Gallegher, the Mad Scientist who plays by ear is loose!

Worse-from Gallegher's viewpoint-a "small

brown animal" he couldn't see kept him in a horrid

state of sobriety by drinking all his liquor!

Ex Machina

By Lewis Padgett

Illustrated by Cartler

I got the idea out of a bottle labeled 'DRINK ME,'" Gallegher said wanly. "I'm no technician, except when I'm drunk. I don't know the difference between an electron and an electrode, except that one's invisible. At least I do know, sometimes, but they get mixed up. My trouble is semantics."

"Your trouble is you're a lush," said the transparent

robot, crossing its legs with a faint crash. Gallegher winced.

"Not at all. I get along fine when I'm drinking. It's only

during my periods of sobriety that I get confused. I have a

technological hangover. The aqueous humor in my eyeballs

is coming out by osmosis. Does that make sense?"

"No," said the robot, whose name was Joe. "You're crying, that's all. Did you turn me on just to have an audience? I'm busy at the moment."

"Busy with what?"

"I'm analyzing philosophy, per se. Hideous as you humans are, you sometimes get bright ideas. The clear, intellectual logic of pure philosophy is a revelation to me."

Gallegher said something about a hard, gemlike flame. He still wept sporadically, which reminded him of the bottle labeled "DRINK ME," which reminded him of the liquor-organ beside the couch. Gallegher stiffly moved his long body across the laboratory, detouring around three bulky objects which might have been the dynamos, Monstro and Bubbles, except for the fact that there were three of them. This realization flickered only dimly through Gallegher's mind. Since one of the dynamos was looking at him, he hurriedly averted his gaze, sank down on the couch, and manipulated several buttons. When no liquor flowed through the tube into his parched mouth, he removed the mouthpiece, blinked at it hopelessly, and ordered Joe to bring beer.

The glass was brimming as he raised it to his lips. But it was empty before he drank.

"That's very strange," Gallegher said. "I feel like Tantalus."

"Somebody's drinking your beer," Joe explained. "Now do leave me alone. I've an idea I'll be able to appreciate my baroque beauty even more after I've mastered the essentials of philosophy."

"No doubt," Gallegher said. "Come away from that mirror. Who's drinking my beer? A little green man?"

"A little brown animal," Joe explained cryptically, and

turned to the mirror again, leaving Gallegher to glare at him hatefully. There were times when Mr. Galloway Gallegher yearned to bind Joe securely under a steady drip of hydrochloric. Instead, he tried another beer, with equal ill luck.

In a sudden fury, Gallegher rose and procured soda water. The little brown animal had even less taste for such fluids than Gallegher himself; at any rate, the water didn't mysteriously vanish. Less thirsty but more confused than ever, Gallegher circled the third dynamo with the bright blue eyes and morosely examined the equipment littering his workbench. There were bottles filled with ambiguous liquids, obviously nonalcoholic, but the labels meant little or nothing. Gallegher's subconscious self, liberated by liquor

last night, had marked them for easy reference. Since Gal-legher Plus, though a top-flight technician, saw the world through thoroughly distorted lenses, the labels were not helpful. One said "RABBItS ONLY." Another inquired "WHY NOT?" A third said "CHRISTMAS NIGHT."

There was also a complicated affair of wheels, gears, tubes, sprockets and light tubes plugged into an electric outlet.

"Cogito, ergo sum," Joe murmured softly. "When there's no one around on the quad. No. Hm-m-m."

"What about this little brown animal?" Gallegher wanted to know. "Is it real or merely a figment?"

"What is reality?" Joe inquired, thus confusing the issue still further. "I haven't resolved that yet to my own satisfaction."

"Your satisfaction!" Gallegher said. "I wake up with a tenth-power hangover and you can't get a drink. You tell me fairy stories about little brown animals stealing my liquor. Then you quote moldy philosophical concepts at me. If I pick up that crowbar over there, you'll neither be nor think, in very short order."

Joe gave ground gracefully. "It's a small creature that moves remarkably fast. So fast it can't be seen."

"How come you see it?"

"I don't. I varish it," said Joe, who had more than the five senses normal to humans.

"Where is it now?"

"It went out a while ago."

"Well-" Gallegher sought inconclusively for words. "Something must have happened last night."

"Naturally," Joe agreed. "But you turned me off after the ugly man with the ears came in."

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"I remember that. You were beating your plastic gums .. .what man?"

"The ugly one. You told your grandfather to take a walk, too, but you couldn't pry him loose from his bottle."

"Grandpa. Uh. Oh. Where's he?"

"Maybe he went back to Maine," Joe suggested. "He kept threatening to do that."

"He never leaves till he's drunk out the cellar," Gallegher said. He tuned in the audio system and called every room in the house. There was no response. Presently Gallegher got up and made a search. There was no trace of Grandpa.

He came back to the laboratory, trying to ignore the third dynamo with the big blue eyes, and hopelessly studied the workbench again. Joe, posturing before the mirror, said he thought he believed in the basic philosophy of intellec-tualism. Still, he added, since obviously Gallegher's intellect was in abeyance, it might pay to hook up the projector and find out what had happened last night.

'This made sense. Some time before, realizing that Gallegher sober never remembered the adventures of Gallegher tight, he had installed a visio-audio gadget in the laboratory, cleverly adjusted to turn itself on whenever circumstances warranted it. How the thing worked Gallegher wasn't quite sure anymore, except that it could run off miraculous blood-alcohol tests on its creator and start recording when the percentage was sufficiently high. At the moment the machine was shrouded in a blanket. Gallegher whipped this off, wheeled over a screen, and watched and listened to what had happened last night.

Joe stood in a corner, turned off, probably cogitating.

Grandpa, a wizened little man with a brown face like a bad-tempered nutcracker, sat on a stool cuddling a bottle. Gallegher was removing th\$ liquor-organ mouthpiece from between his lips, having just taken on enough of a load to start the recorder working.

A slim, middle-aged man with large ears and an eager expression jittered on the edge of his relaxer, watching Gallegher.

"Claptrap," Grandpa said in a squeaky voice. "When I was a kid we went out and killed grizzlies with our hands. None of these new-fangled ideas-"

"Grandpa," Gallegher said, "shut up. You're not that old. And you're a liar anyway."

"Reminds me of the time I was out in the woods and a grizzly came at me. I didn't have a gun. Well, I'll telLyou. I just reached down his mouth-"

"Your bottle's empty," Gallegher said cleverly, and there was a pause while Grandpa, startled, investigated. It wasn't.

"You were highly recommended," said the eager man. "I do hope you can help me. My partner and I are about at the end of our rope."

Gallegher looked at him dazedly. "You have a partner? Who's he? For that matter, who are you?"

Dead silence fell while the eager man fought with his bafflement. Grandpa lowered his bottle and said: "It wasn't empty, but it is now, Where's another?"

The eager man blinked. "Mr. Gallegher," he said faintly. "I don't understand. We've been discussing-"

Gallegher said, "I know. I'm sorry. It's just that I'm no good on technical problems unless I'm. .ah.. .stimulated. Then I'm a genius. But I'm awfully absent-minded. I'm sure

"∙

I can solve your problem, but the fact is I've forgotten what it is. I suggest you start from the beginning. Who are you and have you given me any money yet?"

"I'm Jonas Harding," the eager man said. "I've got fifty thousand credits in my pocket, but we haven't come to any terms yet."

"Then give me the dough and we'll come to terms," Gallegher said with ill-concealed greed. "I need money."

" You certainly do," Grandpa put in, searching for a bottle. "You're so overdrawn at the bank that they lock the doors when they see you coming. I want a drink."

"Try the organ," Gallegher suggested. "Now, Mr. Harding-"

"I want a bottle. I don't trust that dohinkus of yours."

