go."

Hopper sneered and jerked his thumb toward the door. Narcissus walked forward, catfooted. "Shall I break their heads, chief?" he inquired gently. "I like blood. It's a primary color."

Commander Wall put down his coffee cup and rose, his voice sounding crisp and metallic. "All right, officers. Let Mr. Gallegher go."

"Don't do it," Hopper insisted. "Who are you, anyway? A space captain!"





Wall's weathered cheeks darkened. He brought out a badge in a small leather case. "Commander Wall," he said. "Administrative Space Commission. You"—he pointed to Narcissus—"I'm deputizing you as a government agent, pro tern. If these officers don't release Mr. Gallegher ha five seconds, go on and break their heads."

But that was unnecessary. The Space Commission was big. It had the government behind it, and local officials were, by comparison, small potatoes. The officers hastily released Gallegher and tried to look as though they'd never touched him.

Hopper seemed ready to explode. "By what right do you interfere with justice,. Commander?" he demanded.

"Right of priority. The government needs a device Mr. Gallegher has made for us. He deserves a hearing, at least."

"He does not!"

Wall eyed Hopper coldly. "I think he said, a few moments ago, that he fcad fulfilled your commission also."

"With that?" The big shot pointed to the machine. "Does that look like a stereoscopic screen?"

Gallegher said, "Get me an ultraviolet, Narcissus. Fluorescent." He went to the device, praying that his guess was right. But it had to be. There was no other possible answer. Extract nitrogen from dirt or rock, extract all gaseous content, and you have inert matter.

Gallegher touched the switch. The machine started to sing "St. James Infirmary." Commander Wall looked startled and slightly less sympathetic. Hopper snorted. Smeith ran to the window and ecstatically watched the long tentacles eat dirt, swirling madly in the moonlit pit below.

"The lamp, Narcissus."

It was already hooked up on an extension cord. Gallegher moved it slowly about the machine. Presently he had reached the grooved wheel at the extreme end, farthest from the window.

Something fluoresced.

It fluoresced blue—emerging from the little valve in the metal cylinder, winding about the grooved wheel, and piling in coils on the laboratory floor. Gallegher touched the switch; as the machine stopped, the valve snapped shut, cutting off the blue, cryptic thing that

emerged from the cylinder. Gallegher picked up the coil. As he moved the light away, it vanished. He brought the lamp closer—it reappeared.





"Here you are, commander," he said. "Try it."

Wall squinted at the fluorescence. "Tensile strength?"

"Plenty," Gallegher said. "It has to be. Nonorganic, mineral content of, scflid earth, compacted and compressed into wire. Sure, it's got tensile strength. Only you couldn't support a ton weight with it."

Wall nodded. "Of course not. It would cut through steel like a thread through butter. Fine, Mr. Gallegher. We'll have to make tests—"

"Go ahead. It'll stand up. You can run this wire around comers all you want, from one end of a spaceship to another, and it'll never snap under stress. It's too thin. It won't—it can't—be strained unevenly, because it's too thin. A wire cable couldn't do it. You needed flexibility that wouldn't cancel tensile strength. The only possible answer was a thin, tough wire."

The commander grinned. That was enough.

"We*U have the routine tests," he said. "Need any money now, though? We'll advance anything you need, within reason—say up to ten thousand."

Hopper pushed forward. "I never ordered wire, Gallegher. So you haven't fulfilled my commission."

Gallegher didn't answer. He was adjusting his lamp. The wire changed from blue to yellow fluorescence, and then to red.

"This is your screen, wise guy," Gallegher said. "See the pretty colors?"

"Naturally I see them! I'm not blind. But—"

"Different colors, depending on how many angstroms I use. Thus. Red. Blue. Red again. Yellow. And when I turn off the lamp—"

The wire Wall still held became invisible.

Hopper closed his mouth with a snap. He leaned forward, cocking his head to one side.

Gallegher said, "The wire's got the same refractive index as air. I made it that way, on purpose." He had the grace to blush slightly. Oh, well—he could buy Gallegher Plus a drink later.

"On purpose?"





"You wanted a stereoscopic screen which could be viewed from any angle without optical distortion. And

hi color—that goes without saying, these days. Well, here it is."

Hopper breathed hard.

Gallegher beamed at him, "Take a box frame and string each square with this wire. Make a mesh screen. Do that on all four sides. String enough wires inside of the box. You have, in effect, an invisible cube, made of wire. All right. Use ultraviolet to project your film or your television, and you have patterns of fluorescence, depending on the angstrom strength patterns. In other words—a picture. A colored picture. A three-dimensional picture, because it's projected onto an invisible cube. And, finally, one that can be viewed from any angle without distortion, because it does more than give an optical illusion of stereoscopic vision—it's actually a three-dimensional picture. Catch?"