Harding, for all his eagerness, could not quite conceal a growing skepticism. "As for the credits," he said, "I think perhaps we'd better talk a little first. You were very highly recommended, but perhaps this is one of your off days."

"Not at all. Still-"

"Why should I give you the money before we come to terms?" Harding pointed out. "Especially since you've forgotten who I am and what I wanted."

Gallegher sighed and gave up. "All right. Tell me what you are and who you want. I mean-"

"I'll go back home," Grandpa threatened. "Where's a bottle?"

Harding said desperately, "Look, Mr. Gallegher, there's a limit. I come in here and that robot of yours insults me. Your grandfather insists I have a drink with him. I'm nearly poisoned-"

"I was weaned on com likker," Grandpa muttered. "Young whippersnappers can't take it."

"Then let's get "down to business," Gallegher said brightly. "I'm beginning to feel good. I'll just relax here on the couch and you caij tell me everything." He relaxed and sucked idly at the organ's mouthpiece, which trickled a gin buck. Grandpa cursed.

"Now," Gallegher said, "the whole thing, from the beginning."

Harding gave a little sigh. "Well-I'm half partner in Adrenals, Incorporated. We run a service. A luxury service, keyed to this day and age. As I told you-"

"I've forgotten it all," Gallegher murmured. "You should have made a carbon copy. What is it you do? I've got a mad picture of you building tiny prefabricated houses on top of kidneys, but I know I must be wrong."

"You are," Harding said shortly. "Here's your carbon copy. We're in the adrenal-rousing business. Today man lives a quiet, safe life-"

"Ha.!" Gallegher interjected bitterly.

"-what with safety controls and devices, medical advances, and the general structure of social living. Now the adrenal glands serve a vital functional purpose, necessary to the health of the normal man." Harding had apparently launched into a familiar sales talk. "Ages ago we lived in caves, and when a sabertooth burst out of the jungle, our adrenals, or suprarenals, went into instant action, flooding our systems with adrenalin. There was an immediate explosion of action, either toward fight or flight, and such periodic flooding of the blood stream gave tone to the whole system. Not to mention the psychological advantages. Man is a competitive animal. He's losing that instinct, but it can be roused by artificial stimulation of the adrenals."

"A drink?" Grandpa said hopefully, though he understood practically nothing of Harding's explanation.

Harding's face became shrewder. He leaned forward confidentially.

"Glamour," he said. "That's the answer. We offer adventure. Safe, thrilling, dramatic, exciting, glamorous adventure to the jaded modern man or woman. Not the vicarious, unsatisfactory excitement of television; the real article. Adrenals, Incorporated, will give you adventure plus, and at the same time improve your health physically and mentally. You must have seen our ads: 'Are you in a rut? Are you jaded? Take a Hunt-and return refreshed, happy, and healthy, ready to lick the world!'"

"A Hunt?"

"That's our mest popular service," Harding said, relapsing into more businesslike tones. "It's not new, really. A long time ago travel bureaus were advertising thrilling tiger hunts in Mexico-"

"Ain't no tigers in Mexico," Grandpa said. "I been there. I warn you, if you don't find me a bottle, I'm going right back to Maine."

But Gallegher was concentrating on the problem. "I don't see why you need me, then. I can't supply tigers for you."

"The Mexican tiger was really a member of me cat family. Puma, I think. We've got special reservations all over the world-expensive to set up and maintain-and there we have our Hunts, with every detail carefully planned in advance. The danger must be minimized-in fact, eliminated. But there must be an illusion of danger or there's no thrill for the customer. We've tried conditioning animals so they'll stop short of hurting anyone, but... ah... that isn't too sue-

cessful. We lost several customers, I'm sorry to say. This is an enormous investment, and we've got to recoup. But we've found we can't use tigers,or, in fact, any of the large carni-vora. It simply isn't safe. But there must be that illusion of danger! The trouble is, we're degenerating into a trapshoot-ing club. And there's no personal danger involved in trap-shooting."

Grandpa said: "Want some fun, eh? Come on up to Maine with me and I'll show you some real hunting. We still got bear back in the mountains."

Gallegher said: "I'm beginning to see. But that personal angle-I wonder! What is the definition of danger, anyhow?"

"Danger's when something's trying to git you," Grandpa pointed out.

"The unknown-the strange-is dangerous too, simply because we don't understand it. That's why ghost stories have always been popular. A roar in the dark is more frightening than a tiger in the daylight."

Harding nodded. "I see your point. But there's another factor. The game mustn't be made too easy. It's a cinch to outwit a rabbit. And, naturally, we have to supply our customers with the most modern weapons." I

## "Why?" I

"Safety precautions. The trouble is, with those weapons and scanners and scent-analyzers, any fool can track down j and kill an animal. There's no thrill involved unless the animal's a man-eating tiger, and that's a little too thrilling for our underwriters!"

"So what do you want?"

"I'm not sure," Harding said slowly. "A new animal, perhaps. One that fulfills the requirements of Adrenals, In-

corporated. But I'm not sure what the answer is, or I wouldn't be asking you."

Gallegher said: "You don't make new animals out of thin air."

"Where do you get them?"

"I wonder. Other planets? Other time-sectors? Other probability-worlds? I got hold of some funny animals once-Lybblas-by tuning in on a future time-era on Mars, but they wouldn't have filled the bill."

"Other planets, then?"

Gallegher got up and strolled to his workbench. He began to piece together stray cogs and tubes. "I'm getting a thought. The latent factors inherent in the human brain- My latent factors are rousing to life. Let me see. Perhaps-"

Under his hands a gadget grew. Gallagher remained preoccupied. Presently he cursed, tossed the device aside, and settled back to the liquor-organ. Grandpa had already tried it, but choked on his first sip of a gin buck. He threatened to go back home and take Harding with him and show him some real hunting.

Gallegher pushed the old gentleman off the couch. "Now look, Mr. Harding," he said. "I'll have this for you tomorrow. I've got some thinking to do-"

"Drinking, you mean," Harding said, taking out a bundle of credits. "I've heard a lot about you, Mr. Gallegher. You never work except under pressure. You've got to have a deadline, or you won't do a thing. Well-do you see this? Fifty thousand credits." He glanced at his wrist watch. "I'm giving you one hour. If you don't solve my problem by then, the deal's off."

Gallegher started up from the couch as though he had been bitten. "That's ridiculous. An hour isn't time enough-"

Harding said obdurately: "I'm a methodical man. I know enough about you to realize that you're not. I can find other specialists and technicians, you know. One hour! Or I go out that door and take these fifty thousand credits with me!"

Gallegher eyed the money greedily. He took a quick drink, cursed quietly, and went back to his gadget. This time he kept working on it.

After a while a light shot up from the worktable and hit Gallegher in the eye. He staggered back, yelping.

"Are you all right?" Harding asked, jumping up.

"Sure," Gallegher growled, cutting a switch. "I think I'm getting it. That light.. .ouch. I've sunburned my eyeballs." He blinked back tears. Then he went over to the liquor-organ.

After a hearty swig, he nodded at Harding. "I'm getting on the trail of what you want. I don't know how long it will take, though." He winced. "Grandpa. Did you change the setting on this thing?"

"I dunno. I pushed some buttons."

"I thought so. This isn't a gin buck. Wheeooo!"

"Got a wallop, has it?" Grandpa said, getting interested and coming over to try the liquor-organ again.

"Not at all," Gallegher said, walking on his knees toward the audio-sonic recorder. "What's this? A spy, huh? We know how to deal with spies in this house, you dirty traitor." So saying, he rose to his feet, seized a blanket, and threw it over the projector.

At that point the screen, naturally enough, was blank.

"I cleverly outwit myself every time," Gallegher remarked, rising to switch off the projector. "I go to the trouble of building that recorder and then blindfold it just when matters get interesting. I know less than I did before, because there are more unknown factors now."

"Men can know the nature of things," Joe murmured.

"An important concept," Gallegher admitted. "The Greeks found it out quite a while ago, though. Pretty soon, if you keep on thinking hard, you'll come up with the bright discovery that two and two are four."

"Be quiet, you ugly man," Joe said. "I'm getting into abstractions now. Answer the door and leave me alone."

"The door? Why? The bell isn't singing."

"It will," Joe pointed out. "There it goes."

"Visitors at this time of the morning," Gallegher sighed."Maybe it's Grandpa, though." He pushed a button, studied the doorplate screen, and failed to recognize the lantern-jawed, bushy-browed face. "All right," he said. "Come in. Follow the guide-line." Then he turned to the liquor-organ thirstily before remembering his current Tantalus proclivities.

The lantern-jawed man came into the room. Gallegher said: "Hurry up. I'm being followed by a little brown animal that drinks all my liquor. I've several other troubles, too, but the little brown animal's the worst. If I don't get a drink, I'll die. So tell me what you want and leave me alone to work out my problems. I don't owe you money, do I?"

"That depends," said the newcomer, with a strong Scots accent. "My name is Murdoch Mackenzie, and I assume you're Mr. Gallegher. You look untrustworthy. Where is my partner and the fifty thousand credits he had with him?"

Gallegher pondered\* "Your partner, eh? I wonder if you mean Jonas Harding?"

"That's the lad. My partner in Adrenals, Incorporated."

"I haven't seen hini-"

With his usual felicity, Joe remarked, "The ugly man with the big ears. How hideous he was."

"Vurra true," Mackenzie nodded. "I note you're using the past tense, or rather that great clanking machine of yours is. Have you perhaps murdered my partner and disposed of his body with one of your scientific gadgets?"

"Now look-" Gallegher said. "What's the idea? Have I got the mark of Cain on my forehead or something? Why should you jump to a conclusion like that? You're crazy."

Mackenzie rubbed his long jaw and studied Gallegher from under his bushy gray brows. "It would be no great loss, I know," he admitted. "Jonas is little help in the business. Too methodical. But he had fifty thousand credits on his person when he came here last night. There is also the question of the body. The insurance is perfectly enormous. Between ourselves, Mr. Gallegher, I would not hold it against you if you had murdered my unfortunate partner and pocketed the fifty thousand. In fact, I would be willing to consider letting you escape with... say... ten thousand, provided you gave me the rest. But not unless you provided me with legal evidence of Jonas's death, so my underwriters would be satisfied."

"Logic," Joe said admiringly. "Beautiful logic. It's amazing that such logic should come from such an opaque

horror."

"I would look far more horrible, my friend, if I had a transparent skin like you," Mackenzie" said, "if the anatomy

charts are accurate. But we were discussing the matter of my partner's body."

Gallegher said wildly: "This is fantastic. You're probably laying yourself open to compounding a felony or something."

"Then you admit the charge."

"Of course not! You're entirely too sure of yourself, Mr. Mackenzie. I'll bet you killed Harding yourself and you're trying to frame me for it. How do you know he's dead?"

"Now that calls for some explanation, I admit," Mackenzie said. "Jonas was a methodical man. Vurra. I have never known him to miss an appointment for any reason whatsoever. He had appointments last night, and more this morning. One with me. Moreover, he had fifty thousand credits on him when he came here to see you last night."

"How do you know he got here?"

"I brought him, in my aircab. I let him out at your door. I saw him go in."

"Well, you didn't see him go out, but he did," Gallegher said.

Mackenzie, quite unruffled, went on checking points on his bony fingers.

"This morning I checked your record, Mr. Gallegher, and it is not a good one. Unstable, to say the least. You have been mixed up in some shady deals, and you have been accused of crimes in the past. Nothing was ever proved, but you're a sly one, I suspect. The police would agree."

"They can't prove a thing. Harding's probably home in bed."

"He is not. Fifty thousand credits is a lot of money. My partner's insurance amounts to much more than that. The

business will be tied up sadly if Jonas remains vanished, and there will be litigation. Litigation costs money."

"I didn't kill your partner!" Gallegher cried.

"Ah," Mackenzieferiuled. "Still, if I can prove that you did, it will come to the same thing, and be reasonably profitable for me. You see your position, Mr. Gallegher. Why not admit it, tell me what you did with the body, and escape with five thousand credits."

"You said ten thousand a while ago."

"You're daft," Mackenzie said firmly. "I said nothing of the sort. At least, you canna prove that I did."

Gallegher said: "Well, suppose we have a drink and talk it over." A new idea had struck him.

"An excellent suggestion."

Gallegher found two glasses and manipulated the liquor-organ. He offered one drink to Mackenzie, but the man shook his head and reached for the other glass. "Poison, perhaps," he said cryptically. "You have an untrustworthy face."

Gallegher ignored that. He was hoping that with two drinks available, the mysterious little brown animal would show its limitations. He tried to gulp the whisky fast, but only a tantalizing drop burned on his tongue. The glass was empty. He lowered it and stared at Mackenzie.

"A cheap trick," Mackenzie said, putting his own glass down on the workbench. "I did not ask for your whisky, you know. How did you make it disappear like that?"

Furious with disappointment, Gallegher snarled: "I'm a wizard. I've sold my soul to the devil. For two cents I'd make you disappear, too."

Mackenzie shrugged. "I am not worried. If you could,

you'd have done it before this. As for wizardry, I am far from skeptical, after seeing that monster squatting over there." He indicated the third dynamo that wasn't a dynamo.

"What? You mean you se\$ it, too?"

"I see more than you think, Mr. Gallegher," Mackenzie said darkly. "In fact, I am going to the police now."

"Wait a minute. You can't gain anything by that-"

"I can gain nothing by talking to you. Since you remain obdurate, I will try the police. If they can prove that Jonas is dead, I will at least collect his insurance."

Gallegher said: "Now wait a minute. Your partner did come here. He wanted me to solve a problem for him."

"Ah. And you solved it?"

"N-no. At least-"

"Then I can get no profit from you," Mackenzie said firmly, and turned to the door. "You will hear from me vurra soon."

He departed. Gallegher sank down miserably on the couch and brooded. Presently he lifted his eyes to stare at the third dynamo.

It was not, then, a hallucination, as he had first suspected. Nor was it a dynamo. It was a squat, shapeless object like a truncated pyramid that had begun to melt down, and two large blue eyes were watching him. Eyes, or agates, or painted metal. He couldn't be sure. It was about three feet high and three feet in diameter at the base.

"Joe," Gallegher said, "why didn't you tell me about that thing?"

"I thought you saw it," Joe explained.

"I did, but-what is it?"

"I haven't the slightest idea."

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"Where could it have come from?"

"Your subconscious alone knows what you were up to last night," Joe said. "Perhaps Grandpa and Jonas Harding know, but they're not around, apparently."

Gallegher went to the teleview and put in a call to Maine. "Grandpa may have gone back home. It isn't likely he'd have taken Harding with him, but we can't miss any bets. I'll check on that. One thing, my eyes have stopped watering. What was that gadget I made last night?" He passed to the workbench and studied the cryptic assemblage. "I wonder why I put a shoehorn in that circuit?"

"If you'd keep a supply of materials available here, Gallegher Plus wouldn't have to depend on makeshifts," Joe said severely.

"Uh. I could get drunk and let my subconscious take over again.. .no, I can't. Joe, I can't drink anymore! I'm bound hand and foot to the water wagon!"

"I wonder if Dalton had the right idea after all?"

Gallegher snarled: "Do you have to extrude your eyes that way? I need help!"

"You won't get it from me," Joe said. "The problem's extremely simple, if you'd put your mind to it."

"Simple, is it? Then suppose you tell me the answer!"

"I want to be sure of a certain philosophical concept first."