Hopper said feebly, "Yes. I understand. You . . . why didn't you tell me this before?"

Gallegher changed the subject in haste. "I'd like some police protection, Commander Wall. A crook named Max Cuff has beef trying to get his hooks on this machine. His thugs kidnaped me this afternoon, and—"

"Interfering with government business, eh?" Wall said grimly. "I know these jackpot politicians. Max Cuff won't trouble you any more—if I may use the visor?"

Smeith beamed at the prospect of Cuff getting it in the neck. Gallegher caught his eye. There was a pleasant, jovial gleam in it, and somehow, it reminded Gallegher to offer his guests drinks. Even the commander accepted this time, turning from his finished visor call to take the glass Narcissus handed him.

"Your laboratory will be under guard," he told Gallegher. "So you'll have no further trouble."

He drank, stood up, and shook Gallegher's hand. "I must make my report. Good luck, and many thanks. We'll call you tomorrow."

He went out, after the two officers. Hopper, gulping his cocktail, said, "I ought to apologize. But it's all water under the bridge, eh, old man?"

"Yeah," Gallegher said. "You owe me some money."

"Trench will mail you the check. And ... uh ... and—" His voice died away.

"Something?"

"N-nothing," Hopper said, putting down his glass and turning green. "A little fresh air ... urp!"





The door slammed behind him. Gallegher and Smeith eyed each other curiously.

"Odd," Smeith said.

"A visitation froni heaven, maybe," Gallegher surmised. "The mills of the gods—"

"I see Hopper's gone," Narcissus said, appearing with fresh drinks. ,*

"Yeah. Why?" *

"I thought he would. I gave him a Mickey Finn," the robot explained. "He never looked at me once. I'm not exactly vain, but a man so insensitive to beauty deserves a lesson. Now don't disturb me. I'm going into the kitchen and practice dancing, and you can get your own liquor out of the organ. You may come and watch if you like."

Narcissus spun out of the lab, his innards racing. Gallegher sighed.

"That's the way it goes," he said.

"What?"

"Oh, I dunno. Everything. I get, for example, orders for three entirely different things, and I get drunk and make a gadget that answers all three problems. My subconscious does things the easy way. Unfortunately, it's the hard way for me—after I sober up."

"Then why sober up?" Smeith asked cogently. "How does that liquor organ work?"

Gallegher demonstrated. "I feel lousy," he confided. "What I need is either a week's sleep, or else—"

"What?"

"A drink. Here's how. You know—one item still worries me."

"What, again?"

"The question of why that machine sings 'St. James Infirmary' when it's operating."

"It's a good song," Smeith said.

"Sure, but my subconscious works logically. Crazy logic, I'll admit. Nevertheless—"

"Here's how," Smeith said.





Gallegher relaxed. He was beginning to feel like himself again. A warm, rosy glow. There was money in the bank. The police had been called off. Max Cuff was, no doubt, suffering for his sins. And a heavy thumping announced that Narcissus was dancing hi the kitchen.

It was past midnight when Gallegher choked on a drink and said, "Now I remember!"

"Swmpmf," Smeith said, startled. "What/at?"

"I feel like singing."

"So what?"

"Well, I feel like singing 'St. James Infirmary.'"

"Go right ahead," Smeith invited.

"But not alone," Gallegher amplified. "I always like to sing that when I get tight, but I figure it sounds best as a duet. Only I was alone when I was working on that machine."

"Ah?"

"I must have built hi a recording play-back," Gallegher said, lost in a vast wonder at the mad resources and curious deviations of Gallegher Plus. "My goodness. A machine that performs four operations at once. It eats dirt, turns out a spaceship manual control, makes a stereoscopic nondistorting projection screen, and sings a duet with me. How strange it all seems."

Smeith considered. "You're a genius."

"That, of course. Hm-m-m." Gallegher got up, turned on the machine, and returned to perch atop Bubbles. Smeith, fascinated by the spectacle, went to hang on the window sill and watch the flashing tentacles eat dirt. Invisible wire spun out along the grooved wheel. The calm of the night was shattered by the more or less melodious tones of the "St. James Infirmary."

Above the lugubrious voice of the machine rose a deeper bass, passionately exhorting someone unnamed to search the wild world over.

"But you'll never find

Another sweet ma-a-ahn like me."

Gallegher Plus was singing, too.