"Take all the time you want. When I'm rotting in jail, you can spend your leisure hours pondering abstracts. Get me a beer! No, never mind. I couldn't drink it anyway. What does this little brown animal look like?"

"Oh, use your head," Joe said.

Gallegher growled; "I could use it for an anchor, the way it feels. You know all the answers. Why not tell me instead of babbling?",

"Men can know the nature of things," Joe said. "Today is the logical development of yesterday. Obviously you've solved the problem Adrenals, Incorporated, gave you."

"What? Oh. I see. Harding wanted a new animal or something."

"Well?"

"I've got two of 'em," Gallegher said. "That little brown invisible dipsomaniac and that blue-eyed critter sitting on the floor. Oh-ho! Where did I pick them up? Another dimension?"

"How should I know? You've got 'em."

"I'll say I have," Gallegher agreed. "Maybe I made a machine that scooped them off another world-and maybe Grandpa and Harding are on that world now! A sort of exchange of prisoners. I don't know. Harding wanted non-dangerous beasts elusive enough to give hunters a thrill-but where's the element of danger?" He gulped. "Conceivably the pure alienage of the critters provides that illusion. Anyway, I'm shivering."

"Flooding of the blood stream with adrenalin gives tone to the whole system," Joe said smugly.

"So I captured or got hold of those beasts somehow, apparently, to solve Harding's problem...mm-m." Gallegher went to stand in front of the shapeless blue-eyed creature. "Hey, you," he said.

There was no response. The mild blue eyes continued to regard nothing. Gallegher poked a finger tentatively at one of them.

Nothing at all happened. The eye was immovable and

hard as glass. Gallegher tried the thing's bluish, sleek skin. It felt like metal. Repressing his mild panic, he tried to lift the beast from the floor, but failed completely. It was either enormously heavy or it had sucking-disks on its bottom.

"Eyes," Gallegher said. "No other sensory organs, apparently. That isn't what Harding wanted."

"I think it clever of the turtle," Joe suggested.

"Turtle? Oh. Like the armadillo. That's right. It's a problem, isn't it? How can you kill or capture a.. .a beast like this? Its exoderm feels plenty hard, it's immovable- that's it, Joe. Quarry doesn't have to depend on flight or fight. The turtle doesn't. And a barracudo could go nuts trying to eat a turtle. This would be perfect quarry for the lazy intellectual who wants a thrill. But what about adrenalin?"

Joe said nothing. Gallegher pondered, and presently seized upon some reagents and apparatus. He tried a diamond drill. He tried acids. He tried every way he could think of to rouse the blue-eyed beast. After an hour his furious curses were interrupted by a remark from the robot.

"Well, what about adrenalin?" Joe inquired ironically.

"Shut up!" Gallegher yelped. "That thing just sits there looking at me! Adren... what?"

"Anger as well as fear stimulates the suprarenals, you know. I suppose any human would become infuriated by continued passive resistance."

"That's right," said the sweating Gallegher, giving the creature a final kick. He turned to the couch. "Increase the nusiance quotient enough and you can substitute anger for fear. But what about that little brown animal? I'm not mad at it."

"Have a drink," Joe suggested.

"All right, I am mad at the kleptomaniacal so-and-so!

You said it moved so fast I can't see it. How can I catch it?"

"There are undoubtedly methods."

"It's as elusive as the other critter is invulnerable. Could I immobilize it by gelling it drunk?"

"Metabolism."

"Burns up its fuel too fast to get drunk? Probably. But it must need a lot of food."

"Have you looked in the kitchen lately?" Joe asked.

Visions of a depleted larder filling his mind, Gallegher rose. He paused beside the blue-eyed object.

"This one hasn't got any metabolism to speak of. But it has to eat, I suppose. Still, eat what? Air? It's possible."

The doorbell sang. Gallegher moaned, "What now?" and admitted the guest. A man with a ruddy face and a belligerent expression came in, told Gallegher he was under tentative arrest, and called in the rest of his crew, who immediately began searching the house.

"Mackenzie sent you, I suppose?" Gallegher said.

"That's right. My name's Johnson. Department of Violence, Unproved. Do you want to call counsel?"

"Yes," said Gallegher, jumping at the opportunity. He used the visor to get an attorney he knew, and began outlining his troubles. But the lawyer interrupted him.

"Sorry. I'm not taking any jobs on spec. You know my rates."

"Who said anything about spec?"

"Your last check bounced yesterday. It's cash on the line this time, or no deal."

"I... Now wait! I've just finished a commissioned job that's paying off big. I can have the money for you-"

"When I see the color of your credits, I'll be your lawyer," the unsympathetic voice said, and the screen

blanked. The detective, Johnson, tapped Gallegher on the shoulder.

"So you're overdrawn at the bank, eh? Needed money?"

"That's no secret. Besides, I'm not broke now, exactly. I finished a-"

"A job. Yeah, I heard that, too. So you're suddenly rich. How much did this job pay you? It wouldn't be fifty thousand credits, would it?"

Gallegher drew a deep breath. "I'm not saying a word," he said, and retreated to the couch, trying to ignore the Department men who were searching the lab. He needed a lawyer. He needed one bad. But he couldn't get one without money. Suppose he saw Mackenzie-

The visor put him in touch with the man. Mackenzie seemed cheerful.

"Hello," he said, "see, the police have arrived."

Gallegher said, "Listen, that job your partner gave me-I've solved your problem. I've got what you want."

" Jonas's body, you mean?" Mackenzie seemed pleased.

"No! The animals you wanted! The perfect quarry!"

"Oh. Well. Why didn't you say so sooner?"

"Get over here and call off the police!" Gallegher insisted. "I tell you, I've got your ideal Hunt animals for you!"

"I dinna ken if I can call off the bloodhounds," Mackenzie said, "but I'll be over directly. I will not pay vurra much, you understand?"

"Bah!" Gallegher snarled, and broke the connection. The visor buzzed at him. He touched the receiver, and a woman's face came in.

She said: "Mr. Gallegher, with reference to your call of inquiry regarding

your grandfather, we report that investiga-

tion shows that he has not returned to our Maine sector. That is all."

She vanished. Johnson said: "What's this? Your grandfather? Where's he at?\*

"I ate him," Gallegher said, twitching. "Why don't you leave me alone?"

Johnson made a note. "Your grandfather. I'll just check up a bit. Incidentally, what's that thing over there?" He pointed to the blue-eyed beast.

"I've been studying a curious case of degenerative osteomyelitis affecting a baroque cephalopod!"

"Oh, I see. Thanks. Fred, see about this guy's grandfather. What are you gaping at?"

Fred said: "That screen. It's set up for projection."

Johnson moved to the audio-sonic recorder. "Better impound it. Probably not important, but-" He touched a switch. The screen turned blank, but Gallegher's voice said: "We know how to deal with spies in this house, you dirty traitor."

Johnson moved the switch again. He glanced at Gallegher, his ruddy face impassive, and in silence began to rewind the wire tape. Gallegher said: "Joe, get me a dull knife. I want to cut my throat, and I don't want to make it too easy for myself. I'm getting used to doing things the hard way."

But Joe, pondering philosophy, refused to answer.

Johnson began to run off the recording. He took out a picture and compared it with what showed on the screen.

"That's Harding, all right," he said. "Thanks for keeping this for us, Mr. Gallegher."

"Don't mention it," Gallegher said. "I'll even show the hangman how to tie the knot around my neck."

"Ha-ha. Taking notes, Fred? Right."

The reel unrolled relentlessly. But, Gallegher tried to

make himself believe, there was nothing really incriminating recorded.

He was disillusioned after the screen went blank, at the point when he had thrown a blanket over the recorder last night. Johnson held up his hand for silence. The screen still showed nothing, but after a moment or two voices were clearly audible.

"You have thirty-seven minutes to go, Mr. Gallegher."

"Just stay where you are. I'll have this in a minute. Besides, I want to get my hands on your fifty thousand credits."

"But-"

"Relax. I'm getting it. In a very short time your worries will be over."

"Did I say that?" Gallegher thought wildly. "What a fool I am! Why didn't I turn off the radio when I covered up the lens?"

Grandpa's voice said: "Trying to kill me by inches, eh, you young whippersnapper!"

"All the old so-and-so wanted was another bottle," Gallegher moaned to himself. "But try to make those flatfeet believe that! Still-" He brightened. "Maybe I can find out what really happened to Grandpa and Harding. If I shot them off to another world, there might be some clue-"

"Watch closely now," Gallegher's voice said from last night. "/'/ explain as I proceed. Oh-oh. Wait a minute. I'm going to patent this later, so I don't want any spies. I can trust you two not to talk, but that recorder's still turned on to audio. Tomorrow, if I played it back, I'd be saying to myself, 'Gallegher, you talk too much. There's only one way to keep a secret safe.' Off it goes!"

Someone screamed. The shriek was cut off midway. The projector stopped humming. There was utter silence.

The door opened to admit Murdoch Mackenzie. He was rubbing his hands.

"I came right down," he said briskly. "So you've solved our problem, eh, Mr. Gallagher? Perhaps we can do business then. After all, there's no real evidence that you killed Jonas-and I'll be willing to drop the charges, if you've got what Adrenals, Incorporated, wants."

"Pass me those handcuffs, Fred." Johnson requested.

Gallegher protested, "You can't do this to me!"

"A fallacious theorem," Joe said, "which, I note, is now being disproved by the empirical method. How illogical all you ugly people are."

The social trend always lags behind the technological one. And while technology tended, in these days, toward simplification, the social pattern was immensely complicated, since it was partly an outgrowth of historical precedent and partly a result of the scientific advance of the era. Take jurisprudence. Cockburn and Blackwood and a score of others had established certain general and specific rules- say, regarding patents-but those rules could be made thoroughly impractical by a single gadget. The Integrators could solve problems no human brain could manage, so, as a governor, it was necessary to build various controls into those semimechanical colloids. Moreover, an electronic duplicator could infringe not only on patents but on property rights, and attorneys prepared voluminous briefs on such questions as whether "rarity rights" are real property, whether a gadget made on a duplicator is a "representation" or a copy, and whether mass-duplication of chinchillas is unfair competition to a chinchilla breeder who depended on old-fashioned biological principles. All of which added up to the fact that

the world, slightly punch-drunk with technology, was trying desperately to walk a straight line. Eventually the confusion would settle down.

It hadn't settled down yet.

So legal machinery was a construction far more compl -cated than an Integrator. Precedent warred with abstract theory as lawyer warred with lawyer. It was all perfectly clear to the technicians, but they were much too impractical to be consulted; they were apt to remark wickedly, "So my gadget unstabilizes property rights? Well-why have property rights, then?"

And you can't do that!

Not to a world that had found security, of a sort, for thousands of years in rigid precedents of social intercourse. The ancient dyke of formal culture was beginning to leak in innumerable spots, and, had you noticed, you might have seen hundreds of thousands of frantic, small figures rushing from danger-spot to danger-spot, valorously plugging the leaks with their fingers, arms, or heads. Some day it would be discovered that there was no encroaching ocean beyond that dyke, but that day hadn't yet come.

In a way, that was lucky for Gallegher. Public officials were chary about sticking their necks out. A simple suit for false arrest might lead to fantastic ramifications and big trouble. The hard-headed Murdoch Mackenzie took advantage of this situation to vise his own personal attorney and toss a monkey wrench in the legal wheels. The attorney spoke to Johnson.

There was no corpse. The audiosonic recording was not sufficient. Moreover, there were vital questions involving habeus corpus and search warrants. Johnson called Headquarters Jurisprudence and the argument raged over the heads

of Gallegher and the imperturbable Mackenzie. It ended with Johnson leaving, with his crew-and the increasing recording-and threatening to return as soon as a judge could issue the appropriate writs and papers. Meanwhile, he said, there would be officers on guard outside the house. With a malignant glare for Mackenzie, he stamped out.

"And now to business," said Mackenzie, rubbing his hands. "Between ourselves"-he leaned forward confidentially-"I'm just as glad to get rid of that partner of mine. Whether or not you killed him, I hope he stays vanished. Now I can run the business my way, for a change."

"It's all right about that," Gallegher said, "but what about me? I'll be in custody again as soon as Johnson can wangle it."

"But not convicted," Mackenzie pointed out. "A clever lawyer can fix you up. There was a similar case in which the defendant got off with a defense of non esse-his attorney went into metaphysics and proved that the murdered man had never existed. Quite specious, but so far the murderer's gone free."

Gallegher said: "I've searched the house, and Johnson's men did, too.

There's simply no trace of Jonas Harding or my grandfather. And I'll tell you frankly, Mr. Mackenzie, I haven't the slightest idea what happened to them."

Mackenzie gestured airily. "We must be methodical. You mentioned you had solved a certain problem for Adrenals, Incorporated. Now, I'll admit, that interested me."

Silently Gallegher pointed to the blue-eyed dynamo. Mackenzie studied the object thoughtfully.

"Well?" he said.

"That's it. The perfect quarry."

Mackenzie walked over to the thing, rapped its hide,

and looked deeply into the mild azure eyes. "How fast can it run?" he asked shrewdly.

Gallegher said: "It doesn't have to run. You see, it's invulnerable."

"Ha. Hum. Perhaps if you'd explain a wee bit more-"

But Mackenzie did not seem pleased with the explanation. "No," he said, "I don't see it. There would be no thrill to hunting a critter like that. You forget our customers demand excitement-adrenal stimulation."

"They'll get it. Anger has the same effect as rage-" Gallegher went into detail.

But Mackenzie shook his head. "Both fear and anger

give you excess energy you've got to use up. You can't, against a passive quarry. You'll just cause neuroses. We try to get rid of neuroses, not .create them."

Gallegher, growing desperate, suddenly remembered the little brown beast and began to discuss that. Once, Mackenzie interrupted with a demand to see the creature. Gallegher slid around that one fast.

"Ha," Mackenzie said finally. "It isna canny. How can you hunt something that's invisible?"

"Oh-ultraviolet. Scent-analyzers. It's a test for ingenuity-"

"Our customers are not ingenious. They don't want to be. They want a change and a vacation from routine, hard work-or easy work, as the case may be-they want a rest. They don't want to beat their brains working out methods to catch a thing that moves faster than a pixy, nor do they want to chase a critter that's out of sight before it even gets there. You are a vurra clever man, Mr. Gallegher, but it begins to look as though Jonas's insurance is my best bet after all."

"Now wait-"

Mackenzie pursed his lips. "I'll admit the beasties may-I say may-have

some possibilities. But what good is quarry that can't be caught? Perhaps if you'd work out a way to capture these other-worldly animals of yours, we might do business. At present, I willna buy a pig in a poke."

"I'll find a way," Gallegher promised wildly. "But I can't do it in jail."

"Ah. I am a little irritated with you, Mr. Gallegher. You tricked me into believing you had solved our problem. Which you havena done-yet. Consider the thought of jail. Your adrenalin may stimulate your brain into working out a way to

trap these animals of yours. Though, even so, I can make no rash promises-"

Murdoch Mackenzie grinned at Gallegher and went out, closing the door softly behind him. Gallegher began to dine off his finger nails.

"Men can know the nature of things," Joe said, with an air of solid conviction.

At that point matters were complicated even further by the appearance, on the televisor screen, of a gray-haired man who announced that one of Gallegher's checks had just bounced. Three hundred and fifty credits, the man said, and how about it?

Gallegher looked dazedly at the identification card on the screen. "You're with United Cultures? What's that?"

The gray-haired man said silkily, "Biological and medical supplies and laboratories, Mr. Gallegher."

"What did I order from you?"

"We have a receipt for six hundred pounds of Vita-plasm, first grade. We made delivery within an hour."

"And when-"

The gray-haired man went into more detail. Finally Gallegher made a few lying promises and turned from the blanking screen. He looked wildly around the lab.

"Six hundred pounds of artificial protoplasm," he murmured. "Ordered by Gallegher Plus. He's got delusions of economic grandeur."

"It was delivered," Joe said. "You signed the receipt, the night Grandpa and Jonas Harding disappeared."

"But what could I do with the stuff? It's used for plastic surgery and for humano-prosthesis. Artificial limbs and stuff. It's cultured cellular tissue, this Vitaplasm. Did I use it

to make some animals? That's biologically impossible. I think. How could I have molded Vitaplasm into a little brown animal that's invisible? What about the brain and the neural structure? Joe, six hundred pounds of Vitaplasm has simply disappeared. Where has it gone?" But Joe was silent.

Hours later Gallegher was furiously busy. "The trick is," he explained to Joe, "to find out all I can about those critters. Then maybe I can tell where they came from and how I got 'em. Then perhaps I can discover where Grandpa and Harding went. Then-"

"Why not sit down and think about it?"

"That's the difference between us. You've got no instinct of self-preservation. You could sit down and think while a chain reaction took place in your toes and worked up, but not me. I'm too young to die. I keep thinking of Reading Gaol. I need a drink. If I could only get high, my demon subconscious could work out the whole problem for me. Is that little brown animal around?"

"No, "Joe said.

"Then maybe I can steal a drink." Gallegher exploded, after an abortive attempt that ended in utter failure: "Nobody can move that fast."

"Accelerated metabolism. It must have smelled alcohol. Or perhaps it has additional senses. Even I can scarcely varish it."

"If I mixed kerosene with the whisky, maybe the dip- " somaniacal little monster would't like it. Still, neither would I. Ah, well. Back to the mill," Gallegher said, as he tried reagent after reagent on the blue-eyed dynamo, without any effect at all.

"Men can know the nature of things." Joe said irritat-ingly.

"Shut up. I wonder if I could electroplate this creature? That would immobilize it, all right. But it's immobilized already. How does it eat?"

"Logically, I'd say osmosis."

" Very likely. Osmosis of what?"

Joe clicked irritatedly. "There are dozens of ways you could solve your problem. Instrumentalism. Determinism. Vitalism. Work from a posteriori to a priori. It's perfectly obvious to me that you've solved the problem Adrenals, Incorporated, set you."

"I have?"

"Certainly."

"How?"

"Very simple. Men can know the nature of things."

"Will you stop repeating that out-moded basic and try to be useful? You're wrong, anyway. Men can know the nature of things by experiment and reason combined!"

Joe said: "Ridiculous. Philosophical incompetence. If you can't prove your point by logic, you've failed. Anybody who has to depend on experiment is beneath contempt."

"Why should I sit here arguing philosophical concepts with a robot?" Gallegher demanded of no one in particular. "How would you like me to demonstrate the fact that ideation is dependent on your having a radioatomic brain that isn't scattered all over the floor?"

"Kill me, then," Joe said. "It's your loss and the world's. Earth will be a poorer place when I die. But coercion means nothing to me. I have no instinct of self-preservation."

"Now look," Gallegher said, trying a new tack, "if you know the answer, why not tell me? Demonstrate that wonder-

ful logic of yours. Convince me without having to depend on experiment. Use pure reason."

"Why should I want, to convince you? I'm convinced. And I'm so beautiful ari'd perfect that I can achieve no higher glory than to admire me."

"Narcissus," Gallegher snarled. "You're a combination of Narcissus and Nietzsche's Superman."

"Men can know the nature of things," Joe said.

The next development was a subpoena for the transparent robot. The legal machinery was beginning to move, an immensely complicated gadget that worked on a logic as apparently twisted as Joe's own. Gallegher himself, it seemed, was temporarily inviolate, through some odd interpretation of jurisprudence. But the State's principle was that the sum of the parts was equal to the whole. Joe was classified as one of the parts, the total of which equaled Gallegher. Thus the robot found itself in court, listening to a polemic with impassive scorn.

Gallegher, flanked by Murdoch Mackenzie and a corps of attorneys, was with Joe. This was an informal hearing. Gallegher didn't pay much attention; he was concentrating on finding a way to put the bite on the recalcitrant robot, who knew all the answers but wouldn't talk. He had been studying the philosophers, with an eye toward meeting Joe on his own ground, but so far had succeeded only in acquiring a headache and an almost unendurable longing for a drink. Even out of his laboratory, though, he remained Tantalus. The invisible little brown animal followed him around and stole his liquor.

One of Mackenzie's lawyers jumped up. "I object," he said. There was a brief wrangle as to whether Joe should be

classified as a witness or as Exhibit A. If the latter, the subpoena had been falsely served. The Justice pondered.

"As I see it," he declared, "the question is one of determinism versus voluntarism. If this... ah... robot has free will-"

"Ha!" Gallegher said, and was shushed by an attorney. He subsided rebelliously.

"-then it, or he, is a witness. But, on the other hand, there is the possibility that the robot, in acts of apparent choice, is the mechanical

expression of heredity and past environment. For heredity read... ah... initial mechanical basics."

"Whether or not the robot is a rational being, Mr. Justice, is beside the point," the prosecutor put in,

"I do not agree. Law is based on res-"

Joe said: "Mr. Justice, may I speak?"

"Your ability to do so rather automatically gives you permission," the Justice said, studying the robot in a baffled way. "Go ahead."

Joe had seemingly found the connection between law, logic, and philosophy. He said happily: "I've figured it all out. A thinking robot is a rational being. I am a thinking robot-therefore I am a rational being."

"What a fool," Gallegher groaned, longing for the sane logics or electronics and chemistry. "The old Socratic syllogism. Even I could point out the flaw in that?"

"Quiet," Mackenzie whispered. "All the lawyers really depend on is tying up the case in such knots nobody can figure it out. Your robot is perhaps not such a fool as you think."

An argument started as to whether thinking robots really were rational beings. Gallegher brooded. He couldn't see the

"Then," the prosecutor said triumphantly, "I wish to bring a charge of assault and battery against Mr. Gallegher. Since this robot has been tentatively classed as a rational being, any activity causing him, or it, to lose consciousness or the power of mobility is contra bonos mores, and may be classed as mayhem

Mackenzie's attorneys were ruffled. Gallegher said: "What does that mean?"

A lawyer whispered: "They can hold you, and hold that robot as a witness." He stood up. "Mr. Justice. Our statements were in reply to purely theoretical questions."

The prosecutor said: "But the robot's statement answered a non-theoretical question."

"The robot was not on oath."

"Easily remedied," said the prosecutor, while Gallegher saw his last hopes slipping rapidly away. He thought hard, while matters proceeded.

"Do you solemnly swear to tell the truth the whole truth and nothing but the truth so help you God?"-

Gallegher leaped to his feet. "Mr. Justice, I object."

"Indeed. To what?"

"To the validity of that oath."

Mackenzie said: "Ah- ha!"

The Justice was thoughtful. "Will you please elucidate, Mr. Gallegher? Why should the oath not be administered to this robot?"

"Such an oath is applicable to man only."

"And?"

"It presupposes the existence of the soul. At least it implies theism, a personal religion. Can a robot take an oath?"

The Justice eyed Joe. "It's a point, certainly. Ah... Joe. Do you believe in a personal deity?"

"I do."

point, really. Nor did it become clear until, from the maze of contradictions, there emerged the tentative decision that Joe was a rational being. This seemed to please the prosecutor immensely.  $\setminus \bullet$ 

"Mr. Justice," he announced, "we have learned that Mr. Galloway Galleghertwo nights ago inactivated the robot before us now. Is this not true, Mr. Gallegher?"

But Mackenzie's hand kept Gallegher in his seat. One of the defending attorneys rose to meet the question.

"We admit nothing," he said. "However, if you wish to pose a theoretical question, we will answer it."

The query was posed theoretically.

"Then the theoretical answer is 'yes,' Mr. Prosecutor. A robot of this type can be turned on and off at will."

"Can the robot turn itself off?"

"Yes."

"But this did not occur? Mr. Gallegher inactivated the robot at the time Mr. Jonas Harding was with him in his laboratory two nights ago?"

"Theoretically, that is true. There was a temporary inac-tivation."

"Then," said the prosecutor, "we wish to question the robot, who has been classed as a rational being."

"The decision was tentative," the defense objected.

"Accepted. Mr. Justice-"

"All right," said the Justice, who was still staring at Joe, "you may ask your questions."

"Ah... ah-" The prosecutor, facing the robot, hesitated.

"Call me Joe," Joe said.

"Thank you. Ah... is this true? Did Mr. Gallegher inactivate you at the time and place stated?"

"Yes."

The prosecutor beamed. "Then we can proceed."

"Wait a minute," Murdoch Mackenzie said, rising. "May I ask a question, Mr. Justice?"

"Go ahead." ^

Mackenzie stared at the robot. "Well, now. Will you tell me, please, what this personal deity of yours is like?"

"Certainly," Joe said. "Just like me."

After a while it degenerated into a theological argument. Gallegher left the attorneys debating the apparently vital point of how many angels could dance on the head of a pin, and went home temporarily scot-free, with Joe. Until such points as the robot's religious basics were settled, nothing could be done. All the way, in the aircab, Mackenzie insisted on pointing out the merits of Calvinism to Joe.

At the door Mackenzie made a mild threat. "I did not intend to give you so much rope, you understand. But you will work all the harder with the threat of prison hanging over your head. I don't know how long I can keep you a free man. If you can work out an answer quickly-"

"What sort of answer?"

"I am easily satisfied. Jonas's body, now-"

"Bah!" Gallegher said, and went into his laboratory and sat down morosely. He siphoned himself a drink before he remembered the little brown animal. Then he lay back, staring from the blue-eyed dynamo to Joe and back again.

Finally he said: "There's an old Chinese idea that the man who first stops arguing and starts swinging with his fists admits his intellectual defeat."

Joe said: "Naturally. Reason is sufficient; if you need experiment to prove your point, you're a lousy philosopher and logician."

Gallegher fell back on casuistry. "First step, animal. Fist-swinging. Second step, human. Pure logic. But what about the third step?"

"What third step?"

"Men can know the nature of things -but you're not a man. Your personal deity isn't an anthropomorphic one. Three steps: animal, man, and what we'll call for convenience, superman-though man doesn't necessarily enter into it. We've always attributed godlike traits to the theoretical superbeing. Suppose, just for the sake of having a label, we call this third-stage entity Joe."

"Why not?" Joe said.

"Then the two basic concepts of logic don't apply. Men can know the nature of things by pure reason, and also by experiment and reason. But such second-stage concepts are as

elementary to Joe as Plato's ideas were to Aristotle." Gal-legher crossed his fingers behind his back. "The question is, then, what's the third-stage,operation for Joe?"

"Godlike?" the rob\t said.

"You've got special senses, you know. You can varish, whatever that is. Do you need ordinary logical methods? Suppose- "

"Yes," Joe said, "I can varish, all right. I can skren, too. Hm-m-m."

Gallegher abruptly rose from the couch. "What a fool I am. 'DRINK ME'. That's the answer. Joe, shut up. Go off in a corner and varish."

"I'm skrenning," Joe said.

"Then skren. I've finally got an idea. When I woke up yesterday, I was thinking about a bottle labeled 'DRINK ME'. When Alice took a drink, she changed size, didn't she? Where's that reference book? I wish I knew more about technology. Vasoconstrictor.. .hemostatic. ..here it is- demonstrates the metabolic regulation mechanisms of the vegetative nervous system. Metabolism. I wonder now-"

Gallegher rushed to the workbench and examined the bottles. "Vitalism. Life is the basic reality, of which everything else is a form or manifestation. Now. I had a problem to solve for Adrenals, Incorporated. Jonas Harding and Grandpa were here. Harding gave me an hour to fill the bill. The problem...a dangerous and harmless animal. Paradox. That isn't it. Harding's clients wanted thrills and safety at the same time. I've got no lab animals on tap at the moment... Joe!"

"Well?"

"Watch," Gallegher said. He poured a drink and watched the liquid vanish before he tasted it. "Now. What happened?".

"The little brown animal drank it."

"Is that little brown animal, by any chance- Grandpa?"

"That's right," Joe said.

Gallegher blistered the robot's transparent hide with sulphurous oaths. "Why didn't you tell me? You-"

"I answered your question," the robot said smugly. "Grandpa's brown, isn't he? And he's an animal."

"But-little! I thought it was a critter about as big as a rabbit."

"The only standard of comparison is the majority of the species. That's the

yardstick. Compared to the average height of humans, Grandpa is little. A little brown animal."

"So it's Grandpa, is it?" Gallegher said, returning to the workbench. "And he's simply speeded up. Accelerated metabolism. Adrenalin. Hm-m-m. Now I know what to look for, maybe-"

He feH to. But it was sundown before Gallegher emptied a small vial into a glass, siphoned whisky into it, and watched the mixture disappear.

A flickering began. Something flashed from corner to corner of the room. Gradually it became visible as a streaking brownness that resolved itself, finally, into Grandpa. He stood before Gallegher, jittering like mad as the last traces of the accelerative formula wore off.

"Hello, Grandpa," Gallegher said placatingly.

Grandpa's nutcracker face wore an expression of malevolent fury. For the first time in his life, the old gentleman was drunk. Gallegher stared in utter amazement.

"I'm going back to Maine," Grandpa cried, and fell over backwards.

"Never seen such a lot of slow pokes in my life," Grandpa said, devouring a steak. "My, I'm hungry. Next time I let you stick a needle in me I'll know better. How many months have I been like\* this?"

"Two days," Gallegher said, carefully mixing up a formula. "It was a metabolic accelerator, Grandpa. You just lived faster, that's all."

"All! Bah. Couldn't eat nothing. Food was solid as a rock. Only thing I could get down my gullet was liquor."

"Oh?"

"Hard chewing. Even with my store teeth. Even whisky tasted hotter. As for a steak like this, I couldn't've managed

it"

"You were living faster." Gallegher glanced at the robot, who was still quietly skrenning in a comer. "Let me see. The antithesis of an accelerator is a decelerator- Grandpa, where's Jonas Harding?"

"In there," Grandpa said, pointing to the blue-eyed dynamo and thus confirming Gallegher's suspicion.

"Vitaplasm. So that was it. That's why I had a lot of Vi-taplasm sent over a couple of nights ago. Hm-m-m." Gallegher examined the sleek, impermeable surface of the apparent dynamo. After a while he tried a hypodermic syringe. He couldn't penetrate the hard shell.

Instead, using a new mixture he had concocted from the bottles on his workbench, he dripped a drop of the liquid on the substance. Presently it softened. At that spot Gallegher made an injection, and was delighted to see a color-change spread out from the locus till the entire mass was pallid and plastic.

"Vitaplasm," he exulted. "Ordinary artificial protoplasm cells, that's all. No wonder it looked hard. I'd given it a

decelerative treatment. An approach to molecular stasis. Anything metabolizing that slowly would seem hard as iron." He wadded up great bunches of the surrogate and dumped it into a convenient vat. Something began to form around the blue eyes-the shape of a cranium, broad shoulders, a torso-

Freed from the disguising mass of Vitaplasm, Jonas Harding was revealed crouching on the floor, silent as a statue.

His heart wasn't beating. He didn't breathe. The decelerator held him in an unbreakable grip of passivity.

Not quite unbreakable. Gallegher, about to apply the hypodermic, paused and looked from Joe to Grandpa. "Now why did I do that?" he demanded.

Then he answered his own question.

"The time limit. Harding gave me an hour to solve his problem. Time's relative-especially when your metabolism is slowed down. I must have given Harding a shot of the decelerator so he wouldn't realize how much time had passed. Let's see." Gallegher applied a drop to Harding's impermeable skin and watched the spot soften and change . hue. "Uh-huh. With Harding frozen like that, I could take weeks to work on the problem, and when he woke up, he'd figure only a short time had passed. But why did I use the Vitaplasm on him?"

Grandpa downed a beer. "When you're drunk, you're apt to do anything," he contended, reaching for another steak.

"True, true. But Gallegher Plus is logical. A strange, eerie kind of logic, but logic nevertheless. Let me see. I shot the decelerator into Harding, and then-there he was. Rigid and stiff. I couldn't leave him kicking around the lab, could I?

If anybody came in theykl think I had a corpse on my hands!"

"You mean he ain't dead?" Grandpa demanded.

"Of course not. Merely decelerated. I know! I camouflaged Harding's body. 1 sent out for Vitaplasm, molded the stuff around his body, and then applied the decelerator to the Vitaplasm. It works on living cellular substance-slows it down. And slowed down to that extent, it's impermeable and immovable!"

"You're crazy," Grandpa said.

"I'm short-sighted," Gallegher admitted. "At least, Gallegher Plus is. Imagine leaving Harding's eyes visible, so I'd be reminded the guy was under that pile when I woke up from my binge! What did I construct that recorder for, anyhow? The logic Gallegher Plus uses is far more fantastic than Joe's." "Don't bother me," Joe said. "I'm still skrenning."

Gallegher put the hypodermic needle into the soft spot on Harding's arm. He injected the accelerator, and within a moment or two Jonas Harding stirred, blinked his blue eyes, and got up from the floor. "Ouch!" he said, rubbing his arm. "Did you stick me with something?"

"An accident," Gallegher said, watching the man warily. "Uh..'. this problem of yours-"

Harding found a chair and sat down, yawning. "Solved it?"

"You gave me an hour."

- "Oh. Yes, of course." Harding looked at his watch. "It's stopped. Well, what about it?"

"Just how long a time do you think has lapsed since you came into this laboratory?"

" Half an hour? " Harding hazarded.

"Two months," Grandpa snapped.

"You're both right," Gallegher said. "I'd have another answer, but I'd be right, too."

Harding obviously thought that Gallegher was still drunk. He stayed doggedly on the subject.

"What about that specialized animal we need? You still have half an hour- "

"I don't need it," Gallegher said, a great white light dawning in his mind. "I've got your answer for you. But it isn't quite what you think it is." He relaxed on the couch and considered the liquor-organ. Now that he could drink again, he found he preferred to prolong the anticipation.

"I came upon no wine so wonderful as thirst," he remarked.

"Claptrap," Grandpa said.

Gallegher said: "The clients of Adrenals, Incorporated, want to hunt animals. They want a thrill, so they need dangerous animals. They have to be safe, so they can't have dangerous animals. It seems paradoxical, but it isn't. The answer doesn't lie in the animal. It's in the hunter."

Harding blinked. "Come again?"

"Tigers. Ferocious man-eating tigers. Lions. Jaguars. Water buffalo. The most vicious, carnivorous animals you can get. That's part of the answer."

"Listen-" Harding said. "Maybe you've got the wrong idea. The tigers aren't our customers. We don't supply clients to the animals, it's the other way round."

"I must make a few more tests," Gallegher said, "but the basic priciple's right here in my hand. An accelerator. A latent metabolic accelerator with a

strong concentration of adrenalin as the catalyst. Like this- " He sketched a vivid verbal picture.

Armed with a rifle\* the client wandered through the artificial jungle, seeking quarry. He had already paid his fee to Adrenals, Incorporated,, and got his intravenous shot of the latent accelerator. That substance permeated his blood stream, doing nothing as yet, waiting for the catalyst.

The tiger launched itself from the underbrush. It shot toward the client like catapulted murder, fangs bared. As the claws neared the man's back, the suprarenals shot adrenalin into the blood stream in strong concentration.

That was the catalyst. The latent accelerative factor became active.

The client speeded up -tremendously.

He stepped away from the body of the tiger, apparently frozen in midair, and did what seemed best to him before the effect of the accelerator wore off. When it did, he returned to normal-and by that time he could be in the supply station of Adrenals, Incorporated, getting another intravenous shotunless he'd decided to bag his tiger the easy way.

It was as simple as that. \_

"Ten thousand credits," Gallegher said, happily counting them. "The balance due as soon as I work out the catalytic angle. Which is a cinch. Any fourth-rate chemist could do it. What intrigues me is the forthcoming interview between Harding and Murdoch Mackenzie. When they compare the time element, it's going to be funny."

"I want a drink," Grandpa said. "Where's a bottle?"

"Even in court, I think I could prove I only took an hour

or less to solve the problem. It was Harding's hour, of course,

but time is relative. Entropy-metabolism-what a legal

battle that would be! Still, it won't happen. I know the for-

mula for the accelerator and Harding doesn't. He'll pay the other forty thousand-and Mackenzie won't have any kicks. After all, I'm giving Adrenals, Incorporated, the success factor they needed."

"Well, I'm still going back to Maine," Grandpa contended. "Least you can do is give me a bottle."

"Go out and buy one," Gallegher said, tossing the old gentleman several credits. "Buy several. I often wonder what the vintners buy-"

"Eh?"

" -one-half so precious as the stuff they sell. No, I'm not tight. But I'm going to be." Gallegher clutched the liquor-organ's mouth-piece in a loving grip and began to play alcoholic arpeggios on the keyboard. Grandpa, with a parting sneer at such new-fangled contraptions, took his departure.

Silence fell over the laboratory. Bubbles and Monstro, the two dynamos, sat quiescent. Neither of them had bright blue eyes. Gallegher experimented with cocktails and felt a warm, pleasant glow seep through his soul.

Joe came out of his corner and stood before the mirror, admiring his gears.

"Finished skrenning?" Gallegher asked sardonically.

"Yes."

"Rational being, forsooth. You and your philosophy. Well, my fine robot, it turned out I didn't need your help after all. Pose away."

"How ungrateful you are," Joe said, "after I've given you the benefit of my superlogic."

"Your... what? You've slipped a gear. What super-logic?"

"The third-stage, of course. What we were talking

about a while back. That's why I was skrenning. I hope you didn't think all your problems were solved by your feeble brain, in that opaque cranium of yours."

Gallegher sat up. "What are your talking about? Third-stage logic? You didn't- "

"I don't think I can describe it to you. It's more abstruse than the noumenon of Kant, which can't be perceived except by thought. You've got to be able to skren to understand it, but-well, it's the third stage. It's...let's see...demonstrating the nature of things by making things happen by themselves."

"Experiment?"

"No. By skrenning, I reduce all things from the material plane to the realm of pure thought, and figure out the logical concepts and solutions."

"But... wait. Things have been happening! I figured out about Grandpa and Harding and worked out the accelerator-"

"You think you did," Joe said. "I simply skrenned. Which is a purely super-intellectual process. After I'd done that, things couldn't help happening. But I hope you don't think they happened by themselves!"

Gallegher said: "What's skrenning?"

"You'll never know."

"But., .you're contending you're the First Cause... no, it's voluntarism... third-stage logic? No-" Gallegher fell back on the couch, staring. "Who do you think you are? Deus ex machina?"

Joe glanced down at the conglomeration of gears in his torso.

"What else?" he asked smugly.